Relational pathways to substance misuse and offending in women: the role of trauma, insecure attachment and shame

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Doctorate in Clinical Psychology

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ACKNOWLEDGEMENTS

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THESIS ABSTRACT

Background: close interpersonal relationships are highlighted as an important dynamic risk factor for reoffending in women that may mediate the association between their substance misuse and offending. However, research in this area is scarce. Evidence for an association between close relationships and recidivism in women was systematically reviewed. Findings were inconsistent and inconclusive, but they suggested that relationship factors may be relevant to women’s reoffending when interacting with other complex problems. Research is needed that explores these interaction effects and the underlying psychological processes involved.

Aims: to explore experiences of close relationships and the underlying psychological processes impacting on women’s substance misuse and offending, and explore adult attachment style in relation to emergent themes.

Method: a qualitative study was conducted using a social constructivist version of grounded theory. Seven women ex-offenders from community drug treatment services were interviewed about their experiences of close relationships in relation to their substance misuse and offending. Adult attachment style was measured with the Relationship Styles Questionnaire.

Results: a model was constructed of the complex interconnection between substance misuse, offending, family disconnection, dysfunctional intimate partner relationships, and loss of children, driven by unresolved trauma, insecure attachment and shame.

Conclusion: formulations and interventions should consider the potential role of unresolved trauma, insecure attachment, and shame to substance misuse and offending in women to adequately address dynamic risk factors for recidivism.
SYSTEMATIC REVIEW

Relational risk factors for reoffending in women: a systematic review

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Prepared in accordance with guidelines for the journal Criminal Justice and Behavior (see Appendix 1).
Abstract

**Background:** family and other close interpersonal relationships are highlighted as an important dynamic risk factor for reoffending in women. However, empirical research is scarce and findings inconsistent, with key meta-analytical reviews limited in relation to adult women offenders.

**Aims:** this review systematically evaluated the empirical evidence for an association between close relationships, especially family and intimate partner relationships, and recidivism in women and the underlying psychological processes involved.

**Results:** the search resulted in eight included studies. Most were of fair methodological quality but had several limitations. Findings were inconsistent and inconclusive; yet they suggested that relationship factors may be relevant to reoffending when interacting with other complex problems.

**Conclusions:** research is needed that explores the interacting and mediating effects of various factors, including relationships, on women’s reoffending, and the underlying psychological processes involved.

**Key words:** recidivism, criminogenic needs, interpersonal relationships, women offenders.
Women commit less crime, particularly violent crime, than men (Blanchette & Brown, 2006; Chesney-Lind & Pasko, 2004; McIvor, 2007), yet the female prison population has greatly increased across the Western world in the last two decades (e.g., Berman, 2012; Carson & Sabol, 2012; McIvor, 2007). Consequently, there is increased debate about what works in reducing reoffending in women (Commission of Women Offenders, 2012; Corston, 2007; Sheehan, McIvor, & Trotter, 2007). Part of this debate centres on whether dominant risk assessment tools and offender rehabilitation models and interventions apply equally as well to women as to men (Blanchette & Brown, 2006; Bloom, Owen, & Covington, 2003; Garcia-Mansilla, Rosenfeld, & Nicholls, 2009). Some argue that because they are based on theories of male criminality and developed with male offenders they may not be as appropriate for women (e.g., Blanchette & Brown, 2006; Bloom et al., 2003; Reisig, Holtfreter, & Morash, 2006). Calls have been made for more research on risk factors relevant to women’s recidivism to inform more gender-sensitive and effective risk assessment, management and intervention with women offenders (Blanchette & Brown, 2006; Bloom et al., 2003; de Vogel & de Vries Robbé, 2013; Garcia-Mansilla et al., 2009; Logan, 2003).

The Risk-Need-Responsivity Model

The leading offender rehabilitation model is the Risk-Need-Responsivity (RNR) model (e.g., Bonta & Andrews, 2007). The risk principle states that intervention should be matched to an offender’s level of risk; the need principle that intervention to be most effective should target ‘criminogenic needs’, that is, dynamic and changeable risk factors functionally related to offending; and the responsivity principle that intervention should be matched to individual ability, motivation and
learning style (Bonta & Andrews, 2007). The model is underpinned by the integrated General Personality and Cognitive Social Learning (GPCSL) theory of criminal conduct (Bonta & Andrews, 2007). Its general notion is that a person’s personality and cognitive predispositions interact with their social context to motivate criminal behaviour. However, the theory has been criticised by some for not adequately taking into account the potential impact of broader social and systemic issues (e.g., racial and gender oppression, economic marginalisation, and organisational systems) on offending in general and by women specifically (Covington & Bloom, 1999).

The RNR model is argued to be applicable to both men and women (Bonta & Andrews, 2007), but its empirical evidence base is predominantly based on White male offenders (Blanchette & Brown, 2006; Hollin & Palmer, 2006). This also applies to the RNR derived risk assessment tools, the Level of Service Inventory-Revised (LSI-R; Andrews & Bonta, 1995) and its derivative the Level of Service/Case Management Inventory (LS/CMI; Andrews, Bonta, & Wormith, 2004). There is ongoing debate about these instruments’ utility with women (e.g., Andrews et al., 2012; Hannah-Moffat, 2009; Morash, 2009; Smith, Cullen, & Latessa, 2009; Van Voorhis, Wright, Salisbury, & Bauman, 2010). This includes whether they comprise dynamic risk factors (criminogenic needs) less relevant for women and miss out others specifically relevant for women. This has important implications for appropriate risk assessment, management and intervention with women offenders (Blanchette & Brown, 2006; Hollin & Palmer, 2006; Van Voorhis et al., 2010).

Close Interpersonal Relationships: a Gender-Responsive Criminogenic Need?

Research examining criminogenic needs with women is scarce and findings inconsistent (Blanchette & Brown, 2006; Hedderman, 2004; Hollin & Palmer, 2006).
Yet, the literature suggests that while some criminogenic needs are similar across gender (i.e., gender-neutral) others may be particularly relevant to or more frequent in women or qualitatively different across gender (i.e., gender-responsive) (Dowden & Andrews, 1999; Hollin & Palmer, 2006; Reisig et al., 2006; Van Voorhis et al., 2010). For example, substance misuse is considered a gender-neutral criminogenic need, although some research findings suggest that it may be particularly salient to women (Andrews et al., 2012), and is a key treatment target across gender (Blanchette & Brown, 2006; Scottish Government, 2011). However, substance misuse interventions that incorporate gender-responsive needs may be more effective with females (Bloom et al., 2003; Covington, Burke, Keaton, & Norcott, 2008; McMurran, Riemsma, Manning, Misso, & Kleijnen, 2011; Messina, Grella, Cartier, & Torres, 2010).

One criminogenic need highlighted as particularly relevant to women, which may mediate between their substance misuse and reoffending (Hollin & Palmer, 2006), is close interpersonal relationships, specifically family and intimate partner factors (Blanchette & Brown, 2006; Hollin & Palmer, 2006; Van Voorhis et al., 2010). However, few studies have explored the association between close relationships and recidivism in females, particularly in adult women, and findings are inconsistent (Blanchette & Brown, 2006; Hollin & Palmer, 2006).

The main evidence comes from a meta-analysis by Dowden and Andrews (1999) exploring the association between recidivism and correctional interventions targeting criminogenic needs in females. They found that interpersonal criminogenic treatment targets, particularly family processes ($r = .51$) including affection ($r = .51$) and supervision ($r = .62$), had the strongest significant association with reduced
recidivism. However, the review included both juvenile and adult offender samples. The authors noted that nine studies contributed to the family effects but did not specify which. From inspection of their list of included studies it appears that those on family interventions may predominantly have comprised juvenile samples. Yet families tend to play a different role in the lives of juveniles than in the lives of adults. For example, juveniles are generally under parental supervision whereas adults generally are not. Family processes may therefore have a different function or meaning to recidivism for juvenile than adult offenders. Consequently, it is unclear how well or to what extent Dowden and Andrews’s findings apply to adult women offenders. Because their findings were correlational they also cannot inform on causality.

A recent meta-analysis (Andrews et al., 2012) exploring the predictive validity of the LS/CMI (Andrews et al., 2004) risk/need factors across gender did not find the family/marital factor\(^1\) to be particularly salient to women. Although the mean validity value was slightly higher for females than for males (.20 vs .18, respectively) the confidence interval for this factor was large (95% CI = .04 to .36). The findings were also based on both adult and juvenile samples. As mentioned, there is debate about the applicability of the LS/CMI to women (e.g., Morash, 2009). Another limitation of this instrument is that the family/marital factor is a composite of various family and marital relationship processes; hence, it is unclear what proportion of the variance is explained by each.

Van Voorhis et al. (2010) conducted a large-scale (\(N = 1,626\)), multi-sample (prison, probation, and prerelease), prospective study of women offenders’ risks and

\(^1\) Measuring dissatisfaction with marital or equivalent relationship, non-rewarding relationships with parents and other relatives, and having a criminal family/spouse.
needs. They assessed traditional risk/need factors using the LSI-R (Andrews & Bonta, 1995) and gender-responsive risk/need factors using the purpose designed Women’s Risk/Needs Assessment (WRNA). This measure included factors of dynamic relationship processes including ‘relationship dysfunction’, capturing loss of personal power or codependency as per the substance misuse literature (Van Voorhis et al., 2010); ‘parental stress’, relating to childcare responsibilities; ‘family support’ (unspecified), and ‘adult physical abuse’. Results were mixed across samples with significant correlations generally small in magnitude. Poor quality family/marital relationships ($rs = .13$ to $.21$) and adult physical abuse ($rs = .22$ to $.24$) was mainly associated with recidivism in the community. Parental stress was only associated with community recidivism ($rs = .18$ to $.24$). Relationship dysfunction was mainly relevant to prison misconduct ($rs = .09$ to $.27$), although in one sample also to community recidivism ($rs = .26$ to $.28$), and lack of family support was associated with recidivism across samples ($rs = -.11$ to -.20). Although generally methodologically robust, the study was limited by some variation in measures applied across samples and the use of a newly developed and non-validated risk/need measure.

Thus, the empirical foundation for close relationships as a salient criminogenic need for women offenders appears equivocal. The psychological mechanisms that may be involved are particularly unclear.

Aims of Review

This review aimed to systematically evaluate the evidence for an association between close relationships, especially family and intimate partner relationships, to recidivism in women including the psychological processes involved.
**Method**

A systematic review of the literature was conducted to identify studies that explored the association between interpersonal relationships and recidivism in women offenders.

**Inclusion and Exclusion Criteria**

The search prioritised published and unpublished primary empirical studies that used quantitative methodologies. Inclusion criteria were: 1) adult offender (18+ years) samples only, 2) female only or mixed gender samples, 3) study included a measure of recidivism and a follow-up period, 4) study included a measure of interpersonal relationships, particularly family and intimate partner relationships, and 5) the article was published in English. Studies were excluded that: 1) used male samples only or predominantly (90% or more), 2) used juvenile (below age 18) only or mixed samples, 3) used qualitative methodology, and 4) was a review or theoretical article only.

**Search Strategy**

Literatures searches were carried out in February 2013 and were informed by guidance from Centre for Reviews and Dissemination (CRD; 2008) and Petticrew and Roberts (2006). Relevant electronic databases were searched for published and unpublished studies, as outlined below. No date limits were set to maximise sourcing of relevant studies. Only articles published in English were included due to unfeasibility for text translation. Searches were done within title, abstracts and keywords. Both free text and controlled vocabulary search terms were used. Searches were conducted using the following search terms in multiple combinations modified to each database:

i) (recidivism OR reoffend* OR “prisoner reentry”) AND
(relation* OR "interpersonal relation*" OR "personal relationships" OR "social relationships" OR "family relationships" OR "marital relationships" OR "intimate partner relationships" OR "romantic relationships") AND

(women OR female OR gender* OR "women offenders" OR "female offenders").

Limitations applied included age (adults 18+ years) and gender (female or women).

The electronic databases searched were: Applied Social Sciences Index and Abstracts (ASSIA), Campbell Collaboration Systematic Reviews, Cochrane Database of Systematic Reviews, EMBASE, MedLine, PsychINFO, Scopus, Social Services Abstracts, Social Care Online, Sociology Abstracts, Web of Knowledge (including Science Citation Index and Social Science Citation Index), and WestLaw. Manual searches were also conducted of review article reference lists and of content pages of key journals (Crime & Delinquency; Criminal Justice and Behavior; Justice Quarterly). First authors of key review papers were contacted to enquire about unpublished studies, with none available for inclusion in the review.

Results
Selection of Studies

The database searches identified 593 potentially relevant studies. Screening of titles and abstracts for suitability according to inclusion and exclusion criteria resulted in 535 studies being excluded. The majority were excluded due to irrelevant study focus and male or juvenile samples only. Full copies of the remaining 51 studies were retrieved and assessed for eligibility, and four potentially relevant studies were identified through manual searches. A further 47 studies were excluded at this stage (reasons detailed in Figure 1), resulting in eight studies included in the
review (Benda, 2005; Cobbina, Huebner, & Berg, 2012; Huebner, DeJong, & Cobbina, 2010; Li & MacKenzie, 2003; Rettinger & Andrews, 2010; Salisbury & Van Voorhis, 2009; Taylor, 2012; van der Knaap, Alberda, Oosterveld, & Born, 2012). One study (Taylor, 2012) was an unpublished doctoral dissertation. The final number of included studies is similar to the median number of six (interquartile range 3 to 12) studies per review reported for a typical Cochrane review and the mean (10 to 14) number for other types of systematic reviews (Mallett & Clarke, 2003). The study selection process is detailed in Figure 1.

![Flow chart of review study selection process](image)

**Title/abstracts identified and screened from databases (can include duplicates) n = 593**

**Full copies retrieved and assessed for eligibility n = 51**

**Articles identified from other sources n = 4**

**Studies included in the review n = 8**

**Excluded n = 535**

- Inappropriate question (e.g., gender differences in offence type; risk assessment tool validation) (n = 14)
- Inappropriate design (e.g., no recidivism or relationship measure) (n = 11)
- Review or theoretical paper (n = 7)
- Juvenile only/mixed sample (n = 5)
- Qualitative methodology (n = 4)
- Male only/predominant sample or no gender ratio reported (n = 3)

**Excluded n = 47**

**Data Extraction**

The following data variables were extracted from the review studies using a purpose designed form: reference details, country, aims or hypotheses, study design,
sample size including proportion females, key demographic variables, population, recruitment and procedure, inclusion and exclusion criteria, response and drop-out rate, research setting, recidivism measure and follow-up period, key independent variables and measures, relevant confounding variables, statistical analyses, recidivism outcomes, key relevant outcomes, and additional outcomes.

**Description of Studies**

All studies were conducted in the United States except for one from Canada and one from the Netherlands (see Table 1). Five studies included predominantly Caucasian participants and five studies used mixed-gender samples. Although the focus of the review is on females, results for males from these studies are presented in Table 1 for comparison. The total number of female participants across studies was 3791 (range 31 to 1691). Samples were recruited from community criminal justice services and correctional facilities and included probationers, incarcerated and paroled or released prisoners, and boot camp graduates. Four studies (Benda, 2005; Cobbina et al., 2012; Li & MacKenzie, 2003; Taylor, 2012) focused specifically on the association between recidivism and relationship factors; the others explored relationships as one of several risk factors for recidivism.

Due to heterogeneity of studies, particularly in relationship variables and measures, meta-analytic synthesis of studies was unfeasible. Findings were instead evaluated using narrative synthesis (Petticrew & Roberts, 2006).
<table>
<thead>
<tr>
<th>Author (year)</th>
<th>N (female)/population response/dropout-rate</th>
<th>Mean baseline age (SD), range</th>
<th>Ethnicity (White)</th>
<th>Relevant study aims</th>
<th>Study design/analysis</th>
<th>Recidivism measure/ follow-up period</th>
<th>Relationship variable/measure/scale</th>
<th>Relevant confounding variables</th>
<th>Relationship variables' association with recidivism</th>
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<tr>
<td>Benda (2005)</td>
<td>600 Females: 24.1 (4.3), 20+ Males: 25.9 (6.1), 20+</td>
<td>Females: 36.7% Males: 45.3%</td>
<td>USA</td>
<td>Gender differences in relationships as predictors of recidivism.</td>
<td>Prospective longitudinal cohort</td>
<td>Return to custody for new felony or parole violation. 5 years/60 months.</td>
<td>1) Relations with friends, partner and family; MPI self-report questionnaire; 7-point Likert scale. 2) Criminal peer associations; self-report; 5-point Likert scale. 3) Criminal partner; self-report; dichotomous scale. 4) Number of children; self-report; discrete scale.</td>
<td>Age first arrest, substance misuse, adverse feelings and thoughts, childhood and adulthood victimization.</td>
<td>Females: Number of children ($\beta = -1.24**$) Partner relations ($\beta = -65**$) Criminal partner ($\beta = -66**$) Family relations ($\beta = -43**$) Friendships ($\beta = -36**$) Criminal peers ($\beta = -19$) Males: Criminal peers ($\beta = 55**$) Partner relations ($\beta = -26**$) No other significant findings.</td>
</tr>
<tr>
<td>Cobbina (2012)</td>
<td>570 Females: 32.5 (6.93), nr Males: 31.8 (8.7), nr</td>
<td>Females: 76% Males: 72%</td>
<td>USA</td>
<td>Variation in recidivism in relation to nature and quality of social ties.</td>
<td>Prospective cohort Cox proportional hazard models, log-rank test of survival curve equality.</td>
<td>First post-release arrest. 'Time-to-failure' measured. 3.8 years/46 months.</td>
<td>1) Quality of parental and intimate partner relationship; LSI-R, self-report interview and file review; 4-point Likert scale. 2) Criminal peers; LSI-R, dichotomous scale.</td>
<td>Criminal history, substance misuse history, post-release employment.</td>
<td>Females: Quality intimate partner relationship ($\beta = -62$) Quality parental ties ($\beta = -50$) Criminal peers ($\beta = -27$, ns) Males: Criminal peers ($\beta = 1.51$) Quality parental ties ($\beta = -27$) Quality intimate partner relationship ($\beta = -0.04$, ns)</td>
</tr>
<tr>
<td>Huebner (2010)</td>
<td>506 Females: 33.81 (8.02), nr</td>
<td>Females: 64%</td>
<td>USA</td>
<td>Long-term patterns of recidivism.</td>
<td>Prospective cohort Parametric survival models, logistic regression.</td>
<td>Reconviction for any crime or return to prison for any reason. 'Time-to-failure'. 8 years/96 months.</td>
<td>Married at intake, living with intimate partner post-release, motherhood; self-report structured interview; dichotomous scales.</td>
<td>Criminal history, mental health, post-release drug use, concentrated disadvantage.</td>
<td>Recidivists vs non-recidivists: Significantly more likely to have dependent children (87% vs 76%) and less likely to live with intimate partner (95% vs 10%) post-release. ns multivariate effects.</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Size</td>
<td>Gender</td>
<td>Offending Method</td>
<td>Follow-Up</td>
<td>Recidivism Method</td>
<td>Risk Factors</td>
<td>Correlation Method</td>
<td>Recidivism Pathology</td>
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<tr>
<td>Li (2003) USA</td>
<td>125</td>
<td>Females: 34.10 (7.73), 73</td>
<td>29%</td>
<td>Prospective longitudinal offending</td>
<td>Self-reported offending</td>
<td>Living with spouse, boyfriend or girlfriend; self-report events calendar survey; dichotomous scale.</td>
<td>Prior arrests, substance misuse, post-release employment or education.</td>
<td>Females: Living with a spouse increased probability of recidivism. Males: Living with a spouse decreased probability of recidivism. Significant multivariate effect of gender (y = -2.91**)</td>
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<tr>
<td>Rettinger (2010) Canada</td>
<td>411</td>
<td>Incarcerated and community supervised offenders</td>
<td>74%</td>
<td>Prospective longitudinal offending</td>
<td>Reconviction for any new offence (violent and non-violent).</td>
<td>1) Family/marital and Companions subscales; LSI-R and LS/CMI, self-report survey, semi-structured interview and file review; 4-point Likert scale. 2) Parenting concerns (motherhood, single parent, worry about children, financial child care concerns) and family support; purpose designed semi-structured/structured interview; nr.</td>
<td>Criminal history, substance misuse, education/employment, poverty, mental health, childhood and adulthood victimization.</td>
<td>General recidivism: Companions (r = .43*) Family/marital (r = .23*) Non-supportive family (r = .17*) Violent recidivism: Companions (r = .28*) Family/marital (r = .19*) Being unmarried, dissatisfaction with marital circumstances, and parenting concerns unrelated to any recidivism.</td>
<td></td>
</tr>
<tr>
<td>Salisbury (2009) USA</td>
<td>313</td>
<td>Women's pathways to recidivism</td>
<td>67.8%</td>
<td>Prospective cohort</td>
<td>Prison admission for any reason.</td>
<td>1) Family support; Women's risk/needs assessment (WRNA), self-report semi-structured interview; Likert-type scale. 2) Intimate relationship dysfunction; WRNA self-report survey; Likert scale.</td>
<td>Past and current substance misuse, mental health, childhood and adulthood victimization, self-efficacy, employment and financial difficulties.</td>
<td>Intimate relationship dysfunction: Only indirectly related to recidivism through adult victimization, reduced self-efficacy, current depression/anxiety, and current substance misuse. Family support: Low family support indirectly related to recidivism through employment/financial difficulties.</td>
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<tr>
<th>Approx. 30 (7), nr</th>
<th>Approx. 40%</th>
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<tr>
<td>Inmates</td>
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Inmates: 45% females, 58% males

At final phase: Females: 45%, Males: 58%

Approx. 30 (7), nr

Association between emotional and instrumental family support and recidivism.

Spearman's correlation, logistic regression.

Self-reported offending and officially recorded rearrest.

1) Emotional and instrumental family support; purpose designed self-report structured interview; 4-point Likert scale.

2) Married or intimate steady relationship; self-report structured interview; dichotomous scale.

Criminal history, employment, physical victimization, substance misuse, mental health.

Inmates: 45% females, 58% males

Females: Emotional support: ns findings.

Instrumental support: Significantly (*) decreased any crime at 3 and 9-15 months and drug crime at 3 months, but increased drug crime at 3-9 months.

Males: Emotional support: Significantly (*) decreased any crime and drug crime at 3 months and any arrests at 9-15 months.

Instrumental support: Significantly (*) increased any crime and drug crime at 3 months and any arrests at 9-15 months.

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van der Knaap (2012) Netherlands Probationers

<table>
<thead>
<tr>
<th>Females: 36 (12.1), nr</th>
<th>Females: 72.1%</th>
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</thead>
<tbody>
<tr>
<td>Males: 34.6 (12), nr</td>
<td>Males: 66.2%</td>
</tr>
</tbody>
</table>

Gender differences in risk factors and their relevance in predicting recidivism.

Spearman's correlation, logistic regression, t-test, chi-square.

Any recidivism (general recidivism) or violent recidivism (violent recidivism).

Relationships with partner, family and relatives, and with friends and acquaintances; RISc, self-report structured interview and file review; dichotomous or 3-point scale.

Criminal history, substance misuse, emotional well-being.

Females: General recidivism:

Partner/family/relatives ($r = .09**; \beta = -12$, ns)

Friends/acquaintances ($r = .19**; \beta = .02$, ns)

Violent recidivism:

Partner/family/relatives ($r = .08**; \beta = .09$, ns)

Friends/acquaintances ($r = .08**; \beta = -09$, ns)

Males: General recidivism:

Partner/family/relatives ($r = .12**; \beta = -.01$, ns)

Friends/acquaintances ($r = .25**; \beta = .16**$

Violent recidivism:

Partner/family/relatives ($r = .13**; \beta = .17**$

Friends/acquaintances ($r = .10**; \beta = -.05$, ns)

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Note. LSI-R = Level of Service Inventory-Revised (Andrews & Bonta, 1995), MPSI = Multiple Problem Screening Inventory (Hudson, 1990), RISc = Recidivism Risk Assessment Scales (Adviesbureau Van Montfoort & Reclassering Nederland, 2004); nr = not reported; ns = not significant; * = significantly greater effect for women, ** = significantly greater effect for men; * $p < .05$, ** $p < .01$. 

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Quality Appraisal

Methodological quality was assessed using criteria (see Appendix 2) developed based on recommendations for appraising observational studies by CRD (2008), Crombie (1996), Petticrew and Roberts (2006), and Scottish Intercollegiate Guidelines Network (SIGN; 2008). Murray, Farrington, and Eisner's (2009) recommendations for evaluating quality of observational risk factor studies were also consulted. Quality was evaluated across several categories: study design, sample selection, measurement, data, and interpretation. Criteria were assessed according to outcome ratings adapted from SIGN (2008): a score of 2 if well addressed (good), 1 if adequately addressed (fair), and 0 if not addressed, not reported or poorly addressed (poor).

The first author conducted all quality appraisal but to assess reliability of ratings the third author conducted quality cross-ratings of three selected studies, one from each quality category (i.e., poor, fair and good). Raters were in 100 percent agreement on the overall quality of all studies but eight points apart on total quality rating for one study (rated as 'fair'). Ratings for this study were discussed and consensus established. Due to the low number of studies eligible for inclusion in the review, and the paucity of empirical research in this area, no studies were excluded based on quality.

Based on Murray et al.'s (2009) recommendations a primary distinction was made between prospective and retrospective designs, with prospective studies scored 2 and retrospective studies 1. Prospective studies measure risk factors before the outcome occurs, with data collected either longitudinally (i.e., over a longer time period with risk factors, and possibly outcome, measured at several time points) or from archival records. This allows for more confident conclusions to be drawn than from retrospective studies.
where data is based on recall of risk factors that occurred in the past. All review studies used observational prospective survey designs with three (Benda, 2005; Li & MacKenzie, 2003; Taylor, 2012) gathering data longitudinally, although the latter two only across short time periods.

There is no consensus on the most robust recidivism measure but reconviction or reincarceration is generally considered most reliable (e.g., Reisig et al., 2006). This review assigned a score of 2 to both these measures but reconviction was preferred. Measures of offences unsubstantiated through court, such as rearrest and self-report, are more prone to bias. These were scored 1 and 0, respectively. Most review studies used robust recidivism measures but some only used rearrest (Cobbina et al., 2012) and self-reported reoffending (Li & MacKenzie, 2003) or a combination of the two (Taylor, 2012). Two studies (Cobbina et al., 2012; Huebner et al., 2010) included a ‘time-to-failure’ measure in addition to the discrete recidivism measure. Follow-up periods ranged from eight months (Li & MacKenzie, 2003) to 96 months (Huebner et al., 2010) (M = 41.25, SD = 27.40). Only three studies explored recidivism separately across offence type (i.e., violent, drug or general) (Rettinger & Andrews, 2010; Taylor, 2012; van der Knaap et al., 2012). Examining recidivism across offence type is important because women generally commit more acquisitive and drug-related crime than violent crime (Blanchette & Brown, 2006; Chesney-Lind & Pasko, 2004).

Quality Ratings of Review Studies

Table 2 presents quality ratings across review studies. The majority of studies received an overall ‘fair’ rating with only one study receiving an overall ‘good’ rating (Salisbury & Van Voorhis, 2009) and one an overall ‘poor’ rating (Li & MacKenzie,
2003). This suggests that Salisbury and Van Voorhis (2009) was the most methodologically robust study. It should be noted that the sample for this study was part of the previously discussed large-scale study by Van Voorhis et al. (2010). Salisbury and Van Voorhis only employed the newly developed gender-responsive WRNA risk/need measure, but reported acceptable to good internal consistency (alphas from .62 to .97). Participants were sampled using stratified sampling, with excellent response and drop-out rates (see Table 1). Furthermore, Salisbury and Van Voorhis was the only review study to explore indirect relational pathways to reoffending using path analysis. The study sample included three 17-year-olds, which could be argued to be a limitation when focusing on adult offenders. Yet, because this only represented one percent of the study’s total sample size, and due to its overall good quality, it was retained in the review.

Key methodological limitations across studies included lack of sample representativeness, poor generalizability of studies, poor or non-reported response and drop-out rates, lack of key demographics, limitations of relationship measures including use of self-report and dichotomous scales that could not capture dynamic relationship processes, and none or limited psychometric information provided for utility of measures with female offender populations. Two studies (Cobbina et al., 2012; Rettinger & Andrews, 2010) used the LSI-R and LS/CMI tools. As discussed, although they have a strong research base their utility for use with women is debated (e.g., Morash, 2009).

The studies had several overall strengths including use of prospective designs and acceptable follow-up periods. Most also employed robust recidivism measures, but only two studies (Cobbina et al., 2012; Huebner et al., 2010) included a 'time-to-failure
recidivism measure in addition to a discrete measure, which may aid further understanding of the reoffending process. All studies had acceptable sample sizes although none reported on power. Studies generally employed appropriate statistical analyses to test their hypotheses; considered key confounding variables (e.g., criminal history, substance misuse, employment and education, past and current victimization, mental health), and results were, generally, adequately described. Exceptions were Li and MacKenzie (2003) and Taylor (2012). Taylor employed a significance value of $p < .10$, which is incorrect according to acceptable standards for statistical significance. For this review only findings at the traditional significance level of $p < .05$ were considered.
Table 2. Quality ratings of studies

<table>
<thead>
<tr>
<th>Study</th>
<th>1) Study design</th>
<th>2) Sample selection</th>
<th>3) Measurement</th>
<th>4) Data</th>
<th>5) Interpretation</th>
<th>Total (of 38) / mean quality score</th>
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<tr>
<td>Benda (2005)</td>
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<td>Huebner (2010)</td>
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<td>Li (2003)</td>
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<td>Rettinger (2010)</td>
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<td>Salisbury (2009)</td>
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<td>Taylor (2012)</td>
<td>poor</td>
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<td>van der Knaap (2012)</td>
<td>fair</td>
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Note. See Appendix 2 for quality rating criteria details.
The Association between Interpersonal Relationships and Recidivism in Women

A number of different relationship types and processes were explored across studies including family-of-origin, intimate partners, friends and acquaintances, and dependent children. Relationship processes explored included quality of relationships; intimate partner relationship commitment, dysfunction and criminality; family support; parenting concerns; and criminal peer associations. Findings are discussed below according to relationship type and processes. For mixed gender studies, only the female findings are reported (see Table 1 for male findings).

**Family-of-origin relationships.**

**Quality of family relationships.** Several studies found that poorer quality family relationships were significantly associated with recidivism, but effects were generally small (Benda, 2005; Cobbina et al., 2012; Rettinger & Andrews, 2010; van der Knaap et al., 2012). What ‘quality’ meant was typically also not specified. There were also key limitations in how family relationships were measured in some studies and all studies suffered from poor sample representativeness. The findings should therefore be interpreted with caution.

Using the LSI-R and LS/CMI instruments (Andrews & Bonta, 1995; Andrews et al., 2004), Rettinger and Andrews (2010) found that general \( r = .23 \) and violent \( r = .19 \) recidivism was significantly but weakly associated with poorer quality family relationships in prison and community offender samples. They did not specify what quality meant, but the LSI-R and LS/CMI instruments’ family/marital factor measures dissatisfaction with marital or equivalent relationship, non-rewarding relationships with parents and other relatives, and having a criminal family/spouse. However, because this
is a composite factor the possibly unique effects of family processes cannot be ascertained. The measures may also be limited for use with women (e.g., Morash, 2009). Rettinger and Andrews also did not report relationship findings separately across samples. As demonstrated by Van Voorhis et al. (2010), context (i.e., prison or community setting) may be relevant to family effects.

Cobbina et al. (2012) found poorer quality parental relationships to be a significant predictor ($\beta = -.50$) of recidivism in paroled prisoners. They also used the LSI-R measure and similar to other studies there was lack of specificity of what quality meant. However, they explored and reported on the specific relationship components of the family/marital factor separately. Similarly Benda (2005) found poorer quality family relationships to be a significant predictor ($\beta = -.43$) for recidivism in female boot camp graduates. A limitation of the study was the used of the self-report measure, the Multiple Problem Screening Inventory (MPSI; Hudson, 1990). Although Benda reported that it has demonstrated good reliability (alphas above .80) and validity of subscales, no details were provided including about construct validity for use with female offenders. The sample may also not generalize well to general adult offender samples due to its relatively young average age and boot camp selection criteria (e.g., no psychological problems including drug addiction that would preclude military training).

Van der Knaap et al. (2012) employed a Dutch risk assessment tool, the Recidivism Risk Assessment Scales (RISc; Adviesbureau Van Montfoort & Reclassering Nederland, 2004), which is reportedly conceptually similar to the LSI-R. They found that problems in relationships with family and other relatives were significantly associated with both general and violent recidivism but with very small
effects ($rs = .09$). However, similar to the LS tools, the RISc relationship factor is a composite that includes relations with intimate partners. The meaning of relationship problems was also not specified apart from one sample item referring to history of domestic violence. This limits the conclusions that can be drawn from the study about family effects. Furthermore, van der Knaap et al. reported that the RISc has adequate psychometric properties but provided no information for use with women offenders.

**Family support.** Three studies explored the effect of family support on recidivism but findings were mixed and inconclusive. Rettinger and Andrews (2010) found that having a non-supportive family was significantly associated with general recidivism ($r = .17$) but the effect was very small. It is also unclear whether the support related to practical or emotional support or both. Taylor (2012) explored the association between emotional and instrumental (practical) family support and recidivism in serious and violent offenders at various time periods pre- and post-prison release. Her only significant female findings were for instrumental family support. It significantly predicted a decrease in any self-reported crime at 3 months ($\beta = .78$) and 9 to 15 months ($\beta = .80$) and self-reported drug crime at 3 months ($\beta = .82$), but an increase in self-reported drug crime at 3 to 9 ($\beta = 1.19$) months. However, a key limitation was the use of self-report and a relatively short follow-up period (less than two years). Because the sample consisted of high risk offenders, findings may not be representative of lower risk offenders. Salisbury and Van Voorhis (2009) was the only study with fair sample representativeness, and the only study to explore indirect associations between variables. They only found an indirect association between low family support and recidivism.
through employment and financial difficulties. Family support included both emotional and practical support but it is unclear how each contributed to the findings.

**Marital/intimate partners relationships.**

**Intimate partner relationship commitment.** Findings for being married or in a committed intimate partner relationship were also mixed and inconclusive. Huebner et al. (2010) found that paroled prisoners who reoffended were less likely to live with an intimate partner after release from prison than those who did not reoffend. Rettinger and Andrews (2010) reported that being unmarried was unrelated to recidivism, but provided no statistical test details. Finally, Li and MacKenzie (2003) found that living with a spouse increased women probationers’ probability of recidivism. However, this study was of poor overall methodological quality with a very small female sample size and short follow-up period. Huebner et al. and Li and MacKenzie considered dichotomous relationship status only which limits the utility of their findings, and all three studies suffered from poor sample representativeness.

**Quality of marital/intimate partner relationships.** Several studies found an association between poorer quality intimate partner relationships and recidivism, but due to methodological limitations no definite conclusions can be drawn. The strongest support comes from Benda (2005) and Cobbina et al. (2012). Both found that poor quality intimate partner relationship was a relatively strong significant predictor ($\beta$s = -.65 and -.62, respectively) of recidivism in women, more so than for men. As mentioned, Cobbina et al. used the LSI-R measure but explored each relationship type in the family/marital factor separately. Rettinger and Andrews (2010) also used the LSI-R and the LS/CMI. They found poor quality marital relationship to be significantly associated
with general and violent recidivism but, as mentioned, did not separate the marital and family components or specify what quality meant. However, with interview data they found dissatisfaction with marital circumstances to be unrelated to recidivism, but did not provide statistical test details for this finding. Similarly, van der Knaap et al. (2012) found that problems within intimate partner relationships were significantly related to both general and violent recidivism, but with very small effects. As mentioned, this factor was also confounded with family effects and had poor specificity.

**Intimate partner relationship dysfunction.** Salisbury and Van Voorhis (2009) examined the association between recidivism and intimate partner relationship dysfunction. In contrast to other studies, this factor was specified and included loss of sense of self in relationships; getting into painful, unsatisfying, and unsupportive relationships; and greater tendency to incur legal problems when in an intimate relationship. Salisbury and Van Voorhis only found an indirect association with recidivism via adult victimization, reduced self-efficacy, current depression and anxiety, and current substance misuse. This was the only study with fair sample representativeness and good overall methodological quality. However, due to the use of a new and non-validated measure of relationship dysfunction the findings should be interpreted with some caution. Yet they suggest that dysfunctional intimate partner relationships may only increase women’s risk of recidivism through other complex problems.

**Intimate partner criminality.** Benda (2005) was the only study to specifically explore the association between having a criminal intimate partner and recidivism. The
study found that living with a criminal partner was a strong significant predictor ($\beta = .60$) of recidivism for women. However, the factor was only considered dichotomously.

**Children/parenthood relationships.**

**Parenting concerns.** Three studies examined variables broadly relating to parenting concerns, but two only explored number of children. Benda (2005) found that low number of children was the strongest significant predictor ($\beta = -1.24$) of recidivism for females. The effect was not mediated by participant young age. In contrast, Huebner et al. (2010) found that recidivists were more likely to have dependent children than non-recidivists, although their interpretation of the results appears contradictory to their reported figures. Rettinger and Andrews (2010) explored parenting concerns more broadly and found that being a mother, a single parent, worrying about one’s children, and financial concerns relating to caring for children were all unrelated to recidivism. However, limited information was provided about the measuring of this variable. Due to the limitations and mixed results across studies, the relationship between parenting concerns and recidivism cannot be established in the present literature.

**Peer relationships.**

Although the focus of this review was primarily on family and intimate partner relationships, reported findings for peer relationships are included.

**Quality of peer relationships.** Only van der Knaap et al. (2012) specifically explored the quality of peer relationships. They found that problems with friends or acquaintances were significantly associated with general ($r = .19$) and violent ($r = .08$) recidivism, but with very small effects. However, from the provided RISc measure sample items this factor appears to partially tap personality traits relevant to risk of
recidivism (e.g., sensation and risk seeking). Hence, it is unclear how informative the results are regarding the relevance of peer relationships to recidivism.

**Criminal peers.** Finally, three studies (Benday, 2005; Cobbina et al., 2012; Rettinger & Andrews, 2010) explored the effects of having criminal peers on recidivism, but with mixed and inconclusive findings. Only two studies found a significant association between criminal peers and recidivism in women. Using self-report, Benda (2005) found that having criminal peers significantly predicted ($\beta = .19$) recidivism for females, but with very small effects. Rettinger and Andrews (2010) used the LSI-R and found the strongest association to general ($r = .43$) and violent ($r = .28$) recidivism for criminal peers than for their other relationship variable. Yet effects were small to moderate. It is also unclear if they differed across their samples.

**Discussion**

The eight review studies explored various relationship types and processes including quality of family, intimate partner, and peer relationships; family support; intimate partner relationship commitment and dysfunction; parenting concerns, and criminal peer association. Findings were inconsistent and inconclusive. Due to methodological limitations studies have limited comparative and generalizable utility and no firm conclusions can be drawn from them. Specifically, with one exception review studies focused upon direct relationships between variables only. This does not allow for the complexity of variables or their potential mediating effects to be taken into account, and cannot inform on causality. Furthermore, studies generally used relationship measures with poor specificity, which impedes understanding of underlying psychological processes involved. Yet, studies also had some overall strengths including
used of prospective designs and generally adequate female sample sizes and follow-up periods.

Findings from the most methodologically robust study (Salisbury & Van Voorhis, 2009) suggested that it is essential to consider interaction and mediator effects of multiple variables when trying to understand women’s reoffending. According to these findings dysfunctional and disempowering intimate partner relationships per se may not increase women’s risk of recidivism, only if combined with other complex problems such as depression and anxiety, substance misuse, low self-efficacy, and adult victimization. Similarly, lack of family support may only increase risk of recidivism in combination with employment and financial difficulties. Hollin and Palmer (2006) also stressed the need to understand the role of mediating factors to female offending and recidivism. They pointed out that themes of trauma, substance misuse and mental health problems permeate the female offender literature. While such needs are naturally very important to address, not all of them may be criminogenic. However, static (unchangeable) risk factors such as childhood abuse may be precursors to or mediate risk of recidivism through interaction with dynamic risk factors.

Hollin and Palmer (2006) warned against the risk of “mistranslation of women-specific needs into criminogenic needs” (p. 191). This could lead to inaccurate risk assessment of women through either over- or under-estimation of actual risk levels, and thus to inappropriate offender management and intervention procedures and strategies. This also highlights the problem of relying on actuarial risk assessment tools that do not allow for clinical understanding at the individual level through formulation (Logan, Nathan, & Brown, 2011).
Limitations of Review

The review was constrained by time and resources, which meant that a comprehensive review of the grey and unpublished literature was unfeasible. The exclusion of non-English language sources may also have missed relevant studies. The majority of studies were North American so an element of cultural bias is possible. Although the review excluded juvenile samples, at least one study included some 17-year-olds. It is possible other studies that did not report age range likewise included some participants below 18. This would limit their generalizability to adult offenders.

Implications for Research and Practice

As argued by Murray et al. (2009), systematic reviews that help identify risk factors of crime may help advance theory and inform the development of preventive interventions. A greater understanding of criminogenic needs relevant to females may help inform more gender-sensitive and effective risk assessments and interventions with women (e.g., Blanchette & Brown, 2006; de Vogel & de Vries Robbé, 2013; Garcia-Mansilla et al., 2009). Increased knowledge of women offenders’ specific needs — criminogenic and non-criminogenic — may help inform service planning (Corston, 2007; CWO, 2012). This is particularly important in light of the growing female prison population and current developments to try to reduce this trend and improve services for women in the criminal justice system (e.g., Berman, 2012; CWO, 2012).

This review highlights the need for more specific and robust research on the role of relationships to women’s reoffending, but also on the need to refocus research efforts. To improve understanding of the complexity of factors that may impact on women’s reoffending, future studies should explore the presence of multiple interacting variables.
and their mediating effects in relation to recidivism. This requires robust and prospective longitudinal studies that are large enough to test sophisticated models and specify predictors about the association between variables rather than rely upon correlational data. Studies should be designed to capture the dynamic nature of relationships over time. It is essential to employ relationship measures with good specificity to increase understanding of underlying psychological processes. The context of women’s lives is also vital to consider. Multi-method and qualitative studies will aid understanding of this context and the underlying psychological processes involved in recidivism, and support theory development. Focus should be on examining these issues in women in their own right. However, large, matched, and mixed-gender studies would also be useful in establishing whether, where and to what extent gender differences exist.

Conclusions

No firm conclusions can be drawn about close relationships as a criminogenic need in women from this review. That does not mean that relationships may not be relevant to women’s reoffending. However, efforts to understand women’s risk of recidivism need to be refocused and redefined. There is a need for more research into criminogenic needs in women, but this applies to static risk factors as well (Garcia-Mansilla et al., 2009). It is imperative not simply to examine and identify factors that may be relevant to reoffending in women – and how these may or may not differ from those relevant to men – but to explore how factors may interact in complex ways to increase risk of recidivism. Yet, it is equally important to understand how different factors may function and interact to support women’s desistance.
References


Relational pathways to substance misuse and offending in women: the role of trauma, insecure attachment and shame

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Word count: 7316
Abstract

Background: women offenders commonly have complex needs including substance misuse problems. Close interpersonal relationships may mediate the association between women’s substance misuse and offending, but the psychological mechanisms for this are unclear.

Aims: to explore close relationships and underlying psychological processes impacting on women’s substance misuse and offending, and examine adult attachment style in relation to emergent themes.

Method: a social constructivist version of grounded theory was employed. Seven women ex-offenders in community drug treatment were interviewed about experiences of close relationships in relation to their substance misuse and offending. Adult attachment style was measured with the Relationship Styles Questionnaire.

Results: a model was constructed of the complex interconnection between substance misuse, offending, family disconnection, dysfunctional intimate partner relationships, and loss of children, driven by unresolved trauma, insecure attachment, and shame.

Conclusion: formulations and interventions should consider the potential role of unresolved trauma, insecure attachment, and shame to substance misuse and offending in women to adequately address dynamic risk factors for recidivism.

Key words: women offenders, recidivism, relationships, substance misuse, attachment, shame
Women are a marginalised but dramatically increasing population in the criminal justice system (e.g., McIvor, 2007); consequently there is increased focus on their needs and on what works in reducing their risk of reoffending (e.g., Blanchette & Brown, 2006; Bloom, Owen, & Covington, 2003; Commission on Women Offenders [CWO], 2012; Corston, 2007; Sheehan, McIvor, & Trotter, 2007). Substance misuse is a key criminogenic need (i.e., a treatable dynamic risk factors for reoffending; Bonta & Andrews, 2007) across gender and therefore a key offender rehabilitation treatment target (Blanchette & Brown, 2006; Scottish Government, 2011). However, according to Hollin and Palmer (2006) there may be contextual and motivational gender differences for substance misuse, particularly illicit drug use.

Findings suggest that there is a direct relationship between women’s drug use and their involvement in crime, particularly property crime, whereas criminality more commonly precedes men’s drug use (Loxley & Adams, 2009; McClellan, Farabee, & Crouch, 1999; Swan & Goodman-Delahunty, 2013). Compared to male prisoners, female prisoners have been found to have higher levels of problematic drug use patterns (e.g., opioid dependence) prior to incarceration (Langan & Pelissier, 2001; McClellan et al., 1999; O’Brien, Mortimer, Singleton, & Meltzer, 2001; Peters, Strozier, Murrin, & Kearns, 1997; Singleton, Meltzer, Gatward, Coid, & Deasy, 1998). Female prisoners also report higher levels of childhood and adulthood trauma and mental health problems (e.g., depression, anxiety, psychosis, posttraumatic stress disorder, self-harm and suicidality) than male prisoners and women in the general population (Fazel & Danesh, 2002; Grella, Lovinger, & Warda, 2013; Langan & Pelissier, 2001; McClellan et al., 1999; O’Brien, 2001; Peters et al., 1997; Singleton et al., 1998). Substance dependence
is strongly associated with childhood maltreatment, particularly neglect, in female prisoners (Mullings, Hartley, & Marquart, 2004), more so than in male prisoners (McClellan et al., 1997). More female than male prisoners also report using drugs to cope with psychological pain (Gutierres & Van Puymbroeck, 2006; Langan & Pelissier, 2001). Thus, the association between substance misuse and offending in women may be complex and multi-dimensional and may interact with various other factors to increase risk of reoffending (Blanchette & Brown, 2006; Hollin & Palmer, 2006; Salisbury & Van Voorhis, 2009; Van Voorhis, Wright, Salisbury, & Bauman, 2010).

It has been suggested that close interpersonal relationships, particularly with family and intimate partners, may be an important criminogenic need for women and may mediate their substance misuse and offending (Blanchette & Brown, 2006; Cobbina, Huebner, & Berg, 2012; Hollin & Palmer, 2006; Palmer, Jinks, & Hatcher, 2010). The empirical evidence for relationships as a criminogenic need in adult women offenders is, however, scarce and findings inconsistent and inconclusive (Kreis, Schwannauer, & Gillings, 2013). Most quantitative studies have failed to explore dynamic relationship processes and underlying psychological processes that may be involved in impacting on women’s offending (e.g., Benda, 2005; Cobbina et al., 2012; Rettinger & Andrews, 2010). Childhood trauma is a static rather than dynamic (changeable) risk factor, but it may indirectly impact on reoffending through dynamic risk factors (Hollin & Palmer, 2006).

Few qualitative studies have explored the role of relationships to reoffending in women (Cobbina, 2010; Harm & Phillips, 2001; Leverentz, 2006). Cobbina (2010) interviewed incarcerated and formerly incarcerated women and found that unsupportive
and negative social networks, particularly criminal family members and abusive intimate male partners, and lack of social support was particularly relevant to reintegration failure. A similar study found that women's offending was directly related to their drug use, which was central to their relationships (Leverentz, 2006). Drug use introduction was commonly through family members, particularly parents, and drug addiction was commonly preceded by traumatic experiences and functioned as an escape from pain. Abusive intimate relationships with criminal and drug addicted partners were central to women's ongoing addiction and dynamically related to their desistance and recovery process. Although both studies are informative neither fully explored the psychological processes that may drive the impact of relationships on women's substance misuse and offending.

One possible relational psychological process hypothesised to be relevant to substance misuse is insecure attachment (Flores, 2004). A primary function of the attachment system is to regulate affect (Padykula & Conklin, 2010; Schore & Schore, 2008). Within an attachment theory framework addiction is thought to develop due to insecure attachment, which may result from childhood trauma (Courtois & Ford, 2013; Herman, 1992; Padykula & Conklin, 2010), and resultant impaired affect regulation (Flores, 2004; Padykula & Conklin, 2010). Substance misuse may develop as a self-medicating and self-soothing strategy to regulate affect, either to reduce chronic hyperarousal or as a numbing/dissociative strategy. Substance misuse exacerbates this self-dysregulation and may lead to further relational discord, and thus to more substance use to self-regulate (Flores, 2004; Padykula & Conklin, 2010).
Some empirical support for the notion that addiction is related to insecure attachment exists. Men and women with substance misuse problems have been found to have higher levels of insecure attachment than secure attachment, also compared to non-substance using controls (Caspers, Cadoret, Langbehn, Yucuis, & Troutman, 2005; De Rick & Vanheule, 2007; Schindler, Thomasius, Petersen, & Sack, 2009; Thorberg & Lyvers, 2006, 2010). Findings are limited by the predominant use of self-report attachment measures and cross-sectional correlational research designs that cannot inform on causality. Yet, they suggest that substance misuse may in some cases be driven by negative relationship experiences through insecure attachment. Opioid misuse has been associated with higher levels of insecure attachment, particularly fearful-avoidant attachment, than alcohol and other illicit drugs (Schindler et al., 2009; Thorberg & Lyvers, 2006).

A relational theoretical framework that dominates the literature on women's substance misuse and criminal justice involvement is relational theory (Covington, 2007; Covington & Surrey, 1997). It posits that positive human connectedness is a core need essential to healthy psychological growth, but considers connectedness to others particularly central to women's sense of identity and self-worth. Relationship disconnection or violation is therefore thought to be key to women's psychological problems (Covington, 2007; Miller, 1976). Substance misuse is hypothesised to develop to cope with relational pain, as a relationship substitute or in an effort to maintain relationships (Covington & Surrey, 1997). Relational theory, together with trauma and addiction theories, underpin gender-responsive programmes for women offenders (e.g.,
Bloom et al., 2003). However, there has been limited empirical investigation of this theory to women’s – or men’s – risk of reoffending (Blanchette & Brown, 2006).

In summary, substance misuse may interact with other criminogenic needs, particularly close relationships, to increase risk of recidivism in women offenders; however, the underlying psychological mechanisms for this remain unclear and underexplored (Hollin & Palmer, 2006). Insecure attachment (Flores, 2004; Padykula & Conklin, 2010) and relationship disconnections or violations may be implicated (Covington & Surrey, 1997). There is a need for more research exploring this, particularly research using qualitative methodologies to aid conceptual understanding and model development (Hedderman, Gunby, & Shelton, 2011).

**Aims**

This study aimed to explore experiences of close interpersonal relationships and the underlying psychological processes impacting on women’s substance misuse and offending behaviour. A secondary aim was to examine adult attachment style in relation to emergent themes.

**Method**

**Design**

A qualitative research design was employed using Charmaz’s (2006) social constructivist version of grounded theory, which encourages flexible application of grounded theory methodology to enable further analytic innovation. Dey’s (1999) notion of theoretical sufficiency was employed rather than theoretical saturation. It refers to the point where sufficient categories have been suggested by the data to provide an adequate theoretical explanation. Grounded theory’s focus on generating a theoretical
understanding of a poorly understood phenomenon seemed most appropriate for this study. Social constructivist grounded theory posits that data is interpreted and theory constructed through the researcher’s interaction with participants and the social context of both (Charmaz, 2006). Researcher transparency is therefore important. Relevant contextual factors for the researcher (the first author) included her role as a trainee clinical psychologist working with marginalised populations in community substance misuse treatment services and a forensic community mental health service, prior research experience with female offenders, and personal experiences.

Participants and recruitment

Participants were recruited from community substance misuse treatment services, primarily from court ordered criminal justice drug treatment programmes, where they received treatment for heroin dependence. Inclusion criteria included female clients with previous criminal convictions, aged minimum 18, with English language proficiency; exclusion criteria included learning disability, acute psychosis, and intoxication at consent or interview stage. At time of recruitment (November 2012 to June 2013) there were approximately 30 women in court ordered drug treatment and 265 across generic services. Due to recruitment procedures (see below) the exact number of potential participants is unknown. Recruitment was challenged by the nature of the population, which has high levels of instability, treatment non-attendance, and difficulties with trust, but also by limited staff resources in the services when the study was conducted. Several recruited participants failed to attend for interview at least once and four became too unstable to participate post recruitment.
Seven women \((N = 7)\) participated in the study. Findings by Guest, Bunce, and Johnson (2006) suggest this sample size was adequate to achieve theoretical sufficiency. Participants were aged between 26 and 40 \((M = 34.14, \text{SD} = 5.0)\). Five were in court ordered drug treatment. The average time in (current) treatment was 10 months \((\text{SD} = 6.20, \text{range} = 3-18)\). Two participants were also on probation orders. Number of self-reported (approximate) previous criminal convictions ranged from 5 to 75 \((M = 26.42, \text{SD} = 22.94)\). Most offences were acquisitive (theft and fraud) and drug related. Other common offences were breach of the peace and assault. Four participants had previously been incarcerated, with average number of incarcerations 3.8 \((\text{SD} = 5.75, \text{range} = 2-15)\) and longest time in custody ranging from 7 days to 12 months. None of the participants were married but three were currently in a relationship, two of them co-habiting. Most \((71\%)\) lived in their own tenancy. All but one participant had children \((M = 1.3, \text{SD} = 0.47)\), most aged below 16, but only two participants were the primary carer of their children. One participant was pregnant at time of interview. Most \((71\%)\) participants had completed secondary school but none were employed and all were financially supported by state benefits. All participants reported having experienced childhood trauma particularly emotional abuse \((71\%)\), with 57 percent having experienced multiple forms of trauma. Most \((71\%)\) had also experienced trauma in adulthood. All participants had current mental health problems and most \((71\%)\) had a history of self-harm.

**Measures**

*Semi-structured qualitative interview schedule* (Appendix 4).

Participants were interviewed using a semi-structured purpose designed interview schedule that explored participants’ experiences of close relationships in
relation to their substance misuse and offending behaviour using open-ended questions and prompts (e.g., ‘describe your relationship with people closest to you when you first started using drugs’). The interview commenced and ended with more neutral questions about participants’ drug treatment to allow for rapport building and sensitive interview closure.

**Relationship Styles Questionnaire (RSQ; Griffin & Bartholomew, 1994. See [http://www.sfu.ca/psyc/faculty/bartholomew/rsq.htm](http://www.sfu.ca/psyc/faculty/bartholomew/rsq.htm).** (Appendix 5).

Several self-report measures of adult attachment exist (see e.g., Crowell, Fraley, & Shaver, 2008; Kurdek, 2002), but none have been validated with substance misuse populations. The RSQ was chosen because it has a stronger empirical foundation and appears to be conceptually closer to the developmental construct of attachment than some other measures, and because some comparative data exists for substance misuse populations. The RSQ is a 30-item self-report measure of adult attachment style across four prototypes (secure, fearful, preoccupied, and dismissing) and the underlying dimensions of anxious and avoidant attachment. Short statements relating to close relationships are rated on a 5-point Likert scale ranging from 1 (not at all like me) to 5 (very much like me). The RSQ can be worded to apply to general or specific relationships. Based on recommendations by Fraley, Heffeman, Vicary, and Brumbaugh (2011) it was worded to apply specifically to romantic relationships. Support for the RSQ’s internal consistency (Cronbach’s alphas of .68 to .77 for the avoidance and anxiety dimensions, respectively) has been found with adult male and female substance misuse treatment clients (Perrier, Boucher, Etchegary, Sadava, & Molnar, 2010). Similar alpha levels have been found with university students (Perrier et al., 2010), male prison
inmates (Hansen, Waage, Eid, Johnsen, & Hart, 2011), and married couples (Kurdek, 2002). Support has also been found for the RSQ’s discriminant validity with male and female substance misuse clients (Perrier et al., 2010) and married couples (Kurdek, 2002).

The RSQ was scored as a continuous measure across the two underlying attachment dimensions using Kurdek’s (2002) methods, as recommended by the RSQ authors (see http://www.sfu.ca/psyca/faculty/bartholomew/rsq.htm). The two-dimensional model of adult attachment has been found to better capture the individual variability in attachment styles across time and relationships than the prototypes (Bartholomew & Horowitz, 1991). The two dimensions reflect Bowlby’s (1969) conceptualisation of internal working models of self (anxiety) and others (avoidance), that is, peoples’ expectations about their self-worth and others’ availability (Griffin & Bartholomew, 1994). In the RSQ, greater levels of either anxious or avoidant attachment indicates insecure attachment.

**Ethical considerations**

The study was approved (see Appendix 6) by the National Health Service (NHS) East of Scotland Research Ethics Committee and the local Research and Development Office. Participation was voluntary and confidential within standard clinical guidelines, with interview data anonymised and stored according to the Data Protection Act. The first author was transparent about her dual role as a doctorate student and trainee clinical psychologist in the substance misuse services. None of the participants were or had been seen for psychological therapy by the first author.
**Procedure**

Eligible participants were identified by clinical treatment staff (keyworkers and doctors) and provided with verbal and written information (Appendix 7) about the study from their keyworkers. They were given at least 24 hours to decide if they wanted to participate. Interviews were arranged via keyworkers and all interviews were conducted by the first author either before or after keyworking sessions at substance misuse service premises. Prior to interview participants completed a consent form (Appendix 8), a demographic information form, and the RSQ questionnaire. Participants with literacy difficulties were assisted in completing these by the first author. All participants were interviewed once. Interviews ranged from 15 to 52 minutes ($M = 34.29$, $SD = 13.27$). They were recorded using a digital voice recorder and transcribed verbatim by the first author.

**Data analysis**

Transcribed interviews were analysed using grounded theory methods following guidelines by Charmaz (2006). NVivo Version 10 software (Qualitative Solutions Research, 2012) was used to aid analysis. Transcripts were initially line-by-line coded, with common codes organised into higher-order categories. Themes were developed through constant comparative analysis of codes and reflective memos written during data collection and analysis process. Iterative coding was also used whereby initial codes were re-examined for fit to broader emerging themes. Validation of findings was conducted using triangulation, operationalised in two ways. Firstly, to ensure internal validity, the fourth anonymised interview transcript was cross-coded by a clinical
psychologist supervising the first author's clinical work in the substance misuse services. Secondly, themes were cross-validated through a second literature review.

Results

Insecure adult attachment style

All but one participant displayed an insecure adult attachment style within romantic relationships based on the RSQ two-dimensional model of anxious and avoidant attachment (Griffin & Bartholomew, 1994). Mean anxious attachment was 2.47 (SD = 1.02) and mean avoidant attachment was 3.33 (SD = 0.67). This is similar to levels found in other substance misuse treatment samples, which were significantly greater than those found in university students (Perrier et al., 2010). This suggests that participants in this study generally held low views of their own self-worth and of others' availability, and were avoidant of emotional closeness within romantic relationships. It also indicated a level of unresolved trauma (Howe, 2011; Padykula & Conklin, 2010).

The role of relationships to substance misuse and offending

Several themes emerged from interviews with participants that suggested their substance misuse and offending was related to negative relationship experiences. Substance misuse was central to onset of offending and to reoffending; most participants started and continued to offend primarily to fund their drug habit. Relationships impacted on offending through substance misuse in complex and bidirectional ways involving various psychological processes including trauma, insecure attachment and shame.
Themes and subthemes are reported below according to the theoretical constructs that emerged. Quotes from transcribed interviews are included to illustrate themes, with participants represented by numbers to ensure anonymity.

‘And that was the beginning of my drug problem, my mother’: traumatic early experiences/dysfunctional parenting.

All participants started using drugs or alcohol in their teens. For most this was in direct response to adverse relationship experiences as a way to cope with distress and unmet psychological needs. A key theme and pathway to substance misuse onset was traumatic early experiences and dysfunctional parenting involving abuse, neglect, rejection, lack of affection, abandonment, and parental substance misuse. This seemed to have led to unmet psychological needs for security, safety, love and connection, and to the development of insecure attachment to one or both parents and feelings of low self-worth and shame.

Several participants described suffering emotional and physical abuse by their parents, particularly emotional abuse by their mothers, or witnessing domestic violence:

P3: I had quite a bad upbringing with my mum (...) my mum tried to get me put in a home but because there were no behavioural difficulties and that at the time, the social work wouldn’t do that. She had started drinking and that so (...) she’d always been good for lifting her hands and that for as far back as I can remember. More nastiness from her mouth like telling me she’d be happy if I hadn’t come into her life (...) I kind of rebelled when I got to 14. Just a lot of things going on with my mum and she was trying to put me in a home and stuff and, I started going to under-18 raves kind of thing and I started taking amphetamines and acid and stuff.

P7: I first got flung out with 14.
Interviewer: who threw you out?
P7: my mum.
Interviewer: ok. Why did she throw you out?
P7: because I was drinking. And, she used to tell me that she wished she never had me, and, she used to tell me to play tick with the traffic and, go and get run over by a truck.

For one participant the abuse involved her mother secretly giving her drugs, which resulted in her initially developing an addiction to benzodiazepines before developing a heroin addiction:

P2: my mother, she was putting Diazepam in my sandwiches (...) crushing it down (...) I was still going to high school at the time. And when she stopped doing it I started feeling funny, eh, my dad knew nothing of this and still doesn't (...) and she told me what she had done, and my mother actually went away out and scored drugs for me (...) and that was the beginning of my drug problem, my mother.

Another common theme was that of parental substance misuse. For some participants this was closely interconnected with other types of abuse and with their own substance misuse:

P2: because she didn't want me getting on with my dad (...) it was like emotional blackmail. I found a bottle of, eh, vodka in the washing machine when I was putting my dirty clothes in and she said, because of course I said 'what's this?', and she said 'put that back or I'll tell your dad what you're doing' and I thought right, I better, because I need her to get what I need or I'll be not well.

Many participants described parents who were rejecting, including being emotionally or physically absent during their childhood, or who had abandoned them:

Interviewer: and you mentioned just before, before you started using Diazepam, it sounded like you were in a difficult place there.
P1: see I had no family and all that round about me. I was 16. I had come straight out of care and moved in with a boyfriend (...) from I was 14 right up till I was 16, I've had to look after myself you know.

Interviewer: if you think back to when you first starting using drugs (...) describe the relationship you had with the people who were closest to you at that time.
P7: my father (...), well, I only really seen him when it was my birthday or Christmases because he was a, in the pub (...) he used to smoke cannabis, and he hung about with my best friend's dad who also smoked the cannabis, and, like, we thought, like, it would be good to try it to see what it would be like.

Interviewer: how old were you at the time?
about 12 when I first had my first joint.

Some described how parental rejection was related to their substance misuse, which seemed to lead to feelings of shame; that is, damage to self-worth due to being judged by disapproving others (Tangney, Stuewig, & Hafez, 2011):

he [father] was absolutely disgusted with me when he found out that I was on heroin. He actually shouted out of a window of a car ‘you junkie bastard’ when he was driving past, and I was devastated I really was, I was heartbroken that he’d done that to me.

Experiences of abusive and rejecting parenting resulted in many participants growing up emotionally deprived, feeling unloved and unwanted:

my mum loved my brother, but she didn’t love me (...) Interviewer: you mentioned that you didn’t feel that she [mother] loved you. P2: no, no. My gran yes, her no.

they [parents] never told me that they loved me. I was always wanting to hear that. They’ve still not told me that.

‘I had to detach myself from them as soon as I went onto heroin’: family disconnection.

Family disconnection emerged as a key theme in relation to substance misuse and offending. Initially most participants funded their drug habit by borrowing money from family while deceiving them about the purpose. This behaviour and their addiction eventually led to participants disconnecting themselves from or being disconnected by their families, including from positive family relationships with, for example, grandparents or siblings. Shame appeared to be central to this disconnection; being shamed and rejected by family or detaching oneself from them to avoid painful feelings of shame. This disconnection meant a loss of emotional and practical support and a
source of drug funding, leading to offending to fund their addiction, further substance
misuse to cope and, hence, more shame:

P3: she’d [grandmother] stick by me, I could go out and murder someone
tomorrow, my gran would stick by me for that but drugs is different, so I had to
detach myself from them as soon as I went onto heroin. I started going and
borrowing money from my gran constantly and it was getting out of hand so I
just cut myself off completely from them.

P6: they’ve [sisters] always stuck by me aye but (…) when I started taking
heroin, cause they hated the idea of that eh, I mean, I was the only person in my
family really to go and do something like that (…) but me and my sisters, we
slipped away a wee bit (…) my older sister aye, she was really disappointed in
me, the whole family was, aunties and all that.

The below narrative illustrates how shame and stigma associated with having a drug
addiction could stand in the way of asking families for support thus creating
disconnection:

P1: I got a really good relationship with my mum eh, but I don’t like asking her
for help. You know, because I think she’s got, because I’m the oldest like, my
family should really look, like brothers and siblings and all, like, they should
really be looking up to me you know, whereas they’d be looking up to a drug
addict.

However, shame-based disconnection was also directly related to offending:

P7: my dad was, says to me, like, ‘don’t worry, I’ll, we’ll go to court and that
with you’ but he never went and…
Interviewer: so he didn’t go and support you?
P7: no, nobody did.
Interviewer: was there no one there for you?
P7: no. And when it came in the paper and that my dad totally disowned me, and,
my family disowned me except for my mum.

Even if participants were not disconnected from their family, lack of emotional and/or
practical family support was common:

Interviewer: [when caught offending] was there anyone there to support you?
P4: no. I would stay with my mum but I don’t have a great relationship with her.
Eh, no. I was just going about doing my own thing, getting the drugs every day,
stealing to fund my habit and got to a stage where you don’t bother if you get caught or not. Either way you are gonna get help.

This narrative also highlights how offending could be an escape from a chaotic lifestyle; ‘getting caught’ in order to get help.

‘It was like we weren’t any good for each other’: dysfunctional intimate partner relationships.

Being disconnected from family and having no or limited family support meant that participants often only had an intimate partner for support. Such relationships were commonly dysfunctional involving abuse, shared addiction and offending. They often contributed to further family disconnect, low self-worth and shame.

Although most participants did not implicate intimate partners in onset of their substance misuse, several described being introduced to harder drugs like heroin or developing an addiction with or through partners who were themselves misusing drugs:

P7: I met [ex-husband] and he was into his heroin but I wasn’t at the time. 
Interviewer: was that, did you get into it through him then?
P7: no not through him, I’d touched, I’d touched it before but, I just, I wasn’t even thinking about it, and then he came along and it’s like ‘have you tried heroin?’ I says ‘I’ve tried it’, he says ‘do you fancy getting a bit?’ and I was like, when I meet somebody I get all nervous so, like, I says ‘aye’, my stupid self, and he was actually feeding my habit.

Intimate partners were thus commonly implicated in ongoing substance misuse. A common theme was that of shared addiction; being in a relationship with each other and with the drugs, supporting and encouraging each others’ habit, blocking recovery and desistance:

P5: I had started injecting, [partner] didn’t really like injecting so when he was at home I was sneaking around behind his back but, he was really against injecting but eventually I talked him in to doing it as well and, it was like we weren’t any
good for each other because, like, if he was having an off day then I would get it and if I was having an off day then he would get it. We would kind of lean on each other that way.

Again, some participants described ‘escaping’ to prison from the ‘bleakness’ of shared addiction in which they felt out of control:

P3: my whole life was taken up by drugs, my life, my partner’s life. I couldn’t get my partner to get it together. We just, he didn’t realise that we had the problem that we had, he didn’t see it being as bad as it was at the time, and I just couldn’t keep in control of my life at all, and I thought that at least in prison I’d have a bit of control in my life.

For many participants, their intimate relationships involved offending together to fund their shared addiction:

P6: just basically, me and my partner, struggling for money and started selling heroin and, just an easy way for money because the two of us were obviously still taking heroin ourselves at the time.

A number of participants described being the driving force in this criminal partnership with their partners taking a more passive role, although sometimes male partners took the legal consequences:

P2: well, to tell you the truth, I was the business person, I was the person that made the money. He just sat back (...) in the background. But if the door was to go in and anything was to be found, the rules are, as you know, the man takes the blame, and if anything like that happened he took the blame, every time.

Other participants were both committing the offences and receiving the convictions:

P5: that was how I funded my habit the first time around, shoplifting, and I just started doing that (...) and because I’d know what I was doing and I’d done it before, [partner] would stay at home and watch the kids and I’d go out, and that’s why I’ve got so many previous [convictions] and he’s not.

Most participants described abusive, sometimes mutually violent, intimate relationships, which in some cases resulted in them committing violent offences against their partners:
P2: for the first start of the [relationship], for the first 12 years he used to beat me up, burn me with cigarettes, very jealous (...) and the second half of our relationship I used to beat him up (...) I stabbed him twice.

P3: he turned violent after we started the methadone. I started getting back to my old self, looking well and that, and he just got, oh it was torture after that, he just started getting really abusive and the relationship turned violent and I ended up getting charged with attempted murder and all, I stabbed him.

This latter narrative highlights how some participants’ partners appeared to feel threatened by her growing drug stability, thus sabotaging her recovery and desistance. This seemed related to insecure attachment; the fear of losing a partner triggered dysfunctional attachment behaviour (e.g., aggression) to keep them close.

'It was after a loss of a prescription and having a habit with heroin again':

losing a child.

Most participant were mothers but only two were the primary carer of their children, with most children being in foster or kinship care. Loss of a child was therefore a common theme. Participants described losing the care of their children due to their chaotic lifestyles. This commonly escalated their substance misuse as a way of coping with the pain and shame, leading to further offending to fund their addiction and, often, greater family disconnect:

P5: because I got caught shoplifting and I had to eventually get my dad to look after the kids, and then the last time that I was in the cells, I got out and my dad said ‘I’m not giving you the kids back until you get your house sorted’ (...) social work intervened and said on a voluntary basis we’re going to say that your dad keeps the kids until you get yourself together (...) it was really really bad at first, but then it kind of gave me an excuse just to do what I wanted and take more drugs.

Some participants described losing concern for the consequences of their offending after losing a child. Again, some saw offending as a possible detour to drug treatment:
P4: my wee, my youngest boy, eh, got taken into foster care, and it was after a loss of a prescription and having a habit with heroin again, eh, so I was out shoplifting, not caring if I did get the jail or coming clean and get a methadone programme again.

Hence, for some participants losing a child also served as a catalyst for positive change, motivating recovery to continue contact with or regain custody of their child.

Relational pathways to substance misuse and offending: the role of trauma, insecure attachment and shame

Participants described how their dysfunctional and disconnected family relationships and dysfunctional intimate partner relationships were complexly interconnected with their substance misuse and offending, driven by various psychological processes particularly insecure attachment and shame. The finding that most participants self-reported insecure attachment styles within romantic relationships, as measured by the RSQ (Griffin & Bartholomew, 1994), supported the emergent themes. Figure 1 provides a proposed model of the hypothesised relational pathways to substance misuse and offending and the underlying psychological processes involved. Solid arrows represent associations where correlational data already exists. Dashed arrows represent hypothesised associations.
In this model substance misuse commonly began within the context of abusive and rejecting parenting and parental substance misuse, with resultant unmet core psychological needs (e.g., for feeling safe, loved, and connected to others) and insecure attachment. Substance misuse may have developed as an attempt to regulate affect, particularly to numb painful emotions, and self-soothe. Some participants were also exposed to substance use as a way to cope with stress and regulate affect through
parental modelling. Participants’ early dysfunctional parenting experiences seemed to generate feelings of shame, but shame could both precede and be a consequence of substance misuse. Shame appeared to become the context for ongoing negative relationship dynamics, substance misuse, and offending in interconnected and bidirectional ways. The attempt to escape the painful feelings of shame through drug use exacerbated them in the process. Participants commonly used their families to fund their growing drug habit through misrepresentation, which led to further shame and consequent family disconnection as participants detached themselves from their families or were rejected, triggering further substance misuse.

The loss of family financial support meant participants began offending to fund their drug habit, creating further shame and family disconnection. Relationships with intimate partners were commonly dysfunctional involving abuse, shared addiction and offending. This indicated that they may be driven by underlying insecure attachment and unresolved trauma. Participants’ intimate relationships appeared dynamically interconnected with ongoing substance misuse, offending, feelings of low self-worth and shame, and further family disconnection as participants’ lives spiralled out of control. The loss of children as a consequence of a chaotic lifestyle appeared to exacerbate feelings of shame, leading to further substance use to cope, offending to fund their drug habit, and further family disconnection. Hence, a vicious, dynamic and interconnected cycle developed between ongoing negative relationship experiences, substance misuse and offending, driven by insecure attachment and shame.

The model is supported by the literature highlighting the link between trauma, attachment and addiction (e.g., Potter-Efron, 2006). Traumatic experiences, particularly
multiple forms of relational trauma (e.g., directly experiencing, witnessing or being threatened with sexual or physical assault), are highly prevalent (90% or higher) among substance misuse treatment populations generally (Ford & Smith, 2008; Mills, Lynskey, Teeson, Ross, & Darke, 2005; Reynolds et al., 2005) and women with substance misuse problems specifically (Gutierres & Van Puymbroeck, 2006; Kendler et al., 2000; Simpson & Miller, 2002). Dysfunctional parenting experiences in childhood have been related to early onset of substance use in both men and women in treatment for substance misuse, but women had significantly higher maternal abuse scores than men (Icick, 2013). Neglectful and negative parenting experiences in childhood (i.e., emotional abuse, parental alcohol abuse and conflict, and feeling unwanted and unloved) have also been associated with greater adult psychological distress, parenting problems, and lower perceived family support in women recovering from substance misuse (Harmer & Sanderson, 1999).

Relational trauma experiences (e.g., physical, sexual, emotional abuse; neglect; witnessing domestic violence) that are chronic, repeated and often multiple in form are conceptualised as complex trauma or complex posttraumatic stress (Courtois & Ford, 2013; Herman, 1992). Early complex trauma impacts on the structural and functional development of the brain (e.g., Ford, 2009; Padykula & Conklin, 2010; Schore, 2002, 2009; Siegel, 1999), particularly on the right hemisphere implicated in the stress response and affect regulatory system (Schore, 2002, 2009). Opiate receptor density may also be reduced (Flores, 2004). Consequently the ability to regulate affect becomes impaired and chronic hyperarousal and/or hypoarousal may develop (Schore, 2002, 2009). Substances may be used in an attempt to regulate affect, but dysregulation may
be exacerbated and brain functioning further impacted on by substance misuse (Fowler, 2006; Padykula & Conklin, 2010).

Children exposed to complex trauma, particularly by primary caregivers, may develop an insecure attachment pattern as part of an adaptive survival strategy (Courtois & Ford, 2013; Howe, 2011). This may develop into an adult insecure attachment style that is ambivalent, dismissive, fearful, or disorganised/unresolved. Individuals with insecure attachment styles relating to unresolved trauma may engage in dysfunctional relationships involving difficulties with trust and intimacy, fear of abandonment and rejection, and victimization from and/or of others (Courtois & Ford, 2013; Herman, 1992; Howe, 2011). Interpersonal difficulties are one of the core domains of complex trauma, the others being affect dysregulation and loss of self-integrity including the use of dissociation as a self-regulatory strategy (Courtois & Ford, 2013; Schore, 2009). Dissociation involves pain reduction through an increase in endogenous opioids (Schore, 2009). Heroin use may thus function as a dissociative regulatory strategy for reducing emotional pain (Padykula & Conklin, 2010).

Shame is a common consequence of both complex trauma and poor attachment experiences (Courtois & Ford, 2013; Herman, 1992). It is defined as a painful social emotion related to the disapproval of the self by others, leading to negative evaluations of and feelings about the self as flawed, worthless and undesirable (Tangney & Dearing, 2002). Shame may be defended against through submissive or avoidant behaviours such as hiding to escape the pain of shame (Tangney et al., 2011). Dissociation may be one psychological strategy used to escape pain. Interpersonal withdrawal may also function as an insecure attachment strategy to avoid rejection and abandonment (Howe, 2011).
Related to this, longitudinal research suggests that shame proneness in adolescence is related to harsh and particularly rejecting parenting (Stuewig & McCloskey, 2005). Experiences of emotionally abusive and rejecting parenting may therefore be particularly shame inducing and damaging to self-worth. However, bodily shame has also been positively associated with physical and sexual childhood abuse in adult women offenders (Milligan & Andrews, 2005).

Addiction and offending has been related to shame across gender (Dearing, Stuewig, & Tangney, 2005; Jackson, Blackburn, Tobolowsky, & Baer, 2011; Tangney et al., 2011). Shame proneness has been indirectly related to recidivism through substance misuse (Tangney et al., 2011), but longitudinal research also suggests that shame proneness directly increases risk for recidivism whereas guilt proneness decreases it, at least in males (Hosser, Windzio, & Greve, 2008). In relation to substance misuse, Dearing et al. (2005) suggested that shame may produce a ‘self-defeating cycle of negative affect’ (p. 1393) whereby an individual uses substances in an effort to regulate painful feelings of shame. This supports the mechanisms proposed in the current model.

**Discussion**

The findings suggest that close interpersonal relationships are central to substance misuse and offending in women, but that these variables are complexly interconnected and driven by underlying psychological processes including unresolved trauma, insecure attachment, and shame. Participants described how their substance misuse commonly originated in early traumatic experiences and dysfunctional parenting including abuse particularly emotional abuse, rejection, lack of affection, and parental substance misuse. These experiences appeared to have led to unmet core psychological
needs, insecure attachment, affect dysregulation, and shame (e.g., Courtois & Ford, 2013; Schore & Schore, 2008). Substance use may have begun as an attempt to regulate affect (hyper- and/or hypoarousal), self-soothe and escape emotional pain, for example as a dissociative strategy (Padykula & Conklin, 2010). Offending commonly began as a way to fund a drug habit after loss of financial family support due to family disconnection, driven by shame. Ongoing substance misuse and offending was dynamically interconnected with family disconnection, dysfunctional intimate relationships, and loss of children, within the context of unresolved trauma, insecure attachment, and shame.

The relational pathways to substance misuse and offending that emerged in this study are similar to those found by Leverentz (2006), but the current study further illuminates the complex underlying psychological processes that may be involved. Similar to previous research with substance misuse populations, traumatic experiences (e.g., Gutierres & Van Puymbroeck, 2006; Mills et al., 2005) and insecure attachment (e.g., Perrier et al., 2010; Schindler et al., 2009; Thorberg & Lyvers, 2006) were highly prevalent among current participants. This resonates with the notion that addiction may be driven by efforts to modulate affect dysregulation resulting from early trauma and insecure attachment (Flores, 2004; Padykula & Conklin, 2010). Avoidant, anxious, and disorganised/unresolved insecure attachment styles appeared central to participants’ dysfunctional intimate relationships (Courtois & Ford, 2013; Howe, 2011). These relationships were commonly abusive and revolved around shared substance misuse and offending, and seemed to exacerbate feelings of shame. Dysfunctional parenting experiences were also commonly transmitted to participants’ relationships with their
own children who suffered the consequences of participants' chaotic lifestyles, with many ending up in care. Interestingly, however, for some participants loss of a child became a catalyst for positive change. Pathways to desistance and recovery were not explored in this study but it would be interesting for future studies to explore the role motherhood may play in this process.

Shame appeared central to ongoing negative relationship experiences, drug addiction and offending. The significance of shame to relational pathways to substance misuse and offending in women does not appear to have been fully considered despite shame being related to addiction and offending (Dearing et al., 2005; Hosser et al., 2008; Jackson et al., 2011; Tangney et al., 2011). Participants’ disconnection from family can be understood as a defensive strategy to avoid the pain of shame, but also as part of an avoidant insecure attachment style. Shame and insecure attachment thus appeared closely linked, driving a complex and bidirectional cycle of relationship disconnection and dysfunction, substance misuse to regulate affect, and offending to fund drug addiction.

Thus, based on the current findings relationship factors appear to impact on women’s offending and risk of recidivism in complex ways; some are dynamic but others are not. Experiences of childhood abuse and dysfunctional parenting are static (non-changeable) risk factors. Furthermore, not all traumatised children grow up to develop problems with addiction and criminality. However, childhood trauma may impact indirectly on reoffending through potential complex trauma consequences including substance misuse, insecure attachment, and shame (Courtois & Ford, 2013). For women who struggle with substance misuse and who primarily offend to fund a drug
habit, pathways to offending may involve disconnected and unsupportive family relationships; dysfunctional intimate relationships involving abuse, shared addiction and offending; and the loss of children as a consequence of a chaotic lifestyle. If unresolved trauma, insecure attachment, and shame are significant to this process, they should be key treatment targets to adequately address dynamic risk for recidivism. However, intervention must be informed by case formulation and target individual needs and risks as well as being gender-informed (Jackson et al., 2011; Logan & Johnstone, 2013).

Some limitations should be noted. Although procedures for ensuring rigour in qualitative research were employed, data analysis and interpretation was unavoidably filtered through the researchers. Participants may differ from women who declined or were unable to take part, non-treatment populations, and women in other forensic settings (e.g., inpatient or prison). Broad generalisations from the results to all criminal justice involved women with substance misuse problems cannot be made. The proposed model naturally needs empirical validation. Robust and large-scale quantitative studies that explore the hypothesised associations and complex interconnections between early trauma/dysfunctional parenting, insecure attachment, shame, substance misuse, offending, family disconnection, dysfunctional intimate relationships, and loss of children are needed. This study focused on women only and can therefore only comment on women. However, it would be interesting if future studies explored the model across gender. More qualitative and mixed-method research is also needed to extent and build on the proposed model. It would be useful to explore these issues with women in different forensic settings and at varying levels of risk (e.g., violent and non-violent offenders). Considering that shame has been found to directly predict recidivism in
males (Hosser et al., 2008), its potential role to recidivism in women warrants more research attention.
References


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Siegel, D. J. (1999). *The developing mind: how relationships and the brain interact to shape who we are.* New York: Guilford.


THESIS REFERENCES


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Addiction Research, 13, 101-108.

de Vogel, V. & de Vries Robbé, M. (2013). Working with women: towards a more
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Managing clinical risk: a guide to effective practice (pp. 224-241). Abingdon,
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analytic review. Crime & Delinquency, 45, 438-452.

Fazel, S. & Danesh, J. (2002). Serious mental disorder in 23,000 prisoners: a systematic

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Siegel, D. J. (1999). *The developing mind: how relationships and the brain interact to shape who we are*. New York: Guilford.


Appendix 1

Manuscript guidelines for journal Criminal Justice and Behavior

Criminal Justice and Behavior seeks contributions examining psychological and behavioral aspects of the juvenile and criminal justice systems. The concepts “criminal justice” and “behavior” should be interpreted broadly to include analyses of the etiology of delinquent or criminal behavior, the process of law violation, of victimology, offender classification and treatment, deterrence, and incapacitation. The journal will include analyses of both clientele and employees in the justice systems, and it will include analyses of the effects of differing sanctions or programs. The journal emphasizes reports of original empirical research, theoretical contributions, development and testing of innovative programs and practices, and critical reviews of literature or theory on central topics of criminal justice and behavior. Articles dealing with behavioral aspects of juvenile or criminal justice are welcomed from throughout the world.

Submissions must be sent electronically to https://mc.manuscriptcentral.com/cjb.

Manuscripts should be typed and double spaced, with tables, charts, and references on separate pages. The ideal length for manuscripts submitted to CJB is 25 to 35 pages. The format described in the Publication Manual of the American Psychological Association (5th or 6th edition) must be followed.
### Appendix 2.

**Quality Rating Criteria**

#### 1. STUDY DESIGN

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<tr>
<td>1.1</td>
<td>Is the study addressing a clear and focused question and are the aims and/or hypotheses clearly stated?</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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<tr>
<td>1.2</td>
<td>Is the design appropriate for addressing the study question? (prospective = 2, retrospective = 1).</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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#### 2. SAMPLE SELECTION

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<td>2.1</td>
<td>Is the population being studied clearly described and is the sample representative of the population? (e.g. what is the selection criteria?)</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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<td>2.2</td>
<td>How was the sample selected?</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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<td>2.3</td>
<td>Is the sample size justified? (e.g. if a mixed gender sample, is the female sample large enough to adequately address gender-specific questions?)</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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<td>2.4</td>
<td>What was the response rate? (%)</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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<tr>
<td>2.5</td>
<td>Are the participants adequately described (e.g. relevant demographics).</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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#### 3. MEASUREMENT

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<td>3.1</td>
<td>Are the measures used reliable and valid for use with the study population (e.g. are they valid for use with women?).</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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<td>3.2</td>
<td>Is the measure of recidivism robust? (reconviction preferable).</td>
<td>0 = Poor</td>
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<td>3.3</td>
<td>Was the follow-up period adequate? (2 years or longer preferable).</td>
<td>0 = Poor</td>
<td>1 = Fair</td>
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<td>3.4</td>
<td>What was the drop-out rate? (%)</td>
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<td>2 = Good</td>
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<td>3.5</td>
<td>Are the relationship measures appropriate for answering the study question?</td>
<td>0 = Poor</td>
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<td>3.6</td>
<td>Are main potential confounding variables taken into account? (e.g. gender-neutral and other possible gender-specific criminogenic needs)</td>
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<td>4.</td>
<td>DATA</td>
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<td>4.1</td>
<td>Is the use of statistical analyses appropriate? (e.g. are confounding variables controlled for?)</td>
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<td>4.2</td>
<td>Is the study large enough? (e.g. sample size justification and statistical power)</td>
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<td>4.3</td>
<td>Are the data adequately described? (incl. tables and summary statistics describing the sample and adequate information on the results of analyses).</td>
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<td>5.</td>
<td>INTERPRETATION</td>
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<td>5.1</td>
<td>Is there evidence of any other bias? (e.g. funding bias)</td>
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<td>5.2</td>
<td>Are important factors overlooked? (e.g. other factors that may have influenced recidivism over time)</td>
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<td>Can the results be generalised?</td>
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<td>1 = adequately addressed</td>
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<td>2 = well addressed</td>
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Appendix 3.

Manuscript guidelines for the *Journal of Forensic Psychiatry & Psychology*

The submission should include for each author, name, degrees or other qualifications, position or affiliation, the department where the work was done and an address for correspondence with post code.

Manuscripts should be compiled in the following order: title page; abstract; keywords; main text; acknowledgments; appendixes (as appropriate); references; table(s) with caption(s) (on individual pages); figure caption(s) (as a list).

All the authors of a paper should include their full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page of the manuscript. One author should be identified as the corresponding author. The affiliations of all named co-authors should be the affiliation where the research was conducted. If any of the named co-authors moves affiliation during the peer review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after the article is accepted. Please note that the email address of the corresponding author will normally be displayed in the article PDF (depending on the journal style) and the online article.

For all manuscripts non-discriminatory language is mandatory. Sexist or racist terms should not be used.

The manuscript

Submissions should be in English, double spaced with wide margins. Pages must be numbered.

Articles should normally be no more than 5,000 words in length (excluding references) and be preceded by an abstract of no more than 150 words.
Review papers (e.g., systematic reviews, meta-analyses, law reviews) and some empirical studies may require greater length and the Editors are happy to receive longer papers. We encourage brevity in reporting research.

Brief reports should be no more than 2,000 words in length, including references. Normally, there should be a maximum of one table.

The abstract should be followed by three to six keywords.

Any notes or footnotes, tables and figures should not be inserted in main text of the manuscript but should be on separate pages. Tables and figures should be numbered consecutively in Arabic numerals with a descriptive caption. The desired position in the text for each table and figure should be indicated in the margin of the manuscript. A word count should be provided.

**Style guidelines**

Description of the Journal's article style

American Psychological Association (APA) referencing style should be used

APA references style guide

Any consistent spelling style is acceptable. Use single quotation marks with double within if needed.

Three levels of heading are suggested:

**First level**

**Second level**

**Third level.**

For direct quotations of 40 words or more, which will be printed as prose extracts, page numbers are required. Always use the minimum number of figures in page numbers, dates etc., e.g. pp. 24-4, 105-6 (but using 112-13 for 'teen numbers) and 1968-9.
Appendix 4.

Semi-structured interview schedule

- Can you start by telling me about how you came to be in this treatment programme/on this treatment order? (Prompts: what was happening in your life before you started the programme? Who was in your life? Describe that relationship).

- Tell me about when you first started using drugs – describe your relationship with people (family/partner/friends) closest to you at that time. (Prompts: what did that relationship mean to you? How was it different from your other relationships? How do you think that relationship might have influenced (positive/negative) your drug use?).

- Tell me about when you were last in trouble with the police – describe your relationship with people closest to you at that time. (Prompts: what did that relationship mean to you? How was it different from your other relationships? How do you think that relationship might have influenced (positive/negative) your offending?).

- Tell me about the people closest to you now (partner/family/children) – describe your relationship with them. (Prompts: what does that relationship mean to you? How is it different from your other relationships?).

- What advice would you give to someone who has recently come into a similar situation (drug treatment) to you?
Appendix 5.

Relationship Styles Questionnaire (RSQ)

(Removed for copyright reasons)
Dear Dr Kreis

The Research Ethics Committee reviewed the above application at the meeting held on 05 June 2012. Thank you for attending to discuss the study.

Ethical opinion

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

You clarified the following points. There is no requirement to respond unless there are any inaccuracies:

1. The Committee were concerned that Dr Kriess would be interviewing participants alone – Dr Kriess confirmed that she would conduct the interviews in a clinical environment and assured the committee that there would be adequate staff around who knew her in case any problems arose.

The following points require to be addressed by letter and submission of revised documentation where requested. Please note that there is no requirement to amend your application form.

1. Regarding the Participant Information Sheets:
   - There should be an introductory paragraph as below:
     "My name is Dr Mette Kreis and I am studying for my PhD at the University of Edinburgh. I am required to undertake a project as part of my course and invite you to take part in the following study. However, before you decide to do so, I need to be sure that you understand firstly why I am doing it, and secondly what it would involve if you agreed. I am therefore providing you with the following information. Please read it carefully and be sure to ask any questions you might have and, if you want, discuss it with others including your friends and family. I will do my best to explain the project to you and provide you with any further information you may ask for now or later."

   - Under 'What is the purpose of the study?' – 'More information about this will help researchers.' should read 'More information about this may help researchers.'
Please adapt and insert the appropriate paragraph below under 'Who has reviewed the study?'

'The East of Scotland Research Ethics Committee REC 2, which has responsibility for scrutinising all proposals for medical research on humans in Tayside, has examined the proposal and has raised no objections from the point of view of medical ethics. It is a requirement that your records in this research, together with any relevant records, be made available for scrutiny by monitors from the University of Edinburgh and NHS Forth Valley, whose role is to check that research is properly conducted and the interests of those taking part are adequately protected.'

2. Regarding the Questionnaire:

- Please amend Q4 'I want to merge completely with another person' and Q15 'comfortable having other people depend on' as it does not make sense.

Ethical review of research sites

NHS Sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations

It is responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Confirmation should also be provided to host organisations together with relevant documentation.
Approved documents

The documents reviewed and approved at the meeting were:

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<thead>
<tr>
<th>Document</th>
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<tr>
<td>Covering Letter</td>
<td></td>
<td>11 May 2012</td>
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<tr>
<td>Evidence of insurance or indemnity</td>
<td></td>
<td>01 August 2011</td>
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<tr>
<td>Interview Schedules/Topic Guides</td>
<td>1</td>
<td>10 May 2012</td>
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<td>Investigator CV</td>
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<td>12 April 2012</td>
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<tr>
<td>Letter from Sponsor</td>
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<td>19 March 2012</td>
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<tr>
<td>Other: Dr Matthias Schwannauer</td>
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<td>02 April 2012</td>
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<tr>
<td>Participant Consent Form</td>
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<td>10 May 2012</td>
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<tr>
<td>Participant Information Sheet</td>
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<td>10 May 2012</td>
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<tr>
<td>Participant Information Sheet: Staff</td>
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<td>10 May 2012</td>
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<tr>
<td>Protocol</td>
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<td>04 January 2012</td>
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<tr>
<td>Questionnaire</td>
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<td>REC application</td>
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<td>11 May 2012</td>
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Membership of the Committee

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document ‘After ethical review – guidance for researchers’ gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review.
Yours sincerely

Dr Fergus Daly
Chair

Email: lorraine.reilly@nhs.net

Enclosures:
- List of names and professions of members who were present at the meeting and those who submitted written comments.
- "After ethical review – guidance for researchers"

Copy to:
Dr Matthias Schwannauer, University of Edinburgh
NHS Forth Valley R&D office
Dear Dr. Kreis,

Full title of study: Exploring the role of social relationships to risk of recidivism in substance misusing women offenders.

REC reference number: 12/ES/0051

Thank you for your letter of 10 July 2012. I can confirm the REC has received the documents listed below as evidence of compliance with the approval conditions detailed in our letter dated 05 June 2012. Please note these documents are for information only and have not been reviewed by the committee.

Documents received

The documents received were as follows:

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<th>Document</th>
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<tr>
<td>Participant Information Sheet</td>
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<td>10 July 2012</td>
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<tr>
<td>Questionnaire: Relationship Styles</td>
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<tr>
<td>Response to Request for Further Information</td>
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You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor’s responsibility to ensure that the documentation is made available to R&D offices at all participating sites.
12/E5/0051

Please quote this number on all correspondence.

Yours sincerely,

Mrs Diane Leonard
Assistant Co-ordinator

E-mail: diane.leonard@nhs.net

Copy to: Dr Raymond French University of Edinburgh
NHS Forth Valley R&D Office
INVITATION TO TAKE PART IN RESEARCH STUDY

- The study is about how a woman's partner, family or friends might influence whether or not she misuses alcohol or drugs and commits crime.

- The study is done by Mette Kreis. She is a psychology postgraduate student at University of Edinburgh and a Trainee Clinical Psychologist in NHS Forth Valley substance misuse services.

- If you take part in the study, you will meet with Mette for a one hour interview and complete a short questionnaire. The interview will take place either before or after your normal keyworking session, in the place where you meet your keyworker.

- Taking part is completely voluntary, anonymous and confidential.

- Taking part or not will not affect your substance misuse treatment (positively or negatively) or your access to psychological therapy.

- There are no direct benefits to you in taking part, but hopefully you will find it interesting.

- Read more about the study on the following pages or ask your keyworker to tell you more about it.

Interested in taking part?
Tell your keyworker who will contact Mette to let her know. She will then contact you to arrange a time for an interview.

PARTICIPANT INFORMATION SHEET
My name is Mette Kreis and I am studying for my Doctorate in Clinical Psychology at the University of Edinburgh. I am required to undertake a project as part of my course and invite you to take part in the following study. However, before you decide to do so, I need to be sure that you understand firstly why I am doing it, and secondly what it would involved if you agreed. I am therefore providing you with the following information. Please read it carefully and be sure to ask any questions you might have and, if you want, discuss it with others including your friends and family. I will do my best to explain the project to you and provide you with any further information you may ask for now or later.

What is the purpose of this study?
The purpose of the study is to find out more about how a woman's partner, family or friends might influence whether or not she misuses alcohol or drugs and commits crime. More information about this may help researchers better understand what puts women with substance misuse problems at risk of committing crimes.

Who is doing this study?
The study is done by Mette Kreis. She is a psychology postgraduate student at University of Edinburgh and a Trainee Clinical Psychologist in NHS Forth Valley substance misuse services. The study is part of Mette's psychology degree work.

Why have I been asked to take part?
All women in treatment for substance misuse in NHS Forth Valley who have been involved with the criminal justice system because they committed crimes are invited to take part in this study.

Do I have to take part?
Taking part in the study is completely voluntary. It is up to you to decide whether or not to take part. If you decide to take part, you will be asked to sign a consent form. That is a form which explains what the study involves and what your rights are. Even if you decide to take part, you are still free to leave the study at any time and without giving a reason, also after you have completed the study. Taking part in the study or not, or leaving the study, will not in any way influence your substance misuse treatment (positively or negatively) or your access to psychological therapy.

What does taking part involve?
If you take part in the study, you will be interviewed by the researcher (Mette Kreis) for about one hour. The interview will be audio recorded. It will take place either before or after one of your keyworking sessions, in the same location where you see your keyworker.

In the interview you will be asked to describe your relationship with people close to you, such as your partner, family or friends. You will be asked to talk about how these relationships might influence your alcohol/drug use and criminal behaviour. You will also be asked to complete a short questionnaire on your feelings about romantic relationships. This will be completed during the interview with the help of the researcher. Before the interview starts, the researcher will also ask you for some basic background information (e.g. your age, if you are married or not, and how many times you have been in contact with the criminal justice system).
If you become upset during the interview, you can ask for the interview to be stopped. You can also ask to
talk to the researcher again at a later date if you would like to discuss anything you talked about during the
interview.

What are the possible benefits of taking part?

There will be no direct benefits to you by taking part in the study, but hopefully you will find it interesting.
The findings of the study will help researchers better understand what puts women with substance misuse
problems at risk of committing crimes. This will help local and wider services better understand the needs of
such women.

Confidentiality

All of the information you give the researcher will be anonymous and confidential, within standard clinical
guidelines. That means that the information will not be reported back to your keyworker or doctor. However,
if you tell the researcher about an unreported crime or a crime about to be committed, or tell her
information that makes her think you or someone else might be at risk of harm, she will have to pass that
information on to the appropriate authorities (your keyworker). But you will not be asked to give such
information and you should only do so if you wish to.

The information you give in the study will be stored in a secure and anonymous way according to the 'Data
Protection Act'. That means that if you take part in the study, you will be given a unique research number.
Only this number will be shown in the information stored about you. The recorded interview will be kept in a
locked filing cabinet. After the interview has been transcribed (written up) by the researcher, the recording
will be deleted. All information you provide will be kept in locked filing cabinets and on password protected
computers/secure servers. Only the researcher and members of the research team will have access to the
information.

What will happen to the results of the study?

The results will be available within a year after the study is finished. Reports of the study will be based on
interviews with all the women who took part. The reports will describe the experiences of the group of
women as a whole and will not identify any women. The results will be presented to local substance misuse
services and to researchers internationally. If you would like to, you will receive a copy of the
research findings.

Who is organising and funding the research?

The study is organised by the Doctoral Clinical Psychology Programme at University of Edinburgh. It is
supervised by Dr Matthias Schwannauer, Programme Director and Consultant Clinical Psychologist, and
Dr Kirsty Gillings, Clinical Psychologist. The research is funded by NHS Education for Scotland. If you have
any complaints about the research or how it was conducted, please contact Dr Matthias Schwannauer on
telephone number 0131 651 3972.

Who has reviewed the study?

The East of Scotland Research Ethics Committee REC 2, which has responsibility for scrutinising all
proposals for medical research on humans in Tayside, has examined the proposal and has raised no
objections from the point of view of medical ethics. It is a requirement that your records in this research,
together with any relevant records, be made available for scrutiny by monitors from the University of
Edinburgh and NHS Forth Valley, whose role is to check that research is properly conducted and the
interests of those taking part are adequately protected. The study has also been fully approved by NHS Forth Valley Research and Development Office. The study will follow standard ethical practice of the British Psychological Society.

Where can I get more information or sign up for the study?

Please tell your keyworker that you are interested in hearing more about the study or in taking part. He/she will contact Mette Kreis who will then contact you.
Appendix 8. Participant consent form

THE UNIVERSITY of EDINBURGH

Project Title: Social relationships and reoffending in women offenders

Name of Researcher: Mette Kreis
Trainee Clinical Psychologist

Thank you for reading the information about our research project. If you would like to take part, please read and sign this form.

Participant's name: ___________________________ Date of Birth ______

Service ___________________________

1. I have read and understand the information sheet dated 10.7.12 (version 2) and have had the opportunity to ask questions. Please initial box

2. I understand that participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected. This means that withdrawing will not affect my substance misuse treatment or my access to psychological therapy. Please initial box

3. If I get upset during the interview, I can ask for the interview to be stopped. I can also ask to talk to the researcher at a later date if I would like to discuss anything I talked about during the interview. Please initial box

4. All the information I provide in the study will be anonymous and confidential. However, if I reveal information about an unreported crime or a crime about to be committed, or about future harm to myself or others, that information will have to be reported to the appropriate authorities. Please initial box

5. I give permission for my Substance Misuse Treatment Doctor to be informed of my participation and given any relevant information. Please initial box

6. I agree to take part in the above study. Please initial box

Name of Participant ___________________________ Signature ___________________________ Date ___________

Name of Person taking consent ___________________________ Signature ___________________________ Date ___________