Female offenders and the use of mixed-gender rehabilitation groups in the community – a rapid evidence assessment

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2007
1. Introduction

At the time of this literature review it was current practice within the National Probation Service (NPS) to allocate female offenders to a mixed-gender offending behaviour programme if no all-female alternative existed. With low levels of all-female programmes within the NPS, and fewer female than male offenders within the criminal justice system, it was often the case that female offenders attended rehabilitation programmes that were mixed-gender, with a high ratio of male to female offenders.

When this review was commissioned, NPS had not examined whether the use of mixed-gender groups had a negative impact on female offenders, nor had NPS conducted its own research on the issue of mixed-gender groups. This literature review had two aims: the first was to examine the research literature for any evidence that female offenders may be affected by the use of mixed-gender groups; the second was to ensure that any research that NPS commissioned on the use of mixed-gender groups was informed by previous research in the area.

2. Method

The type of literature review conducted was a rapid evidence assessment. This is a timely and cost-effective way of conducting a systematic search and evaluation of the literature. Rapid evidence assessments are designed to be transparent and replicable. Information is provided on the sources that are searched and the criteria for including articles in the review. This information enables the reader to make an assessment of the quality and limitations of the review.

Rapid evidence assessments also evaluate research articles that are retrieved in the search. Evaluation criteria include the relevance of any article to the research topic for the review and the quality of the research conducted in the article. This information enables the reader of the review to assess both the quantity and the quality of the research before drawing any conclusions from the material.

One of the requirements of this review was to assess whether a full systematic review of the literature was justified. A systematic review is a more exhaustive literature search than a rapid evidence assessment. It aims to consult all published literature in the area, as well as to search for unpublished documents. This rapid evidence assessment was conducted in such a way as to ensure that the information gathered could be transferred into a full systematic review should this be required.

In keeping with the time-efficient manner of rapid evidence assessments the first search aimed to identify previous systematic reviews on the impact of the gender composition of groups. Any articles that could be retrieved as part of this search could have significantly reduced the time needed to carry out the remainder of this literature review. Databases searched were the British Library Catalogue, Campbell Collaboration, Cochrane Collaboration, CSA Illumina, International Bibliography of the Social Sciences (IBSS), Psychinfo and Swetswise. No reviews were found in any of the databases searched. Details of this search can be found in Appendix 1.

The second search aimed to identify any research on the gender composition of groups that existed within the criminal justice literature. This search used the British Library Catalogue, Canadian Correction Service website, Crossref by Google, CSA Illumina, the Home Office website, IBSS, National Crime Justice Reference Service, Psychinfo and Swetswise. No literature records were found that directly examined the issue of mixed-gender offending behaviour programmes.

Given a lack of systematic reviews on the gender composition of groups, and a lack of any research that directly examined the issue of gender composition of offending behaviour programmes, the third search aimed to retrieve
any articles that could be considered useful for the purposes of this review. Retrieved articles were placed in a hierarchy of primary, secondary, or tertiary articles depending on their relevance to the current review.

Primary articles were articles that had the most relevance to the review. Two types of primary articles were retrieved: articles that compared the impact of single-gender versus mixed-gender groups using either qualitative or quantitative methods; and articles that provided an explanation of the impact of single- versus mixed-gender groups, which were typically reviews or theoretical papers.

Secondary and tertiary articles were also recorded as part of this review. Typically these articles were associated with the topic of group gender composition, but did not provide any comparison between different gender compositions, or any theoretical explanation regarding the impact of mixed-gender groups. Secondary and tertiary articles were recorded in order to eliminate them from future searches and to ensure that a record was kept for any future reviews. This search used the following databases: British Library Catalogue, Campbell Collaboration, Cochrane Collaboration, CSA Illumina, Crossref by Google, IBSS, Medline and Psychinfo.

Additional searching was conducted using each primary article as a source. The reference section of the article was searched for any other relevant research and a ‘cited by’ search was conducted to examine how many times the primary article had been referenced by others since its publication and whether any of these more recent articles could be of relevance to this literature search.

3. Results

This literature review did not identify any previous systematic reviews on the gender composition of groups, or any research that directly investigated the gender composition of offending rehabilitation groups. Consequently the main finding of this review is that there appears to be no published research on the gender composition of offending behaviour programmes. A search for relevant research in the area identified 21 primary articles: nine that compared the impacts of single-gender versus mixed-gender groups; and 11 that sought to explain the impact of group gender composition. The amount of research on the gender composition of groups outside the context of offending behaviour programmes therefore appears to be limited. The remainder of this review will concentrate on the implications of the findings from the 21 primary studies retrieved during this review.

3.1 What did articles that compared the impacts of single-gender versus mixed-gender groups find?

Nine articles that compared the impacts of single-gender versus mixed-gender groups were recorded as part of this review. All of these articles relate to interventions with alcohol or drug users. A summary of all of these articles can be found in Appendix 2.

3.1.1 Single-gender treatment is more effective than mixed-gender treatment

Of the nine primary articles identified, five found that single-gender treatment was more effective than mixed-gender treatment. In a study that examined levels of continuity in care Claus et al. (2007) found that 37% of their sample of 747 women receiving specialised single-gender treatment were still continuing with their treatment at follow-up compared to 14% of their sample of 823 women receiving standard mixed-gender treatment. With treatment retention being associated with improved outcomes (Donovan, 1998) this study demonstrates the potential utility of single-gender treatment.

Greenfield, Trucco, McHugh, Lincoln and Gallop (2007) conducted a randomised control trial (n=36) which also found beneficial follow-up outcomes for women receiving specialised single-gender treatment in comparison to women receiving standard mixed-gender treatment. In this case the single-gender treatment was associated with
improved abstinence from drug use at a six-month follow-up and greater satisfaction levels. However, the authors note that satisfaction levels for both groups were high, and that they were unable to detect any differences in outcomes between the two groups immediately following treatment.

Similarly Niv and Hser (2007) were only able to detect differences between mixed-gender and single-gender outcomes on a limited number of outcome measures. In their longitudinal study, which compared 189 women who undertook women-only treatment for substance use to 871 women in mixed-gender treatment, no differences were found between the two groups in terms of treatment retention, completion, alcohol use, employment, family issues, medical issues, or psychiatric issues. However, women in the women-only group demonstrated better drug and legal outcomes than the women in the mixed-gender group at follow-up.

A final quantitative study which found favourable results for single-gender treatment was conducted in 1989 by Dahlgren and Willander. This study compared treatment outcomes of 75 women receiving specialised female treatment for early alcohol problems with 68 women receiving standard mixed-gender treatment. At the two-year follow-up the women from the female-only treatment demonstrated greater improvement in terms of alcohol consumption and social adjustment than the women in the mixed-gender treatment.

The only qualitative study identified in this review highlights the complexity of female treatment needs using the experiences of 34 women who had received either mixed- or single-gender therapy for addictions. Kauffman, Dore and Nelson-Zlupko (1995) conclude that these needs are much better met in single-gender treatment group than in mixed-gender treatment group.

3.1.2 Single-gender treatment is not more effective than mixed-gender treatment

In total four studies were identified which found that single-gender treatment was no more effective than mixed-gender treatment. In a randomised control trial using a sample of 122 participants Kaskutas, Zhang, French and Witbrody (2005) compared single-gender treatment for alcohol and drug use to mixed-gender treatment. No significant differences were found between the two treatment types for psychiatric, family, or drug problems at any of the follow-up points. Rates of alcohol abstinence were significantly higher for the mixed-gender hospital programme than either the single-gender or mixed-gender community programmes.

Bride (2001) was unable to detect any difference in treatment outcomes when he compared retention and completion rates after a treatment provider changed from the provision of mixed-gender to single-gender treatment (n=407). Similarly, Dodge, Potocky and Tripodi (2001) found no differences in attrition rates when they compared female-sensitive treatment, mixed-gender treatment, and a combination of female-sensitive and mixed-gender treatment over a three-month period (n=89). Finally, Copeland, Hall, Didcott and Biggs (1993) compared treatment outcomes between participants using a specialist women’s service and participants using traditional mixed-gender treatment (n=160). No differences in outcomes were found between the two groups.

3.1.3 What can we conclude from these findings?

Methodological weaknesses with these studies make it difficult to draw any firm conclusions based on the evidence presented. A full list of methodological limitations of all of the studies can be found in Appendix 2. Some of the studies (e.g. Greenfield et al., 2007; Kauffman et al., 1995) have small sample sizes which makes it hard to generalise the findings to other areas. A lack of randomisation and careful matching of participants means that the majority of the studies may have sampling errors. For example, in the study by Niv and Hser (2007) participants from each group differed in problem severity, ethnicity, education and history of physical abuse.

A common weakness across the majority of studies is that they do not provide a ‘true’ test of group gender composition. Six of the studies provided specialised single-gender treatment rather than providing the same
treatment to both a single-gender and a mixed-gender group. Consequently, any differences in outcomes could be a result of either the gender composition or the altered treatment.

Whilst the studies all contribute to our knowledge of the impacts of gender composition of treatment groups, they represent a limited body of research. In line with other literature reviews of this research area (e.g. Sun 2006) this literature review concludes that there is not sufficient evidence to form any firm conclusions regarding the effectiveness of single-gender versus mixed-gender treatment groups.

A trend identified in the literature is that treatment that is tailored to women’s needs is more effective than simply providing women with the same treatment programme in an all-female environment. Out of the six studies that tested the impact of specialised or tailored women-only treatment, four found that this treatment was more effective than mixed-gender treatment. Both of the studies that examined the provision of an identical treatment programme in a mixed-gender and all-female context found that all-female treatment was not more effective than mixed-gender treatment. This finding suggests that the provision of mixed-gender treatment for women is not detrimental to outcomes if the only available alternative is to provide women with the same treatment in an all-female environment. In order to have an impact on outcomes it is likely that specialised treatment that is tailored to the needs of women would be required.

3.2 What explanations are given for the impacts of group gender composition?

In total eleven papers were identified that either reviewed the area of the gender composition of therapy groups or provided a theoretical explanation as to why single-gender programmes may be of benefit to women. The findings from these papers are summarised below. A full list of these articles can be found in Appendix 3.

3.2.1 What conclusions do the articles draw?

All of the authors of literature reviews in this area conclude that the low volume and quality of the literature available makes it impossible to draw any firm conclusions regarding the impact of single-gender versus mixed-gender groups. Greenfield et al. (2007), note that only 11.8% of the studies that they reviewed used a randomised control trial design allocation. Similarly, Sun (2006) concludes that whilst his review supports the use of single-gender treatment by a ratio of 9:3, methodological weaknesses with the studies means that it would not be appropriate to favour single-gender treatment on the basis of his review.

A number of authors comment on the potential utility of tailored treatment for women. For example, Green (2006) suggests that single-gender treatment may be of particular importance to certain subgroups of women who seek single-gender programmes as a treatment of choice. Such women are likely to be victims of child sexual abuse (Copeland, et al., 1993; Jarvis, 1992), have dependent children, to be lesbian, or to have a maternal history of drug or alcohol problems (Copeland et al., 1993).

Some reviewers focus their attention on the nature of mixed-gender and single-gender groups. The findings suggest that communication patterns in mixed groups tend to be male dominated (Walker, 1981), leading women to be quieter (Wright, 1996) and to feel more restricted (Hodgins, El-Guebaly, & Addington, 1997). Mixed groups are associated with gender-stereotyping which increases as the ratio of women in the group decreases; consequently it is thought to be particularly disadvantageous for women when they are the minority or a sole woman in a mixed-gender group (Wright, 1996).

In contrast to this, all-female groups are thought to be beneficial for women as they tend to be more co-operative (Walker, 1981), and are associated with greater levels of engagement, retention and self-disclosure (Hodgins et al., 1997). Whilst authors tend to agree that single-gender groups represent an advantage to women, some
authors suggest that they are disadvantageous to men. All-male groups are thought to be more aggressive, more competitive, and to discourage self-disclosure (Wright, 1996). However, as Hodgins et al. (1997) note, there is little empirical evidence that this affects outcomes.

The final area explored by the reviews is the different treatment needs of women. Kaskutas et al. (2005) note the many differences between male and female clients and suggest that given such differences it is appropriate that they are given different treatment. These differences include personal history, reasons for abuse, patterns of abuse, presentation at the beginning of treatment, treatment needs, change processes, and recovery rates between male and female addicts (Kaskutas et al., 2005).

A similar literature exists for female offenders (e.g. Covington, 2001; Sorbello, Eccleston, Ward, & Jones, 2002) however an examination of the specific treatment needs of female offenders was beyond the scope of this rapid evidence assessment.

The articles above represent a body of literature that contains a number of arguments in favour of single-gender treatment. However, as the reviews of the empirical studies conclude, currently there is not enough empirical evidence to form any firm conclusions about mixed-gender treatment.

3.3 Is a systematic review of the area likely to be beneficial?

A requirement of this rapid evidence assessment was to assess the utility of conducting a full systematic review. This rapid evidence assessment has not been able to gather any grey literature and there has been a lack of time to conduct hand and citation searches on all primary studies.

However, despite the limited time-scale of this review a broad search of all major electronic resources has been conducted. Over a dozen databases have been systematically searched, covering a time span from 1806 to the week beginning 1st October 2007.

The review is strengthened by a number of recent publications in the area which have themselves included literature reviews (e.g. Greenfield et al., 2007 and Sun, 2006). Further evidence of the depth of the review was the amount of saturation during the literature searching process, with the same core primary studies being referenced repeatedly, and a lack of new studies being identified in the later stages of the review. The potential benefits of conducting a systematic review are listed below.

<table>
<thead>
<tr>
<th>Research area</th>
<th>Potential benefit of a systematic review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching for a previous review in the area</td>
<td>Any published reviews in the area of mixed-gender group programmes should have been identified by this rapid evidence assessment.</td>
</tr>
<tr>
<td>Searching for literature in the offending behaviour context</td>
<td>Any published research on mixed-gender group programmes with offenders should have been recovered by this rapid evidence assessment. A systematic review may examine literature that identifies the treatment needs of female offenders, which could add a useful dimension to the current review.</td>
</tr>
<tr>
<td>Searching for literature in the non-offending behaviour context</td>
<td>This rapid evidence assessment searched for articles from all areas of psychotherapy but was only able to identify relevant research from the substance abuse area. This bank of literature may be extended slightly by a systematic review.</td>
</tr>
<tr>
<td>Searching for grey literature</td>
<td>This rapid evidence assessment did not recover any grey literature. A full systematic review may identify relevant research which has not been published.</td>
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Whilst this review has been limited in time and scope, it is likely that the quantity of research retrieved reflects the limited amount of research that has been conducted in this area, rather than the limitations of this review. It is unlikely that a full systematic review will significantly add to the research gathered in this rapid evidence assessment. Consequently, the resources required for a full systematic review may be better utilised by generating new research rather than searching for more previous research in the area.

4. Conclusion – what can NPS take from this literature review?

The main finding from this literature review is that the research evidence on the impact of group gender composition is low in volume and poor in quality. This literature review is therefore unable to provide any evidence-based guidance on the current practice of allocating female offenders to mixed-gender rehabilitation groups in the community. Instead the following recommendations are made on the basis of this literature review.

**Do not conduct a further review of the literature**

This literature review has concluded that a systematic review of the literature is unlikely to significantly add to the articles retrieved in this review.

**Conduct research on the impact of mixed-gender rehabilitation groups**

With a lack of previous research in the area NPS needs to conduct its own research into the potential impact of using mixed-gender rehabilitation groups in the community. Generating new research is the only way for NPS to enable evidence-based decisions in this area, and will provide an important contribution to the research literature.

**How should NPS research this area?**

If this review had identified a large body of research in the area it may have been possible to adapt existing research protocol from this literature and apply the methodology to any research that NPS wished to conduct. For example, a large body of research may have included validated measures of group cohesion or attitudes to groups that could have been used by NPS. However, given the low volume and poor quality of the research identified in this review there is no firm theoretical or methodological framework for NPS to take from the literature and apply to the context of offending behaviour programmes.

Consequently, based on the findings of this review, an explorative study is recommended in order to generate themes and theories as to the potential impact of mixed-gender offending behaviour programmes.

The research identified in this literature review suggests that issues to explore include the additional impact of being the sole female in a mixed-gender group, whether female offenders feel their needs are met by mixed-gender groups, whether female offenders prefer mixed-gender or single-gender groups, how confident female offenders feel about talking in a group, and whether female offenders feel listened to in a group. As the research literature suggests that men may be disadvantaged by the use of single-gender groups it would also be useful to examine male offender attitudes to single-gender and mixed-gender rehabilitation groups.

As there is no existing research evidence on the gender composition of offending behaviour groups it is important that any research considers the specific context of offending behaviour programmes and seeks to generate theories as to why the use of mixed-gender offending behaviour groups may, or may not, be disadvantageous for female offenders.
5. References


Appendix 1: Results from literature searching

Search one: Search for previous reviews in the area

This literature search aimed to check for any systematic or narrative reviews on the impact of mixed-gender therapy. For all literature searching a record of databases searched, search terms used, and articles retrieved was made. The following databases were searched.

<table>
<thead>
<tr>
<th>Database</th>
<th>Reviews found</th>
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<tr>
<td></td>
<td>Systematic</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>Campbell Collaboration</td>
<td>0</td>
</tr>
<tr>
<td>Cochrane Collaboration</td>
<td>0</td>
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<tr>
<td>British Library Catalogue</td>
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<tr>
<td>Psychinfo &amp; IBSS</td>
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<tr>
<td>CSA Illumina</td>
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<td>Swetswise</td>
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Search two: Search for literature in the offending behaviour programmes literature

The aim of this search was to identify non-review literature within the offending behaviour literature on the impact of mixed-gender therapy.

<table>
<thead>
<tr>
<th>Database</th>
<th>Articles retrieved</th>
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<tbody>
<tr>
<td></td>
<td>Offending behaviour literature</td>
</tr>
<tr>
<td>British Library Catalogue</td>
<td>0</td>
</tr>
<tr>
<td>CCS</td>
<td>0</td>
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<tr>
<td>Crossref by Google</td>
<td>0</td>
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<td>CSA Illumina</td>
<td>0</td>
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<tr>
<td>Home Office RDS site</td>
<td>0</td>
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<tr>
<td>NCJRS</td>
<td>0</td>
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<tr>
<td>Psychinfo &amp; IBSS</td>
<td>0</td>
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<tr>
<td>Swetswise</td>
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CCS - (Canadian Correction Service website) / NCJRS - (National Crime Justice Reference Service website)
Appendix 2: Comparison of impact of single-gender versus mixed-gender groups (qualitative and quantitative studies)

<table>
<thead>
<tr>
<th>First author</th>
<th>Year</th>
<th>Type</th>
<th>Summary</th>
<th>Problems with method</th>
<th>Conclusions</th>
</tr>
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</table>
| Claus        | 2007 | Quasi Experiment N=1570 | This quasi-experimental retrospective study reports on the continuity of care for women with children who were admitted to long-term residential substance abuse treatment. Women were admitted to seven agencies offering specialized, women’s only treatment (n=747) or to nine agencies that provided standard mixed-gender treatment (n=823). Client and treatment data were gathered from administrative sources. The authors hypothesised that women in specialised treatment would demonstrate higher continuing care rates after controlling for treatment completion and length of stay. | • Gender composition was not the only difference between the programmes. The content of the women-only programme was tailored to women’s needs.                                                                 | Women in single-gender programmes (37%) were more likely than those in mixed-gender programmes (14%) to continue care. The findings show that specialised treatment for women promotes continuing care and demonstrates the importance of treatment completion.  
**Single-gender groups may improve longer-term outcomes.**                                                                                                                                                                                                                                                                 |
| Greenfield   | 2007 | RCT N=36 | The aim of this study was to develop a manual-based 12-session women’s recovery group (WRG) and to test this new treatment in a randomised control trial against a mixed-gender group drug counselling (GDC), an effective manual-based treatment for substance use disorders. | • Small sample size.  
• Hawthorne effect due to being a pilot.  
• Gender composition was not the only difference between the programmes: the content of the women-only programme was tailored to women’s needs. | No significant differences in substance use outcomes were found between WRG and GDC during the 12-week group treatment. However, during the six-month post-treatment follow-up, WRG members demonstrated a pattern of continued reductions in substance use while GDC women did not. While satisfaction with both groups was high, women were significantly more satisfied with WRG than GDC.  
**Single-gender groups may slightly improve longer-term outcomes and increase client satisfaction.**                                                                                                                                                                                                 |
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<th>First author</th>
<th>Year</th>
<th>Type</th>
<th>Summary</th>
<th>Problems with method</th>
<th>Conclusions</th>
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| Niv          | 2007 | Longitudinal study N=1060 | Objectives: This prospective longitudinal study examined service needs, utilisation and outcomes for 189 women in women-only (WO) programmes and 871 women in mixed-gender (MG) programmes. Methods: The Addiction Severity Index was administered at both intake and the nine-month follow-up interview to assess clients’ problem severity and outcomes. The Treatment Service Review was given at the three-month interview to measure service utilisation. Treatment completion and arrests were based on official records. | • Gender composition was not the only difference between the programmes. The content of the women-only programme was tailored to women’s needs.  
• Participants were not matched: those in the women-only group had greater levels of treatment need.  
• Hard to compare participants and treatment  
• Residential versus outpatient and different treatment needs.  
• Unclear how attrition was treated in the data. | Women in WO programmes had better drug and legal outcomes at follow-up compared to women in MG programmes. Programme type was not predictive of treatment retention/completion or outcomes in other domains (i.e. alcohol, employment, family, medical and psychiatric). The greater problem severity of women treated in WO programmes and their better drug and legal outcomes suggest that these specialised services are filling an important gap in addiction services.  
Single-gender groups may have better long-term outcomes. |
| Kaskutas     | 2005 | RCT N=122     | This study compared outcomes and costs of outpatient women’s treatment to mixed-gender programmes. Women were interviewed at baseline, at the end of treatment (94% response rate) and at six and 12 months post-treatment (100% response rates). Measures included alcohol and drug use, and psychiatric and social problems. Program costs were estimated using the Drug Abuse Treatment Cost Analysis Programme. | • Potential problems with length of stay for treatment. For many participants their stay was very short (e.g. mean length of stay of 9.4 days for the women’s programme). It is therefore questionable that any of the treatment programmes were delivered at a high enough intensity to have any impact.  
• The content of the women-only programme was tailored to women’s needs. | No significant differences between the women’s programme and any of the mixed-gender programmes were found for psychiatric problem severity, problems with family and friends or rates of drug use at any of the follow-up points. Rates of alcohol abstinence and total abstinence were similar between the women’s programme and both of the mixed-gender community programmes, but were higher at the mixed-gender hospital program.  
These findings suggest that female substance abusers may be treated as effectively in mixed-gender programmes as in women’s programmes. |
<table>
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<tr>
<th>First author</th>
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<th>Type</th>
<th>Summary</th>
<th>Problems with method</th>
<th>Conclusions</th>
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<tr>
<td>Bride</td>
<td>2001</td>
<td>Longitudinal study, N=407</td>
<td>Investigated the impact on retention and completion following a treatment provider change from the delivery of mixed-gender to single-gender treatment. Data were collected on 305 men and 102 women who were treated in either mixed-gender or single-gender settings.</td>
<td>• Allocation to groups was not random therefore potential selection effects.</td>
<td>No difference in retention or completion rates for single-gender groups compared to mixed-gender groups. Author suggests that simply separating the two genders will not improve treatment outcomes: gender-tailored treatment is required.</td>
</tr>
<tr>
<td>Dodge</td>
<td>2001</td>
<td>Longitudinal study, N=89</td>
<td>Investigated the effectiveness of three inpatient substance abuse intervention strategies for women: female-sensitive treatment, mixed-gender treatment, and combination mixed-gender/female-sensitive treatment. Eighty-nine women (mean age 32 yrs) in three treatment facilities were evaluated over a three-month period on levels of self-esteem, social support, depression, and severity of addiction.</td>
<td>• Allocation to groups was not random therefore potential selection effects. • Relatively small sample size. • Gender composition was not the only difference between the programmes.</td>
<td>None of the groups improved on any outcome measures. No differences in attrition. No difference in outcomes for single-gender or mixed-gender groups.</td>
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<tr>
<td>Kauffman</td>
<td>1995</td>
<td>Qualitative study</td>
<td>A qualitative study was conducted of the contrasting experiences of women in mixed-gender and women-only treatment groups. Individual and group interviews were conducted with 34 women who had participated in both coeducational and women-only therapy groups.</td>
<td>• Participants would have encountered a number of different mixed-gender programmes over a potentially wide time span.</td>
<td>Women reported complex treatment needs (e.g. interpersonal relationships, identity) which were better met by single gender treatment. Single-gender programmes may be better able to meet the treatment needs of women.</td>
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<td>First author</td>
<td>Year</td>
<td>Type</td>
<td>Summary</td>
<td>Problems with method</td>
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<tr>
<td>Copeland</td>
<td>1993</td>
<td>Longitudinal</td>
<td>Eighty participants from a specialist women’s service and 80 participants from two traditional mixed-gender treatment services were recruited to a comparative longitudinal study of changes in alcohol and other drug-associated problems. Both programmes were principally based on the traditional disease model and 12-step philosophy, but the specialist women’s service used only female staff and provided residential childcare.</td>
<td>Allocation method not random therefore potential selection bias.</td>
<td>No difference in follow-up outcomes for single-gender or mixed-gender groups. Simply providing the same treatment in an all-female context may not have an impact on outcomes. Gender-specific treatment may be required.</td>
</tr>
<tr>
<td>Dahlgren</td>
<td>1989</td>
<td>Longitudinal</td>
<td>Compared the outcome of treatment of 75 women with early alcohol problem conditions at a specialised female treatment unit with that of 68 control women treated in a regular mixed-gender alcoholism treatment facility.</td>
<td>Potential differences in the treatment provided: 'early alcohol problems' versus 'regular treatment'. Self-report measures used for outcomes. Gender composition was not the only difference between the programmes.</td>
<td>At two-year follow-up, single gender groups showed greater improvement than controls in terms of alcohol consumption and social adjustment. They also reported better family relations following treatment. Single-gender interventions may have better outcomes than mixed-gender interventions.</td>
</tr>
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</table>
Appendix 3: Explanation of impact of mixed-gender therapy (theoretical papers and reviews)

<table>
<thead>
<tr>
<th>First author</th>
<th>Year</th>
<th>Summary</th>
</tr>
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<tbody>
<tr>
<td>Greenfield</td>
<td>2007</td>
<td>This paper reviews the literature examining characteristics associated with treatment outcomes in women with substance use disorders. A search of the English language literature from 1975 to 2005 using Medline and PsycInfo databases found 280 relevant articles. Ninety percent of the studies investigating gender differences in substance abuse treatment outcomes had been published since 1990, and of those, over 40% were published since the year 2000. Only 11.8% of these studies were randomised clinical trials. A convergence of evidence suggests that women with substance use disorders are less likely, over their lifetime, to enter treatment when compared to their male counterparts. Once in treatment, however, gender is not a significant predictor of treatment retention, completion, or outcome. Gender-specific predictors of outcome do exist, however; and individual characteristics and treatment approaches can differentially affect outcomes by gender. While women-only treatment is not necessarily more effective than mixed-gender treatment, some degree of greater effectiveness has been demonstrated by treatments that address problems more common to substance-abusing women or that are designed for specific subgroups of this population. There is a need to develop and test effective treatments for specific subgroups such as older women with substance use disorders, as well as those with co-occurring substance use and psychiatric disorders such as eating disorders. Future research on effectiveness and cost-effectiveness of gender-specific versus standard treatments, as well as the identification of the characteristics of women and men who could benefit from mixed-gender versus single-gender treatments, would advance the field.</td>
</tr>
<tr>
<td>Green</td>
<td>2006</td>
<td>The authors suggest that women are more likely than men to face multiple barriers to accessing substance abuse treatment and are less likely to seek treatment. Women also tend to seek care in mental health or primary care settings rather than in specialised treatment programmes, which may contribute to poorer treatment outcomes. When gender differences in treatment outcomes are reported, however, women tend to fare better than men. Limited research suggests that gender-specific treatment is no more effective than mixed-gender treatment, though certain women may only seek treatment in women-only programmes. Future health services research should consider or develop methods for (1) improving care for women who seek help in primary care or mental health settings, (2) increasing the referral of women to specialised addiction treatment, (3) identifying subgroups of women and men who would benefit from gender-specific interventions, and (4) addressing gender-specific risk factors for reduced treatment initiation, treatment continuation, and treatment outcomes.</td>
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<tr>
<td>Sun</td>
<td>2006</td>
<td>This review of the literature concluded that single-gender programmes may have more positive treatment outcomes for women. However, there are significant methodological problems with most of these studies. More empirical studies with better methods are needed.</td>
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<tr>
<td>Winkler</td>
<td>2004</td>
<td>This review found that female-specific treatment was at least as good as traditional mixed-gender treatment. Treatments tailored to specific problems were found to be particularly effective. Simply providing a female-only environment seems to be less effective than the tailored approach.</td>
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<tr>
<td>First author</td>
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<td>Hodgins</td>
<td>1997</td>
<td>Single-gender groups are advocated for women because substance abuse treatment programmes tend to be male dominated both in numbers and in style. Although there is a paucity of empirical work that directly addresses this assumption, a body of literature that indirectly supports it is reviewed. Male and female substance abusers report different histories and courses for their disorders, and display different needs and characteristics in treatment settings. Men and women may benefit from different treatment approaches, with less structure required for women, particularly problem drinkers. Moreover, specific characteristics such as victimisation, sexual orientation, sex-role conflict and degree of antisocial traits may be important mediating factors in whether single-gender groups are optimal. Social psychological research illustrates the effect of gender composition of groups for men and women. <strong>In general, mixed groups are associated with more variation in interpersonal style for men but are restrictive for women who show more variation in style in single-gender groups.</strong> These findings are suggestive of testable hypotheses concerning the effects of single- and mixed-gender programming. Such investigations have the potential to enhance treatment efficacy. For women, single-gender groups will lead to greater engagement, retention and self-disclosure than mixed groups. Outcome may also be improved compared with mixed groups, particularly for women who are distressed at having been victimised by men. Women, particularly those with less severe drinking problems (i.e. problem drinkers), may require less intensive interventions generally than men or perhaps interventions focusing less on substance abuse and more on psychiatric or emotional issues. The implications of single-gender groups for men are less clear. From the social psychology literature, it can be predicted that mixed groups would be associated with increased retention, engagement and self-disclosure than male-only groups. However, little other evidence supports this notion—outcomes from male-only and mixed gender interventions appear equivocal.</td>
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<td>Bernardes</td>
<td>1996</td>
<td>Reviews the rationale for female-only groups. Suggests that many of the problems that women face are due to their gender and so it is appropriate for women to work in all-female groups.</td>
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<tr>
<td>Schoenholtz-Read</td>
<td>1996</td>
<td>Assesses the utility of mixed-gender and single-gender groups for women. States that there is a lack of empirical evidence in the area and instead relies on key studies and theoretical issues. Studies have found that when women are in a minority in a non-therapy group setting they perform worse, whereas men are advantaged by being the gender minority in a mixed group. Being the minority gender in the group tends to lead to increased gender-stereotyped behaviour. All-male groups are rated as the least cohesive group type. Mixed groups provide an opportunity to challenge gender-stereotyping.</td>
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<tr>
<td>Wright</td>
<td>1996</td>
<td>Reviews empirical studies on gender and group behaviour. All-male groups tend to be competitive and aggressive, whereas all-women groups are more open, interpersonal and supportive. Mixed groups appear to be more beneficial to men than women. In mixed groups men demonstrate more one-to-one interaction, are more self-revealing, less aggressive and less competitive. In contrast, women tend to be quieter, talk less about personal issues, be more task-oriented, and have a smaller social-emotional focus in a mixed group. When women are the minority in a group this may be of particular disadvantage to them. As the number of women in a group increases gender stereotyping decreases, attitudes towards women improve, and consideration of women’s ideas will increase. Being the only woman in a mixed group is likely to be particularly disadvantageous for women, but being a single man in a mixed group can be advantageous for men. In general however, the gender composition of the group is less of an influencing factor than the participant’s gender: people are more likely to behave in gender-stereotypical ways than to be influenced by the gender composition of a group. Mixed-gender groups are helpful when addressing interpersonal issues (especially relationships between the sexes); single-gender groups are helpful when addressing intrapersonal issues.</td>
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</table>
Reviews treatment and outcomes of male and female alcoholics. A review of qualitative studies illustrating differences in the communication patterns in same- and mixed-gender groups, with women in mixed-gender groups showing less interaction. Women who have been sexually abused in childhood show a preference for all-female treatment programmes.

Critiques L. S. Walker’s review of the literature on women’s psychotherapy groups (see below) and asserts that research has not yet offered sufficient data to conclude that women’s groups are different in any way other than their all-female composition and stated philosophy. Walker’s findings of the differences between women’s groups and other groups are discussed in terms of four areas: structure and goals, leadership, communication issues and patterns, and group development. Other literature on women’s groups is considered, focussing on groups with special populations and investigations of the uniqueness of women’s groups. Findings indicate that, while the structure and goals of women’s groups appear to be unique, conclusions about how women’s groups differ from mixed-gender groups in terms of process and outcome cannot be drawn. It is concluded that researchers concerned with women’s groups need to move from a currently well-developed theoretical base to empirical validation regarding the efficacy of women’s groups.

Explores the differences in the structure, goals, interpersonal relationships, communication patterns, and the developmental growth sequence in female therapy groups as opposed to mixed-gender groups. Mixed groups emphasize interpersonal issues, tend to be more competitively oriented, and communication is male dominated. Female groups encourage sharing of intrapersonal issues and the exploration of the social determinants of personal problems, appear to be more co-operatively oriented, and communication is more intimate and expressive. The developmental pace of the two groups varies in that the initial trust-building stage evolves more rapidly in female groups, and female groups have greater difficulty successfully grappling with the anger and conflict of the control stage.