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LITERATURE REVIEW METHODOLOGY



2 Literature review methodology

This section outlines the search strategy and selection criteria adopted for this review, and provides descriptions of the types of studies reviewed. The methodological foundations upon which the reviewed research rest are then discussed.

Search strategy

Relevant research concerning parenting influences on adolescent alcohol use was identified by searching the biomedical and social sciences databases for primary research material. A total of 18 research databases were searched for publications from 1990 through to the present (2004), with key articles obtained primarily from PsychINFO, MEDLINE, ERIC, and The Cochrane Library. A complete list of the databases searched is included in Appendix 1.

In order to ensure that relevant studies were not missed, the search terms remained broad. These were “parenting or family”, plus “adolescent or youth”, plus “alcohol” anywhere in the title or abstract. No language restrictions were employed. Studies were eligible for consideration in this review if: (a) the focus of the study was adolescent alcohol use, or substance use (providing alcohol use was measured separately); and (b) there was at least one parenting variable measured.

To capture unpublished Australian research, personal contact was made with key researchers at universities and research institutions across Australia. This included key personnel at the Australian Drug Foundation, the National Drug Research Institute, the National Drug and Alcohol Research Centre, and other research organisations. A complete list of the organisations contacted is included in Appendix 2.

Finally, a comprehensive search was made of Internet resources in Australia and internationally. A number of sites were searched, although the primary sites used were the Australian Drug Foundation’s Drug Information Clearinghouse and the United States National Clearinghouse for Drug and Alcohol information. A complete list of the websites searched is provided in Appendix 3.

Selection criteria

The next step was a detailed examination of papers, and at this point studies were excluded if the parenting or adolescent measures were insufficiently described, or alcohol use was only a minor variable in the study, and therefore the study did not contribute important information to this review.

For the studies investigating direct associations between parenting and adolescent alcohol use, the review includes all peer reviewed longitudinal studies investigating parenting and adolescent alcohol use. Longitudinal studies were seen as a particularly valuable resource as they facilitate the testing of

relationships between early events or characteristics and later outcomes, and enable the identification of developmental sequences and pathways, as well as the construction of theoretical models which can then be validated in future research. Cross-sectional studies which used large samples and methodologically sound research designs were also retained. Studies with methodological weaknesses arising from small convenience samples, few factors measured, or weak data analysis, were included only when they provided insights not available from more rigorous studies. For the qualitative studies, those studies that contributed new information or covered areas that had not been fully explored in quantitative studies were included. Due to the limited volume of Australian published studies, Australian quantitative and qualitative studies were included wherever possible.

For the review of intervention research, studies were retained if: they employed “control” or “no-treatment” groups; participants were randomly assigned to treatment and non-treatment groups; and the studies included pre-intervention measures as well as post-intervention or follow-up measures.

Study descriptions

As with much research in the area of parenting, the majority of studies were correlational – that is, they investigated statistical relationships between parenting factors and adolescent alcohol use, and interpreted the associations found as showing a direct impact of parenting on adolescent behaviour. The possibility of “mediated” effects, in which parenting impacts on adolescent alcohol use through the influence of an intervening variable (for example, peer influence), has been infrequently investigated. Thus, while most studies have investigated direct associations only, it should be noted that the findings reported may mask more complex relationships.

Overall, 26 cross-sectional and 30 longitudinal studies were included in this review. A small number of qualitative Australian studies were found, and these have been included in the text alongside the discussion of findings emerging from the quantitative studies. Only two intervention programs were found that met the eligibility criteria, that is, they had a treatment and control group; pre-test, post-test and follow-up stages; and positive outcomes. The results of these intervention studies follow the review of research studies. Due to the limited number of intervention studies available, a brief review of promising work has also been included.

Finally, this report includes data from the Australian Temperament Project. This is a large, longitudinal study which has followed children’s psychosocial development from infancy into adulthood, investigating the contribution of personal, familial and broader environmental factors to adjustment and wellbeing. This project is one of very few large scale Australian longitudinal studies that contains data on parenting and adolescent alcohol use².

2 The Australian Temperament Project (ATP), involving a representative sample of over 2400 Victorian families, commenced in 1983 at a child age of four to eight months. A total of 13 waves of data have been collected by mail surveys over the first 20 years of the children’s lives, with information provided by parents, maternal and child health nurses, teachers and, from the age of 12 years onwards, the children themselves. The study has focused primarily on the children’s development and wellbeing. From early adolescence onwards, adolescents have reported on their recent use of substances, along with many other aspects of life.

Methodological considerations

Regarding the methodological foundations upon which the reviewed research rest, there are at least five key issues which must be kept in mind when considering the research outcomes. These are: (a) the nature of correlational research; (b) the measurement of parenting and adolescent variables; (c) the importance of considering the differing levels of alcohol use amongst adolescents; (d) the timing of data collections; and (e) the comparability of cross-cultural findings.

First, as noted previously, the majority of the research is correlational, and cannot therefore determine “cause and effect” relationships. To be confident about causal connections, research would require experimental manipulation of parenting factors under tightly controlled conditions – an approach not feasible in social research. Nevertheless, the correlational research is able to demonstrate significant statistical associations between adolescent alcohol use and parenting factors. Furthermore, the longitudinal studies are able to demonstrate the importance of parenting factors over time, and their weight and sheer volume make it clear that there are indeed significant across-time relationships between parenting behaviours and adolescent alcohol use. With regard to parent and adolescent programs designed to prevent adolescent alcohol use, a change in parental and/or adolescent behaviour patterns is considered essential to demonstrate program effectiveness.

Second, most research on parenting influences has used parent or adolescent reports, collected via self-completion questionnaires. A minority of studies have used observations to assess parenting behaviours. Parental reports reflect parental perceptions, and hence may provide only a partially accurate portrayal of parental behaviours, as they are affected by self-enhancing biases and social desirability. Thus, studies which include parental reports and observational measures often report relatively low rates of agreement between these two sources of information (for example, Smart, Sanson, Toumbourou, Prior and Oberklaid 2000). Equally, adolescent reports are affected by adolescents’ perceptions, and research has demonstrated that adolescents generally have a more negative view of their families than do their parents, and they see their families as less cohesive (Noller 1994). Thus, in this review of mainly self-report studies, results should be tempered by the notion that parents tend to have a positive bias, while adolescents have a negative bias.

Few studies have collected parent and adolescent data together. Information from multiple informants can provide a more complete picture, although again, there may be relatively low rates of agreement between the differing respondents. It can be valuable to obtain information from both parents and adolescents because they generally do not report the same level of problems in their interactions and the views of one may counterbalance those of the other. The few studies that have gathered data from both parties suggest that the concordance between adolescent and parent reports tends to be quite low, even when using identical measures. There is also evidence that concordance between parent and adolescent reports decreases as adolescent age increases. Therefore, younger adolescents are likely to report greater parental involvement and more agreement with parents.

Third, it is also likely that if adolescent alcohol use reaches problem levels, adolescents’ self-reports of parenting behaviours will be influenced by negative

attributions in family interactions and these adolescents are likely to report that their parents are less involved. Thus, it is possible that a somewhat biased view of parental behaviours might be obtained from adolescents with entrenched patterns of risky alcohol use. The research looks at adolescent alcohol use at several levels, including initiation of use, the age at first use, the pattern of regular use, and high risk alcohol use and misuse. Where the level of adolescent alcohol use has been measured alongside a parenting factor, it has been highlighted in this report.

Fourth, it is not always clear in the research when the data were collected, but the timing of data collections, particularly of adolescent self-reports of alcohol use, may have an important bearing on the results. For example, in Australia the fourth term of the school year coincides with end-of-year parties and summer celebrations. It is highly likely that adolescents at this time of the year would report a greater use of alcohol than they would during other parts of the year. Unfortunately the timing of data collection is generally not included in the research studies.

Finally, this review aimed to summarise both the Australian and international literature, although because of the limited number of Australian studies which possess both parenting and adolescent alcohol use data, the international research was relied on quite heavily. Studies included in this review were conducted in Canada (for example, Williams, McDermitt and Bertrand 2003), New Zealand (for example, Ferguson, Horwood and Lynskey 1995), and Scandinavian countries (for example, Bjarnason et al. 2002), although research conducted in the United States predominates.

There are two key issues to consider when comparing Australian and United States research: first, whether adolescents in Australia display similar patterns of alcohol use when compared with adolescents in the United States and, second, the comparability of Australian and United States populations in terms of the mechanisms of parenting, the ways in which parents influence their adolescents, and parental and cultural norms concerning adolescent alcohol use. These issues are discussed further in Section 4 and Section 7.