Why do young people drink? A review of drinking motives

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Abstract

This article reviews evidence of adolescent and young adult drinking motives and their relation to possible consequences over the last 15 years. To this end, a computer-assisted search of relevant articles was conducted. Results revealed that most young people reported drinking for social motives, some indicated enhancement motives, and only a few reported coping motives. Social motives appear to be associated with moderate alcohol use, enhancement with heavy drinking, and coping motives with alcohol-related problems. However, an enormous heterogeneity was found in terms of how motives were measured: 10 to 40 items were grouped into between 2 and 10 dimensions and sometimes the same items occurred under different dimensions. Future studies should therefore use well-defined, theoretically based, homogenous instruments to disentangle cultural from measurement differences across surveys.

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1. Introduction

Excessive alcohol use has been shown to be associated with various adverse consequences and health problems such as fatal and non-fatal injuries, blackouts, suicide attempts, unintended pregnancy,
sexually transmitted diseases, academic failure, and violence (see Gmel, Rehm, & Kuntsche, 2003; Hingson, Heeren, Zakocs, Kopstein, & Wechsler, 2002; Perkins, 2002, for reviews). Since in most cases initiation into alcohol use (e.g. Johnston, O’Malley, Bachman, & Schulenberg, 2004) and excessive drinking (e.g. Gmel et al., 2003; Tucker, Orlando, & Ellickson, 2003) occur in adolescence it is crucial to establish prevention efforts in this life period or even before (e.g. Hawks, Scott, McBride, Jones, & Stockwell, 2002; James, Moore, & Gregersen, 1996). However, for successful efforts to limit premature and excessive drinking among adolescents it is necessary to understand the antecedents and etiology of drinking behavior. In this regard, the motivation for engaging in drinking is one important aspect. Theorists regard drinking motives as the final common pathway to its use, i.e. the gateway through which more distal influences are mediated (Cooper, 1994; Cox & Klinger, 1988). Indeed, empirical research demonstrates, for example, that drinking motives are more closely associated with alcohol use than alcohol expectancies (Cronin, 1997). Although drinking motives are associated with drinking in different situational contexts, they explain a substantial amount of variance in alcohol use in addition to situational factors such as drinking circumstance, location, day of the week, group size, type of relationship, local norms and residence (Kairouz, Gliksman, Demers, & Adlaf, 2002).

The concept of drinking motives is based on the assumption that people drink in order to attain certain valued outcomes (Cooper, 1994; Cox & Klinger, 1988). It also assumes that drinking behavior is motivated by different needs or serves different functions, and that specific drinking motives are associated with a unique pattern of precursors and consequences. Heavy drinking, for example, is particularly likely among people who experience stress and drink for coping motives, as well as those whose friends drink heavily and who drink for social motives themselves (Abbey, Smith, & Scott, 1993). In other words, drinking motives or reasons represent a subjectively derived decisional framework for alcohol use based on personal experience, situation and expectancies (Carpenter & Hasin, 1998b; Cox & Klinger, 1988).

Expectancies, on the other hand, are defined as beliefs about the positive or negative behavioral, emotional and cognitive effects of alcohol intake (Baer, 2002; Quigley & Marlatt, 1996). Wiers, Hoogeveen, Sergeant, and Gunning (1997) defined expectancies as a “probability held by the individual that a particular reinforcement will occur as a function of a specific behavior”. It appears that to hold a particular expectancy is a commensurate condition of drinking because an individual must have a particular expectancy before alcohol will be consumed to achieve the desired effect, but that he or she will not necessarily drink to achieve a desired effect simply because the corresponding expectancy is endorsed (Cooper, 1994). In contrast, as described in the motivational model of alcohol use (Cox & Klinger, 1988, 1990), to have a particular motive or reason is a necessary condition for drinking, conceptualized by the final decision to drink or not to drink.

The motivational model assumes that a person makes a decision about whether or not he or she will consume alcohol. The decision to drink is a combination of emotional and rational processes in that the decision is made on the basis of the affective change that the person expects to achieve by drinking compared with not drinking. The affective change can either be related to the direct chemical effects of alcohol, e.g. tension reduction or mood enhancement, or the indirect effects, such as peer acceptance. In fact, a person does not have to be aware of either having made a decision to drink or the factors affecting this decision. In most cases, decisions about drinking are even unconscious and automatized.

According to the model, the decision to drink is embedded in historical and current factors, expected effects, and drinking motives (Fig. 1). Historical factors relate to biochemical reactivity to alcohol (e.g. the genetic disposition to react positively or negatively to alcohol), personality characteristics (e.g. non-
Fig. 1. Antecedents, alcohol expectancies, drinking motives, and alcohol use according to assumptions of the motivational model (Cooper, 1994; Cox & Klinger, 1988, 1990).
conformity, impulsivity, extraversion, sensation seeking, or self-derogation), socio-cultural and environmental factors (e.g. culture-specific drinking styles), and past reinforcement from drinking. Current factors are associated with quality of life in terms of the quantity and quality of prevailing positive and negative incentives for drinking and situational factors (e.g. if alcohol is available or being exposed to people who drink).

Historical, current, situational, and cognitive factors are the basis for individual expectancies both in terms of the chemical effects of alcohol intake, e.g. mood enhancement, and the non-chemical effects, e.g. to celebrate with friends or to enjoy meals. The result of all expected effects (labeled valence in the motivational model) can either be positive (to enhance positive moods) or negative (to avoid or attenuate negative experiences). The source of these expected effects can further be either internal (regarding the personal affective change) or external (regarding the individual social environment). Accordingly, four categories of drinking motives emerge as final antecedents of drinking behavior: drinking to enhance positive mood or well-being (enhancement: positive, internal), to obtain social rewards (social: positive, external), to attenuate negative emotions (coping: negative, internal), and to avoid social rejection (conformity: negative, external). By adopting a specific reason for drinking the decision for engaging in alcohol consumption is made. For example, people decide to drink because it gives them a pleasant feeling or because it helps them when depressed or nervous.

Although there is a long tradition of research (e.g. Edwards, Hensman, & Peto, 1973; Jung, 1977; Riley, Marden, & Lifshitz, 1948) and profound theoretical considerations (e.g. Cooper, 1994; Cox & Klinger, 1988, 1990), no systematic attempt has been made to summarize recent evidence on drinking motives. The aim of this paper is to review the recent empirical research on adolescents’ and young adults’ drinking motives because if efforts to limit premature and excessive drinking are to succeed, research on these age groups is particularly important. More specifically, the paper concentrates on formal aspects of drinking motives (issues of definition, measurement and classification), and on the possible consequences (alcohol use, related problems, and other problem behaviors).

2. Methods

A computer-assisted literature search was conducted using the keywords “reason” or “reasons” or “motive” or “motives” or “motivation” and “alcohol” or “drinking” or “drunk” or “drunkenness” and “adolescents” or “adolescence” or “juvenile” or “young people”. “Current Contents“, “ERIC Database“, “ETOH“, “Medline“, “PsychInfo“, “Sociological Abstracts“, and “Swetsnet“ were used as databases, together with the internal library system of the Swiss Institute for Prevention of Alcohol and Drug Problems. The search strategy was to include articles published only in English. The literature search was restricted to publications from 1989 onwards, the year after the development of the motivational model of alcohol use (Cox & Klinger, 1988) and to the age group of 10- to 25-year olds.

During the first stage more than 100 articles were identified. Since the review focuses on alcohol use and related problems among adolescents in general, articles on motives to abstain from drinking, on particular drinking motives (e.g. reasons for ending drinking games), and based on particular populations (e.g. women with eating disorders or rural Arab youth) were excluded. Since studies on drinking motives are sometimes integrated into wider studies of young people’s drinking and not explicitly labeled as drinking motives or reasons, all identified articles were crosschecked for other yet unidentified studies. In total, the manuscript was based on 82 articles.
The present review intends to give a comprehensive overview of empirical evidence on young people’s drinking motives published in the last 15 years. In some cases, however, key or exemplary studies based on the general population (including adolescents or young adults) or published before 1989 are highlighted when no recent or age group specific evidence was found.

3. Results

3.1. Formal aspects of drinking motives

3.1.1. Motives and reasons—different terms, same meaning?

In the literature, the terms “drinking motives” and “reasons for drinking” are used interchangeably (Baer, 2002; Stewart & Chambers, 2000; Stewart & Devine, 2000). In English dictionaries (e.g. Cambridge University, 2001; Oxford University, 2001), motives appear to be more broadly defined than reasons, which provide explanations or judgments for events based on practical facts. Similarly, in psychology, reasons are defined as an intellectual process involved in considering the totality of a situation or an explanation for a behavior (Corsini, 2002). Motives are more broadly defined as conscious or unconscious reasons for behavior that directs a person’s energies towards a goal (cf. Cooper, 1994; Cox & Klinger, 1988).

Although it appears that reasons and motives have roughly the same meaning, there are some subtle differences. Accordingly, drinking reasons appear to imply a rational process based on practical facts, whereas drinking motives appear to be more general and also incorporate unconscious and automatized causes. When describing the results of numerous studies in this review, it can lead to misunderstandings when using the two expressions interchangeably. Therefore, we suggest using the term “reason” to describe a specific drinking reason that is not part of a broader classification, such as drinking to help fall asleep or to gain greater sexual pleasure. “Motives” characterize items in specific motive categories, factors, or dimensions, such as social or coping motives. Under these motivational dimensions, all specific motives are subsumed that serve the according purpose.

3.1.2. Approaches to measure drinking motives

There are various ways and instruments to measure drinking motives. A first group of studies adopted a qualitative approach whereby they simply asked young people why they drink. The resulting answers were subsequently classified into categories of commonly indicated reasons, like drinking to get drunk or to be part of a peer group. Only five studies could be identified that fall into this category (Álvarez & del Río, 1994; Boys, Marsden, & Strang, 2001; Kloep, Hendry, Ingebriotsen, Glendinning, & Espnes, 2001; Lo & Globetti, 2000; Palmqvist, Martikainen, & vonWright, 2003).

A second group of studies collected several items on drinking reasons from previous research without explicitly classifying them into broader motive categories, factors or dimensions. In this category, nine studies could be identified (De Micheli & Formigoni, 2002; Feldman, Harvey, Holowaty, & Shortt, 1999; Jerez & Coviello, 1998; Klein, 1992; Montgomery, Benedicto, & Haemmerie, 1993; Neff, 1997; Plant, Bagnall, & Foster, 1990; Rutledge & Sher, 2001; Webb, Getz, Baer, & McKelvey, 1999).

A third group of studies developed their own multidimensional questionnaire to measure drinking motives (e.g. Bradley, Carman, & Petree, 1991; Carpenter & Hasin, 1998b; Cronin, 1997; Haden & Edmundson, 1991; Kairouz et al., 2002; Karwacki & Bradley, 1996; Labouvie & Bates, 2002; Stewart &
<table>
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<tr>
<th>Name (abbreviation, author)</th>
<th>Items, categories (labels)</th>
<th>Studies</th>
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<tbody>
<tr>
<td>Definitions of Alcohol Scale (DAS, Mulford &amp; Miller, 1960)</td>
<td>18 items, 2 categories (social/celebratory, personal/deficiency)</td>
<td>Connors et al., 1990</td>
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<tr>
<td>Drinking Context Scale (O’Hare, 1997)</td>
<td>Original 22 items reduced to 9 items in 3 categories (convivial drinking, negative coping, intimate drinking)</td>
<td>O’Hare, 2001</td>
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<tr>
<td>Drinking Motivations Scale (Bailly, 1987)</td>
<td>40 items, 4 categories (positive social, personal psychological, dominance power, assertiveness power)</td>
<td>Bailly, Carman, &amp; Forslund, 1991</td>
</tr>
<tr>
<td>Drinking Motive Questionnaire (DMQ, Cooper et al., 1992)</td>
<td>15 items, 3 categories (social, coping, enhancement)</td>
<td>Carrigan et al., 1998; Colder, 2001; Colder &amp; O’Connor, 2002; Cooper et al., 1995, 2000; Gire, 2002; Kassel et al., 2000; MacLean &amp; Lecci, 2000; Novak, Burgess, Clark, Zvolensky, &amp; Brown, 2003; Stewart &amp; Chambers, 2000; Stewart &amp; Zeitlin, 1995</td>
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<tr>
<td>Drinking Motive Questionnaire Revised (DMQ-R, Cooper, 1994)</td>
<td>20 items, 4 categories (social, coping, enhancement, conformity)</td>
<td>Comeau et al., 2001; Cooper, 1994; Cooper et al., 1995, 2000; Hussong, 2003; Lecci, MacLean, &amp; Croteau, 2002; Loukas et al., 2000; MacLean &amp; Lecci, 2000; McNally et al., 2003; Read et al., 2003; Simons et al., 2000; Stewart &amp; Power, 2002; Stewart &amp; Devine, 2000; Stewart et al., 2001; Wild, Hinson, Cunningham, &amp; Bacchioni, 2001</td>
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<tr>
<td>Inventory of Drinking Situations—Short Form (IDS-42, Annis, 1984)</td>
<td>42 items, 8 categories (unpleasant emotions, physical discomfort, pleasant emotions, testing personal control, urges and temptations to drink, conflict with others, social pressure to drink, pleasant times with others)</td>
<td>Carey, 1993, 1995; Carrigan et al., 1998</td>
</tr>
<tr>
<td>No specific instrument name (items based e.g. on Barnes, 1981; Jessor, Carman, &amp; Grossman, 1968)</td>
<td>11 items, 2 categories (social, coping)</td>
<td>Bradizza et al., 1999</td>
</tr>
<tr>
<td>No specific instrument name (items based e.g. on Jessor et al., 1968)</td>
<td>40 items, 4 categories (positive social, personal/psychological, personal power, warmth/affection)</td>
<td>Karwacki &amp; Bradley, 1996</td>
</tr>
<tr>
<td>No specific instrument name (items based on Cahalan, Cisin, &amp; Crossley, 1969; Farber et al., 1980)</td>
<td>7 items, 2 categories (drinking to cope with stress, drinking for social reasons)</td>
<td>Abbey et al., 1993</td>
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<tr>
<td>No specific instrument name (items based on Carman, Fitzgerald, &amp; Holmgren, 1983)</td>
<td>19 items, 2 categories (negative/personal, positive/social)</td>
<td>Bradley et al., 1991, 1992</td>
</tr>
<tr>
<td>Name (abbreviation, author)</td>
<td>Items, categories (labels)</td>
<td>Studies</td>
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<tr>
<td>No specific instrument name (items based on Cooper et al., 1992)</td>
<td>13 items, 2 categories (coping, social)</td>
<td>Windle, 1996; Windle &amp; Windle, 1996</td>
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<tr>
<td>No specific instrument name (items based on Goodwin, 1990; Haden &amp; Edmundson, 1991)</td>
<td>10 items; 2 categories (personal, social)</td>
<td>Montgomery et al., 1993</td>
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<tr>
<td>No specific instrument name (items based on Johnston &amp; O'Malley, 1986; Schulenberg, Wadsworth, O'Malley, Bachman, &amp; Johnston, 1996)</td>
<td>Number of items not indicated in the Methods section, 2 categories (reduce negative affect, drinking to get drunk scale)</td>
<td>McCabe, 2002</td>
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<tr>
<td>No specific instrument name (items based on Johnston, O'Malley, &amp; Bachman, 1984)</td>
<td>13 items, 3 categories (increasing positive affect, decreasing negative affect, social facilitation)</td>
<td>Weinberger &amp; Bartholomew, 1996</td>
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<tr>
<td>No specific instrument name (items based on Johnson, Schwitters, Wilson, Nagoshi, &amp; McClearn, 1985)</td>
<td>Number of items not indicated in the Methods section, 2 categories (celebratory/social facilitation, pathological/self-medication)</td>
<td>Nagoshi et al., 1994</td>
</tr>
<tr>
<td>No specific instrument name (no specific author indicated)</td>
<td>10 items; 2 categories (personal motivation, social motivation)</td>
<td>Haden &amp; Edmundson, 1991</td>
</tr>
<tr>
<td>No specific instrument name (no specific author indicated)</td>
<td>15 items, 10 categories (to be sociable/polite, to comply with others, to feel good, to help you relax, to forget your worries, to feel less inhibited or shy, to get high or drunk, to celebrate, to enjoy the taste or add to the enjoyment of a meal, other)</td>
<td>Kairouz et al., 2002</td>
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<tr>
<td>No specific instrument name (no specific author indicated)</td>
<td>33 items, 3 categories (social, disinhibition, suppression)</td>
<td>Labouvie &amp; Bates, 2002</td>
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<tr>
<td>No specific instrument name (no specific author indicated)</td>
<td>30 items, 5 categories (belonging, coping, pleasure, creativity, aggression)</td>
<td>Novacek et al., 1991</td>
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<td>No specific instrument name (no specific author indicated)</td>
<td>16 items, 4 categories (coping, sociable, social confidence, enjoy)</td>
<td>Smith et al., 1993</td>
</tr>
<tr>
<td>No specific instrument name (no specific author indicated)</td>
<td>16 items, 5 categories (to party, for enjoyment, to be social, to cope, to alleviate tension)</td>
<td>Stewart &amp; Power, 2002</td>
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<tr>
<td>Reason for Drinking Scale (RFD, Cronin, 1997)</td>
<td>25 items, 3 categories (social camaraderie, mood enhancement, tension reduction)</td>
<td>Cronin, 1997</td>
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(continued on next page)
Power, 2002; Weinberger & Bartholomew, 1996; Windle & Windle, 1996). In these developments, scales consisting of 10 to 40 items grouped into between 2 and 10 categories, dimensions, or factors were analyzed (see Table 1).

Finally, a fourth group of studies used previously developed, evaluated, and established questionnaires, such as the Drinking Motive Questionnaire (DMQ, Cooper, Russell, Skinner, & Windle, 1992), the Drinking Motive Questionnaire Revised (DMQ, Cooper, 1994), the Reasons for Drinking Questionnaire (RFDQ, Farber, Khavari, & Douglass, 1980), the Reasons for Drinking Scale (RDS, Carpenter & Hasin, 1998b), and the Social Context of Drinking Scales (SCDS, Thombs, Beck, & Pleaf, 1993). Among these multidimensional instruments, the Drinking Motive Questionnaire in its original or revised form is the most commonly used.

3.1.3. Multidimensional classifications

Table 1 gives a comprehensive overview of multidimensional instruments to measure drinking motives. All the instruments listed in Table 1 were identified by using the search terms “reason”, “reasons”, “motive”, “motives”, and “motivation”. Some scales such as the Drinking Context Scale, the Inventory of Drinking Situations, and the Social Context of Drinking Scales, however, appear at first glance to measure other constructs than drinking motives. Nevertheless, by looking closer at the items integrated in these scales, aspects are measured that are otherwise subsumed under certain motive categories. The item “When I’m feeling sad, depressed, or discouraged” of the Negative Coping category of the Drinking Context Scale (O’Hare, 1997), for example, can also be found in the Coping subscale of the Drinking Motive Questionnaire (DMQ, Cooper et al., 1992) and in the Negative Affect subscale of the Reasons for Drinking Scale (RDS, Carpenter & Hasin, 1998b). The subscales “Unpleasant Emotions”, “Pleasant Emotions”, “Pleasant Times with Others”, and “Social Pressure to Drink” of the Inventory of Drinking Situation (IDS-42, Annis, 1984) show high similarities with the dimensions “Coping”, “Enhancement”, “Social” and “Conformity” of the Drinking Motives Questionnaire Revised (DMQ-R, Cooper, 1994). The subscale “Social Facilitation” of the Social Context of Drinking Scales (SCDS, Thombs et al., 1993) appears to be similar to motive subscales used by Carpenter and Hasin (1998b), by Nagoshi, Nakata, Sasano, and Wood (1994), or by Weinberger and Bartholomew (1996).

Traditionally, reasons for drinking have been grouped into two broad categories: drinking to be sociable, to celebrate, to have a good time, or to enhance one’s social confidence on the one hand, and drinking to cope, to escape, or to avoid or regulate unpleasant emotions on the other (McCarty & Kaye, 1984; Smith, Abbey, & Scott, 1993). Cox and Klinger (1988, 1990) proposed the characterization of
drinking motives according to the valence (positive or negative) and source (internal or external) of the outcomes individuals expect to achieve by drinking. Crossing these two dimensions results in four categories of motives: drinking to enhance positive mood or well-being (positive, internal), to obtain social rewards (positive, external), to cope with negative emotions (negative, internal), and to avoid social rejection (negative, external, also labeled “conformity”). Taken together, all studies used a “coping” dimension and one or more other dimensions. Concerning these other dimensions, “social” or “enhancement” motives or both were most frequently included.

Item batteries measuring drinking to cope, to escape, or to avoid or regulate unpleasant emotions are labeled as coping motives (Cooper, 1994; Cooper et al., 1992; Windle, 1996), coping with negative affect motives (Carpenter & Hasin, 1998b), drinking to cope with stress (Abbey et al., 1993), drinking to reduce negative affect (McCabe, 2002), tension reduction (Cronin, 1997; Rutledge & Sher, 2001), drinking to ease tension (Stewart & Power, 2002), relief drinking (Palmqvist et al., 2003; Poikolainen, Tuulio-Henriksson, Aalto-Setälä, Marttunen, & Lönnqvist, 2001), personal reasons (Montgomery et al., 1993), negative personal motives (Bradley et al., 1991; Bradley, Carman, & Petree, 1992), escape motives (Neff, 1997), pathological/self-medication reasons (Nagoshi et al., 1994), and suppression reasons (Labouvie & Bates, 2002). Such reasons are called “coping motives” in the following paragraphs.

Drinking motivated by social reasons was labeled positive-social use of drinking (Bradley et al., 1991; Karwacki & Bradley, 1996), social facilitation (Carey, 1993, 1995; Carpenter & Hasin, 1998b; Carrigan, Samoluk, & Stewart, 1998; Nagoshi et al., 1994; Weinberger & Bartholomew, 1996), social motives (Cooper, 1994; Cooper et al., 1992); social camaraderie (Cronin, 1997), social motivation subscale (Haden & Edmundson, 1991), to be sociable/polite (Kairouz et al., 2002), social reasons (Labouvie & Bates, 2002), and social drinking motives (Windle & Windle, 1996). Some studies further distinguish between positive and negative social motives. Whereas labels for positive motives are listed above, negative social motives (e.g. drinking to fit in a peer group, not to feel left out, because of peer pressure) were labeled conformity motives (Cooper, 1994), social pressure to drink (Carey, 1993, 1995; Carrigan et al., 1998), to comply with others (Kairouz et al., 2002), social pressure (Carpenter & Hasin, 1998b), and peer acceptance (Beck, Thombs, Mahoney, & Fingar, 1995). Since in most identified instruments, social motives were not separated into rewarding and rejection-avoiding motives, both categories were treated together in the following paragraphs and called “social motives”.

Items measuring drinking to experience positive feelings, for kicks or excitement, to get high, because of its good taste were classified as pleasant emotions (Carey, 1993, 1995; Carrigan et al., 1998), drinking for enjoyment (Carpenter & Hasin, 1998b; Smith et al., 1993; Stewart & Power, 2002), to enhance positive mood (Cooper, 1994; Cooper et al., 1992), for mood enhancement (Cronin, 1997), to feel good (Kairouz et al., 2002), to increase positive affect (Weinberger & Bartholomew, 1996), and drinking to get drunk (Kairouz et al., 2002; McCabe, 2002). Such reasons are called “enhancement motives” in the following.

These three broad categories to classify drinking motives appear to be comparable across studies even if different labels and number of items were used. However, the different formulations and classifications of items make it difficult to compare studies that do not use the same instrument to assess drinking motives. Based on a specific connotation, a question can be classified according to different motive dimensions. Drinking to relax or to get drunk, for example, can be considered as a coping motive if one subsumes that relaxation or drunkenness is needed when someone is tense. Relaxation or drunkenness, on the other hand, can be considered as an enhancement motive if one subsumes these are positive
sensations that can be enhanced. In addition, drinking to relax or to get drunk is also likely to appear in the social context. Therefore, in studies in which the items were classified posteriori on an empirical basis using an explorative factor analysis (e.g. Cronin, 1997; Haden & Edmundson, 1991; Novacek, Raskin, & Hogan, 1991; Smith et al., 1993; Weinberger & Bartholomew, 1996), the same items can occur under different dimensions only because the respective populations in the studies (e.g. adolescents compared to college students or US college students compared to Canadian college students) attribute different meanings to the same items. Also, when the items were classified a priori on a theoretical basis and confirmed by using a confirmatory factor analysis (e.g. Bradizza, Reifman, & Barnes, 1999; Carpenter & Hasin, 1998b; Cooper, 1994; Labouvie & Bates, 2002), the same items can occur under different dimensions because the respective researchers attribute divergent connotations.

Consequently, motives that are quite similar in name may differ substantially in the items used to indicate this particular motive and vice versa. In other words, a particular item may, depending on the study, be subsumed under a different type of motive. In the Reasons for Drinking Scale (RFD, Cronin, 1997) and in the Social Context of Drinking Scales (SCDS, Beck et al., 1995; Thombs et al., 1993), the item “drinking to get high or drunk” was part of the social motivation for the drinking subscale, whereas other instruments subsumed this item under enhancement motives (Carpenter & Hasin, 1998b; Cooper, 1994; Cooper et al., 1992; MacLean & Lecci, 2000; Weinberger & Bartholomew, 1996). In the study of Labouvie and Bates (2002), the items “it tastes good” and “to have fun and enjoy things better” were classified as social motives, whereas other instruments subsumed the items under enhancement motives (Carpenter & Hasin, 1998b; Cooper, 1994; Cooper et al., 1992; MacLean & Lecci, 2000; Smith et al., 1993). In the study by Weinberger and Bartholomew (1996), the items “to have a good time with friends” and “to celebrate social occasions” was part of the enhancement motive subscale, whereas other instruments subsumed these items under social motives (Cooper, 1994; Cooper et al., 1992; Haden & Edmundson, 1991; MacLean & Lecci, 2000; Montgomery et al., 1993; Smith et al., 1993). For the dimensions of other instruments, only examples (e.g. Abbey et al., 1993; Carey & Correia, 1997; Stewart & Power, 2002; Windle, 1996; Windle & Windle, 1996) or no item information (e.g. Bradley et al., 1991; Kairouz et al., 2002; Karwacki & Bradley, 1996) are given, making it unclear whether they can be compared with other instruments.

These different classifications become particularly important when the different motive dimensions were used to predict alcohol use and related problems (see below). In the following, however, we maintained the broad classification of coping, social, and enhancement motives and analyzed the classification of the items only when contradictory evidence emerged.

3.2. Conclusion of formal aspects

Drinking motive research is highly heterogeneous, making it difficult to compare studies. First, the terms “motive” and “reason” are used interchangeably in the literature. We suggest, however, that “reason” can be used to describe a specific drinking reason, whereas “motive” refers to items included in broader motive categories. Second, four different ways to assess drinking reasons and motives were identified (qualitatively, via single items, and development and replication of multidimensional scales). Third, even among studies that used multidimensional classifications (see Table 1) a high degree of heterogeneity was found: 54 studies used 25 different instruments in which 10 to 40 items, grouped into 2 to 10 categories, were analyzed. Fourth, studies with similar dimensions used different items and studies with similar items differ in relation to the dimensions under which particular items were
subsumed. This was mainly due to how the classifications were created: theoretically based
classifications a priori versus empirically based posteriori. When comparing results from studies using
different instruments it is particularly important to examine which items are subsumed under a certain
motive dimension. Future studies should, however, use multidimensional instruments that are based on
theoretical assumptions and validated by means of confirmatory factor analysis in different samples,
because the motive classifications in such instruments do not depend on the specific sample
characteristics and are therefore rather comparable across studies. In this respect, the Drinking Motive
Questionnaire Revised (DMQ-R, Cooper, 1994) is a good example because is was developed based on
the Motivational Model of Alcohol Use (Cox & Klinger, 1988, 1990) and confirmed in different samples
(e.g. MacLean & Lecci, 2000; Stewart, Loughlin, & Rhyno, 2001).

3.3. Possible consequences of indicating drinking motives

3.3.1. Alcohol use

In general, most adolescents drink for social reasons or for enhancement reasons in the sense of
enjoyment. In a study among 13- to 18-year olds in Argentina, for example, 80% drank for enjoyment
reasons and only 7% to improve bad mood, 4.6% to be accepted by peers, and 1% to relax or to escape
boredom (Jerez & Coviello, 1998). Among 14- to 16-year olds in the UK, drinking to make a party more
enjoyable was the most often reported reason (e.g. 94.4% of the male heavy drinkers indicated that
reason, Plant et al., 1990). In a Canadian study, most college students drank to enjoy the taste (24.9%),
to celebrate (21.3%) or to be sociable (16.9%), whereas only 2.1% drank to forget worries or to feel less
shy (Kairouz et al., 2002). Stewart and Power (2002) identified eight different drinking clusters among
US high school students. While the level of endorsement of different reasons varied between groups,
drinking to party was the most prevalent in all groups, directly followed by drinking for enjoyment.
Among US college students, drinking to celebrate was also the most prevalent reason, directly followed
by enjoyment of taste (Klein, 1992). Among 14- to 18-year olds in Canada, the three most prominent
reasons for drinking were “to get in a party mood” (18%), “because I enjoy it” (16%), and “to get drunk”
(10%, Feldman et al., 1999). Among 15- to 17-year olds in Hong Kong, however, drinking to have fun
was the most prevalent reason for girls, while boys drank mainly to feel the effects of alcohol (Lo &
Globetti, 2000).

As most young people drink for social facilitation, improvement of social gatherings, or to get in a
party mood, social motives are associated with moderate drinking in most studies (e.g. Cooper, 1994;
Feldman et al., 1999; Kairouz et al., 2002; Kassel, Jackson, & Unrod, 2000; Weinberger & Bartholomew,
1996; Windle, 1996; Windle & Windle, 1996). Among young adults in the US, social motives were
negatively associated with drinking intensity in multiple models ($b = -.25$, Labouvie & Bates, 2002). US
college students who drank for social motives were less likely to use alcohol excessively than those who
drank for enhancement or coping motives ($r = -.18$, Karwacki & Bradley, 1996).

Enhancement motives in the sense of feeling the effects of alcohol appear to be highly endorsed by
heavy drinkers (e.g. Kairouz et al., 2002). Among US college students, heavy drinkers (defined as
having seven or more drinks on an average drinking occasion) scored significantly higher on drinking to
enhance pleasant emotions ($M=3.03$) than light ($M=2.09$) and moderate ($M=2.61$) drinkers (Carey,
1993). In a study among US college students, heavy episodic drinkers scored highest on the created
“drinking to get drunk” scale that contained enhancement motives (McCabe, 2002). In a discriminant
analysis, drinking to get drunk was the reason that discriminated best between moderate and heavy
drinking among US college students (Billingham, Parrillo, & Gross, 1993). Heavy drinkers aged between 14 and 18 in Canada were more likely to state that they drink “to get drunk” (22%) than moderate drinkers (7%, Feldman et al., 1999).

Consequently, when items such as “I like the feeling of drunkenness” or “I drink to get high” were integrated in enhancement motive scales, these scales were most closely associated with heavy drinking (Carpenter & Hasin, 1998b; Cooper, 1994; Weinberger & Bartholomew, 1996). When “drinking to get drunk” was not part of the enjoyment/enhancement scale, this scale was only a weak predictor of heavy drinking (β < .10, Smith et al., 1993). If drinking to get drunk or to get high was subsumed with other motives under the label “social camaraderie” (Cronin, 1997) or “social facilitation” (Beck et al., 1995) these batteries were in turn the best predictor for average drinks per occasion, frequency of binge episodes (having five drinks or more per occasion), and frequency of drinking days. They also discriminated best between low and high intensity drinkers with a high endorsement among high intensity drinkers.

Coping motives appear to be also associated with heavy drinking (Cooper, Agocha, & Sheldon, 2000; Labouvie & Bates, 2002; Montgomery et al., 1993). In the US, tension reduction drinking motives were associated with heavy drinking in each year of college (β > .30, Rutledge & Sher, 2001). Anglo-, African-, and Mexican Americans had all more drinks on a typical occasion and more frequently indicated having five drinks or more when indicating escape motives, independently of their cultural origin (Neff, 1997). In a US population study including persons aged between 21 and 86, the frequency of heavy drinking was highest among those reporting a high endorsement of coping motives and a high level of perceived stress (Abbey et al., 1993). In one study among US college students, however, drinking to attenuate negative affects was not significantly associated with heavy episodic drinking (β < − .06, McCabe, 2002).

Apart from the specific relation between the different motive dimensions and alcohol use, young people tend to indicate drinking motives in general. That means that in all studies in which correlations between the different motive dimensions were reported, positive associations were found (see Table 2 for an overview). Consequently, apart from the different kind of drinking motives, it appears that the total number of reasons is associated with higher levels of alcohol use. In a study among US college students, motivation for drinking in general was associated with high levels of drinking (Weinberger & Bartholomew, 1996). In this study, frequency of drinking was correlated with all three motivation

Table 2
Overview of correlations between different motive dimensions according to the study in which they were reported

<table>
<thead>
<tr>
<th>Study</th>
<th>Correlation between motives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social and coping motives</td>
</tr>
<tr>
<td>(Bradizza et al., 1999)</td>
<td>.61</td>
</tr>
<tr>
<td>(Carey &amp; Correia, 1997)</td>
<td>.44</td>
</tr>
<tr>
<td>(Cooper et al., 1992)</td>
<td>.47</td>
</tr>
<tr>
<td>(Cooper, 1994)</td>
<td>.46</td>
</tr>
<tr>
<td>(Labouvie &amp; Bates, 2002)</td>
<td>.42</td>
</tr>
<tr>
<td>(O’Hare, 2001)</td>
<td>.39</td>
</tr>
<tr>
<td>(Smith et al., 1993)</td>
<td>.35</td>
</tr>
<tr>
<td>(Windle &amp; Windle, 1996)</td>
<td>.32</td>
</tr>
</tbody>
</table>
dimensions measured. The correlation, however, was higher for positive affect enhancement ($r = .32$) and coping with negative affects ($r = .29$) compared to social facilitation ($r = .10$). In another study among US college students, the total number of drinking motives was correlated with the quantity–frequency index of drinking ($r = .22$, Karwacki & Bradley, 1996).

The total number of drinking reasons also appears to differentiate between types of drinkers. Among US college students, heavy drinkers indicated more motives than moderate drinkers (Montgomery et al., 1993). Similarly, in a study among US high school students (Stewart & Power, 2002), heavy multiple-context drinkers who tended to drink heavily and frequently in a socially appropriate context (e.g. with friends or family at parties) and in a risky context (e.g. drinking at school, drinking in cars and drinking alone or with strangers) reported the highest level of all 5 motive categories (drinking to party, for enjoyment, to ease tension, to cope, and to be social). Among 14- to 16-year olds in England, heavy drinkers who had the highest quantity of alcohol at the last drinking occasion scored higher than other drinkers on all drinking reasons surveyed except on the “to find out what it’s like” reason (Plant et al., 1990).

However, no study was found that classified young people according to the number of drinking reasons or that tried to identify homogenous groups of young people who drink mainly for specific motives. Due to the high intercorrelation of the different motive dimensions (cf. Table 2), it appears difficult to disentangle young people who drink mainly for coping but sometimes also for enhancement motives from those who drink mainly for enhancement motives but sometimes also for coping motives. Nevertheless, it appears fruitful to target specific prevention approaches to homogenous risk groups and their specific needs and deficits (e.g. Kuntsche & Gmel, 2004; Masterman & Kelly, 2003); drinking motives as most proximal antecedents of alcohol use (Cooper, 1994; Cox & Klinger, 1988) appear to be of particular importance in this respect.

3.3.2. Alcohol-related problems

Drinking to cope with negative emotional states is particularly associated with alcohol problems (e.g. Cooper, Frone, Russell, & Mudar, 1995; McNally, Palfai, Levine, & Moore, 2003; Simons, Correia, & Carey, 2000; Windle & Windle, 1996). Among 14- to 16-year olds in the US, for example, problem drinkers (defined as heavy drinkers who also indicated five or more alcohol-related problems such as missing school due to drinking) scored higher on coping motives ($M = 15.0$) than abstainers ($M = 9.7$) and light ($M = 10.0$), moderate ($M = 11.4$), and heavy ($M = 12.0$) drinkers (Windle, 1996). Among Canadian college students, a moderation effect was found; only a weak association between neuroticism and alcohol problems (measured by the Rutgers Alcohol Problem Index) was found among those who did not indicate drinking to cope but a strong association among those who indicated drinking to cope (Stewart et al., 2001). Similarly, among US college students, the relation between a negative-self score and alcohol problems (measured by the Young Adult Alcohol Problems Screening Test) was moderated by coping motives (McNally et al., 2003). In a multiple model, controlled for age, sex, and quantity–frequency drinking index, only coping motives ($\beta = .38$) but not social ($\beta = .16$) or enhancement ($\beta = .05$) motives were significantly related to drinking problems among US college students (Kassel et al., 2000). Furthermore, there is evidence that coping motives are associated with alcohol dependence in adulthood (Carpenter & Hasin, 1998a, 1998b; Carpenter & Hasin, 1999). It is argued that, while effective in the short term, drinking to cope as a way to compensate for deficits in problem-focused coping leads to adverse long-term consequences because the discrepancies that foster negative affects have never been adequately addressed (Cooper et al., 1995; Kassel et al., 2000).
Mixed evidence was found for the association between enhancement motives and alcohol problems. Whereas some studies found that, in addition to coping motives, enhancement motives (including drinking to get drunk or similar items) were a second strong predictor for alcohol problems among adolescents and young adults in North America (Cooper, 1994; Cooper et al., 2000; Cronin, 1997; Labouvie & Bates, 2002), others failed (Read, Wood, Kahler, Maddock, & Palfai, 2003; Simons et al., 2000). Some studies found a strong association between enhancement motives and alcohol problems on the bivariate level that did not remain significant when adjusting for coping motives in multiple analyses (Carey & Correia, 1997; Cooper et al., 1995; Kassel et al., 2000).

Social drinkers are less likely to experience alcohol-related problems (e.g. Cooper, 1994; Simons et al., 2000; Stewart et al., 2001; Windle, 1996). Among young adults in the US, social motives were even negatively associated with drinking problems in multiple models ($\beta = -.13$, Labouvie & Bates, 2002).

3.3.3. Other problem behaviors

There is evidence that academic performance relates to drinking motives. Social ($r > .22$) and coping ($r > .37$) motives were correlated with low expectations of academic achievement among US college students (Bradley et al., 1991). Among 16- to 18-year old high school students in the US, both social ($r = -.10$, $p < .01$) and coping ($r = -.17$, $p < .01$) drinking motives were negatively correlated with academic performance (measured by grade point average, Windle & Windle, 1996). However, as both studies were based on correlations the results were not adjusted for drinking levels. Thus, the unique contribution of drinking motives to low academic achievement remains unclear.

In addition, drinking motives appear to affect social relations and law-abiding behavior. Among US college students, coping motives were correlated with scores on the social complications of drinking scale that include destruction of property, accidents, damage to social relationships, absence from or drinking at school or work, and trouble with the authorities (Bradley et al., 1992; Karwacki & Bradley, 1996). With regard to social motives, the evidence is mixed. Bradley et al. (1992) found a positive association between social drinking motives and social complications ($r > .10$), whereas for Karwacki and Bradley (1996) it was negative ($r = -.35$). In addition, social drinking motives predicted significantly delinquent activity in multiple regressions among 16- to 18-year old high school students in the US ($\beta = .09$, Windle & Windle, 1996).

3.4. Conclusion of possible consequences

Most young people report drinking for social reasons or enjoyment. Accordingly, social reasons were found to be even negatively related to heavy drinking and alcohol-related problems. Enhancement motives were associated with heavy drinking in particular. These results, however, depend on whether drinking to get drunk and similar items are part of the relevant enhancement motive scale. If enhancement motives cover only aspects such as drinking for enjoyment, to make a party more enjoyable, or because it tastes good, then enhancement motives are likely to be associated with moderate drinking. If drinking to get drunk, high or intoxicated or to feel the effects of alcohol is included in enhancement (or otherwise labeled) scales, then enhancement motives are likely to be associated with heavy drinking. This demonstrates the importance of the use of theoretically based and internationally validated questionnaires to enhance comparability of findings across studies and to judge the impact of other limitations (see below) such as the use of different reference populations (last month or last year.
drinkers only versus the inclusion of abstainers) or the use of highly selective samples (e.g. college freshmen from one US university or poly-drug users in London).

In addition, enhancement motives appear to be associated with alcohol-related problems but are only mediated by coping motives. When coping motives are controlled, the direct association between enhancement motives and alcohol problems is likely to lessen or vanish. Drinking to cope was found to be associated not only with heavy drinking but also with alcohol-related problems in particular. It is argued that, while effective in short term, drinking to cope as a way to compensate for deficits in problem-focused coping leads to adverse long-term consequences because the discrepancies that foster negative affects have never been adequately addressed (Cooper et al., 1995; Kassel et al., 2000).

Apart from the different kind of drinking motives, the total number of reasons was found to be associated with higher levels of alcohol use. There are indications that adolescents and young adults drink for different reasons depending on the situation (Cooper, 1994; Kairouz et al., 2002). Accordingly, when young people indicate several reasons for their drinking or score high on different motive dimensions, they are likely to drink in a variety of situations, and thus show higher levels of alcohol use.

In addition, evidence was found that coping and social drinking motives are associated with other forms of problem behavior such as low academic achievement, social complications, and delinquency. As the results stem from cross-sectional research, in terms of coping motives, social complications can be seen as precursors to drinking to cope with social disappointments, rejection, and loneliness. This points to the fact that during adolescence different problem behaviors occur in clusters (e.g. Basen-Engquist, Edmundson, & Parcel, 1996; Jessor & Jessor, 1977) including alcohol use for coping, school problems and violence. Although drinking for social motives was found to be associated with moderate drinking levels, they were also associated with low academic achievement and delinquency. The social context in which young people drink seems to be important. Delinquency is likely if drinking occurs in the company of deviant peers (e.g. Fergusson, Swain-Campbell, & Horwood, 2002; Rossow, Pape, & Wichstrom, 1999). In the same way, a tendency towards delinquency was found to be associated with academic failure (Kaplan, Peck, & Kaplan, 1994).

4. Discussion

To summarize, most young people reported drinking for social motives, some indicated enhancement motives and only a few reported coping motives. Concerning potential outcomes, social motives appear to be associated with moderate alcohol use, enhancement with heavy drinking and coping motives with alcohol-related problems.

There are, however, some considerable gaps in the research on drinking motives among young people. Apart from the definition-related problems, different theoretically and empirically based measures were used, even in recently published studies (e.g. Bradizza et al., 1999; Carrigan et al., 1998; Cronin, 1997; Gire, 2002; Kairouz et al., 2002; Labouvie & Bates, 2002; McCabe, 2002; O’Hare, 2001; Stewart & Power, 2002). Although it seems that at least two of the three motive categories “social” (positive, external), “enhancement” (positive, internal), and “coping” (negative, internal) are integrated in all multidimensional instruments, motives to avoid social rejection (negative, external) are often neglected. This was the case even though negative external motives were shown to form an independent motive dimension among adolescents and young adults (Cooper, 1994; MacLean & Lecci, 2000). Another problem is that the same items can occur under different dimensions only because researchers or
participants attribute different meanings to the same items. This becomes crucial when predicting drinking. The item “drinking to get high or drunk”, for example, appears to be a powerful predictor for heavy drinking but was part of enhancement as well as social motivation subscales.

Nevertheless, it appears fruitful to classify drinking reasons according to underlying dimensions. Based on the Motivational Model of Alcohol Use (Cox & Klinger, 1988), Cooper (1994) provided a four-dimensional questionnaire (DMQ-R) according to the valence (positive or negative) and source (internal or external) of the outcomes individuals expect to achieve by drinking; at the present time it is the most frequently used questionnaire in North America (see Table 1). The use of theoretically based questionnaires with well-defined items is particularly important, since the prevailing heterogeneity of research in this field restricts the comparability of findings and makes conclusions difficult.

Most research on drinking motives used very specific populations. More than four out of five studies used samples form North America and more than half of all identified studies used North American college students as research participants. In addition, among the very rare studies coming from countries outside North America, none was found that used a multidimensional approach to measure drinking motives. Therefore, the above results may be limited to the specific populations of North American adolescents and young adults with their particular drinking culture (e.g. Kuntsche, Rehm, & Gmel, 2004). Thus, studies from other countries are needed in order to acquire knowledge on the significance of the cultural embedding of drinking motives.

Studies also differ in terms of the population groups to which their results refer. Some studies included only current drinkers who indicated alcohol use in the last 30 days, in the last 12 months or in a lifetime (e.g. Abbey et al., 1993; Carey, 1993; Comeau, Stewart, & Loba, 2001; Connors, O’Farrell, & Cutter, 1990; Cooper, 1994; Cooper et al., 1992; Karwacki & Bradley, 1996; Kassel et al., 2000; Labouvie & Bates, 2002; Smith et al., 1993; Stewart & Devine, 2000; Stewart et al., 2001; Stewart & Zeitlin, 1995). In other studies, no information was found on whether abstainers were excluded (e.g. Beck et al., 1995; Carey & Correia, 1997; Colder & O’Connor, 2002; Cronin, 1997; Haden & Edmundson, 1991; Montgomery et al., 1993; Novacek et al., 1991; O’Hare, 2001; Weinberger & Bartholomew, 1996; Windle & Windle, 1996). In some studies, abstainers were explicitly included, e.g. by asking “if you do not drink, we would like to know how important each reason would be to you if you were to start drinking” (Bradizza et al., 1999; McCabe, 2002; Nagoshi et al., 1994). Different reference populations are another obstacle when comparing the results of the studies. It is possible, for example, that drinking motives mainly discriminate between drinkers and abstainers (in the last 30 days or 12 months or in a lifetime) and have other implications for drinkers exclusively. Therefore, studies should clearly indicate their reference population and discuss the implications of their sample selection.

Another shortcoming can be seen in the fact that most evidence comes from cross-sectional survey research. No study was found that applies an experimental approach to research drinking motives and only three studies were identified that predicted alcohol-related outcomes in follow-ups, based on a multidimensional measure of drinking motives. Among 13- to 16-year olds in the US, social motives predicted both the onset and continuation of alcohol misuse (including 5+ drinking and drunkenness) 5 and 6 years later (Bradizza et al., 1999). At first glance, these results appear contradictory to those from most cross-sectional research. Although “drinking to get drunk” or similar items were not included in the social motive scale, the item “to see if I can hold it better than the other kids” indicate excessive drinking in the peer group and might be responsible for the causal link with alcohol misuse. Among US college freshmen, enhancement motives were associated with alcohol use and coping motives with alcohol problems in cross-sectional multiple models (Read et al., 2003). Longitudinally, however, no
motive dimension predicted alcohol use or problems from the freshmen to the sophomore years of college. In a general population survey of 18- to 65-year olds in the US, coping motives predicted DSM-IV alcohol dependence diagnosis 1 year later but not enhancement motives (Carpenter & Hasin, 1998a). In this study, neither coping nor enhancement motives predicted DSM-IV alcohol abuse diagnosis 1 year later.

An explanation for these contradictory results could be that motives affect drinking only in the onset phase and not the continuation to drink. It appears that motives are particularly important in adolescence when drinking starts and less important in adulthood when drinking habits are already established. However, it appears that the stability of the association between motives and drinking also depends on the kind of motives. Authors, for example, argue that the internally generated motives, i.e. enhancement and coping, that are most strongly related with personality traits (enhancement with extraversion, coping with neuroticism, e.g. Cooper et al., 2000; Loukas, Krull, Chassin, & Carle, 2000; Stewart & Devine, 2000; Stewart et al., 2001) are more consistently related to alcohol use across drinking situations than external motives such as drinking to enhance social pleasure or to avoid social rejection (Cooper, 1994; Kairouz et al., 2002). However, since longitudinal evidence is rare, it is impossible to determine the long-lasting effects of different drinking motives on different alcohol-related outcomes in different age groups. Experimental and cross-lagged panel studies are needed to clarify causal links.

The aim of this paper was to give an overview of empirical research on formal aspects and possible consequences of drinking motives. Future reviews are needed to provide information on specific subgroups of young people who drink for particular motives.

References


