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Running Head: DRINKING AND DRIVING

Canadian and Spanish Youths' Risk Perceptions of Drinking and Driving and Riding with a  
Drunk Driver

Mandeep K. Dhami, University of Cambridge

David R. Mandel, Defence R&D Canada – Toronto and University of Toronto

and

Rocio Garcia-Retamero, Universidad de Granada

Send correspondence to:

Mandeep K. Dhami, University of Cambridge, Institute of Criminology, Sidgwick Avenue,  
Cambridge, CB3 9DA, England, UK, E-mail: [mkd25@cam.ac.uk](mailto:mkd25@cam.ac.uk), Tel: +44 (0)1223 335385  
Fax: +44 (0)1223 335356

### Abstract

The present research compared Canadian and Spanish youths' perceptions of the potential benefits and drawbacks of drinking under the influence of alcohol (DUI) and riding with a drunk driver (RDD). Eighty (41 female) Canadian and 87 (71 female) Spanish undergraduates completed a survey asking about their past and forecasted engagement in DUI and RDD, and their perceptions of the benefits and drawbacks of DUI and RDD. A sizeable proportion of both samples reported DUI and RDD in the past year. Past risk takers forecasted significantly greater chances of engaging in these behaviors in the following year compared to those who had not engaged in DUI and RDD. Both samples provided significantly more drawbacks than benefits of DUI and RDD. Whereas the benefits of both behaviors tended to refer to personal effects (e.g., save money, arrive faster) that occurred before, during or after driving, the drawbacks referred to a range of outcomes (e.g., accident, kill/injure, penal sanction) that mostly occurred during driving. Although Canada and Spain differ in important respects (e.g., potential penalty for DUI), there were similarities in the two samples' perceptions of DUI and RDD. Young people are aware of the costs of these risky behaviors but nevertheless engage in them. These findings can inform theories of the co-occurrence of risky driving behaviors, and the development of prevention programs that focus on perceived outcomes.

Keywords: Drinking and driving, riding with a drunk driver, youth, risk taking, risk perception

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Youth engage in a variety of risky behaviors that can adversely affect their health, safety, and wellbeing. Two such behaviors, which we examine in the present paper, are driving under the influence of alcohol (DUI) and riding with a drunk driver (RDD). These can cause injury, disability, and premature death, as well as lead to punitive sanctions. Beyond the potential consequences for youth, there are consequences for other road users and pedestrians, as well as the public and economic sectors that meet health and insurance costs. The fact that youth may continue DUI and RDD into later life (Klein, Anthenelli, Bacon, Smith, & Schuckit, 1994), even after negative experiences (McCarthy, Pedersen, & Leuty, 2005), and that these risky behaviors may be associated with others, such as problem drinking (Donovan, 1993), highlights the need to better understand their motivational bases.

Some efforts to understand youth risk taking suggest that the likelihood of engaging in a risky behavior may be influenced by how an individual evaluates the behavior in terms of its costs and benefits (Boyer, 2006; Gruber, 2001; Reyna & Farley, 2006). Research suggests that youth are often aware of the costs of risky behaviors. For instance, they report more negative than positive outcomes (e.g., Beyth-Marom, Austin, Fischhoff, Palmgren, & Jacobs-Quadrel, 1993; Dhimi & Garcia-Retamero, 2010; Goldberg, Halpern-Felsher, & Millstein, 2002; Moore & Gullone, 1996; Moore, Gullone, & Kostanski, 1997). Risky behavior is also associated with perceived potential benefits (e.g., Dhimi & Mandel, *in press*; Greening & Stoppelbein, 2000; Parsons, Siegel, & Cousins, 1997). In fact, the perceived importance of drawbacks (costs or losses) tends to be weaker than is implied by prevention strategies that focus on informing young people about the costs of risk taking (D'Amico & Fromme, 2002).

Both closed-ended and open-ended methods have been used to examine the perceived benefits and drawbacks of engaging in risky behaviors. In closed-ended tasks, participants are given a list of outcomes of risky behaviors, which may have been generated by samples from the same or similar populations under study or by researchers. However, this may overlook

outcomes that are noticeable to participants or they may prompt participants to respond to outcomes that would otherwise not be apparent to them. By contrast, the open-ended approach involves eliciting participants' perceptions of the outcomes of risky behaviors. Here, some outcomes that can occur may not readily come to mind. However, this may be an advantage if the aim of research is to better understand those mentally available factors that motivate risk taking since recall of such outcomes are probable candidates for influencing naturalistic decision making. Indeed, Beyth-Marom et al. (1993) found that when given a closed-ended list, participants circled over five times more consequences of risky behaviors than they wrote down. They were also more likely to identify good outcomes, and a wider range of outcomes (e.g., social reactions). In an effort to better understand why youth engage in DUI and RDD, we have adopted the open-ended approach in the present research.

#### *Drinking and Driving and Riding with a Drunk Driver*

More studies have examined DUI than RDD. DUI was one of several behaviors in the domain of "dangerous driving" studied by Moore and Gullone (1996) who found that school-based youth aged 12-17 listed death, accident, and getting into trouble as negative outcomes of dangerous driving, and getting away with it as the only positive outcome. Similarly, Beyth-Marom et al. (1993) found that 12-18 year olds mentioned six DUI consequences on average. Of those consequences, the majority referred to negative ones. In addition, youth were more likely to mention that DUI would lead to social reactions by peers, family, or other authorities, and to personal effects on themselves than they were to mention effects on others or behaviors they might engage in as a result of DUI. Unlike the present research, however, Beyth-Marom et al. (1993) did not examine positive and negative consequences separately. McCarthy, Pedersen, Leuty, and Thompsen (2006) found that high-school students with a mean age of 16 and university students' self-generated positive DUI outcomes could be reduced to four factors: convenience, control, avoiding unwanted consequences, and

excitement seeking. McCarthy et al. (2006), however, did not examine youth perceptions of negative DUI outcomes, which we do in the present research.

Youth perceptions of DUI and RDD outcomes may also be inferred from studies that have asked youth to justify their engagement in these risky behaviors. For instance, Basch, DeCicco, and Malfetti (1989) found that 18-22 year olds justified a pro-DUI decision in terms of being willing to accept the potential negative consequences, and because they wished to obtain social and other benefits (e.g., peer acceptance, thrill, or independence). Kulick and Rosenberg (2000) found that university students' top three reasons against DUI were (a) that alternative transportation (other than walking) was available, (b) they were not confident in their driving ability or judged driving as too dangerous, and (c) they decided to walk to their destination. The top three reasons in favor of DUI were (a) they wanted to go to another location (e.g., home), (b) they did not think they were very intoxicated, and (c) they perceived other potential drivers (friends) to be too intoxicated to drive thereby requiring them to drive instead. Finally, Nygaard, Waiters, Grube, and Keefe (2003) found that although 15-20 year olds were fearful of legal repercussions of DUI or RDD, they did not expect to be caught. The availability of alternatives did not appear to influence these youths' pro-DUI or pro-RDD decisions, and their judgments about their own or others' level of intoxication and their own or others' driving abilities appeared to spur them to DUI or RDD. However, Nygaard et al.'s (2003) study considered DUI and RDD as an overall behavioral category, precluding assessment of differences in motivations for DUI versus RDD. In the present study, we consider DUI and RDD as separate behaviors.

### The Present Research

The present research compared Canadian and Spanish youths' perceptions of the benefits and drawbacks of DUI and RDD. The specific objectives were to compare the two samples on: (a) their past and forecasted DUI and RDD; (b) the number of benefits and

drawbacks that they perceive in DUI and RDD; and (c) the nature of these outcomes in terms of thematic categories.

The present research builds on past work in a number of ways. First, whereas virtually all past research has focused on U.S. samples, we examine the issue using Canadian and Spanish samples, thus permitting a test of the degree to which previous findings generalize geographically. These two countries differ on important dimensions. For instance, the legal drinking age in Canada is 19 years in the province of British Columbia (B.C., from where our sample was drawn), whereas it is 16 years in Spain. The legal driving age in B.C. is 16 years (for a motorbike) and 17 years (for a car), whereas in Spain it is 14 years (for a motorbike) and 18 years (for a car). The legal alcohol limit when driving is lower in Spain (i.e., 0.05%) than in Canada (i.e., 0.08%). Finally, the potential penalty for a first DUI is more severe in Spain than in Canada as it can involve a combination of fine, suspension and custody. Nevertheless, both Spain and Canada have reported high youth fatality and injury rates associated with DUI (Beirness, Simpson, Mayhew, & Desmond, 2005; Jost, Popolizio, Allsop, & Eksler, 2008), making this issue of relevance to both countries (Canada Safety Council, 2009; Informe Anual de Siniestralidad [DGT], 2007).

Second, and related to the issue of sampling, past research used samples of various ages often from non-university populations, yet DUI and RDD are most prevalent amongst university-based youth internationally (Steptoe et al., 2004). University students are more likely to DUI than their non-student counterparts (Paschal, 2003). Accordingly, the present research focuses on this “at risk” university-based population.

A third key feature of the present research is its emphasis on separating data on DUI and RDD. As noted earlier, past research tends to focus exclusively on DUI, and few studies have examined RDD. Yu and Shackel (1999) demonstrated a strong positive relationship between DUI and RDD among youth. However, such a finding does not imply that the

perceived outcomes of DUI and RDD are the same. It would thus be constructive to know whether youth perceptions of the positive and negative consequences of DUI overlap with their perceptions of RDD. This was one objective of the present research.

Finally, although the qualitative open-ended approach has been useful in identifying the thematic content of youth's DUI and RDD risk perceptions, few researchers have analyzed the relative number of perceived positive and negative outcomes, the nature of these outcomes in terms of, for example, their self-centeredness or focus on social reactions, or in terms of their time perspective. Some research has shown that the perceived outcomes of risky behaviors tend to be classified as social reactions (e.g., be convicted) and personal effects (e.g., feel thrill) rather than behavioral acts (e.g., damage car) or effects on others (e.g., kill someone; Beyth-Marom et al., 1993; Dhimi & Garcia-Retamero, 2010). The perceived outcomes of risky behaviors also tend to be short- rather than long-term in nature (Fong & Hall, 2003; Goldberg et al., 2002; Moore et al., 1997). We examine these dimensions of youth risk perceptions, which could inform prevention strategies.

## Method

### *Participants*

A sample of 80 (41 female) undergraduates from a Canadian university and 87 (71 female) undergraduates from a Spanish university volunteered to participate in the research in exchange for partial course credit (as is the standard ethical practice at these universities). The samples were recruited via advertisement on the participant pool websites at each university. Informed consent was used. The Spanish sample was, on average, significantly older ( $M = 21.60$  years,  $SD = 3.83$ ) than the Canadian sample ( $M = 19.85$ ,  $SD = 2.77$ ),  $t[157] = 3.40$ ,  $p = .001$ . The Spanish sample comprised more females while the Canadian sample had more males,  $\chi^2(1, N = 167) = 17.39$ ,  $p < .001$ .

### *Survey*

Participants completed a survey (either in English or Spanish) asking about DUI and RDD. The survey contained a quantitative and qualitative section pertaining to each risky driving behavior. In the qualitative section, participants reported their perceptions of the benefits and drawbacks of engaging in each behavior using open-ended responses. Specifically, participants closed their eyes and vividly imagined different scenarios depending on the behavior under consideration. For DUI, participants were asked to “imagine that you are out at a bar one night drinking alcohol. You are over the legal alcohol limit and you decide to drive home.” For RDD, they were asked to “imagine that you and a friend are out at a bar one night drinking alcohol. Your friend is over the legal alcohol limit but offers to drive you home, and you say yes.” Participants then listed up to eight potential benefits and eight potential drawbacks of each behavior. The social bar setting described in our scenario is typical of the situations in which student drinking occurs, and where they may decide to DUI or RDD (Greening & Stoppelbein, 2000; Kulick & Rosenberg, 2000).

In the quantitative sections of the survey, participants forecasted their chances of engaging in each behavior in the following year on scales from 0% (no chance at all) to 100% (absolutely certain), marked with 10% intervals. Participants also reported if they had ever engaged in each behavior in the past year by indicating “yes” or “no.” If they indicated yes, they indicated how many times.

### *Procedure*

The order of the questions asking about the benefits and drawbacks of each risky driving behavior was counterbalanced across participants, as was the order of the two risky driving behaviors. The survey was self-administered in small groups at each university, and took approximately 30 minutes to complete.

### *Coding of Qualitative Responses*

The four sets of responses pertaining to the DUI and RDD benefits and drawbacks were each coded into thematic categories by two coders. (Prior to this, the coders had read through all response sets and agreed upon the categories that were apparent.) Inter-coder reliability was measured using Cohen's Kappa. For the Canadian sample, Kappa was .80 for DUI benefits, .95 for DUI drawbacks, .88 for RDD benefits, and .87 for RDD drawbacks. For the Spanish sample, Kappa was .92 for DUI benefits, .98 for DUI drawbacks, .96 for RDD benefits, and .99 for RDD drawbacks. Thus, there was an overall high degree of inter-coder reliability, and the few disagreements were subsequently resolved by a third coder.

For the purposes of data reduction, we reclassified any category with less than 5% of responses as "other." Thus, excluding the "other" category, there were six meaningful categories of responses for each of the four response sets for the Canadian sample and from four to six categories for the Spanish sample (i.e., four categories for benefits of DUI, drawbacks of DUI, and drawbacks of RDD, and six categories for benefits of RDD).

These thematic categories were further coded in terms of two sets of attributes. First, categories were coded in terms of the following four attributes taken from Beyth-Marom et al. (1993) reference to: (a) *personal effects*, (b) *effects on others*, (c) *incurring social reactions*, and (d) *entailment of behavioral acts*. Second, categories were coded in terms of the temporal relation of the outcomes to the driving period: (a) *prior outcomes* referred to those that occurred before driving commenced, (b) *concurrent outcomes* involved those that occurred during the driving period, however long that may be, and (c) *consequent outcomes* referred to those that occurred after the driving period had ceased. A yes or no classification was given to the thematic categories.

## Results

Chi-square analyses were used to compare the responses of the two samples on categorical variables, whereas independent samples *t*-tests were used for continuous variables. A two-tailed alpha level of 0.05 was applied to all statistical tests.

*Past and Forecasted Engagement in DUI and RDD*

*DUI.* Approximately one-fifth (21.25%) of the Canadian sample and 52.33% of the Spanish sample reported DUI in the past year. Past ever DUI was statistically non-independent of sample,  $\chi^2(1, N = 116) = 17.10$ . Among those who did engage in DUI in the past year, on average, Spanish youth engaged in this behavior significantly more frequently ( $M = 4.93, SD = 14.88$ ) than did Canadian youth ( $M = 1.68, SD = 1.83$ ),  $t(85) = 2.49$ . The forecasted chances of DUI in the following year were, on average, 6.88% ( $SD = 19.53$ ) for the full Canadian sample and 18.07% ( $SD = 25.97$ ) for the Spanish sample, and this difference was statistically significant,  $t(152) = 3.12$ . Finally, participants who reported DUI in the past year, on average, judged themselves to have a significantly greater chance of doing so in the coming year (Canadian:  $M = 28.24\%, SD = 35.04$ ; Spanish:  $M = 31.63\%, SD = 29.11$ ) compared to those who reported not engaging in DUI in the past year (Canadian:  $M = 1.11\%, SD = 3.17$ ; Spanish:  $M = 3.50\%, SD = 9.21$ ),  $t(78) = 6.16$  for Canadian sample and  $t(51) = 6.02$  for Spanish sample.

*RDD.* Half (50.63%) of the Canadian sample and 46.51% of the Spanish sample reported RDD in the past year, and past engagement was statistically independent of sample. Of those who did engage in RDD in the past year, there was no significant difference between the two samples in the average number of times they engaged in this behavior (Canadian:  $M = 1.89, SD = 2.32$ ; Spanish:  $M = 2.68, SD = 6.52$ ). The forecasted chances of RDD in the following year were, on average, 16.08% ( $SD = 24.25$ ) for the Canadian sample, and 15.76% ( $SD = 24.18$ ) for the Spanish sample. There was no significant difference between the two samples in terms of forecasted chances of RDD. Those who reported RDD

in the past year, on average, forecasted significantly greater chances of doing so in the coming year (Canadian:  $M = 27.50\%$ ,  $SD = 28.88$ ; Spanish:  $M = 26.50\%$ ,  $SD = 28.51$ ) compared to those who did not report RDD in the past year (Canadian:  $M = 4.36\%$ ,  $SD = 8.52$ ; Spanish:  $M = 6.22\%$ ,  $SD = 17.09$ ),  $t(46) = 4.85$  for the Canadian sample and  $t(62) = 3.92$  for the Spanish sample.

#### *Relations between DUI and RDD*

For both samples, there were statistically significant positive correlations between past and forecasted DUI (Canadian:  $r = .80$ , Spanish:  $r = .55$ ) and between past and forecasted RDD (Canadian:  $r = .77$ , Spanish:  $r = .60$ ). For the Canadian sample, there was a significant positive correlation of .46 between frequencies of past DUI and past RDD, as well as a significant positive correlation of .57, between youths' forecasted chances of engaging in DUI and their forecasted chances of engaging in RDD. However, for the Spanish sample, there were no significant correlations between frequencies of past engagement in the two behaviors, or between forecasted chances of engaging in the two behaviors.

#### *Perceived Consequences of DUI and RDD*

*DUI.* In total, the Canadian sample provided 208 benefit-related and 428 drawback-related consequences of DUI, and the Spanish sample provided 94 benefit-related and 326 drawback-related consequences. On average, Canadian youth provided significantly more benefits and drawbacks (benefits:  $M = 2.61$ ,  $SD = 1.98$ ; drawbacks:  $M = 5.35$ ,  $SD = 1.83$ ) than Spanish youth (benefits:  $M = 1.08$ ,  $SD = 1.13$ ; drawbacks:  $M = 3.83$ ,  $SD = 1.36$ ),  $t(124) = 6.05$  for benefits and  $t(143) = 6.05$  for drawbacks. In fact, on average, participants perceived significantly fewer benefits of DUI,  $t(78) = 10.59$  for Canadian sample and  $t(86) = 15.14$  for Spanish sample.

Tables 1 and 2 present the thematic content of the Canadian and Spanish samples' perceived DUI benefits and drawbacks, respectively. The most commonly cited DUI benefit

among Canadian youth was that it was a cheaper way of getting home, and the most commonly cited drawback was that it might trigger a negative response from criminal justice agencies. For Spanish youth, the most commonly cited DUI benefit was that it would be faster or save time, and the most commonly cited drawbacks were equally that it might result in an accident or a penal sanction.

#### TABLES 1 TO 2 ABOUT HERE

As Table 3 shows, for Canadian youth, DUI benefits mostly referred to personal effects, whereas DUI drawbacks referred to a range of effects including personal, effect on others, social reactions, and behavioral acts. For Spanish youth, DUI benefits mostly referred to personal effects, whereas DUI drawbacks referred to personal effects and behavioral acts. Furthermore, as Table 4 shows, for Canadian youth DUI benefits typically referred to effects that occurred either before driving had commenced or after it had ceased, whereas the drawbacks largely referred to effects that occurred during driving. For Spanish youth, DUI benefits typically referred to effects that occurred before, during or after driving, whereas the drawbacks mostly referred to effects that occurred during driving.

#### TABLES 3 AND 4 ABOUT HERE

*RDD*. In total, the Canadian sample provided 196 benefit-related and 293 drawback-related consequences of RDD, and the Spanish sample provided 144 benefit-related and 260 drawback-related consequences. On average, Canadian youth provided significantly more benefits and drawbacks (benefits:  $M = 2.48$ ,  $SD = 1.83$ ; drawbacks:  $M = 3.72$ ,  $SD = 1.66$ ) than Spanish youth (benefits:  $M = 1.66$ ,  $SD = 1.38$ ; drawbacks:  $M = 2.99$ ,  $SD = 1.23$ ),  $t(164) = 3.30$  for benefits and  $t(146) = 3.30$  for drawbacks. Indeed, on average, participants perceived significantly fewer RDD benefits than drawbacks,  $t(78) = 6.36$  for Canadian sample and  $t(86) = 7.05$  for Spanish sample.

Tables 5 and 6 present the thematic content of perceived RDD benefits and drawbacks for the Canadian and Spanish samples, respectively. For Canadian youth, the most commonly cited RDD benefit was that it would save money, and the most commonly cited RDD drawback was that it might result in the youth's death or injury. For Spanish youth, the most commonly cited RDD benefit was that it would be faster or save time, and the most commonly cited RDD drawback for was that it might result in an accident.

#### TABLES 5 AND 6 ABOUT HERE

For Canadian youth, both RDD benefits and drawbacks largely referred to personal effects (see Table 3). For Spanish youth, the RDD benefits largely referred to personal effects, whereas the drawbacks typically referred to personal effects and behavioral acts (see Table 3). In addition, for Canadian youth, RDD benefits tended to refer to effects that occurred before driving had commenced or after it had ceased, whereas drawbacks largely referred to effects that occurred during driving (see Table 4). For Spanish youth, RDD benefits and drawbacks both typically referred to effects that occurred during driving (see Table 4).

#### Discussion

A sizeable proportion of both Canadian and Spanish youth in our samples reported DUI and RDD in the past year, reiterating the importance of studying these risky driving behaviors among university-based populations, and in targeting these "at risk" youth for prevention and intervention programs. Below, we discuss the similarities and differences between the two samples.

While there was no significant difference between the two samples in youths' past and forecasted RDD, Spanish youth showed significantly greater past and forecasted DUI. Further analyses using ANCOVA that controlled for age and gender suggested that these

findings could not be explained by the fact that the Spanish sample was older and comprised more females. Rather, the lower legal drinking age in Spain may foster a habit of DUI.

For both samples, there was a significant positive correlation between their past and forecasted DUI, and RDD, which is consistent with previous studies (Finken, Jacobs, & Laguna, 1998; Greening & Stoppelbein, 2000). However, there was mixed evidence of the co-occurrence of DUI and RDD, because significant positive correlations between past DUI and RDD and forecasted DUI and RDD were only observed in the Canadian sample. Further analyses using partial correlations that controlled for age and gender revealed that the findings could not be explained by these demographic differences. The findings from the Canadian sample are consistent with previous research on these and other risky driving behaviors (Dhami & Garcia-Retamero, 2010; Yu & Shacket, 1999). This has implications for the generality of the intervention programs that may be required in each country.

Both Canadian and Spanish youth provided significantly more drawbacks than benefits of DUI and RDD, which is consistent with previous research on other risky behaviors (Beyth-Marom et al., 1993; Dhami & Garcia-Retamero, 2010; Goldberg et al., 2002; Moore & Gullone, 1996; Moore et al., 1997). Thus, youth are cognizant of the potential negative ramifications of these behaviors.

There were similarities in the risk perceptions of the Canadian and Spanish samples, despite the differences between the two countries in terms of the legal drinking age, legal driving age, legal alcohol limit when driving, and the potential penalty for DUI. For both samples, DUI and RDD were viewed as fast ways of getting home, but could also result in an accident, killing/injuring self or others, or leading to a penal sanction. This may be useful for developing theories that explain the co-occurrence of risk taking in this domain, and highlight the appropriateness of targeting DUI and RDD simultaneously in prevention programs. The convenience that both samples attached to DUI and RDD is consistent with previous findings

based on U.S. samples (e.g., McCarthy et al., 2006). This supports the generalizability of previous research, and may be useful for understanding the international incidence of these risky behaviors among university populations (Steptoe et al., 2004). For both DUI and RDD, the benefits typically referred to time and cost efficiency, whereas the drawbacks tended to refer to killing/injuring oneself or others and incurring a penal sanction. This is compatible with previous research (Kulick & Rosenberg, 2000; McCarthy et al., 2006; Moore & Gullone, 1996; Nygaard et al., 2003), and suggests that youth are knowledgeable of the types of negative consequences that are often communicated to them in programs using “scare” tactics (Kuthy, Grap, Penn, & Henderson, 1995), but that they also see benefits of these behaviors, which may explain the general ineffectiveness of scare tactics.

Both samples of youth were fairly similar in the types of DUI and RDD benefits (i.e., focus on personal effects), and the time perspective of the drawbacks (i.e., during driving). However, the samples differed somewhat with regard to their perceptions of the types of DUI and RDD drawbacks, and the time perspective of the benefits. Overall, our findings are consistent with previous studies on other risky behaviors showing that young people often perceive positive personal effects of risk taking (Beyth-Marom et al., 1993; Dhimi & Garcia-Retamero, 2010). Although we found mixed support for the idea that youth risk taking is motivated by short-term gains (Goldberg et al., 2002; Moore et al., 1997), it is useful to note that the whole time span in question is relatively short.

The present research contributes to the body of qualitative research on DUI and RDD in several ways. First, we have extended the analysis to Canadian and Spanish youth, showing similarities and differences between the two samples. Second, we have revealed similarities and differences between the two risky driving behaviors in terms of the number and nature of perceived benefits and drawbacks. Finally, we have explored youth’s egocentric motives in, and perceived short-term gains from, engaging in these two behaviors.

The findings have implications for the development of prevention programs dealing with DUI and RDD in a cost-effective and efficient manner. Programs might address the perceived benefits of DUI and RDD in addition to their drawbacks in order to acknowledge their importance to youth and dispel any myths. Programs may also need to change youth perceptions of the alternatives to DUI and RDD so that the benefits can be obtained via safer alternatives (see also Turrisi & Jaccard, 1992). Alternatives such as using public transport or taxis need to be perceived as fast and affordable. It may also be worth improving “safe ride services” in this regard (Caudill, Harding, & Moore, 2000). Finally, programs could highlight the objective probabilities of obtaining the benefits and incurring the drawbacks. For example, DUI and RDD are more likely to be faster ways of getting home than taking public transport, but an accident is less likely when taking public transport. However, youth may not integrate the probabilities with their desire for the outcomes (Dhami & Mandel, in press).

The main limitation of the present research is that, for ethical reasons, youth were asked about the costs and benefits of DUI and RDD while they were sober thus potentially reducing the generalizability of the findings to when they have consumed alcohol. Although future research could survey youth in their naturalistic environment (e.g., when leaving a bar after they have consumed alcohol on their own volition), this may raise other ethical concerns about the ability of intoxicated individuals to consent to participate in research.

Future research could examine how past personal experiences are related to risk perceptions. For instance, McCarthy et al. (2005) found that young people continued to DUI even after negative experiences, and Finken et al. (1998) found that only a small proportion of their sample who reported DUI or RDD got caught or punished, or were involved in an accident. Future research could also aim to develop explanatory models of DUI and RDD. As Dhami and Mandel (in press) have found, Canadian youths’ intentions to engage in DUI are best predicted by the importance they attach to the benefits, irrespective of their probabilities

or the drawbacks that may also be incurred (see also Greening & Stoppelbein, 2000 and McCarthy et al., 2006). It would be useful to ascertain the generality of these findings. An improved understanding of how young people experience and perceive risky driving behaviors can inform policies aimed at curbing the personal and societal costs associated with youth DUI and RDD.

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Table 1

*Canadian Youth's Perceived Benefits and Drawbacks of Driving Under the Influence of Alcohol*

Consequences	Responses %
<i>Benefits (N = 208)</i>	
Cheaper	24.52
Home faster/no waiting	15.87
Certainty of getting home	10.58
Not leave car behind	6.25
Fun/exciting	5.77
Convenient	12.50
Other	24.52
<i>Drawbacks (N = 428)</i>	
Accident	9.81
Kill/injure self	16.12
Kill/injure others	19.86
Damage car/property	8.88
Negative formal/legal reaction	26.64
Negative informal reaction	8.64
Other	10.05

Table 2

*Spanish Youth's Perceived Benefits and Drawbacks of Driving Under the Influence of Alcohol*

Consequences	Responses %
<i>Benefits (N = 94)</i>	
Faster/save time	29.79
Avoid negative outcome	6.38
Better than alternative	23.40
Comfort	14.89
Other	27.67
<i>Drawbacks (N = 326)</i>	
Accident	22.70
Careless/reckless/dangerous driving	16.56
Injure/kill	18.71
Sanction/punishment	22.70
Other	19.33

Table 3

*Attributes of Perceived Benefits and Drawbacks of Risky Driving Behaviors by Canadian and Spanish Youth*

	Canada		Spain	
	DUI	RDD	DUI	RDD
	Benefits (% of responses)			
Personal effect	77.71	62.96	58.82	76.15
Effect on other	0.00	17.28	0.00	0.00
Social reaction	0.00	0.00	8.82	0.00
Behavioral act	22.29	19.75	32.35	23.85
	Drawbacks (% of responses)			
Personal effect	17.92	46.37	51.33	53.91
Effect on other	22.08	21.77	0.00	0.00
Social reaction	39.22	19.35	0.00	0.00
Behavioral act	20.78	12.50	48.67	46.09

Table 4

*Temporal Dimensions of Perceived Benefits and Drawbacks of Risky Driving Behaviors by Canadian and Spanish Youth*

	Canada		Spain	
	DUI	RDD	DUI	RDD
	Benefits (% of responses)			
Before driving	57.32	39.51	32.35	21.54
During driving	7.64	17.28	20.59	78.46
After driving	35.03	43.21	47.06	0.00
	Drawbacks (% of responses)			
Before driving	0.00	0.00	0.00	0.00
During driving	60.78	80.65	71.86	71.74
After driving	39.22	19.35	28.14	28.26

Table 5

*Canadian Youth's Perceived Benefits and Drawbacks of Riding with a Drunk Driver*

Consequences	Responses %
<i>Benefits (N = 196)</i>	
Save money	25.51
Certainty of getting home	9.18
Prevent self from driving/getting punished	11.22
Home faster/no waiting	15.31
Help/support friend	14.29
Not have to take alternative transport/walk	7.14
Other	17.35
<i>Drawbacks (N = 293)</i>	
Kill/injure self	28.67
Kill/injure friend/others	18.43
Accident	10.58
Negative formal/legal reaction	10.58
Negative informal reaction	5.80
Negative emotion	10.58
Other	15.36

Table 6

*Spanish Youth's Perceived Benefits and Drawbacks of Riding with a Drunk Driver*

Consequences	Responses %
<i>Benefits (N = 144)</i>	
Cost efficient	19.44
Faster/save time	22.92
Not be alone	17.36
Better than alternative	15.28
Comfort	9.03
Socialize	6.25
Other	9.72
<i>Drawbacks (N = 260)</i>	
Accident	31.92
Careless/reckless/dangerous driving	8.85
Injure/kill	22.69
Sanction/punishment	25.00
Other	11.54