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Author/s:

Lubman, DI;Cheetham, A;Berridge, BJ;McKay-Brown, L

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**MAKINGtheLINK: A school-based intervention to improve help-seeking
for substance use problems**

Dan I. Lubman^{1,2} Ali Cheetham^{1,2} Bonita J. Berridge^{1,2} & Lisa McKay-Brown^{3,4}

1 Turning Point, Eastern Health, 54-62 Gertrude Street, Fitzroy 3065, Victoria, Australia

2 Eastern Health Clinical School, Monash University, Level 2, 5 Arnold Street, Box Hill
3128, Victoria, Australia

3 Travancore School, Victorian Department of Education and Training, 50 Flemington Street,
Travancore, 3032, Victoria, Australia

4 Melbourne Graduate School of Education, University of Melbourne, Level 6, 100 Leicester
St University of Melbourne, 3010, Victoria Australia

Corresponding author: Prof Dan I. Lubman, Turning Point, 54-62 Gertrude St, Fitzroy VIC
3065, Fax 61 03 9416 3420, Ph 03 8413 8413, Email dan.lubman@monash.edu

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Abstract

Aim: Many young people are reluctant to seek professional help for alcohol and other substance use problems, preferring to rely on family and friends. *MAKINGtheLINK* is a school-based intervention that teaches adolescents how to help their peers overcome barriers to engaging with professional help. The current study examined the effect of the *MAKINGtheLINK* program in a sample of 12-15 year old students.

Methods: Participants included 338 Grade 8 students (49% male, 51% female) recruited from the three schools in Victoria, Australia. Participants completed questionnaires measuring barriers to professional help-seeking, help-seeking intentions, and confidence to seek help at three time points (pre-intervention, post-intervention, and 6-week follow-up). A non-controlled repeated measures design was used to assess the effect of the program on help-seeking across time points.

Results: The program decreased barriers, increased intentions to seek help from formal sources, decreased intentions to seek help from family, and increased confidence to seek help for a peer. The decrease in barriers was maintained at the 6-week follow-up, as were decreased intentions to seek help from family members, and increased intentions to seek help from school counsellors and alcohol and drug workers. The effects of the intervention did not differ substantially between males and females.

Conclusions:

MAKINGtheLINK is the first intervention to focus on overcoming barriers to help-seeking for substance use problems by helping adolescents develop skills to support their peers. The intervention has promise as a means of facilitating help-seeking during adolescence, although further research is needed to test its effectiveness in a more rigorous design.

Key words: Adolescence, alcohol, help-seeking, mental health, school

INTRODUCTION

Increasing early intervention efforts are key to reducing the harms associated with adolescent substance use (1, 2). However, many young people are reluctant to seek professional help for problems related to their alcohol or drug use (3, 4). Studies have identified barriers to seeking treatment that may explain these findings, including concerns about stigma or judgement, limited trust in health professionals, a lack of understanding of professional confidentiality obligations, poor emotional competence, as well as the young person's belief that they should be able to resolve their own problems (5-8). These barriers constitute a significant challenge for health promotion activities targeting adolescent substance use, and highlight the need for programs that facilitate help-seeking skills amongst young people.

When adolescents do seek help for substance use problems, they often turn to peers or family members for support (3, 9-12). As peers become increasingly influential during the teenage years (13), adolescents are ideally placed to act as 'gate-keepers' to mental health services by supporting other young people and encouraging them to access appropriate professional help (14). However, studies have found that many adolescents demonstrate poor mental health literacy, including a limited ability to recognise specific disorders, poor knowledge of how to seek mental health information, as well as attitudes that do not promote problem recognition or appropriate help-seeking (15). Further, while approximately 50% of Australian secondary school students drink at harmful levels by the age of 17 (16), many young people underestimate the risks associated with harmful drinking (17-19). Studies also suggest that there may be unique barriers to seeking help for substance use problems, such as beliefs regarding the positive effects of substance use or attachment to a drug-using identity [7]. Teaching adolescents how to overcome these barriers is likely to improve gate-keeping skills and increase early identification and treatment of substance use problems.

Research examining help-seeking patterns suggests that females are more likely to seek help for mental health problems than males, with some evidence to suggest such gender differences are more pronounced at earlier ages (20). Indeed, females report less stigma or pressure in relation to concealing their problems, demonstrate better mental health literacy, and are more open and expressive in talking about mental health issues (21-23). Accordingly, females report greater intentions to seek help from peers, family, and professional sources (13, 22, 24-26), as well as online (27, 28). However, only a small number of studies have examined gender differences in help-seeking for substance use problems (11, 29, 30), and it is unclear whether the impact of help-seeking interventions differs between males and females, particularly during adolescence.

The *MAKINGtheLINK: Seeking Help for Risky Drinking* program is a school-based intervention designed to address identified barriers and enablers to adolescent help-seeking, in order to increase future help-seeking for substance-related problems before they reach a level of clinical significance. The current study examined the effect of the *MAKINGtheLINK* intervention on help-seeking barriers, intentions, and confidence in a sample of 12-15 year old students. It was hypothesised that the program would decrease barriers to seeking professional help, increase help-seeking intentions, and increase participants' confidence to seek help for themselves and for their peers. Gender was included in the analyses, in order to examine whether the effect of the program differed between males and females. Consistent with the mental health research literature, we expected that females would report fewer barriers to help-seeking, greater confidence, and greater intentions. However, we did not expect that the effect of the program would differ as a function of gender.

METHODS

Design

The *MAKINGtheLINK: Seeking Help for Risky Drinking* program is an adaptation of a previous school-based intervention that aimed to increase help-seeking for cannabis and mental health problems during adolescence (31). *MAKINGtheLINK* focuses on teaching adolescents the skills needed to identify mental health issues in their peers, and helping them overcome barriers to accessing and engaging with professional help (i.e., teaching practical steps for students to become effective gate-keepers). The program draws on two models of behaviour change – the Information-Motivation-Behavioural Skills Model (IMB) and Theory of Planned Behaviour (TpB). The IMB model is a well-validated, comprehensive health behaviour change framework that has been used in schools for HIV education and prevention (32). The model proposes that preventative behaviour is a function of the extent to which the individual is well-informed, motivated, and in possession of the skills needed to execute the behaviour. The TpB is a health behaviour change framework that has been used extensively in experimental health intervention trials (33), and proposes that behavioural outcomes are determined by intention and perceived behavioural control. In the *MAKINGtheLINK* intervention, the help-seeking activities included providing students with information about how to seek help and from whom (information), investigating perceived barriers to help-seeking (beliefs, intentions), and providing opportunities and videos for skill rehearsal (behavioural skills), which according to our composite model will lead to increased intentions to seek help as well as actual help-seeking behaviour (behavioural outcome). The program

comprises an implementation guide, a teacher manual, six interactive discussion-based activities, including an animation about the effects of alcohol on the developing brain and two vodcasts modelling how to assist a friend to seek help. A non-controlled repeated measures design was used to assess the effect of the program on help-seeking at three time points (pre-intervention, post-intervention, and 6-week follow-up).

Participants

A convenience sample of three high schools in Victoria, Australia, was recruited. Two of the schools were in the outer suburbs (one large, one medium size), and one was in the inner-city (small). All students in Grade 8 (aged 12-15) from the three schools were eligible to participate in the study (n=330). Student participation was entirely voluntary, and informed consent for all time points was obtained from the students' parents prior to participation. Ethics approval was obtained from ethics committees at Eastern Health and the Department of Education and Early Childhood Development, Victoria.

Procedure

The intervention was delivered over three hours on two separate occasions in each school (one two-hour session and another one-hour session in the same week) by an experienced teacher external to the school. All students were required to attend as part of their regular home group curriculum. Participants completed an anonymous online survey on SurveyMonkey during class time 2 weeks before the program, immediately after the program, and at 6 weeks follow-up. The survey took students between 10 and 15 minutes to complete. Data was collected between March-October 2011.

Measures

Perceived help-seeking barriers were assessed with The Barriers to Engagement in Treatment Screen (BETS; (34)). The BETS is an 11-item measure identifying major barriers to seeking help from a health professional, with responses rated on a 4-point scale (0= "Agree" to 3= "Disagree"). All 11 BETS items were modified to focus on health professionals, rather than GPs, and two items were modified to include drug and alcohol problems ("if I tell a health professional about my drug or alcohol problems as well as emotional problems, I believe they will keep it a secret" and "I think health professionals are interested in drug and alcohol problems as well as emotional problems"). Chronbach's alphas for the modified scale ranged from $\pm .82$ to $\pm .92$ across the three time points.

Intention to seek help was measured with the General Help Seeking Questionnaire (GSHQ; (35)), which required participants to indicate how likely they would be to seek help for an alcohol or drug problem from different sources, rated on a 5-point scale (1 = “very unlikely” to 5 = “very likely”). Help sources were divided into four main factors or categories; family (mother, father, friend, other relative), peer (friend, boyfriend/girlfriend), internet (chat room/blog, website), and formal sources (teacher, school counsellor, mental health professional, alcohol and drug worker, GP).

Confidence to seek help was measured with a single item: “How confident are you to seek help if you had an alcohol or drug problem?” Confidence to seek help for a peer was measured with a similar item, “How confident are you to assist a friend to seek help if they had an alcohol or drug problem?” Responses to both items were made on a 5-point Likert scale (1 = “Not confident at all” to 5 = “Very confident”).

Lifetime and recent alcohol use were assessed via the questions “during your life, on how many days have you had at least one drink of alcohol?” “during the past 30 days, on how many days did you have at least one drink of alcohol?” and “during the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?”

RESULTS

Baseline results

In total, 247 students from the three secondary schools completed the pre-intervention assessment. Of these, 215 completed the post-intervention assessment, and 203 completed the 6-week follow-up, with a total of 196 students completing measures at all three time points (a retention rate of 66.0%). There were no significant gender differences between participants who completed the measures at all three time points and participants who did not ($X^2 = 0.46$, $p = 0.55$). Similarly, there were no significant differences between groups on baseline scores on the GHSQ ($t(245) = -0.148$, $p = 0.88$), BETS ($t(245) = 0.129$, $p = 0.90$), confidence to seek help for a peer ($t(245) = 1.603$, $p = 0.11$), or lifetime alcohol use ($X^2 = 0.47$, $p = 0.83$). However, participants who completed measures at all three time points reported higher baseline confidence to seek help for themselves ($t(245) = 2.14$, $p = 0.03$). Demographic characteristics of the final sample of 196 participants are provided in Table 1.

-----Insert Table 1 here-----

Pre-intervention results

Perceived barriers, intentions, and confidence at the pre-intervention assessment are displayed in Table 2. Regarding barriers, participants ‘somewhat agreed’ with positive statements about help-seeking from health professionals. Help-seeking intentions were highest in regard to family, followed by peers and formal sources (between ‘unsure’ and ‘likely’), and the internet (between ‘unsure’ and ‘unlikely’). Participants reported feeling between ‘slightly confident’ and ‘confident’ in regard to seeking help, for both self and peer. Females reported higher intentions to seek help from peers, and greater confidence to help a peer, compared to males. No other gender differences were found.

-----Insert Table 2 here-----

Changes in barriers, confidence, and intentions

Changes in perceived barriers, intentions, and confidence were analysed using repeated-measures ANOVAs, with gender included as a between-subjects factor. Intentions to seek help from individual help sources were examined if there was a significant main effect for overall help type (Table 3). There was a significant main effect of time on perceived barriers to seeking professional help, with Bonferroni-corrected post-hoc tests demonstrating a significant reduction in perceived barriers at the post-intervention and follow-up assessments. There was no significant interaction between barriers and gender.

There were significant main effects of time on intentions to seek help from formal sources, family, and the internet, but not from peers. In regard to formal sources, intentions increased significantly from pre- to post-intervention, before decreasing back to pre-intervention levels at follow-up. However, examination of individual help sources showed that increased intentions to seek help from school counsellors and alcohol and drug workers remained significantly higher at follow-up (only intentions to seek help from mental health professionals decreased at this time point). Conversely, intentions to seek help from family decreased significantly from pre- to post-intervention, with no significant change at follow-up. This pattern was consistent across individual help sources (mothers, fathers, and other relatives). Finally, despite the significant main effect of time on intentions to seek help from the internet, post-hoc tests did not demonstrate significant differences between time points.

Further analyses were conducted to explore the trend-level interactions between gender and intentions to seek help from formal and internet sources. Separate one-way

ANOVAs demonstrated significant changes in help-seeking intentions from formal sources amongst females ($F(2, 198)=14.54, p<0.001$), but only a trend-level change amongst males ($F(2, 190)=2.26, p=0.090$). Bonferroni-corrected post-hoc tests revealed a significant increase in help-seeking intentions for females between the pre-intervention and post-intervention assessment ($p<0.001$), and a significant decrease (to pre-intervention levels) between the post-intervention and follow-up assessments ($p=0.006$). One-way ANOVAs examining help seeking from internet sources also revealed significant changes in intentions amongst females ($F(2, 198) = 4.418, p = 0.015$), but not amongst males ($F(2, 198) = 1.196, p = 0.303$). Amongst females, intention to seek help from internet sources did not change between the pre-intervention and post-intervention assessments ($p=0.562$), but increased significantly between pre-intervention and follow-up ($p=0.022$).

-----Insert Table 3 here-----

There was no change over time in confidence to seek help for self, however there was a significant main effect of time on confidence to seek help for peers. Confidence to seek help for peers increased between the pre-intervention and post-intervention assessments (to 'confident'), and decreased to pre-intervention levels at follow-up.

DISCUSSION

Substance use disorders are amongst the most common mental health problems experienced during adolescence. However, despite considerable investment in early intervention in recent years, including the development of school-based alcohol and drug education programs, less than 10% of young people with substance use disorders report accessing professional help (3). The *MAKINGtheLINK: Seeking Help for Risky Drinking* program is a school-based intervention that focuses on reducing perceived barriers to help-seeking for substance use problems during adolescence. The current study examined the effect of *MAKINGtheLINK* on help-seeking in a sample of 12-15 year old students. Findings indicate that the program decreased perceived barriers to seeking professional help, increased intentions to seek help from formal sources, decreased intentions to seek help from family, and increased confidence to seek help for a peer. The significant decrease in perceived barriers was maintained at the 6-week follow-up. The decrease in intentions to seek help from family members was also

maintained at follow-up, as was the increase in intentions to seek help from school counsellors and alcohol and drug workers, though not from formal sources overall.

Encouraging adolescents to seek help from appropriate sources is likely to reduce the long-term impact of early mental health problems (36). As such, the *MAKINGtheLINK* program focusses on teaching adolescents how to overcome perceived barriers to accessing and engaging with professional help, which may explain participants' decreased intentions to seek help from family at follow-up (i.e., the intervention may have shifted their help-seeking preferences away from informal and towards formal sources of help). In particular, the program appeared to increase adolescents' intentions to seek help from school counsellors and alcohol and drug workers, and decrease intentions to seek help from parents and other relatives. While encouraging adolescents to approach more appropriate help sources is an important goal, particularly as untrained adults demonstrate poor mental health literacy (37), there is evidence that parents (in particular, mothers) can play an important role in facilitating formal help-seeking during adolescence (25). As such, it is important to ensure that parents as well as other family members remain involved in the help-seeking process.

As predicted, the effects of the intervention did not differ significantly between males and females. However, there was some evidence to suggest that the intervention had a greater impact on help-seeking intentions amongst females, specifically in regard to formal and internet sources. While these results should be interpreted with caution given that the overall interactions between gender and help-seeking intentions did not reach significance, they highlight the need for further research examining the possibility that help-seeking interventions for substance use may differentially benefit males and females. This is of particular importance given that males are both more likely to experience substance use disorders and less likely to seek treatment for these (3). In particular, increasing intentions to seek formal help is likely to benefit males, as there is evidence that other people (particularly health professionals) have a strong influence on their decision to seek mental health treatment [4].

The baseline findings point towards differences in help-seeking for substance use compared to other mental health problems. Specifically, there were few pre-intervention differences in help-seeking between males and females, and intentions to seek help from family members were greater than intentions to seek help from peers. This latter finding could be influenced by the young age of participants, as decreased reliance on family as a help source becomes more apparent during mid-adolescence [13]. Alternatively, help-seeking preferences may vary depending on problem severity. Windle and colleagues [10] found that

while most adolescents seek help from multiple informal sources, those with more severe substance use problems were less likely to seek help from their parents, and more likely to rely on peers as their sole form of support. This is consistent with research indicating that adolescents with substance use problems do not typically perceive parents to be a supportive resource (38).

MAKINGtheLINK was designed to be both a prevention and early intervention program, and targeted students in the early secondary school years so that students have the skills to seek help for substance use problems before they reach a level of clinical significance. To our knowledge, the program is the first intervention to focus on overcoming perceived barriers to help-seeking for alcohol and other drug problems by helping adolescents develop the skills necessary to support their peers. In addition to improving gate-keeping skills, this is likely to have a positive impact on adolescents' ability to identify and seek help for their own substance use problems (39). Moreover, while the current intervention focussed on substance use, adolescents rely on each other for other mental health problems that could also be addressed by utilising peers as potential gate-keepers. These problems share common barriers, suggesting the mental health literacy and help-seeking skills that *MAKINGtheLINK* aims to develop are likely to be transferrable (36).

While the results of the current study are promising, there are a number of limitations to note. First, while the program decreased perceived barriers and increased intentions and confidence, no formal measures of behaviour were included. Although the measure used to assess intentions (the GHSQ) has been found to predict help-seeking behaviours (35), continued research is needed to determine whether the intervention actually increases engagement with help sources following the experience of substance use problems. Second, many of the changes that were found immediately post-intervention were not maintained at the 6-week follow-up. While it is encouraging that the reduction in perceived barriers remained significant at this time point, it is unclear whether this reflects a permanent or temporary change. Indeed, given the very short-term nature of the follow-up, there is a need for further research investigating whether the intervention leads to longer-term changes in help-seeking attitudes. Third, as only three high schools were involved in the intervention, the results may not be generalisable to other school settings. Finally, as this was an uncontrolled trial, it cannot be conclusively established that the changes observed at follow-up reflect the impact of the intervention. A cluster randomised controlled trial of *MAKINGtheLINK* is currently underway (40), which will hopefully address many of the limitations identified here, and will provide evidence regarding the potential long-term benefits of the program.

In conclusion, the results of the current study suggest that *MAKINGtheLINK* has promise as a means of reducing the harms associated with adolescent substance use by reducing barriers to help-seeking, increasing help-seeking intentions, and increasing confidence amongst young people to help their peers. Further research is necessary to determine the effectiveness of the program before it can be recommended for inclusion within school curricula.

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Table 1. Participant demographics

Demographics	Final sample (n=196)
Age at baseline (M, SD)	13.3 (0.54)
Age range at baseline	12-15 years
Gender	
Male (%)	96 (49.0%)
Female (%)	100 (51.0%)
Country of birth	
Australia (%)	175 (86.3%)
New Zealand (%)	1 (2%)
Other (%)	20 (11.8%)
Home language	
English (%)	159 (81.1%)
Other (%)	37 (18.9%)
Alcohol use	
Lifetime used (%)	66 (33.7%)
Lifetime days drinking (M, SD)	0.68 (1.27)
Lifetime days drinking (range)	0-100+
Recent ^a (%)	21 (10.7%)
Recent harmful ^b (%)	6 (3.0%)

^a Use over the past 30 days^b Consumed 5+ standard drinks over the past 30 days

Table 2. Help-seeking barriers, intentions, and confidence (pre-intervention)

	Full sample	Male	Female	Difference	
	M (SD)	M (SD)	M (SD)	t(1, 245)	p
Barriers	1.08 (0.51)	1.06 (0.52)	1.11 (0.51)	-0.74	0.456
Intentions					
Formal	3.08 (0.88)	3.07 (0.92)	3.09 (0.84)	-0.28	0.782
Family	3.87 (0.93)	3.80 (0.98)	3.93 (0.89)	-1.10	0.273
Peer	3.40 (0.85)	3.21 (0.87)	3.57 (0.79)	-3.41	0.001
Internet	2.33 (1.06)	2.27 (1.11)	2.39 (1.01)	-0.95	0.342
Confidence					
Self	2.67 (1.22)	2.65 (1.34)	2.53 (1.18)	0.78	0.434
Peer	2.64 (1.27)	2.29 (1.45)	2.84 (1.11)	-3.36	0.001

Table 3. Change in barriers, help-seeking intentions, and confidence

	Pre	Post	Follow-up	Main effect		Gender interaction	
	M	M	M	F (2, 388)	<i>p</i>	F (2, 388)	<i>p</i>
Barriers	1.08 (0.51) ^a	0.92 (0.61) ^b	0.98 (0.54) ^b	10.42	<0.001	0.98	0.370
Intentions							
Formal	3.23(0.92) ^a	3.51 (0.91) ^b	3.34 (0.93) ^a	11.94	<0.001	2.51	0.083
<i>School counsellor</i>	2.91 (1.21) ^a	3.55 (1.21) ^b	3.13 (1.20) ^b	28.25	<0.001	3.84	0.023
<i>Mental health professional</i>	3.53 (1.25) ^a	3.80 (1.14) ^b	3.62 (1.17) ^a	4.77	0.009	0.40	0.665
<i>Alcohol and drug worker</i>	3.28 (1.21) ^a	3.66 (1.20) ^b	3.52 (1.20) ^b	10.02	<0.001	0.58	0.559
<i>Doctor</i>	3.38 (1.12)	3.45 (1.18)	3.44 (1.06)	0.42	0.650	0.56	0.563
<i>Teacher</i>	2.32 (1.07)	2.33 (1.06)	2.23 (1.07)	0.90	0.405	1.18	0.307
<i>Phone help line</i>	2.99 (1.22)	3.09 (1.31)	2.96 (1.26)	1.08	0.339	2.13	0.122
Family	3.90 (0.92) ^a	3.45 (1.01) ^b	3.52 (1.03) ^b	29.28	<0.001	1.57	0.210
<i>Mother</i>	4.24 (1.10) ^a	3.69 (1.25) ^b	3.85 (1.22) ^b	31.80	<0.001	0.21	0.808
<i>Father</i>	3.91 (1.30) ^a	3.43 (1.29) ^b	3.54 (1.28) ^b	4.77	0.009	0.57	0.561
<i>Other relative</i>	3.54 (1.06) ^a	3.23 (1.21) ^b	3.19 (1.18) ^b	10.02	0.001	1.34	0.258
Peer	3.38 (0.84)	3.33 (0.94)	3.27 (1.08)	1.01	0.361	0.27	0.757
Internet	2.32 (1.08) ^a	2.33 (1.15) ^a	2.50 (1.17) ^a	3.42	0.035	2.46	0.086
Confidence							
Self	2.67 (1.22) ^a	2.60 (1.43) ^a	2.69 (1.31) ^a	0.41	0.660	1.17	0.839
Peer	2.64 (1.27) ^a	2.93 (1.13) ^b	2.63 (1.37) ^a	5.50	0.005	2.03	0.133

Means with different superscripts are significantly different ($p < 0.05$, Bonferroni-corrected)