Help-negation for suicidal thoughts in sub-clinical samples of young people

Coralie Joy Wilson
University of Wollongong


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Help-Negation for Suicidal Thoughts in Sub-Clinical Samples of Young People

A thesis presented in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Psychology at the University of Wollongong

Coralie Joy Wilson
2003
Abstract

Across the popular and academic literature, it is widely recognised that young people with persistent suicidal thoughts are at high risk for suicide completion. It is also accepted that seeking and receiving appropriate help offers protection against the development of acute forms of suicidality, along with suicide completion. Yet, as promising as appropriate help-seeking appears for suicide prevention, a growing number of studies suggest that suicidal ideation itself may impede the help-seeking process. There is evidence that acutely suicidal samples will negate or avoid available help, and there are indications that the help-negation process may occur in samples before levels of suicidal ideation become acute and require clinical intervention. With implications for suicide prevention and clinical practice, findings of help-negation suggest that if the effect can be found in sub-clinical (i.e., non-acutely suicidal) samples, help-negation can be identified as a risk-factor for youth suicide. Moreover, if factors contributing to the help-negation effect can be identified, it may be possible to prevent the help-negation process from occurring.

This thesis explores the help-negation effect in four studies with young people at sub-clinical levels of suicidal ideation. Two studies were conducted with university students and two studies, with high school students. The help-negation effect is indicated by negative associations between suicidal ideation and intentions to seek help for suicidal thoughts from a variety of specific sources, along with a positive association between suicidal ideation and intentions to seek help from “no-one”. Study 1 used a sample of 302 first-year university students, Study 2, a sample of 269 private high school students, Study 3, a second sample of 351 first-year university students, and Study 4, a sample of 105 public high school students. Studies 1 to 3 found that higher levels of suicidal ideation related significantly to lower intentions to seek help for suicidal thoughts from a range of sources, and higher intentions to seek help from no-one. Study 4 found that higher levels of suicidal ideation related significantly to lower intentions to seek help from family for suicidal thoughts. Suicidal ideation was measured by the Suicidal Ideation Questionnaire (SIQ; Reynolds, 1988) and help seeking intentions, by the General Help-Seeking
In addition to the help-negation hypothesis, this thesis examines the impact of several variables on the help-negation effect. Studies 1 and 2 examine the possibility that hopelessness and/or prior help-seeking experience might either explain or strengthen the help-negation relationship in university and/or high school students. Hopelessness is measured by the Beck Hopelessness Scale (BHS; Beck, Rial, & Rickles, 1974) and prior help-seeking experience, by the GHSQ. Similar results in both Studies 1 and 2 found that neither hopelessness nor prior help-seeking could fully explain the help-negation relationship over and above the impact of suicidal ideation. In Study 1, there was no evidence to indicate that hopelessness or prior help-seeking moderated the help-negation relationship in university students. However, Study 2 found that hopelessness might contribute to the overall strength of help-negation effect in high school students. In Study 2, although hopelessness was unable to fully account for the help-negation effect, a small moderation effect was found, indicating that higher levels of hopelessness were associated with a greater reluctance to seek help for suicidal thoughts as levels of suicidal ideation increased.

On the basis of Study 1 and 2 results, it was hypothesised that hopelessness might contribute to the strength of the help-negation effect, at least in adolescent populations, through negative appraisals about help as a suitable and effective way to manage suicidal thoughts. It was also hypothesised that some young people may not seek help for suicidal thoughts because they do not recognise they have a problem or they view suicidal thoughts as not in need of solution. Studies 3 and 4 explore the possibility that problem-solving appraisal and/or problem recognition might either explain or strengthen the help-negation effect, as for Studies 1 and 2, in samples of university and high school students. Aspects of problem-solving are measured by the short form of Frauenknecht and Black’s (1995) Social Problem-Solving Inventory for Adolescents (SPSI-A). Similar results for Studies 3 and 4 indicated that neither problem-solving appraisal nor problem recognition could fully account for the help-negation effect over and above the impact of suicidal ideation, and neither variable moderated the help-negation relationship. However, additional results in Study 4 found that total problem-solving capacity might explain adolescents’ help-negation
from family. In study 4, the negative relationship between students’ levels of suicidal ideation and their help-seeking intentions for family became non-significant once total problem-solving capacity was controlled.

Together, the results of Studies 1 to 4 confirm the robust nature of the help-negation process in sub-clinical youth samples and suggest that help-negation is not merely the result of hopelessness, prior help-seeking experiences, or aspects of poor social problem-solving, but a function of other variables that are associated with suicidal ideation and help-seeking intentions. Results are discussed in terms of individuation and autonomy, help-seeking fears, coping style, and personality characteristics. The thesis concludes by highlighting a number of questions for subsequent research. It is proposed that answers to these questions may provide explanations for the help-negation effect together with specific strategies for prevention and points for more effective early intervention and clinical practice.
Acknowledgements

Initial thanks must go to the National Health and Medical Research Council of Australia for providing the funding for this PhD research (Grant YS060), together with my fellow Chief Investigators on the broader NHMRC funded project, Prof. Frank Deane, A/Prof. Debra Rickwood and Dr. Joseph Ciarrochi. Additional thanks, to Frank for providing a starting point for this thesis along with supervision throughout the course of the research, to Joseph for providing access to participants and statistical support in Study 1, and to Deb for timely advice regarding the management of non-parametric data. Thanks must also go to the numerous colleagues and students who have assisted at various points in the research process, along with the participants who took part in each thesis and supporting study. Particular thanks to Stephen Anderson, Libby Westbrook, Vikki Costin, Kris Stevens, Greg Scott, Terry Birch, Helen Clancy, Fiona Kyle, Sandra Tuck, and the New South Wales Department of Education and Training for providing access to participants. Thanks to John Wilson, Naomi Ireland, Salli Hart, Greg Scott, and Anna Richardson for your research support, and to Janette Ellis for your help putting together the final draft of this thesis.

On a more personal note, special thanks must go to friends and colleagues who have given me the ongoing support and encouragement I have needed to continue my years of study and my quest to make a small difference in the area of youth health and mental health. In particular, thanks to A/Prof.s Ross Todd, John Spicer, and Kevin Ronan whose belief in me, kind words and wise advice gave me the courage I needed to take the next step in my academic journey. Thanks to staff from Dapto High School, Grace Lutheran College, the Illawarra Institute for Mental Health, the Illawarra Division of General Practice, Lifeline South Coast, and a number of youth health agencies across Australia for your ongoing interest in this research and much treasured friendship. Additional thanks to Jane Bajgar, Kim Capp, Michelle Hudoba, Steve Palmisano, Kristine Fogarty, Susan Beaton, Dianne Booth, Jo Dennison, Garry Hewitt, Tracey Jones, Kirsty Ross, Bronwyn Campbell, Lynda Keck, Jenny Nixon, Adelle Ward, Corina and Mark Seeman, Kerryn Sutton, and Craig and Lynda Botton.
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**Dedication**

This thesis is dedicated in loving memory to my dear friend and walking partner Garry Hewitt, who died suddenly on November 12, 2003. Garry was one of the most special people I have ever been fortunate enough to meet and get to know. After surviving a liver transplant, he spent his days celebrating life and reaching out to all those around him, particularly the young people. Garry openly valued others. He was passionate about people and reminded me on a daily basis about the important things in life. I won’t forget.
# Table of Contents

Abstract ......................................................................................................................... ii
Acknowledgements ........................................................................................................... v
Dedication ......................................................................................................................... vi
Table of Contents ............................................................................................................... vii
List of Appendices .......................................................................................................... xi
List of Tables................................................................................................................. xiii

Introductory Overview: ..................................................................................................... 1
The context of Australian youth suicide ................................................................. 1
Suicide and gender ........................................................................................................ 3
Suicidal pathways .......................................................................................................... 3
Suicidal ideation ............................................................................................................ 4
Help-negation for suicidal thoughts ........................................................................ 5
Implications .................................................................................................................... 5
Thesis framework ......................................................................................................... 6
General method ............................................................................................................. 7
Ethics .............................................................................................................................. 7
Sampling rationale ...................................................................................................... 8

Chapter 1 ...................................................................................................................... 10
Risk and protective factors ....................................................................................... 11
Appropriate help-seeking ......................................................................................... 12
Young peoples’ help-seeking patterns and barriers .............................................. 15
  Broad help-seeking patterns ................................................................................. 16
  Help-seeking barriers ............................................................................................ 17
  Suicidal ideation as a significant help-seeking barrier ....................................... 19
Summary ...................................................................................................................... 20

Chapter 2 ...................................................................................................................... 21
Help-negation in acutely suicidal samples ............................................................... 21
Help-negation in non-clinical samples ..................................................................... 23
Chapter 4 ......................................................................................................................74
  Social problem-solving defined .................................................................74
  Social problem-solving and suicide ..........................................................75
  Professional psychological help-seeking .................................................77
  Problem recognition and help-negation ..................................................79
    Difficulties associated with problem recognition ..............................80
  Problem-solving appraisal and help-negation .........................................83
  Summary .............................................................................................................87

Chapter 5 ......................................................................................................................88
  Aim ....................................................................................................................88
  Hypotheses .......................................................................................................88
  Study 3 ..............................................................................................................89
  Method ..............................................................................................................89
    Participants and procedure .................................................................89
  Measures .........................................................................................................90
  Results ..............................................................................................................94
    Data screening and assumption testing ..............................................94
    Preliminary analyses ..............................................................................96
  Help-negation .............................................................................................100
  Social problem-solving ..........................................................................100
  Study 4 ............................................................................................................107
  Method ..........................................................................................................107
    Participants and Procedure .................................................................107
  Measures .......................................................................................................108
  Results ..........................................................................................................109
    Data screening and assumption testing ..............................................109
    Preliminary analyses ..............................................................................111
  Help-negation .............................................................................................116
  Social problem-solving ..........................................................................116
  Summary ............................................................................................................119
    Preliminary results ..................................................................................119
    Help-negation ..........................................................................................123
    Problem recognition and problem-solving appraisal .....................124
List of Appendices

Appendix I ......................................................................................................................... 177

Research Summaries

Suicidal ideation ............................................................................................................. 178
Help-seeking patterns ................................................................................................. 183
Help-seeking barriers ................................................................................................. 187
Social problem-solving and suicide ......................................................................... 192

Appendix II .................................................................................................................. 196

Questionnaire

Introduction ................................................................................................................... 197
Method ......................................................................................................................... 203
Results ......................................................................................................................... 204
Discussion ................................................................................................................... 206
References ................................................................................................................... 208

Appendix III ............................................................................................................... 214

Study 1: Establishing the Help-Negation Effect in Sub-Clinical Samples
Protocol ....................................................................................................................... 215
Data screening and assumption tests ........................................................................ 225
Wilcoxon Z Scores .................................................................................................... 231

Appendix IV ............................................................................................................. 232

Study 2: Establishing the Help-Negation Effect in Sub-Clinical Samples
Protocol ....................................................................................................................... 233
Data screening and assumption tests ........................................................................ 247
Wilcoxon Z Scores .................................................................................................... 252
Appendix V ............................................................................................................................. 253

Study 3: Help-negation, Problem Recognition, and Problem-Solving
Appraisal in Sub-Clinical Populations

Protocol ............................................................................................................................. 254
Data screening and assumption tests ................................................................. 264
Wilcoxon Z Scores ....................................................................................................... 296

Appendix VI ....................................................................................................................... 270

Study 4: Help-negation, Problem Recognition, and Problem-Solving
Appraisal in Sub-Clinical Populations

Protocol ............................................................................................................................. 271
Data screening and assumption tests ................................................................. 288
Wilcoxon Z Scores ....................................................................................................... 293
List of Tables

Table 3.1. Means and standard errors of the original GHSQ item scores for personal-emotional problems (Per-Emot), anxiety and depression (Anx-Dep), suicidal thoughts (Suicide-Thts), and different sources of help in a university sample (Study 1)...........40

Table 3.2. Means (M) and standard errors of university students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 1)............................................44

Table 3.3. Correlations between suicidal ideation (SIQ), hopelessness (BHS), and help-seeking intentions for non-suicidal and suicidal problems and different sources of help in a university sample (Study 1). .........................................................46

Table 3.4. Summary of MANCEVA analysis for suicidal ideation (SIQ) predicting help-seeking intentions for suicidal thoughts and personal-emotional problems while controlling for hopelessness and prior help in a university sample (Study 1). ...............49

Table 3.5. The impact of hopelessness and prior help-seeking experience on help-negation in a university sample (Study 1).................................................................51

Table 3.6. Means (M) and standard errors of the original GHSQ item scores for high school students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 2)..............56

Table 3.7. Means (M) and standard errors of high school students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 2).........................................59

Table 3.8. Correlations (r) between suicidal ideation (SIQ), hopelessness (BHS), and help-seeking intentions for personal-emotional and suicidal problems, and different sources of help for high school students (Study 2). ........................................61
Table 3.9. Summary of MANCOVA analysis for suicidal ideation (SIQ) predicting help-seeking intentions for suicidal thoughts and personal-emotional problems while controlling for hopelessness and prior help in a high school sample (Study 2)........64

Table 3.10. The impact of hopelessness and prior help-seeking experience on help-negation in a high school sample (Study 2). .................................................................65

Table 5.1. Means (M) and standard errors of help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot), suicidal thoughts (Suicide-Thts), and different sources of help in a university sample (Study 3)..................................................95

Table 5.2. Means (M) and standard errors of university students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 3)..............................98

Table 5.3. Correlations (r) between suicidal ideation (SIQ), problem-solving appraisal and problem recognition (SPSI-A), and help-seeking intentions for suicidal and non-suicidal problems and different sources of help in a university sample (Study 3)....101

Table 5.4. Summary of MANCOVA analysis for suicidal ideation (SIQ) predicting help-seeking intentions while controlling for social problem-solving appraisal and problem recognition (SPSI-A) in a university sample (Study 3).........................103

Table 5.5. The impact of problem-solving appraisal and problem-recognition on help-negation in a university student sample (Study 3). ..................................................106

Table 5.6. Means (M) and standard errors of help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot), suicidal thoughts (Suicide-Thts), and different sources of help for a high school sample (Study 4).................................110

Table 5.7. Means (M) and standard errors of help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot), suicidal thoughts (Suicide-Thts), and different sources of help for a high school sample (Study 4).................................113
Table 5.8. Correlations (r) between suicidal ideation (SIQ), problem-solving appraisal and problem recognition (SPSI-A), and help-seeking intentions for suicidal and non-suicidal problems and different sources of help in a high school sample (Study 4)..........................................................................................................................115

Table 5.9. The impact of problem-solving appraisal and problem-recognition on help-negation in a high school student sample (Study 4)..................................................120

Table A.1. Australian Studies of Suicidal Ideation: Cross-sectional studies of suicidal ideation among young people. ...................................................................................178

Table A.2. International (Non-Australian) Studies of Suicidal Ideation: American cross-sectional studies of suicidal ideation among young people.........................179

Table A.3. International Studies of Suicidal Ideation: American case-controlled studies of suicidal ideation among young people...............................................181

Table A.4. International Studies of Suicidal Ideation: American cohort studies of suicidal ideation among young people.........................................................181

Table A.5. International Studies of Suicidal Ideation: Non-American cross-sectional studies of suicidal ideation among young people..............................182

Table A.6. International Studies of Suicidal Ideation: Non-American cohort studies of suicidal ideation among young people..............................................182

Table A.7. Patterns of youth help-seeking for personal, emotional, and suicidal problems..............................................................................................................183

Table A.8. Barriers to young people in non-clinical populations seeking professional psychological help.................................................................187

Table A.9. Conceptual links between social problem-solving (SPS) and suicidal variables. ........................................................................................................192
Table A.10. Frequency of original GHSQ data in a university sample (Study 1). ....226

Table A.11. Frequency of original SIQ data in a university sample (Study 1).........227

Table A.12. Means (M), standard errors (SE), and z-scores (Wilcoxon t-tests) between help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts) for different help-sources in a university sample (Study 1)......................................................................................................................231

Table A.13. Frequency of original GHSQ data in a high school sample (Study 2)...248

Table A.14. Frequency of original SIQ data in a high school sample (Study 2). ......249

Table A.15. Means (M), standard errors (SE), and z-scores (Wilcoxon t-tests) between help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts) for different help-sources in a high school sample (Study 2)......................................................................................................................252

Table A.16. Frequency of original GHSQ data in a university sample (Study 3). ....265

Table A.17. Frequency of original SIQ data in a university sample (Study 3).........266

Table A.18. Means (M), standard errors (SE), and z-scores (Wilcoxon t-tests) between help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts) for different help-sources in a university sample (Study 3)......................................................................................................................269

Table A.19. Frequency of original GHSQ data for high school students (Study 4). .289

Table A.20. Frequency of original SIQ data for high school students (Study 4)......290
Table A.21. Means (M), standard errors, and Z-scores (Wilcoxon T tests) between help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot) suicidal thoughts (Suicide-Thts) for different help-sources for high school students (Study 4).
Introductory Overview:

**Thesis Context, Framework, and General Method**

Please see print copy for poem cited in Garvey, 2000.

*Darren Garvey (August, 1999; cited in Garvey, 2000, p. 34-35)*

**The context of Australian youth suicide**

Whether statistical or lyrical, suicide among young people is an increasingly salient preoccupation for many communities and cultures (Graham, Reser, Scuderi, Zubrick, Smith, & Turley, 2000). Traditionally, suicide rates have been highest among elderly males, however, rates among young people have increased to such an extent that young people are now the group most at risk in a third of countries (*World Health Organisation* [WHO], 2000). Offering hope, international data collected between 1980 and 1992 show that suicide rates declined from 16.1 to 14.9 per 100,000 (7.2%)
for persons aged 20 to 24 years. Unfortunately, the same data also show that international rates increased from 8.5 to 10.9 per 100,000 (28.3%) for 15 to 19 year olds, and from 0.8 to 1.7 per 100,000 (120.0%) for 10 to 14 year olds (Centers for Disease Control & Prevention [CDC], 1995a). Of the large industrialised nations, Australia has one of the highest death rates for young people aged 15 to 24 years (e.g., Burke, 2002; UNICEF, 1993). Within Australia, youth suicide is frequently reported to be the cause of 30 to 50% of all deaths in the 15 to 19 year age group and is second only to motor vehicle accidents in terms of youth mortality (Australian Bureau of Statistics [ABS], 1997). During 2000, suicide accounted for 338 deaths in the 15 to 24 year age group, generating a death rate of 12.5 per 100,000 young people (Burke, 2002). The highest number of suicides in this age group over the eleven-year period from 1990 to 2000 was registered in 1997 (510 deaths with a death rate of 19.1 per 100,000 young people) (Burke, 2002).

International comparisons should be interpreted conservatively due to differences in systems of data collection that account for some variation in rates (Graham et al., 2000; Moscicki, 1995). However, of the 23 Western nations, Australian suicide rates for 15 to 24 year olds have consistently ranked fourth for males and eighth for females (Cantor, Neulinger, & De Leo, 1999). At first glance, this comparison puts Australian youth suicide rates into the top third of Western nations, and makes Australia comparable by trend with other colonised countries such as New Zealand, Canada and the USA (Cantor, Leenaars, Lester, Slater, Wolanowski, & O’Toole, 1996; La Vecchia, Lucchini, & Levi, 1994; WHO, 2000). In an earlier study, Pritchard (1992) found that when Australian youth suicide rates were compared with rates from 19 other countries, youth suicide rates for Australia and New Zealand were greater than the overall male and female suicide rates for either country. This was in contrast to other countries, most reporting higher general, rather than youth suicide rates for both males and females (Pritchard, 1992).

In sum, although data collected between the years 1999 and 2002 suggest that Australian youth suicide rates may have stabilised (Burke, 2002), since the 1970’s when overall suicide rates were falling, Australian youth suicide rates have increased (Cantor et al., 1999), and remain unacceptably high (Martin, 2002).
Suicide and gender

In most countries being young and male is one of the greatest risk factors for suicide completion (e.g., CDC, 1995b; Cantor, Neulinger, Roth, & Spinks, 1998; Davis & Kosky, 1991; Pritchard, 1992; Lester, 1997; Morrell, Taylor, & Kerr, 1998). Within Australia, although there is evidence that rates of young male suicide have decreased in the past three years, when these rates are considered within the context of the last thirty years, young male suicides increased while young female suicides remained less than that of males and relatively stable (e.g., Baume, Cantor, & McTaggart, 1997; Burke, 2002; Cantor et al., 1998; Lester, 1998). For young males and females, suicide completion continues to remain the second most common cause of death, however, there are marked differences in the suicide rates between these two groups. Pritchard (1992) found that suicide completions by young males increased by 66% and decreased by 6% for young females between the years 1973 and 1987. Lester (1998) reported that Australian youth suicide rates increased by 51% for young males and 4% for young females between the years 1980 and 1990. In the period from years 1990 to 2000, young male suicides outnumbered young female suicides by a factor of approximately four times. However, in the year 2000 the gap closed within the 15 to 24 year age group, such that suicide accounted for 22% of the total male deaths and 16% of the total female deaths (Burke, 2002).

Suicidal pathways

While the broad statistical features surrounding Australian youth suicide are becoming increasingly clear, an understanding of the specific complexities that culminate in suicide completion remains crucial for prevention and early intervention (Graham et al., 2000). In general, it is agreed that suicidal behaviours have developmental pathways. It is also agreed that these pathways typically begin with emotional and/or psychological distress that develops into suicidal ideation, continues to suicide attempt, and ends with suicide completion (e.g., Cole, Protinsky, & Cross, 1992; Felner, Adan, & Silverman, 1992; Pfeffer, Klerman, Hurt, Kakuma, Peskin, & Siefer, 1993; Schweitzer, Klayich, & McLean, 1995; Yung & McGorry, 1996). According to Novick (1996), suicide completion is not necessarily an impulsive act, but the end-point on a continuum of pathological regression. Providing support, a
study by the *New South Wales Child Death Review Team* found that between the years 1996 and 2000, of the 187 children aged 12 to 17 years that died from suicide or risk-taking behaviour across the State, 124 deaths (66%) occurred within the context of significant enduring or chronic difficulties (Sankey & Lawrence, 2003). Almost three-quarters of these young people (72.7%) were aged 16 or 17 years at the time of their death. Difficulties incurred at the time of death included problems of mental ill-health, family dysfunction, school-related difficulties, or any combination of these. Twenty-eight of the 124 young people who died experienced more than one difficulty, and 32 young people had been diagnosed with mental health problems (most commonly behavioural disorders, followed by depression). Twenty-two of the young people who died were suffering high levels of emotional distress but had no diagnosis of mental ill-health. Seventy young people experienced chronic family dysfunction, including physical abuse, neglect, emotional abuse, sexual abuse, maladaptive parenting and ongoing conflict and arguments. Thirty-eight of the young people who died experienced significant ongoing school-related problems, including stress with Higher School Certificate study, learning difficulties, peer-relationship problems, and ongoing behavioural or disciplinary problems (Sankey & Lawrence, 2003).

**Suicidal ideation**

“Suicidal ideation” refers to people’s thoughts and ideas about death, suicide, and serious self-injurious behaviours (Reynolds, 1988). These thoughts can relate to the planning, process, or outcome of suicidal behaviours, and appear relatively common in young people. Australian studies (Table A.1, Appendix I) together with non-Australian studies (Tables A.2 to A.6, Appendix I) have found that up to 62.6% of young people report suicidal ideation at some time in their lifetime, up to 43% of young people report suicidal ideation within the previous year, and up to 23.4% of young people report current and/or recurrent suicidal ideation. Despite methodological issues such as inconsistent measurement criteria (e.g., Beutrais, 1998; Wagner, 1997), along with some evidence suggesting that reported rates of suicidal ideation may underestimate actual rates by as much as two-thirds (Madge & Harvey, 1999), Australian and non-Australian data converge to suggest that at any point in time, up to 23.4% of the youth population are potentially at risk to act on their suicidal
thoughts.

Help-negation for suicidal thoughts

Appropriate help-seeking offers protection against suicide completion and the development of acute levels of suicidal ideation that may precede an attempt (Kalafat, 1997). Nonetheless, few adolescents experiencing significant levels of distress, including suicidal distress, seek appropriate help (e.g., Dubow, Lovko, & Kaush, 1990; Offer, Howard, Schonert, & Ostrov, 1991; Rickwood & Braithwaite, 1994; Saunders, Resnick, Hoberman, & Blum, 1994; Seiffge-Krenke, 1989; Whitaker, Johnson, Shaffer, Rappaport, Kalikow, & Walsh et al., 1990). Providing the most concern are consistent indications of help-negation in sub-clinical youth samples. Help-negation refers to “the refusal to accept or access available helping resources” (Rudd, Joiner, & Rajab, 1995, p. 499) and until recently, had only been identified in clinical samples of acutely suicidal participants (Clark & Fawcett, 1992; Rudd et al., 1995). In several studies however, the help-negation effect has been indicated by an inverse relationship between suicidal ideation and help-seeking intentions in samples that were not acutely suicidal (i.e., sub-clinical samples). Within these samples, higher levels of suicidal ideation were significantly associated with lower help-seeking intentions (Carlton & Deane, 2000; Deane, Skogstad, & Williams, 1999; Saunders et al., 1994).

Implications

There are several implications if the help-negation effect can be found in sub-clinical populations. If intentions proximate actual behaviours (e.g., Ajzen, 1985, 1991), and appropriate help-seeking offers protection against the development of acutely suicidal behaviour (e.g., Kalafat, 1997; Rudd, Rajab, Orman, Stulman, Joiner, & Dixon, 1996; Rutter, 1985), then lower help-seeking intentions may be related to fewer protective help-seeking behaviours. Subsequently, fewer help-seeking behaviours may increase the individual’s risk for suicide attempt and completion. There is a need to establish the help-negation effect and extend it to different sub-clinical samples. There is also a need to examine potential explanations for the help-negation process. By understanding this process, together with the factors that contribute to the help-
negation effect in sub-clinical populations, it may be possible to inform initiatives (either targeted or universal) to better prevent suicide completion.

**Thesis framework**

This thesis has two primary objectives. First, to examine the help-negation effect across different sub-clinical university and high school samples. Second, to systematically examine factors that offer promise for understanding the help-negation process.

Chapter 1 provides the impetus for the thesis research. This chapter defines and discusses help-seeking within the context of prevention and clinical intervention, before providing a broad overview of youth help-seeking patterns and barriers that have been identified in the professional psychological help-seeking literature.

Chapter 2 provides a review of help-negation findings in clinical and sub-clinical populations, along with a theoretical account of the way in which hopelessness and prior help-seeking experience might contribute to the help-negation effect in sub-clinical samples.

Chapter 3 presents Studies 1 and 2. These studies identify the help-negation effect in a sub-clinical university sample and a sub-clinical private Christian high school sample, before examining the impact of hopelessness and prior help-seeking on the help-negation effect in each sample. That is, the extent to which hopelessness and/or prior help-seeking either explains or strengthens the help-negation relationship in university and high school students.

Chapter 4 provides a theoretical account of the way in which problem recognition and problem-solving appraisal might underpin the help-negation process.

Chapter 5 presents Studies 3 and 4. These studies extend the help-negation effect to a second sub-clinical university sample and a sub-clinical public high school sample, before examining the impact of problem recognition and problem-solving appraisal on the help-negation effect in each sample. As for Studies 1 and 2, Studies 3 and 4...
examine the extent to which each problem-solving variable either explains or strengthens the help-negation relationship in university and high school students.

Chapter 6 discusses the results of Studies 3 and 4 within the context of results from Studies 1 and 2, and in terms of implications for prevention and clinical intervention.

**General method**

**Ethics**

All studies received review and approval from the University of Wollongong Human Ethics Committee. Study 2 received additional review and approval from the high school Principal and school Pastoral Committee. Study 4 received additional review and approval from the high school Principal and Head Teacher of Student Welfare, along with the New South Wales Department of Education and Training (NSW DET).

For Study 4, NSW DET approval required modifications to the study protocol and the inclusion of more stringent consent procedures than those approved for Studies 1 to 3. NSW DET required the Study 4 protocol to identify and refer students “at risk” for suicide, in addition to gathering research data. Consequently, the Study 4 data collection was divided into two parts; the first part, an anonymous research questionnaire, and the second, a non-anonymous questionnaire that allowed the identification and immediate referral of students that might be at risk for suicide (see Appendix VI). Data collection subsequently required the individual consent of students and parents for the completion of anonymous and non-anonymous protocols. This meant that a total of four separate consent forms had to be read and completed for one student to participate in the study. Following this recruitment procedure, only 105 of the potential 790 students attending the school (13% of the available school population) participated in the study. It is possible that the complex recruitment procedure lead to selection bias and lower levels of suicidal ideation than might be expected in normal student populations. This issue is elaborated on in Study 4 (Chapter 5).
Overview

Sampling rationale

Ethical considerations

Given the sensitivity associated with youth suicide research, even when samples are sub-clinical (attested to by the rigorous consent procedures required for NSW DET to approve Study 4), participants were purposefully recruited from within settings that allowed comprehensive debriefing and which provided direct access to professional psychological care should intervention be necessary (i.e., university and high school settings).

Core and sequential hypothesis testing

As noted, this thesis has two main objectives; first, to confirm and replicate the help-negation effect in different sub-clinical youth samples and second, to systematically examine hypotheses that might help unravel the help-negation relationship. To meet the first objective, all thesis studies use standard measures of suicidal ideation and help-seeking intentions to test the core hypothesis that the help-negation effect would be found in each sub-clinical university and high school sample. To meet the second objective, sequential hypotheses are tested using measures that differ between studies. In Studies 1 and 2, measures of hopelessness and prior help-seeking experience are used to examine the impact of both variables on the help-negation effect in university and high school students. Studies 3 and 4 use measures of social problem-solving capacity to examine the impact of problem recognition and social problem-solving appraisal on the help-negation effect, also in samples of university and high school students.

Sample differences

Hypotheses are examined in both university and high school samples because evidence suggests that university and high school students are sufficiently different to warrant the replication of help-negation findings and to test the generalisation of results. Different levels of cognitive development may mean that variables that either explain or strengthen the help-negation effect in younger populations may not have
the same impact in older youth samples. For example, a study that examined the relationship between hopelessness and the cognitive development of 107 high school, community college, and university students, found that younger students in the concrete operational stage reported higher levels of hopelessness than older students in the formal operational stage (Moilanen, 1993).

**Analytical procedure**

Finally, for consistency and comparison, all thesis studies follow the same broad analytical procedure. Within each study, correlational analyses are used as a preliminary test of the help-negation effect. Covariate analyses are used to examine the possibility that either hopelessness and prior help (Studies 1 and 2) or aspects of social problem-solving (Studies 3 and 4) might explain the help-negation effect over and above the impact of suicidal ideation. Moderational analyses are used to examine the extent to which hopelessness, prior help (Studies 1 and 2), and aspects of social problem-solving (Studies 3 and 4) can account for the strength of the help-negation effect in each student sample.
Help-Seeking in Young People:
Patterns, Barriers and Implications for Research

Help-seeking has a long history of research that has been reported across a wide variety of disciplines. Perhaps this continued interest comes from the recognition that help-seeking is a highly adaptive behaviour that impacts on an individual in a variety of different contexts across their life span (Lee, 1999). From a developmental perspective, Nelson-LeGall (1981) argues that appropriate help-seeking signals the achievement of an important milestone comprising a complex network of cognitive functions: the recognition of problems, the identification of appropriate help-sources, and the development of functional help-seeking strategies. From an educational perspective, appropriate help-seeking increases the efficacy of learning and teaching in the classroom and predicts the academic performance of students (Karabenick, 1998; Karabenick & Knapp, 1988; Newman, 1990). From a financial perspective, appropriate help-seeking predicts the commercial output and general performance of community businesses and organisations. Workers who actively seek help tend to learn new skills faster, solve problems more efficiently, cope better with stress, build a greater number of interpersonal alliances, be seen as leaders, have higher levels of satisfaction, better performance evaluations, and longer tenure (Ashford & Tsui, 1991; Lee, 1999; Morrison, 1993). Finally, from the prevention perspective underpinning this thesis, appropriate help-seeking has the potential to protect the individual against the risk associated with the development of suicidal thoughts and behaviours. This chapter discusses appropriate help-seeking within a prevention context and provides the foundation for the following thesis research.
Risk and protective factors

Determinants of suicidal behaviour occur on many levels, and comprise a complex array of psychosocial and environmental factors that may or may not foster vulnerability to suicidal behaviour. These determinants can be translated into risk and resilience factors for different population groups and individuals. In general, risk factors increase the likelihood that suicidal behaviour will develop, whereas resilience factors reduce this likelihood (Commonwealth Department of Health & Aged Care [CDHAC], 2000; Rutter, 1985).

Risk factors increase the possibility of becoming suicidal by contributing to the development of pathways that lead to acutely suicidal thoughts and behaviours. In short, risk factors exacerbate the burden of an individual’s existing suicidal predisposition and include “genetic, biological, behavioural, psychological, sociocultural, economic, environmental, and demographic conditions and characteristics” (CDHAC, 2000, p. 14). Many risk factors have little influence on their own, but exposure to a number can produce strong interactive effects or cumulative effects over time (Greenberg, Speltz, & DeKlyen, 1993; Kazdin & Kagan, 1994). For example, in a qualitative study of young suicide attempters (mean age 25 years), Everall (1999) found that suicidal behaviour developed after a series of life experiences that began in childhood and accumulated into adolescence and adulthood. Experiences such as recurrent disruption within the family, amassed losses, perceptions of lack of connection and communication with peers and valued adults, and lack of control over life events or outcomes were significant determinants of eventual suicidal attempt. Sankey and Lawrence (2003) reported that of the total number of young people who died in NSW between the years 1996 and 2000, almost two-thirds of the children (124 of 187) had experienced significant long-term difficulties, sometimes lasting many years and causing severe emotional distress. As noted earlier, difficulties included mental health problems, distressing family situations, and problems at school (Sankey & Lawrence, 2003).

In contrast to risk factors, resilience factors reduce the likelihood that an individual will develop acutely suicidal behaviours. These factors tend to build the individual’s ability to “bounce back” from difficult life experiences and can be compensatory
and/or protective. Compensatory factors mitigate the effect of risk factors by stabilising or decelerating the development of suicidal behaviour, whereas, protective factors mitigate the effect of exposure to risk (Rutter, 1985). Put simply, protective factors lower the impact of additional risk factors, regardless of risk factors that might already exist (Resnick, Bearman, Blum, Bauman, Harris, & Jones et al., 1997).

Protective factors may be general (broad-based) or specific and may operate independently, successively, and simultaneously to offer protection at community, family, and individual levels. According to Kalafat (1997), as suicidal pathways move towards acutely suicidal ideation and behaviour, the protective nature of help-seeking moves along a concurrent continuum from broad-based and emotionally low-risk to specific and emotionally high-risk. This suggests that when faced with a new but relatively safe situation, simply knowing that help exists if it is needed might be enough to provide protection against the development of distress. However, when a young person is experiencing suicidal thoughts or is tempted to self-harm, a general help-seeking knowledge is not likely to be sufficient to reduce their suicidal distress. Kalafat (1997) suggested that suicidal young people need to actually seek and engage in help from an appropriate help-source.

In sum, protective factors appear essential for the attenuation and interruption of suicidal pathways (e.g., Coie, Watt, West, Hawkins, Asarnow, & Markham et al., 1993; Felner et al., 1992; Rubenstein, Halton, Kasten, Rubin, & Stechler, 1998; Kalafat, 1997; Resnick et al, 1997; Rudd et al., 1996; Sandin, Chorot, Santed, Valiente, & Joiner, 1998). Protective factors include dispositional attributes such as willingness to seek appropriate help, social problem solving abilities and skills, life affirming beliefs, perceptions of self worth, internal locus of control, family cohesion, external support, perceived group belonging and membership, and strong cultural identity (Royal New Zealand College of General Practitioners [RNZCGP], 2000).

**Appropriate help-seeking**

To prevent youth suicide or intervene when young people are developing suicidal thoughts or behaviours, it is important to have a clear understanding of variables that act most effectively as protective factors. Kalafat (1997) states that we “must seek to
identify risk and protective factors in the adolescent [and youth] population that can be reduced or enhanced, respectively” (p. 179). Certainly, research that determines both risk and protective factors is equally important for reducing suicide in young people (Beutrais, 1998; Coie et al., 1993; Felner et al., 1992; Kalafat, 1997). Nonetheless, the vast amount of existing youth suicide research has focused primarily on the identification of specific risk factors (Beutrais, 1998; CDC, 1995b; Patton & Burns, 1998). In some respects, this approach to youth suicide reduction has been fruitful. For example, there is an increasing awareness of risk factors that must be considered for both clinical assessment and the development of prevention and early intervention programs (e.g., Patton & Burns, 1998). However, most risk factor research has been correlational and not causative (Berman & Jobes, 1995; Williams, 1997), and has been fraught with difficulties such as risk factor morbidity. There have also been methodological problems related to non-standardised measurement, and inconsistent categorisation or recording of suicidal behaviour. It has often been the case that risk factors under investigation have related to a range of emotional and psychological problems and could not be specifically related to the development of suicidal behaviour. Much suicidal behaviour has also been miscategorised and recorded as deaths due to accidents or unintentional injuries (e.g., Beutrais, 1998; Graham et al., 2000; Kalafat, 1997; Moscicki, 1995; Wagner, 1997).

While protection research is in its infancy, there is a strong body of literature to support the view that appropriate help-seeking provides protection against a variety of mental health risk factors, including those for suicide. Gourash (1978) defined help-seeking as “any communication about a problem or troublesome event which is directed toward obtaining support, advice, or assistance in times of distress” (p. 414). For the purposes of this thesis, appropriate help-seeking refers to an appropriate help-source-problem match. Appropriate help-seeking is defined as the behaviour that occurs when an individual needs and seeks help from a source that is potentially able to offer distress reduction, facilitate useful problem-solving, or facilitate access to a more appropriate help-provider. Examples of appropriate help-seeking include a young person seeking help from a clinical psychologist for suicidal thoughts, a student seeking help from a teacher for homework difficulties, or a child seeking help from a parent for an injury that can be managed by home first-aid. Other examples are a student seeking help from a teacher for personal difficulties that are
subsequently referred to the Student Welfare Officer, or a child seeking help from a parent for an injury that requires the facilitation of an appointment with the family’s General Practitioner.

As a suicide intervention strategy, engaging in professional psychological help can assist in reducing or eliminating the immediate risk of suicide completion within acutely suicidal young people (e.g., Resnick et al., 1997; Rubenstein et al., 1998; Rudd, 2000; Rudd et al., 1996; Silverman & Felner, 1995). In their landmark 1996 study, Rudd and colleagues evaluated the effectiveness of a time-limited, outpatient intervention that targeted suicidal young adults (mean age 22 years). The researchers found that high-risk suicidal young people in both the experimental (time-limited) and control (‘treatment as usual’) conditions showed symptom remission and significant decreases in suicidal ideation and behaviour at 1, 6, 12, 18, and 24 month follow-ups. These results support previous research attesting to the efficacy of cognitive-behavioural, problem-solving, and psychological interventions for treating suicidal ideation and behaviours (e.g., Blackburn, Bishop, Glen, Whalley, & Christie, 1981; Gutstein & Rudd, 1990; Learner & Clum, 1990; Liberman & Eckman, 1981; Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Patsiokas & Clum, 1985).

As a suicide prevention or early intervention strategy, professional psychological help-seeking has the potential to reduce the impact or resolve suicidal risk before it develops into ideation or suicidal behaviours (Greenberg, Domitrovich, & Bumbarger, 2001; Tracey, Sherry, & Keitel, 1986). On this basis, a number of suicide prevention programs have focused on lowering young peoples’ barriers to self-referral and increasing appropriate help-seeking through training and support (e.g., school gatekeeper training, community gatekeeper training, general suicide education, screening programs, peer support programs, crisis centres, and hotlines: see CDC, 1992; Kalafat, 1997; Patton & Burns, 1998, for reviews). Although there is little empirical evidence describing the efficacy of these programs (e.g., Kalafat, 1997; Patton & Burns, 1998), attesting to the benefits of appropriate help-seeking as an early intervention strategy, an array of suicide prevention programs have achieved positive results by focusing on the known prodromes of suicidal pathways. For example, clinical depression has been found to predict suicidal thoughts and behaviours among young people (e.g., American Psychiatric Association [APA],
Chapter 1

1994; Finn, 2000; Flisher, 1999; Hammen & Rudolf, 1996; Kovacs, 1996; Lewinsohn, Gotlib, & Seeley, 1995; Lewinsohn, Roberts, Seeley, Rohde, Gotlib, & Hops, 1994; Pagliaro, 1995). Therefore, depression is the focus of a number of promising early intervention initiatives (e.g., Finn, 2000; Jaycox, Reivich, Gillham, & Seligman, 1994; Mazza, 1997; Munoz, Ying, Armen, Chan, & Gurza, 1987; Patton, Glover, Bond, Butler, Godfrey, & Di Pietro et al., 2000). For example, an evaluation of two high school-based suicide prevention programs, found that students at-risk for suicide benefited from two programs that focused on depression (Randall, Eggert, & Pike, 2001). The first program was a brief assessment and resource identification program (C-CARE), and the second, an intensive 12-session life skills training group (CAST). Using a randomised trial (C-CARE, C-CARE plus CAST, “care as usual” control), the researchers found significant decreases in suicidal-risk behaviours in both experimental groups but not in the students assigned to the control group (Randall et al., 2001).

In sum, the promotion and facilitation of appropriate help-seeking offers promise for more effective suicide prevention and early intervention. Research indicates that seeking help for personal-emotional problems might subsequently protect against suicidal risk. Together the evidence suggests that prevention programs which target motivational factors that increase the likelihood that young people will seek help, along with the barriers inhibiting this likelihood, might bring young people to treatment at stages of their distress that are amenable to change (Kalafat, 1997; Silverman & Felner, 1995; Wilson & Deane, 2001).

Young peoples’ help-seeking patterns and barriers

It is widely recognised that young people will seek help from different sources for different types of problems (e.g., Boldero & Fallon, 1995; Offer et al., 1991). It is also recognised that an understanding of the help-seeking patterns that young people maintain, together with the help-seeking barriers that they experience, is vital for the development of effective prevention and early intervention strategies (Kalafat, 1997). It has been suggested that understanding everyday patterns of help-seeking and the variables that impact on this process might facilitate the identification of factors that
can be modified to motivate young people to seek appropriate help when they are distressed or suicidal (Wilson & Deane, 2001).

**Broad help-seeking patterns**

An array of help-seeking findings converges to highlight several robust help-seeking patterns (a research summary is provided in Table A.7, Appendix I). Together, the results indicate that young people generally prefer the informal help of friends before that of family, and the informal help of friends or family before the formal help of medical or mental health professionals, for personal-emotional and suicidal problems (e.g., Boldero & Fallon, 1995; Offer et al., 1991). There is evidence that up to 90% of adolescents tell peers rather than an adult or professional about their suicidal thoughts (Kalafat & Elias, 1995). After friends, parents are most often ranked second as young peoples’ preferred source of help (e.g., Boldero & Fallon, 1995; Schonert-Reichl & Muller, 1996), and help from mental health professionals is consistently preferred least of all available sources (e.g., Donald, Dower, Lucke, & Raphael, 2000; Furr, Westefeld, McConnell, & Jenkins, 2001; Oliver et al., 1999). Overall, few young people indicate a preference for the formal help of mental health professionals above that of informal sources for either personal-emotional problems or suicidal thoughts. For example, across those studies summarised in Table A.7 (Appendix I), preference rates for formal help range from 7% (Benson, 1990) to 29% (Naginey & Swisher, 1990), and rates of actual professional psychological help-seeking range from 1% (Boldero & Fallon, 1995) to 44% (Schonert-Reichl & Muller, 1996). In many instances, young people have also indicated a preference for seeking help from “no-one” and/or managing their problems alone if either of these options were provided. Raising concern, seeking help from no-one has been consistently ranked second to informal help sources and ahead of seeking help from formal sources (e.g., Bee-Gates, Howard-Pitney, LaFramboise, Rowe, 1996; Donald et al., 2000; Offer et al., 1991; Rickwood & Braithwaite, 1994; Riggs & Cheng, 1988; Saunders et al., 1994) (see Table A.7, Appendix I).

The stability of young peoples’ general help-seeking patterns is attested to in a recent study by Wilson et al. (2003) (a full report of the study is provided in Appendix II). In sum, 219 high school students (aged 16 to 21) completed a questionnaire that
measured their intentions to seek help from a variety of formal and informal sources for personal-emotional problems and suicidal thoughts. Students were also asked to report their intentions to seek help from “no-one” for each problem-type. As might be expected from the general help-seeking patterns outlined above, students reported higher help-seeking intentions for informal rather than formal help-sources. Intentions to seek help from friends were significantly higher than for any other source. Students also reported they were most likely to seek help from friends then family for problems that were not suicide related and most likely to seek help from friends then no-one for problems that were suicide related. Consistent with previous research (e.g., Offer et al., 1991), the overall strength of intentions to seek help from formal health care sources was low when compared to that of friends or intentions to seek help from no-one for both problem-types (Wilson et al., 2003).

Help-seeking barriers

Within Australia, young people are the only age-based group whose psychosocial health status has not significantly improved in the past forty years (Australian Institute of Health and Welfare [AIHW], 1998). During this time, as noted, youth suicide along with other related mental health problems have increased (AIHW, 1998). From the prevention perspective, reluctance to seek professional psychological help provides a major obstacle to improving mental health in distressed populations (e.g., Ames & Lau, 1982; Gross & McMullen, 1983). Unfortunately, there is evidence that reluctance to seek appropriate help for symptoms of mental ill-health may be wide spread. The Australian National Survey of Mental Health and Wellbeing (Andrews, Hall, Teesson, & Henderson, 1999) reported that more than one in five of the 10,600 adults who participated in the study met the criteria for a mental health disorder. Of this number, “62% of persons with a mental disorder did not seek any professional help for mental health problems” (Andrews et al., 1999, p. 37). Similarly, an Australian survey of 4,500 children and adolescents found that only 50% of those with a mental health problem had attended any service during the previous 6 months, and only 17% had attended a mental health service (Sawyer, Arney, Baghurst, Clark, Graetz, & Kosky et al., 2000). The same report also found that mental health disorders were the most prevalent among young people. In a Queensland study of 3,092 young adults aged 15 to 24 years, 39% of the males and
22% of the females who completed the survey reported that they would not seek help from formal services for personal-emotional or distressing problems (Donald et al., 2000). Thirty per cent of males and 6% of females reported they would not seek help from anyone indicating, along with other studies (e.g., Kulh, Jarkon-Horlick, & Morrissey, 1997; Kushner & Sher, 1989; Lindsey & Kalafat, 1998), that barriers exist that impede formal help-seeking for adults and young people.

A substantial literature indicates that professional psychological help-seeking is a dynamic, multileveled, and multidimensional process involving a complicated network of interwoven personal and social variables. The term “barrier” is commonly used to describe those variables that inhibit both the utilisation and success of mental health services (e.g., Grencavage & Norcross, 1990; Leong & Zachar, 1999; Newman, 2000; Pescosolido & Boyer, 1999; Rickwood & Braithwaite, 1994; Tudiver & Talbot, 1999). A large number of studies have attempted to identify barriers that inhibit formal help-seeking and specify characteristics of young people who remain reluctant to seek appropriate help when they are distressed. Although some findings are disparate and contradictory (Kalafat, 1997), findings converge to highlight an array of barriers that impede young peoples’ help-seeking when they are distressed or suicidal. The importance of many barriers to professional help-seeking is highlighted by the findings of both quantitative and qualitative studies (e.g., Sawyer et al., 2000; Wilson & Deane, 2001; Wilson, Rickwood, Ciarrochi, & Deane, 2002). (A summary of barrier oriented research is provided in Table A.8, Appendix I.)

Within the *National Youth Health and Wellbeing Survey*, Sawyer et al. (2000) reported that the most common barrier given by young people to explain why they did not seek professional help, even though they met the criteria for mental health care, was a preference for managing problems alone (38%). This was followed by “thinking nothing could help” (18%), “not knowing where to get help” (17%), and “being afraid of what people think” (14%). In a focus group study that obtained high school students’ opinions about help-seeking barriers, Wilson and Deane (2001a) found that students emphasised the inhibiting influence of adolescent autonomy along with help-seeking fears, anxiety, and shame. Students also revealed that two of the most important barriers to formal help-seeking related to their limited knowledge about the help that professionals can provide and their concerns about not having a
relationship with available health care providers. Additional barriers related to concerns about trust and breach of confidentiality, along with pessimistic beliefs about the efficacy of professional health care.

Suicidal ideation as a significant help-seeking barrier

Of the results found across the mental health help-seeking literature, one of the most troubling is the indication that suicidal ideation itself may be a “substantial barrier” to help-seeking (Saunders et al., 1994). A growing number of studies provide evidence that individuals who are suicidal may be more reluctant than their non-suicidal peers to seek help from any source (e.g., Barnes, Ikeda, & Kresnow, 2001; Carlton & Deane, 2000; Rudd et al., 1995). In a recent study, Barnes et al. (2001) examined the association between help-seeking and nearly lethal suicide attempt in a case-controlled study of one hundred and fifty-three 13 to 34 year old suicide attempters. Results found that when attempters had sought help, family and friends were consulted most frequently (48%). After controlling for potential confounds, results also found that attempters were significantly less likely to seek help from any source (either formal or informal) (odds ratio = 0.50, p < .05, 95% confidence intervals = 0.3 to 0.8), than the non-suicidal control-subjects. Control-subjects were selected from the same catchment area as the attempters and recruited for the study through a random digit dial telephone survey. The researchers concluded that not only are young people who attempt suicide generally less likely to seek help than non-suicidal individuals, “they are least likely to seek help from clinicians and other professional care givers even though they are more likely to have problems (e.g., depression, hopelessness, the presence of a medical illness and a history of previous suicide attempt) that would bring them in contact with health care providers” (p. 74). The researchers concluded by suggesting that more studies that are analytic are needed to examine the relationship between help-seeking and suicidality. In their view, such research would “significantly contribute to our understanding of the role of help-seeking in suicide prevention” (Barnes et al., 2001, p. 75).
Chapter 1

Summary

Across the health care and prevention literature, there is growing consensus that appropriate help-seeking provides protection against a variety of risk factors for physical and mental ill-health, including those risk factors for suicide (e.g., Greenberg et al., 2001; Kalafat, 1997; Rudd et al., 1996). However, as promising as appropriate help-seeking appears for suicide prevention, there are indications that suicidal ideation itself may be a substantial barrier in the help-seeking process (Barnes et al., 2001; Carlton & Deane, 2000; Saunders et al., 1994). Since there is evidence that suicidal risk is exacerbated if young people do not seek and receive appropriate treatment or advice (Rosenberg, Eddy, Wolpert, & Broumas, 1989), there are two major implications for suicide prevention. First, if suicidal ideation is a barrier to help-seeking, it increases risk for youth suicide by reducing the potential for young people to access appropriate help when they are suicidal. Second, if the way in which suicidal ideation operates as a help-seeking barrier can be identified, it may be possible to prevent the process from developing. Consequently, several key questions are raised: Can suicidal ideation be established as an help-seeking barrier? If suicidal ideation impedes appropriate help-seeking in one sample, will this finding generalise to other samples? Are there additional variables that contribute to or explain this process? The remainder of this thesis systematically examines each of these questions.
There is mounting evidence that suicidal ideation is a substantial risk factor related to suicide completion (Beck, Brown, Steer, Dahlsgaard & Grisham, 1999), and that suicidal ideation is exacerbated by not receiving appropriate treatment or advice (Cole et al., 1992; Rosenberg et al., 1989). There are also indications that suicidal ideation may act as a significant help-seeking barrier within suicidal populations (e.g., Barnes et al., 2001; Rudd et al., 1995; Saunders et al., 1994). Although the tendency to negate available and appropriate help is commonly recognised in acutely suicidal samples (e.g., Clark & Fawcett, 1992; Rudd et al., 1995), only recently have similar patterns been associated with samples at sub-clinical levels of suicidal ideation (e.g., Carlton & Deane, 2000; Deane et al., 1999). Given the potentially tragic consequences of help-negation for suicidal thoughts, the way in which suicidal ideation might function as an independent help-seeking barrier or in conjunction with other barriers, needs clarification. This chapter reviews the literature related to help-negation for suicidal problems in clinical and sub-clinical samples. This is followed by a discussion of the way in which hopelessness and prior help-seeking experience might explain the effect in sub-clinical university and high school students.

Help-negation in acutely suicidal samples

Within their review of empirical risk factors for suicide, Clark and Fawcett (1992) described help-negation as the unique pattern shown by acutely suicidal clients who
have “reached a state of utter hopelessness concerning treatment, [to] soundlessly abandon, politely terminate, or angrily reject treatment” (p. 40). The researchers postulated that this phenomenon occurred as an extension of the recognised pessimism associated with the suicidal state (e.g., Shneidman, 1992). In one of the first empirical studies of help-negation, Rudd et al. (1995) followed a group of 45 clients (aged 18 to 26) who withdrew prematurely from treatment, and assessed their levels of suicidal ideation and suicidal behaviour. To examine Clark and Fawcett’s original hypotheses, Rudd et al. examined two possible explanations for the help-negation process. First, that suicidal clients who drop out of treatment might became so hopeless, pessimistic, and cynical, that they negate the potential efficacy of intervention or treatment. Second, that help-negation might be a reflection of suicidal clients’ personal characteristics that are likely to have influenced their current suicidal state. Personal characteristics included poor: judgement; decision-making; problem-solving; and overall adaptive coping. Results showed that those clients who withdrew from treatment had similar levels of symptomology, stress, and poor adaptive coping over the first month after suicidal crisis as those clients who remained in therapy. Both client groups shared similar symptomology, Axis I DSM-III-R diagnoses and basic personality characteristics; both groups exhibited similar levels of hopelessness and negative expectancies about the future; and neither group considered themselves to be effective problem-solvers. Yet, one group withdrew from treatment and the other did not. Rudd et al. suggested that although help-negation seemed to be at least in part, a function of hopelessness, pessimism, and cynicism, these characteristics “are most likely not unique to the therapeutic situation or immediate crisis, but indicative of the individual’s general adaptive coping interpersonal style” (p. 503). According to the researchers, help-negation might be a function of general coping style that is avoidant, negativistic, and passive-aggressive, and which is exacerbated by situational stress, associated symptomology, and resultant Axis I diagnoses.

In short, factors over and above hopelessness may contribute to help-negation. Factors may include those which are associated with the “psychological constriction of affect and intellect” that is characteristic of the suicidal state (Shneidman, 1992, p. 24). However, hopelessness remains a promising variable for explaining at least some aspects of the help-negation relationship. It is possible that hopelessness might account at least in part, for the results of four studies in sub-clinical samples,
indicating that the help-negation relationship might be a wider phenomenon than first realised (Carlton & Deane, 2000; Deane et al., 1999; Saunders et al., 1994; Tishby, Turel, Gumpel, Pinus, Ben Lavy, & Winokour et al., 2001).

Help-negation in non-clinical samples

Saunders et al. (1994) examined suicidal ideation as a predictor of formal help-seeking behaviour in a school-based sample of 17,193 adolescents in grades 7 to 12 (no age related data was provided). Suicidal ideation was assessed using the Beck Depression Inventory “suicide” item (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Students rated their level of suicidal ideation on this item in one of four ways: (1) “I don’t have any thoughts about killing myself”; (2) “I have thoughts about killing myself, but I would not carry them out” (thoughts only); (3) “I would like to kill myself”; (4) “I would kill myself if I had the chance”. Formal help-seeking was measured by a single item: “Have you had any serious personal, emotional, behavioural, or mental health problems that you felt you needed help with (during the past year)?” Consistent with the suicidal ideation item, students endorsed one of four possible responses: “I have had few or no personal problems (N = 12,889, 75.1% of all students)”; “I have had (or have now) severe problems but have not felt I needed professional help (N = 2,119, 12.3% of all students)”; “Yes, but I did not seek professional help (N = 1,166, 6.8% of all students)”; “Yes, and I did seek professional help (N = 898, 5.8% of all students)”. Results indicated that adolescents with high levels of suicidal ideation (indicated by the endorsement of choices 3 or 4 on the BDI item) were less likely to obtain formal help than those students with low or no suicidal ideation. Of the 474 students who indicated they wished to complete suicide, 31.8% obtained help. Of the 1,807 students who indicated they had suicidal thoughts only, 40.3% obtained help. And, of the 1,905 students who indicated no thoughts of suicide, 55.7% obtained help. The overall relationship between suicidal ideation and help-seeking was not significant. However, when those students who felt the need for help and actually sought it were contrasted with those who identified a need but did not seek help, suicidal ideation was significantly associated with help-seeking in a negative direction. Results indicated that students with high levels of suicidal ideation were less likely to obtain help than students with less severe suicidal ideation (odds ratio = .90, p < .05) or no suicidal ideation (odds ratio = .81, p < .001). The
reciprocal relationship between suicidal ideation and formal help-seeking was unexpected and lead the researchers to conclude, “substantial barriers to seeking help are associated with suicidality” (p. 727).

In the second study, Deane et al. (1999) examined the intentions of 111 sub-clinical prison inmates to seek professional psychological help for suicidal thoughts and personal-emotional problems (Mean age, 32.33 years). Help-seeking intentions were measured by two items that had been used in an earlier help-seeking study: “How likely is it that you would seek professional psychological help if you had suicidal thoughts?” and “If you did have a personal-emotional problem, how likely is it that you would seek professional psychological help from a psychologist or counsellor?” (Deane & Todd, 1996). Each item was rated on a 9-point Likert scale (1 = “Extremely unlikely” to 9 = “Extremely likely”). Contrary to expectations but similar to the results of Saunders et al.’s (1994) study, inmates reported lower intentions to seek help for suicidal ideation, than personal-emotional problems. Paired t-tests found that inmates were significantly more likely to seek help for personal-emotional problems, $F(2, 100) = 4.77, p < .05$, than suicidal problems, $F(2, 101) = 3.56, p < .05$. Consequently, Deane et al. concluded that the results might reflect aspects of the help-negation process that had previously been identified in acutely suicidal samples (e.g., Rudd et al., 1995).

In the third study, Carlton and Deane (2000) examined the impact of suicidal ideation on a sample of 221 sub-clinical high school students’ intentions to seek professional psychological help (Mean age, 15.63 years). Suicidal ideation was measured by the Suicidal Ideation Questionnaire (SIQ; Reynolds, 1988). Help-seeking intentions were measured by the items used in the Deane and Todd (1996) study described above. Based on the assumption that increased psychological distress increases the likelihood of professional psychological help-seeking (e.g., Choquet & Menke, 1989; Naginey & Swisher, 1990; Seiffge-Krenke, 1989), and evidence that suicidal ideation and psychological distress co-occur (e.g., Marttunen, Hillevi, Hendriksson, & Lonqvist, 1991; Schotte & Clum, 1982; Smith & Crawford, 1986), Carlton and Deane proposed that increased suicidal ideation should in theory, relate to increased professional psychological help-seeking behaviour. As predicted, paired t-tests indicated that students were significantly more likely to seek help for suicidal thoughts than
personal-emotional problems, $t(215) = -5.23$, $p < .001$. However, contrary to predictions, correlational and regression analyses found a significant negative relationship between suicidal ideation and help-seeking intentions, such that higher levels of suicidal ideation related to lower help-seeking intentions (e.g., $r = -.24$, $p = .002$). Carlton and Deane (2000) concluded that these results might provide evidence that the help-negation process occurs at sub-clinical levels of suicidal ideation. The researchers also speculated that this result might be influenced by stages of adolescent development.

In the final study, Tishby et al. (2001) examined the preferences of 1,415 high school students to seek help from a variety of formal and informal help-sources for distressing personal-emotional and suicidal problems. Fifteen percent of the sample was recruited from grades 7 and 8 (Mean age, 13.7 years), 47% of the sample from grades 9 and 10 (Mean age, 15.7 years), and 38% of the sample from grades 11 and 12 (Mean age, 17.5 years). Levels of personal-emotional distress within the previous month was measured by selection of one of the following response options: (1) rarely; (2) sometimes; (3) most of the time; (4) all the time. Suicidality within the previous month were measured by response to the following item: “At the time you were feeling depressed, did you have thoughts of hurting yourself?” (p. 252). Response options included: (1) “I did not have any thoughts of hurting myself”; (2) “I had thoughts of hurting myself, but I had no specific plans; (3) “I would hurt myself if I had the chance”; (4) “I tried to hurt myself”. Help preference was assessed by students’ selection of one source (i.e., parents/family member, friends, physician, school nurse, school counsellor, rabbi, other professional, no-one) for a number of listed problem-types (e.g., family problems, depressed mood, birth control, sexual/physical abuse, drugs/alcohol, social problems, health problems, sexually transmitted diseases, problems with boyfriend/girlfriend, concerns about army service). The results found that suicidal students (ideators and attempters) preferred the help of no-one for “depressed mood” above the help of professionals and parents or family members. Twenty-two percent of suicidal ideators and 45% of attempters preferred the help of no-one for managing their distress. One percent of ideators preferred the help of a professional, 15% preferred the help of a parent or family member, and 60% preferred the help of a friend. No suicide attempters preferred the help of a professional, 10% preferred the help of a parent of family member, and 45%
preferred the help of a friend. Tishby et al. concluded that “students from all ages who experienced high levels of distress (including that indicated by suicidal ideation and attempt), reported they were not likely to seek any kind of help” (p. 261). Consistent with Deane et al. (1999), Tishby et al. likened their results to Saunders et al.’s (1994) findings of “an inverse relationship between level of distress and help-seeking” (p. 261).

In sum, the help-negation relationship has been indicated in four studies with sub-clinical samples (Carlton & Deane, 2000; Deane et al., 1999; Saunders et al., 1994; Tishby et al., 2001). Given the major implication of such a finding, that is, the possibility that suicidal ideation at clinical and sub-clinical levels acts as a barrier to appropriate help-seeking which thereby increases risk for suicide completion, the need to replicate and extend this finding to other sub-clinical samples and explain the help-negation process is clear.

Help-seeking intentions

The Theory of Planned Behaviour (TPB: Ajzen, 1985, 1991) makes the assumption that behaviours of social relevance are under one’s own control and hence, are predictable from intentions. Intentions are operationalised as “a person’s motivation in the sense of her or his conscious plan or decision to exert effort to perform a behaviour” (Conner & Norman, 1996, p. 12). According to Ajzen (1991), intentions are underpinned by attitudes, subjective norms and perceptions of behavioural control. Within the TPB, an individual’s intentions are viewed as the strongest and most immediate predictor of actual behaviour. In support, although not specifically in the help-seeking domain, a number of empirical studies have identified intentions as the immediate precursors of a wide range of intended behaviours (e.g., Ajzen, 1989; Burdon, 1999; Downey & O’Rourke, 1976; Huba, Wingard, & Bentler, 1979; Millstein, 1996; Parsons, Siegel, & Cousins, 1997; Swisher & Hu, 1983; Wolford & Swisher, 1986). Millstein (1996) for example, examined General Practitioners’ delivery of health care services and found a significant relationship between GPs’ intentions and their prospective health care provision over a 6-month period, \( r = .63, p < .001 \). In a meta-analysis of studies aimed at predicting condom use, Sheeran and Orbell (1998) reported that the average intention-behaviour correlation for intervals
up to ten weeks was \( r = .59 \), lowering to \( r = .33 \) when the interval between intention and behaviour exceeded ten weeks.

Within the context of help-seeking, a growing number of studies attest to help-seeking intentions as a strong predictor of future help-seeking behaviour (e.g., Deane, Ciarrochi, Wilson, Rickwood, & Anderson, 2001a; Parsons et al., 1997; Wilson et al., 2003). Deane et al. (2001a) examined a sample of 173 high school students’ intentions to seek help for personal-emotional problems or suicidal thoughts from a variety of sources, before the immediate capture of students’ actual requests for help from a teacher or school counsellor. Results found that students’ intentions to seek help from friends, Wald = 7.2, \( b = .30, p < .01 \), and a teacher or school advisor, Wald = 11.16, \( b = -.41, p < .01 \), were reliable predictors of future help-seeking behaviour. Similarly, Wilson et al. (2003) found that in a sample of 219 high school students, participants’ intentions to seek help for personal-emotional problems and suicidal thoughts significantly associated with retrospective and prospective help-seeking behaviour for either problem-type, over a three-week period. Significant correlations between intentions and retrospective help-seeking behaviour ranged from \( r = .16 \) to \( r = .43 \) for personal-emotional problems and from \( r = .18 \) to \( r = .31 \) for suicidal thoughts. Significant correlations between intentions and prospective help-seeking behaviour ranged from \( r = .17 \) to \( r = .48 \) for personal-emotional problems and from \( r = .22 \) to \( r = .26 \) for suicidal thoughts (see Appendix II).

Together, these results highlight the utility of measuring help-seeking intentions to predict and better understand help-seeking behaviour. The results also support the use of help-seeking intentions as the dependent help-seeking variable in the following thesis studies. (Suicidal ideation is used in each study as the independent variable.)

**Hopelessness, prior help-seeking experience and help-negation**

Studies 1 and 2 (Chapter 3) consider two explanations for the help-negation effect in sub-clinical samples. First, that help-negation might be a reflection of hopelessness. Second, that help-negation might reflect limited prior help-seeking experiences. As outlined below, theoretical and empirical links between hopelessness and suicidal
ideation, and between prior help-seeking experience and help-seeking intentions highlight the potential for each hypothesis in sub-clinical youth samples.

Hopelessness and help-negation

Within clinical adult samples, hopelessness has predicted suicidal ideation and completion (e.g., Beck, Brown, Berchick, Stewart, & Steer, 1990; Beck, Kovacs, & Weissman, 1975; Joiner & Rudd, 1996; Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983; Levy, Jurkovic, & Spirito, 1995; Minkoff, Bergman, Beck, & Beck, 1973; Petrie, Chamberlain, & Clarke, 1988; Schotte & Clum, 1987; Wetzel & Reich, 1989). Minkoff et al. (1973) examined levels of hopelessness in samples of depressed and non-depressed clients. Results indicated that clients with high levels of hopelessness had high levels of suicidal intent once depression was controlled. Beck et al. (1975) found that hopelessness was a better predictor of suicidal ideation among suicide attempters than depression. Schotte and Clum (1987) found that hopelessness independently predicted suicidality in an acutely suicidal psychiatric group when compared to a non-suicidal psychiatric group. Reciprocally, Range and Penton (1994) found that hope was strongly related to lower levels of suicidality.

Within adolescent and non-clinical samples, the relationship between hopelessness and suicide is evident but less clear (Brent, Kolko, Allan, & Brown, 1990; Yang & Clum, 1996). A number of studies have shown that levels of hopelessness significantly relate to suicidal ideation (e.g., Asarnow & Gutherie, 1989; Brent, Kalas, Edelbrock, Costello, Dulcan, & Conover, 1986; Carlson & Cantwell, 1982; Goldney, Smith, Winefield, Tiggemann, & Winefield, 1989; Rich, Kirkpatrick-Smith, Bonner, & Jans, 1992; Ryan, Puig-Antich, Ambrosini, Rabinovich, Robinson, Nelson, & Iyengar et al., 1987; Spirito, Williams, Stark, & Hart, 1988). Goldney et al. (1989) found that high school students’ levels of hopelessness predicted levels of suicidal ideation examined 4 years later. In contrast, other studies have found that the relationship between hopelessness and suicidal ideation became non-significant once depression was partialed out (e.g., Asarnow, Carlson, & Gutherie, 1987; Brent et al., 1990; Rotheram-Borus & Trautman, 1988). Clum and colleagues found in college samples, that depression was the best predictor of suicidal intent at low levels of
ideation while hopelessness was the best predictor of intent at high levels of ideation (Clum, Patsiokas, & Luscomb, 1979; Schotte & Clum, 1982).

Several studies have investigated the way in which hopelessness might influence the development of suicide (e.g., Abramson, Metalsky, & Alloy, 1989; Abramson, Alloy, Hogan, Whitehouse, Cornette, Akhavan et al., 1998; Beck et al., 1975; Hughes & Neimeyer, 1993; Kalafat, 1997; Joiner & Rudd, 1995). In one of the first studies of its kind, Beck et al. (1975) found that hopelessness mediated the relationship between depression and suicidal intent among suicidal attempters. On this basis, Abramson et al. (1989) speculated that within individuals with personality styles that presume negative outcomes (i.e. pessimistic personality styles), hopelessness might exacerbate existing risk factors by mediating the development of suicidal pathways from ideation to completion. In support, Joiner and Rudd (1995) found that college students who attributed negative interpersonal events to stable and global causes had increased levels of suicidality when faced with interpersonal stress. Abramson et al. (1998) found that within a college sample, hopelessness appeared to mediate the relationship between cognitive vulnerability and suicidality.

In short, there is evidence to suggest that suicidal individuals, even at sub-clinical levels of suicidal ideation, might reject appropriate help, and particularly professional psychological help, because they have pessimistic and negative expectations about the worth of such help. Put simply, the suicidal individual might view their situation as hopeless. As noted earlier, help-negation is implied when suicidal ideation increases and intentions to seek help for suicidal thoughts decrease. If hopelessness contributes to the negative relationship between suicidal ideation and help-seeking, the magnitude of the help-negation relationship would be substantially reduced with hopelessness controlled. Hopelessness might strengthen young peoples’ reluctance to seek help for suicidal thoughts as their levels of suicidal ideation increase. If so, hopelessness would moderate the help-negation relationship. These possibilities are examined in Studies 1 and 2 (Chapter 3).
Prior help and help-negation

The decision to seek help has been associated with prior help-seeking experience. There are indications that little or no prior help-seeking experience can function as an avoidance factor. Rickwood and Braithwaite (1994) noted “one has to know how to seek help, not by being told what to do, but by being involved in a network where discussing personal problems is accepted and encouraged” (p. 569). This implies that even with knowledge of available help-sources, without prior help-seeking experience, the individual may have difficulty applying their knowledge. In support, Dadfar and Friedlander (1982) examined the relationship between prior help-seeking and attitudes towards professional psychological help in a sample of 172 college students. Students who indicated no experience of prior help had fewer positive attitudes towards seeking professional psychological help than those who had sought help previously. Halgin and colleagues (1987) examined the relationship between help-seeking history and attitudes, beliefs, and intentions in a sample of 429 college students. Students without experience of prior help had fewer positive attitudes, beliefs, and intentions than students with prior help-seeking experience (Halgin, Weaver, Edell, & Spencer, 1987). Solberg and colleagues (1994) examined the influence of prior help-seeking experience on 596 college students’ willingness to seek help from a college counselling center, and found that no prior help related to less willingness to seek help in the future (Solberg, Ritsma, Davis, Piroshaw Tata, & Jolly, 1994). Deane and Todd (1996) examined the relationship between prior help and future help-seeking intentions in a sample of non-clinical university students. Results found that students “who had previously sought help appeared more likely to seek help in the future” (p. 53). Similarly, Meissen and colleagues (1996) examined the effect of prior help on 270 college students' intentions to use self-help groups. Prior help and help-seeking intentions were assessed during telephone interviews. The results found that participants who had not received prior help from either a self-help group or a combination of self-help group and professional counselling were significantly less likely than participants who had previously sought help, to seek help from self-help groups in the future (Meissen, Warren, & Kendall, 1996). More recently, Carlton and Deane (2000) examined the relationship between prior help and the help-seeking intentions of a high school sample. Results found that having no experience of prior help significantly predicted lower intentions to seek help for
suicidal thoughts. And, Wilson and Deane (2001a) reported that high school students without previous professional psychological help-seeking experience described little or no intention to seek formal help in the future.

Low levels of previous help-seeking experience have been linked to infrequent future help-seeking behavior (Rickwood & Braithwaite, 1994). The majority of Australian young people who experience a mental health problem may not have sought help from a professional psychological source (Sawyer et al., 2000). Thus, it seems possible that young peoples’ previous professional psychological help-seeking experience may either explain or strengthen the help-negation relationship in sub-clinical youth populations. In short, suicidal young people might be reluctant to seek professional psychological help because they have not previously rehearsed the process. Lack of experience might make it difficult for suicidal young people to apply their knowledge of professional psychological help-seeking as behaviour. Alternatively, lack of professional psychological help-seeking experience might reduce the likelihood that suicidal young people will consider help-seeking as an option for managing suicidal thoughts. If prior help-seeking experience contributes to the help-negation relationship, the magnitude of the help-negation effect would be substantially reduced with prior help-seeking experience controlled. Little prior help-seeking experience might strengthen young peoples’ reluctance to seek help for suicidal thoughts as they become more distressed and levels of suicidal ideation rise. If so, prior help-seeking experience would moderate the help-negation relationship. These possibilities are examined in Studies 1 and 2 (Chapter 3).

Summary

A review of existing research provides evidence to speculate that hopelessness and prior help-seeking experience might influence the help-negation relationship through association with suicidal thoughts and/or help-seeking intentions. The extent to which levels of hopelessness and prior help vary in relation to help-negation, and the extent to which hopelessness and prior help contribute to the strength of the help-negation relationship is examined in Studies 1 and 2, Chapter 3.
Chapter 3

Establishing the Help-Negation Effect in Sub-Clinical Samples: Studies 1 and 2

Given the increased levels of risk associated with help-negation in suicidal individuals and the implications for future prevention and early intervention initiatives, there is a need to determine whether help-negation occurs across different sub-clinical samples. Chapter 3 presents Studies 1 and 2. Results extend the help-negation effect to sub-clinical samples of university and high school students. In both samples, suicidal ideation is significantly and inversely related to help-seeking intentions. As suicidal ideation increased, intentions to seek help from specific sources decreased. Neither hopelessness nor prior help could fully explain the help-negation relationship over and above the impact of suicidal ideation in sub-clinical university or high school students. However, hopelessness moderated the help-negation effect in the high school sample, such that higher levels of hopelessness were significantly associated with greater reluctance to seek help for suicidal thoughts as levels of suicidal ideation increased. There was no interaction effect between hopelessness and the help-negation relationship in the university sample and prior help-seeking was unable to moderate the help-negation effect in either sample. Alternative explanatory variables are suggested for Studies 3 and 4.

Aim

The purpose of Studies 1 and 2 is to clarify whether the help-negation effect occurs in different sub-clinical samples, in this case a university sample (Study 1) and a high school sample (Study 2), before examining the impact of hopelessness and prior help on the help-negation relationship.
Hypotheses

- A significant and inverse relationship between suicidal ideation and help-seeking intentions will be found in both Studies 1 and 2.

- If hopelessness and/or prior help-seeking can explain the help-negation effect, suicidal ideation will be unable to significantly predict help-seeking intentions once hopelessness and prior help are controlled in both Studies 1 and 2.

- If hopelessness contributes to the strength of the help-negation relationship as a moderator variable, levels of hopelessness will significantly interact with suicidal ideation in both Studies 1 and 2.

- If prior help-seeking contributes to the strength of the help-negation relationship as a moderator variable, prior help-seeking experience will significantly interact with suicidal ideation in both Studies 1 and 2.

Study 1

Method

Participants and procedure

Archival data was available for a total of 302 psychology undergraduates who had completed the research questionnaire. Two hundred and thirty-two participants (77%) were female and 70 participants (23%) were male. The mean age was 20.58 years (SD = 4.98 years) ranging from 17 to 50 years. Eighty percent of the sample was 21 years or younger.

The study was described in an advertisement on a Department of Psychology research project participation board. Participants signed up for inclusion in the study in exchange for subject credit points. However, participation was voluntary. This was emphasised in the study Information Sheet (Appendix III) and during the introduction
to each data collection. After providing formal consent on the Study 1 Consent Form (Appendix III), each participant completed the anonymous Study 1 questionnaire individually but under the supervision of a postgraduate research assistant. Completed surveys were placed by participants in unmarked envelopes and sealed before collection by the research assistant. A Debrief Sheet (Appendix III) outlining available help services was supplied to each participant upon the completion of the questionnaire.

Measures

The Study 1 questionnaire included self-report measures of help-seeking intentions and prior help-seeking experience (General Help-Seeking Questionnaire [GHSQ] Deane et al., 2001), suicidal ideation (Suicidal Ideation Questionnaire [SIQ], Reynolds, 1988) and hopelessness (Beck Hopelessness Scale [BHS], Beck, Weissman, Lester, & Trexler, 1974), along with general demographic information (e.g., sex, age, university class) (see Appendix III). All measures had been used in previous studies where psychometric properties were also described, with one exception: the GHSQ (Deane et al., 2001). The GHSQ was developed primarily for Study 1 and provides the tool by which the dependent help-seeking intentions variable is measured in thesis Studies 1 to 4. (The GHSQ is described in full, together with the measures theoretical underpinnings and psychometric properties in Wilson et al., 2003, Appendix II).

Help-seeking intentions

The GHSQ (Deane et al., 2001) comprises two parts, the first measures future help-seeking intentions. As noted in Chapter 2, help-seeking intentions offer promise for studying help-seeking behaviour. The GHSQ was developed to formally assess help-seeking intentions for different problem-types. In the past, help-seeking intentions have been examined in a number of different ways. Measures have ranged widely and many have undetermined properties (see Wilson et al., 2003, Appendix II for a review). As described by Wilson et al. (2003), there appear to be several desirable characteristics for a sound measure of intentions. First, a help-seeking intentions measure should include “differentiation of various types of formal [and informal]
help-seeking behaviour” (Saunders et al., 1994, p. 725), along with a variety of targeted help-sources that vary dependent on the context of the investigation. The GHSQ provides a format that asks respondents to rate the likelihood that they would seek help for different problems from a variety of specific help-sources that fall within several generic help-source domains (e.g., friend, family, mental health professional, telephone help-line, physical health professional, no-one). Within the Study 1 GHSQ, the list of help-sources included 7 items that have been identified as relevant to university students in earlier university-based help-seeking research (e.g., Schweitzer et al., 1995). Help-source items included friend, parent, other relative/family member, mental health professional (counsellor, psychologist, psychiatrist), phone help line, doctor/GP, along with two additional items that asked participants to indicate if they “would not seek help from anyone” and to state any other help-source they might use (Deane et al., 2001). To examine the help-negation hypothesis, the Study 1 GHSQ asks participants to rate the likelihood that they would seek help for suicidal thoughts. To provide descriptive information and a basis for comparison, the Study 1 GHSQ also asks participants to rate the likelihood that they would seek help for personal-emotional problems and anxiety or depression. The three problem prompts have the following general structure, ‘If you were having a personal-emotional problem, how likely is it that you would seek help from the following people?’ Participants rate their intentions to seek help from each item in a list of help-sources, on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”). Higher scores indicate higher intentions.

Prior help-seeking experience

Part two of the GHSQ asks participants to indicate by a “yes” or “no” response if they have ever consulted a mental health professional (e.g., school counsellor, counsellor, psychologist, psychiatrist). This response constituted the Study 1 prior help-seeking variable.
Preliminary psychometric properties of the General Help-Seeking Questionnaire (GHSQ)

The GHSQ appears to be supported by adequate reliability and validity. Reflecting the overall help-seeking patterns described in Chapter 1, two studies using the GHSQ in high school samples have found that adolescent help-seeking intentions differed for different help sources and different problem-types (Wilson & Deane, 2001a; Wilson et al., 2003). In both studies, students reported higher intentions to seek help from informal sources (friends and family) than formal sources (e.g., mental health professional, telephone help line, General Practitioner), and high intentions to seek help from “no-one” for suicidal and non-suicidal problems. Wilson et al. (2003) also found that the GHSQ could be reliably reduced as a single help-seeking scale (Cronbach’s alpha = .85, split-half reliability = .69, test-retest reliability assessed over a three week period = .92) or broken down as individual scales comprising specific help-source options for different problem-types. For example, Wilson et al. (2003) reported that the GHSQ could be reliably reduced as two scales. The first for suicidal problems (Cronbach’s alpha = .83, split-half reliability = .65, test-retest reliability assessed over a three week period = .88), and the second for non-suicidal problems (Cronbach’s alpha = .70, split-half reliability = .57, test-retest reliability assessed over a three week period = .86).

The GHSQ has demonstrated positive associations with aspects of emotional competence (e.g., Ciarrochi & Deane, 2001; Ciarrochi, Deane, Wilson, & Rickwood, 2002, Ciarrochi, Wilson, Deane, & Rickwood, 2003), and as reviewed in Chapter 2, retrospective and prospective actual help-seeking behaviour (e.g., Deane et al., 2001a; Wilson et al., 2003). In addition, the GHSQ has demonstrated negative associations with a range of identified barriers to professional psychological help-seeking. In a sample of 357 high school students, Wilson and colleagues (2003a) found that students’ intentions to seek professional psychological help for suicidal thoughts correlated negatively with higher belief-based barriers, $r = -.21$, $p < .001$, higher attitudinal barriers, $r = -.43$, $p < .001$, negative evaluations of prior professional psychological help, $r = -.45$, $p < .001$, a lack of recent professional psychological help-seeking experience, $r = -.19$, $p < .05$, higher levels of hopelessness, $r = -.15$, $p < .05$, and higher levels of depression, $r = -.23$, $p < .001$. Similarly, students’ intentions
to seek professional psychological help for personal-emotional problems correlated negatively with higher belief-based barriers, $r = -0.16$, $p < 0.05$, higher attitudinal barriers, $r = -0.44$, $p < 0.001$, negative evaluations of prior professional psychological help, $r = -0.50$, $p < 0.001$, and no recent professional psychological help-seeking experience, $r = -0.32$, $p < 0.05$. The same study also found that intentions to seek professional psychological help for suicidal thoughts were negatively predicted by higher attitudinal barriers, $\beta = -0.52$, $t = -4.02$, $p < 0.001$, higher levels of depression, $\beta = -0.20$, $t = -2.93$, $p < 0.01$, and positively predicted by recent professional help-seeking experience, $\beta = -0.13$, $t = -2.51$, $p < 0.01$, in a regression model that explained 24% of the variance. Similarly, intentions to seek professional psychological help for personal-emotional problems were predicted by higher attitudinal barriers, $\beta = -0.40$, $t = -7.00$, $p < 0.001$, and positively predicted by recent professional help, $\beta = -0.25$, $t = -5.04$, $p < 0.001$, in a regression model that explained 26% of the variance (Wilson, Deane, Ciarrochi, & Rickwood, 2003a).

**Suicidal ideation**

The SIQ (Reynolds, 1988) comprises 30 items reflecting suicidal thoughts that are self-rated on a 7-point scale (0 = “I never had this thought before” to 6 = “Almost every day”). Items assess suicidal ideation and are scored to indicate the frequency with which each suicidal thought has occurred in the preceding month. Scores range from 0 to 180. Scores of 41 or above are considered to indicate potentially significant psychopathology and acute suicidal risk (Reynolds, 1987).

Reynolds (1987) reported three factors within the scale: a 25-item first factor that accounts for 89.6% of the variance, a 3-item second factor, and a 2-item third factor. Range and Antonelli (1990) identified four factors in suicidality (negative ideas, reasons for living, self-doubt, and suicidal desire). The SIQ loaded favourably on three of the four suicidality factors (negative ideas, self-doubt, and suicidal desire) and accounted for 63% of the variance (Range & Antonelli, 1990).

The SIQ is supported by sound reliability and construct validity data in high school students (aged 12 to 18) and university samples (aged 18 to 21) (e.g., Reynolds, 1987, 1988; Beaumont, 1994). Reliability of the SIQ is strong, with Cronbach’s alphas of
Chapter 3

.93 for adolescents aged 12 to 14 years, .97 for adolescents aged 14 to 18 years, and .96 for young people aged 18 to 21 years (Pinto, Whisman, & McCoy, 1997; Reynolds, 1987). Internal consistency is indicated by an interitem correlation of .55 (Pinto et al., 1997), and item-total correlations that range from .72 to .76 (Pinto et al., 1997; Reynolds, 1987). The strong validity of the SIQ is indicated by positive correlations with adolescent depression, adult depression, hopelessness, anxiety, and negative life events, and a negative correlation with self-esteem (Reynolds, 1987). According to Pinto et al. (1997), the 30-item SIQ provides a brief but reasonable suicidal ideation-screening tool that is suitable for inclusion within a composite questionnaire.

Hopelessness

The BHS (Beck et al., 1974) comprises 20 true-false items that reflect hopelessness (e.g., “My future seems dark to me”) and appear to access a general hopelessness construct. Items are scored to indicate the existence of hopelessness and the extent of negative attitudes about the future. Scores range from 0 to 20.

Beck et al. (1974) reported three factors within the scale: feelings about the future, loss of motivation, and future expectations. More recent analyses have reported different factors, depending upon the characteristics of the populations being studied (Beck & Steer, 1988). For example, Nekanda-Trepka and colleagues (1983) examined the psychometric properties of the BHS in a sample of 83 patients with major depression. Principal-component analysis identified five factors within the scale: motivation and outcome, confidence in the future, future accomplishments, trust in the future, and time perspective (Nekanda-Trepka, Bishop, & Blackburn, 1983). Nimeus and colleagues (1997) examined the psychometric properties of the BHS in a sample of 212 hospitalised suicide attempters. Factor analysis identified four factors within the scale: a first 8-item factor that accounted for 43.3% of the variance (loss of motivation), a second 7-item factor (expectations of the future), a third 8-item factor (feelings about the future), and a fourth single item factor (“I can’t imagine what my life would be like in ten years”). For this population, it appeared that that the BHS measured primarily cognitive aspects of hopelessness (Nimeus, Traskman-Bendz, & Alsen, 1997).
The BHS is supported by sound reliability and construct validity data across samples (e.g., Metalsky & Joiner, 1992). Internal reliability of the BHS is strong with Cronbach’s alphas of .93 being found in two studies (Beck et al., 1974; Nimeus et al., 1997) and Kuder-Richardson reliabilities ranging from .87 to .93 (Beck & Steer, 1988). Test-retest reliability is indicated by Pearson product-moment correlations that range from .66 to .69, \( p < .001 \), between test-retest scores collected over a six week time period (Beck & Steer, 1988). Finally, the strong validity of the BHS is indicated by high correlations with suicidal ideation and attempt, and high scores in those with single-episode major depression, recurrent-episode major depression, dysthymia, and drug and alcohol misuse (Beck & Steer, 1988). The BHS has also demonstrated high correlations with other self-report measures of hopelessness, \( r = .46 \) to .76, \( p < .001 \) (Beck et al., 1974).

Results

Data screening and assumption testing

Prior to the preliminary and main analyses, scores for the GHSQ, SIQ, and BHS were examined through SPSS programs for the extent to which the data met the assumptions of the analyses conducted (i.e., Correlational, Repeated Measures ANOVA, MANCOVA, Multiple Regression, and Principal-Component Analysis). Normality could not be assumed for any variables. GHSQ item scores tended to range between 5 and 7 for informal sources, 1 and 3 for formal sources and seeking help from no-one (see Table A.10, Appendix III). Means and standard errors of the original GHSQ item scores are provided in Table 3.1. SIQ and BHS scores had a negative skew, indicating that most cases had low levels of suicidal ideation and moderate to low levels of hopelessness. Loglinear transformation was applied to SIQ and BHS variables to correct for skew. Log SIQ and Log BHS were used in all reported analyses. For ease of expression, Log SIQ and Log BHS are referred to as suicidal ideation and hopelessness when described in the results. Transformation could not correct GHSQ distributions therefore all GHSQ analyses were conducted with both transformed and untransformed data. Where possible, GHSQ analyses were
Table 3.1. Means and standard errors of the original GHSQ item scores for personal-emotional problems (Per-Emot), anxiety and depression (Anx-Dep), suicidal thoughts (Suicide-Thts), and different sources of help in a university sample (Study 1).

<table>
<thead>
<tr>
<th>Source of Help</th>
<th>Per-Emot M</th>
<th>Per-Emot SE</th>
<th>Anx-Dep M</th>
<th>Anx-Dep SE</th>
<th>Suicide-Thts M</th>
<th>Suicide-Thts SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friend</td>
<td>5.26 .11</td>
<td></td>
<td>5.16 .11</td>
<td></td>
<td>4.38 .13</td>
<td></td>
</tr>
<tr>
<td>Parent</td>
<td>4.28 .12</td>
<td></td>
<td>4.35 .12</td>
<td></td>
<td>3.51 .14</td>
<td></td>
</tr>
<tr>
<td>Other Relative/Family Member</td>
<td>3.74 .12</td>
<td></td>
<td>3.60 .12</td>
<td></td>
<td>3.13 .13</td>
<td></td>
</tr>
<tr>
<td>Mental Health Professional</td>
<td>2.75 .11</td>
<td></td>
<td>2.86 .12</td>
<td></td>
<td>3.80 .13</td>
<td></td>
</tr>
<tr>
<td>Phone Help Line</td>
<td>1.73 .07</td>
<td></td>
<td>1.75 .08</td>
<td></td>
<td>2.77 .12</td>
<td></td>
</tr>
<tr>
<td>Doctor/GP</td>
<td>2.61 .10</td>
<td></td>
<td>2.60 .10</td>
<td></td>
<td>2.79 .12</td>
<td></td>
</tr>
<tr>
<td>Would not seek help</td>
<td>2.45 .11</td>
<td></td>
<td>2.36 .12</td>
<td></td>
<td>2.56 .12</td>
<td></td>
</tr>
</tbody>
</table>

N = 302. Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”).
also conducted using both parametric and non-parametric methods. Using untransformed data and parametric analytical methods did not alter the significance or pattern of findings. Consequently, the reported results are based on untransformed GHSQ data and parametric analyses. This decision is supported by large cell sizes indicating that the GHSQ violation to the assumption of univariate normality was of minimal concern for the interpretation of multivariate results (Coakes & Steed, 1999). As a further precaution, both Pillai’s Trace and Wilks’ Lambda were examined for multivariate analyses; first, without covariates and second, with hopelessness and prior help included as covariates. All multivariate statistics were significant for each analysis at $p < .001$ for help-source and the interaction between problem-type and help-source. Since Pillai’s Trace criterion is considered to have acceptable power and to be the most robust multivariate statistic against violations of assumptions (Coakes & Steed, 1999), the interpretability of multivariate results was assumed. (Detailed results of the Study 1 data screening and assumption tests are provided in Appendix III, along with GHSQ and SIQ Frequency Tables, and non-parametric findings.)

Preliminary analyses

The mean score, standard deviation, and Cronbach’s alpha for the original SIQ data was calculated for the total sample, $M(302) = 19.96$, $SD = 21.36$, $\alpha = .96$, and found to be non-significantly ($p = .067$) lower than those from a comparative university study, $M(402) = 21.79$, $SD = 18.74$, $\alpha = .95$ (Beaumont, 1994). The mean score, standard deviation, and Cronbach’s alpha for original SIQ data for each gender was also calculated and found that females had non-significantly ($p = .267$) higher SIQ mean scores, $M(231) = 20.29$, $SD = 22.09$, $\alpha = .97$, than males, $M(67) = 17.07$, $SD = 15.67$, $\alpha = .94$. Nine percent ($N = 25$) of the sample reported a level of suicidal ideation similar to that of suicidal attempters with chronic psychiatric problems (Reynolds, 1987), indicating that the majority of participants in Study 1 were in the normal range on the suicidal ideation measure. The mean score, standard deviation, and Cronbach’s alpha for the original BHS data was calculated for the total sample, $M(302) = 3.93$, $SD = 3.76$, $\alpha = .86$, and for each gender. In contrast to the SIQ results, females had similar BHS mean scores, $M(231) = 3.99$, $SD = 3.95$, $\alpha = .87$, to
males, $M(70) = 3.47, SD = 3.07, \alpha = .79$, and the mean difference was non-significant ($p = .313$).

As detailed in Appendix III, assumption testing found that correlations between help-seeking intentions for personal-emotional problems and anxious-depressive problems were large ($r \leq .88$). This suggested that while an absence of multicollinearity and singularity could be assumed between suicidal and non-suicidal problem-types, this was not true for the non-suicidal problems. Thus, the possibility that personal-emotional and anxious-depressive variables might be collapsed into one problem-type was explored. The 7 help-sources for the two types of non-suicidal problems (14 items) were submitted to an exploratory principle-component analysis that uncovered five factors with eigenvalues greater than 1 and which explained 78% of the variance. Oblimin rotation found that the items “parent” and “other relative/family member” loaded on factor 1 (2 problem types, 2 items), “mental health professional” and “doctor/GP” loaded on factor 2 (2 problem types, 2 items), “friend (not related to you)” loaded on factor 3 (2 problem types, 1 item), “phone help line” loaded on factor 4 (2 problem types, 1 item), and “I would not seek help from anyone” loaded on factor 5 (2 problem types, 1 item). Based on this factor analysis and a need for maximum power in the Study 1 analyses by using the fewest number of variables (Rosenthal, Rosnow, & Rubin, 2000; Wilcox, 1997, 1998), a new scale was formed and labelled “non-suicidal problems”; first, by combining matched personal-emotional and anxious-depressive help-source items and second, by combining the new items for “parent” and “other relative/family member” (i.e., items that loaded on factor 1). The new items for “mental health professional” and “doctor/GP” were not combined because there is evidence that seeking help from doctors and mental health professionals may differ in important ways (e.g., Pescosolido & Boyer, 1999; Tudiver & Talbot, 1999; Ross & Hardy, 1999; Wilson & Deane, 2001; Wilson et al., 2003, 2003b). The help-source items for suicidal thoughts were reduced in the same manner as for personal-emotional and anxious-depressive problems. The new variables for suicidal thoughts and non-suicidal problems were labelled “family” (suicidal thoughts, $\alpha = .81$; non-suicidal problems, $\alpha = .87$), “mental health professionals”, “physical health professionals”, “friend”, “phone help line”, and “no-one”.
Additional analyses revealed that once “no-one” was reverse scored, GHSQ variables could be reliably reduced in several ways. First, as a single help-seeking intentions score that included all help-source variables for suicidal and non-suicidal problems ($\alpha = .82$), and second, as two scales, the first comprising all help-source variables for suicidal thoughts ($\alpha = .78$), the second comprising all help-source variables for non-suicidal problems ($\alpha = .77$). (Intentions reduced as one scale for each problem-type are used in the moderation analyses reported later in these results.)

There is evidence that young people prefer different sources of help for different problems (e.g., Boldero & Fallon, 1995; Offer et al., 1991). Consequently, preliminary analyses were conducted to determine if students’ help-seeking intentions differed significantly for different help-sources and whether the following main analyses should initially examine the help-negation hypothesis in relation to intentions for each help-source variable rather than as individual intention scales for each problem-type. A GLM repeated measures ANOVA examined the impact of the 6 help-source variables (friends, family, mental health professional, telephone help-line, physical health professionals, and no-one) and problem-type (suicidal thoughts and non-suicidal problems) on students’ help-seeking intentions. Results found a significant main effect for helping source, $F(5, 1425) = 106.25$, $p < .001$, that was qualified by a significant interaction with problem-type, $F(5, 1425) = 57.80$, $p < .001$, indicating that students’ help-source preference depended on the type of problem they were facing (see Table 3.2). To compare parametric and non-parametric results, two Friedman tests were conducted. First, for suicidal problems and second, for non-suicidal problems using the same help-source variables as in the parametric analyses. Consistent with the parametric results, non-parametric results found significant differences between help-seeking intentions for suicidal problems, $\chi^2(5, N = 288) = 193.88$, $p < .001$, and non-suicidal problems, $\chi^2(5, N = 298) = 583.31$, $p < .001$.

To further evaluate this interaction, pairwise comparisons were conducted using a Bonferroni adjustment to control for Type I error at $p < .05$. As shown in Table 3.2, students indicated they were most likely to seek help from friends for all types of personal problems but less likely to seek help from friends for suicidal thoughts than non-suicidal problems. Students also indicated that when experiencing suicidal
Table 3.2. Means (M) and standard errors of university students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 1).

<table>
<thead>
<tr>
<th>Help Source</th>
<th>Per-Emot</th>
<th>Suicide-Thts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Friend</td>
<td>5.23</td>
<td>.10</td>
</tr>
<tr>
<td>Family</td>
<td>3.97</td>
<td>.10</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2.62 a</td>
<td>.09</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>1.75</td>
<td>.07</td>
</tr>
<tr>
<td>Physical Health</td>
<td>2.82 a</td>
<td>.10</td>
</tr>
<tr>
<td>No-one</td>
<td>2.41 a</td>
<td>.10</td>
</tr>
</tbody>
</table>

N = 302. Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”). *Means differ between personal-emotional problems and suicidal thoughts in the same row at p < .001. aMeans differ non-significantly between corresponding help-sources in the same column (Means without subscripts differ at p < .01).
thoughts rather than other problems, they were less likely to seek help from parents and other relatives but more likely to seek help from a mental health professional or a telephone help-line. As a precaution, Wilcoxon t-tests were calculated to compare parametric and non-parametric results for each problem-type. Z-scores and p-values are reported in Table A.12, Appendix III. Non-parametric analyses found the same pattern of significant differences between different help-sources for suicidal and non-suicidal problems as the parametric analyses (see Table A.12). This result confirmed that students had significantly different help-seeking intentions for different help-sources and that these intentions changed depending on their type of problem. On the basis of these results, the help-negation effect was examined for each help-source variable in the first set of main analyses.

Finally, given the differences between males and females in the Study 1 sample, preliminary analyses were conducted to determine the extent to which gender might influence the help-negation results. The correlation between gender and suicidal ideation was non-significant (p = .280) and there were no gender differences on measures for intentions to seek help from any sources for suicidal thoughts, all ps > .1. Being female however, was correlated with higher intentions to seek help for non-suicidal problems from friends, r(302) = .18, p < .01, and family, r(302) = .16, p < .01. As a precaution, the extent to which gender might either explain or strengthen the help-negation effect was explored using the covariance and moderation procedures outlined in the following main analyses. The results found that gender did not make a significant contribution to the help-negation effect in the Study 1 sample, therefore no further reference is made to this variable.

Help-negation

The main analyses first used correlations to test of the possibility that students high in suicidal ideation would show evidence of the help negation effect. That is, a significant inverse relationship between suicidal ideation and help-seeking intentions. Parametric (r) and non-parametric (rs) analyses were conducted. Both types of correlation analyses revealed coefficients that were low to moderate in magnitude, significant, and consistent between parametric and non-parametric analyses. For clarity, only parametric results are reported in Table 3.3. As anticipated, suicidal
**Table 3.3.** Correlations between suicidal ideation (SIQ), hopelessness (BHS), and help-seeking intentions for non-suicidal and suicidal problems and different sources of help in a university sample (Study 1).

<table>
<thead>
<tr>
<th>Help-Seeking Intentions</th>
<th>Suicidal Ideation</th>
<th>Hopelessness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Suicidal thoughts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-.29**</td>
<td>-.28**</td>
</tr>
<tr>
<td>Mental Health Professional</td>
<td>-.21**</td>
<td>-.18*</td>
</tr>
<tr>
<td>Friend</td>
<td>-.20*</td>
<td>-.23**</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.19*</td>
<td>-.13*</td>
</tr>
<tr>
<td>Physical Health Professional</td>
<td>-.13*</td>
<td>-.15*</td>
</tr>
<tr>
<td>No-one</td>
<td>.24**</td>
<td>.21**</td>
</tr>
<tr>
<td><strong>Non-suicidal problems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-.26**</td>
<td>-.34**</td>
</tr>
<tr>
<td>Mental Health Professional</td>
<td>.00</td>
<td>-.03</td>
</tr>
<tr>
<td>Friend</td>
<td>-.19*</td>
<td>-.23**</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.04</td>
<td>.03</td>
</tr>
<tr>
<td>Physical Health Professional</td>
<td>.03</td>
<td>.01</td>
</tr>
<tr>
<td>No-one</td>
<td>.15*</td>
<td>.24**</td>
</tr>
</tbody>
</table>

_N = 302. **p < .001, *p < .05_
ideation was negatively correlated with each of the help-seeking variables, providing evidence of the help-negation effect (Table 3.3). Higher levels of suicidal ideation were associated with lower intentions to seek help for suicidal problems from all specific help-sources. Higher levels of suicidal ideation were also negatively associated with seeking help from a number of help-sources for non-suicidal problems (physical and mental health care professionals, and phone help-lines being the exceptions), and higher intentions to seek help from no-one for both problem-types.

Hopelessness and prior help

Covariate analyses

To test the hypotheses that adolescents contemplating suicide might negate help because they feel hopeless or because they have not had formal help-seeking experiences, four GLM MANCOVAs were conducted. GLM was used because it allowed the use of continuous versions of the independent and dependent variables and did not require the sample to be divided into groups. MANCOVA was used because preliminary analyses revealed that students’ intentions were different for different sources of help (Table 3.2), and confirmed the need to examine the impact of hopelessness and prior help-seeking experience on the help-negation relationship for each help-source variable. The first MANCOVA examined help-seeking intentions for suicidal thoughts while controlling for hopelessness. The second examined help-seeking intentions for non-suicidal problems while controlling for hopelessness. In a similar manner, the third and fourth MANCOVAs examined help-seeking intentions for suicidal thoughts and non-suicidal problems while controlling for prior help-seeking experience. Within MANCOVAs one and two, suicidal ideation was used to predict the six help-seeking intention variables for each problem-type (e.g., friends, family, mental health professional, physical health professional, phone help-line, no-one). Within MANCOVAs three and four, since prior help-seeking experience was measured for professional psychological help-seeking only, suicidal ideation was used to predict only two help-source variables for each problem-type: mental health professional and no-one. Suicidal ideation and hopelessness were used in the first and second MANCOVAs as covariates, as were suicidal ideation and prior help-seeking experience in the third and fourth MANCOVAs. With hopelessness controlled,
suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, Wilk’s Lambda = .942, \( p < .01 \), but not non-suicidal problems, Wilk’s Lambda = .976, \( p = .348 \). With prior help-seeking experience controlled, suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, Wilk’s Lambda = .900, \( p < .001 \), and non-suicidal problems, Wilk’s Lambda = .953, \( p < .01 \).

To examine this effect further, univariate tests were conducted for each variable. As can be seen by the Beta values presented in Table 3.4, with either hopelessness or prior help-seeking experience controlled, suicidal ideation related to all help-seeking intentions sources. Higher levels of suicidal ideation associated with lower intentions to seek help from specific sources and higher intentions to seek help from no-one. Particularly noteworthy is the significant negative relationship between suicidal ideation and intentions to seek help from mental health professionals with both hopelessness and prior help-seeking experience controlled (Table 3.4).

To examine these results still further, the same MANCOVAs as above were conducted but with one exception. Suicidal ideation was dichotomised so that the high scorers in the top 9% (\( N = 25 \)) (equivalent to a suicidal attempter, Reynolds, 1987) might be excluded from the analysis. With the reduced sample, the analysis replicated the pattern of findings for help-seeking intentions for suicidal thoughts described in Table 3.4, and confirmed that the current results apply to university students at sub-clinical levels of suicidal ideation.

**Moderation analyses for help-seeking intentions as two scales**

Although neither hopelessness nor prior help-seeking could fully explain the help-negation effect in the Study 1 sample, the possibility that hopelessness and/or prior help-seeking experience might contribute to the overall strength of the help-negation relationship was explored. Thus, the criteria for a moderation effect between hopelessness and the help-negation effect and then between prior help and the help-negation effect were examined.
Table 3.4. Summary of MANCOVA analysis for suicidal ideation (SIQ) predicting help-seeking intentions for suicidal thoughts and personal-emotional problems while controlling for hopelessness and prior help in a university sample (Study 1).

<table>
<thead>
<tr>
<th>Help-Source</th>
<th>Suicidal Thoughts&lt;sub&gt;a&lt;/sub&gt;</th>
<th>Non-Sui Problems&lt;sub&gt;b&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>A: Hopelessness controlled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>-1.23&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.41</td>
</tr>
<tr>
<td>Family</td>
<td>-1.22&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.49</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-1.18&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.44</td>
</tr>
<tr>
<td>Friend</td>
<td>-.83</td>
<td>.45</td>
</tr>
<tr>
<td>Physical Health</td>
<td>-.60</td>
<td>.44</td>
</tr>
<tr>
<td>No-one</td>
<td>1.16&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.43</td>
</tr>
<tr>
<td>B: Prior help-seeking experience controlled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>-1.71**</td>
<td>.38</td>
</tr>
<tr>
<td>No-one</td>
<td>1.53**</td>
<td>.38</td>
</tr>
</tbody>
</table>

<sup>a</sup>df (A) = 1, 275; <sup>b</sup>df (A) = 1, 284;
<sup>a</sup>df (B) = 1, 276; <sup>b</sup>df (B) = 1, 283.
**p < .001, *p < .01
According to Baron and Kenny (1986), moderation can be assumed between continuous variables if three criteria are met. Within the context of the help-negation relationship: first, suicidal ideation must significantly predict help-seeking intentions; second, hopelessness must significantly predict help-seeking intentions; and third, suicidal ideation and hopelessness must significantly interact to predict help-seeking intentions. On the basis of recommendations made by Cohen and colleagues (2003), multiple regression analyses were used to evaluate whether hopelessness moderated the help-negation relationship (Cohen, Cohen, West, & Aiken, 2003). Two regression analyses were conducted using suicidal ideation, hopelessness, and the product terms between suicidal ideation and hopelessness: first, to predict help-seeking intentions for suicidal thoughts; and second, for non-suicidal problems (for comparison). The independent variables were entered into each regression model in the following order: suicidal ideation, hopelessness, then, the corresponding cross-product term. The six help-source variables for suicidal thoughts were reduced to a single scale, as were the six help-source variables for personal-emotional problems, before use as the dependent variable in analyses one and two. Following the procedure outlined in Aiken and West (1991) for testing moderation effects involving continuous variables, all continuous variables were converted to z-scores before analysis. As shown in Table 3.5, the criteria for a significant moderation effect between hopelessness and the help-negation effect for suicidal thoughts were not met. Although there were significant negative direct relationships between suicidal ideation and help-seeking intentions and between hopelessness and help-seeking intentions for suicidal thoughts, the interaction between suicidal ideation and hopelessness was not significant (Table 3.5).

Baron and Kenny (1986) also provide three criteria for assuming moderation effects between continuous and dichotomous variables. Within the context of the help-negation effect: first, suicidal ideation must significantly predict help-seeking intentions in students who have no prior professional psychological help-seeking experience; second, suicidal ideation must significantly predict help-seeking intentions in students who have prior professional psychological help-seeking experience; and third, the difference between these predictor variables for each group must be significant. Aiken and West (1991) suggest that the difference between
Table 3.5. The impact of hopelessness and prior help-seeking experience on help-negation in a university sample (Study 1).

<table>
<thead>
<tr>
<th>Help-seeking Intentions</th>
<th>Suicidal Thoughts&lt;sub&gt;a&lt;/sub&gt;</th>
<th>P-E Problems&lt;sub&gt;b&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
</tbody>
</table>

A:
- **Suicidal Ideation**
  - B: -.21 (SE: .07, β: -.22*)
  - Baseline: -.01 (SE: .07, β: -.01)
- **Hopelessness**
  - B: -.16 (SE: .07, β: -.16*)
  - Baseline: -.15 (SE: .07, β: -.15*)
- **Suicidal Ideation x Hopelessness**
  - B: .01 (SE: .04, β: -.05)
  - Baseline: -.13 (SE: .04, β: -.22**)

B:
- **Suicidal Ideation (No Prior Help)**
  - B: -.25 (SE: .08, β: -.22**)
  - Baseline: -.08 (SE: .06, β: -.09)
- **Suicidal Ideation (Prior Help)**
  - B: -.31 (SE: .09, β: -.33***)
  - Baseline: -.18 (SE: .11, β: -.17)
- **Suicidal Ideation x Prior Help**
  - B: .06 (SE: .12, β: -)
  - Baseline: .14 (SE: .13, β: -)

<sup>a</sup>R<sup>2</sup> (A) = .13, aAdj. R<sup>2</sup> (A) = .12, adf (A) = 3, 283.
<sup>b</sup>R<sup>2</sup> (A) = .11, bAdj. R<sup>2</sup> (A) = .10, bdf (A) = 3, 284.
<sup>ac</sup>R<sup>2</sup> (B) = .05, aAdj. R<sup>2</sup> (B) = .04, adf (B) = 1, 202.
<sup>ad</sup>R<sup>2</sup> (B) = .11, aAdj. R<sup>2</sup> (B) = .10, adf (B) = 1, 94.
<sup>a</sup> No significant difference between groups (95% CI: -.18 to .30)
<sup>bc</sup>R<sup>2</sup> (B) = .01, bAdj. R<sup>2</sup> (B) = .01, bdf (B) = 1, 202.
<sup>bd</sup>R<sup>2</sup> (B) = .03, bAdj. R<sup>2</sup> (B) = .02, bdf (B) = 1, 94.
<sup>b</sup> No significant difference between groups (95% CI: -.11 to .39)

***<sup>p</sup> < .001, **<sup>p</sup> < .01, *<sup>p</sup> < .05.
predictor variables may be thought of as the interaction term that is used when moderator and independent variables are continuous. Therefore, for ease of expression, the difference between predictor variables is described here as the interaction term and reported as “Sui. Ide. x Prior Help” in Table 3.5. Following the procedure recommended by Baron and Kenny (1986), multiple regression analyses were used to evaluate whether prior help-seeking experience moderated the help-negation relationship. Four regression analyses were conducted. Analyses one and two used suicidal ideation in students who had no prior help-seeking experience to predict help-seeking intentions; first, for suicidal thoughts and second, for non-suicidal problems. Analyses three and four used suicidal ideation in students who had received prior help to predict each problem-type. Since prior help-seeking experience was measured using a dichotomous item that related specifically to professional psychological help-seeking, all prior help-seeking moderation analyses used only the “mental health professional” variable as the dependent intention variable for each problem-type. Confidence Intervals (CIs) for the differences between predictor variables were calculated following the procedure outlined by Cohen et al. (2003). Similar to the hopelessness results, the criteria for a significant moderation effect between prior help-seeking experience and the help-negation effect for suicidal thoughts were not met. As shown in Table 3.5, there were significant negative direct relationships between suicidal ideation and help-seeking intentions for students who had prior help-seeking experience and those who did not. However, each 95% CI included 0, indicating that there was no significant difference in the strength of the help-negation effect between these groups, and thus no interaction effect in the university sample (Aiken & West, 1991) (see Table 3.5).

**Study 2**

**Method**

**Participants and procedure**

Students were recruited from the junior to senior classes (Grades 9 to 12) of a private Christian (Lutheran) high school that was located in a suburban middle-class area. A
total of 269 students completed all items in the research questionnaire (approximately 33% of the available student population). A further 88 students from Grade 8 completed most items in the study questionnaire but were not given school permission to complete the measure of suicidal ideation. Due to their younger age, these students were considered by the school to be at high risk for distress. Consequently, data from these additional 88 students was not included in the current study. Ninety-eight participants (36%) were male and 171 participants (64%) were female. The mean age was 15.86 years ($\text{SD} = 1.26$ years) and ranged from 12 to 18 years.

The study was described in an Information Sheet (Appendix IV) that was posted to parents. The information sheet gave details of the subject and the purpose of the study. It explained how the study would be conducted and stressed the voluntary nature of participation. Students who took part in the study volunteered and full consent was obtained from their parents on a Parental Consent Form (Appendix IV). Formal student consent was obtained on a Student Consent Form (Appendix IV) prior to questionnaire completion. Each participant completed the anonymous research questionnaire individually under the supervision of classroom teachers. Teachers were provided with a script that introduced the data collection and provided a standard guideline for the study procedure. At the end of the class time assigned for data collection, students placed completed and uncompleted questionnaires in unmarked envelopes that they sealed and left for collection by the teachers. A Debrief Sheet (Appendix IV) outlining available sources of help was supplied to students and read out by teachers after all envelopes were collected. The school counsellor and Pastoral staff were “on call” during data collection and remained available for counselling and support following study completion.

**Measures**

The Study 2 survey included a modified version of the GHSQ (Wilson et al., 2003), along with the same measures of suicidal ideation (SIQ), hopelessness (BHS), and demographic information that were used in Study 1 (see Appendices III & IV).
Study 2 GHSQ

In contrast to the Study 1 GHSQ, the Study 2 measure includes a variety of high school-specific help-sources for personal-emotional problems and suicidal thoughts. Listed help-sources were arrived at in consultation with school welfare personnel and included boyfriend/girlfriend, friend, parent, relative, mental health professional (school counsellor, counsellor, psychologist, psychiatrist), telephone help line, doctor/GP, teacher (year level coordinator, classroom teacher, home class teacher, Dean of Students, support staff), Pastor/Priest, and youth worker. As in the Study 1 GHSQ, an additional item also asks participants to indicate if they “would not seek help from anyone”. Since the results from Study 1 indicated that anxious-depressive and personal-emotional problems could be combined, only the personal-emotional problem prompt was used in the Study 2 GHSQ, together with the prompt for suicidal thoughts. The two problem prompts have the same general structure as those used in Study 1 (‘If you were having a personal-emotional problem, how likely is it that you would seek help from the following people?’). As before, participants rate their intentions to seek help from each specific help-source, along with “I would not seek help from anyone”, on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”), and higher scores indicate higher help-seeking intentions.

To maintain consistency with Study 1, the help-source items that were common to both the Study 1 and 2 measures were combined in the same way as for Study 1. To maintain maximum power for the Study 2 analyses (Rosenthal et al., 2000; Wilcox, 1997, 1998), prior to the preliminary and main analyses, individual help-source items that were included in the Study 2 GHSQ but not in Study 1 measure were combined if they met two criteria. First, individual help-source items needed to be theoretically similar and second, they needed to show good internal consistency for suicidal thoughts and personal-emotional problems. Using these criteria, the 11 Study 2 help-source items were reduced as 9 new help-source variables for each problem-type. As in Study 1, in Study 2, the items “parent” and “non-parent relative” were collapsed as a single variable and labelled “family” for each problem-type (suicidal thoughts, $\alpha = .83$; personal-emotional problems, $\alpha = .74$). In their psychometric study, Wilson et al. (2003) examined a version of the GHSQ that included the same items as those used in
Study 2. Results found that high school students reported help-seeking intentions that were non-significantly different for “Pastor/Priest” and “Youth Worker” for personal-emotional problems and suicidal thoughts (see Appendix II). On this basis, in Study 2, the items “Pastor/Priest” and “Youth Worker” were collapsed and labelled “community” (suicidal thoughts, $\alpha = .90$; personal-emotional problems, $\alpha = .79$). “Boyfriend/girlfriend” was relabelled “partner”, “doctor/GP” was relabelled “medical health professional” and “would not seek help from anyone” was relabelled “no-one”. “Friend”, “teacher”, “mental health professional”, “phone help line” were left unchanged. (Treatment of the Study 2 GHSQ in consistent with the GHSQ treatment in Studies 3 and 4.)

Additional analyses also confirmed that once “no-one” was reverse scored, the Study 2 GHSQ could be reduced as two individual scales: help-seeking intentions for suicidal thoughts ($\alpha = .86$) and help-seeking intentions for personal-emotional problems ($\alpha = .66$). (Although the internal consistency of the help-seeking intentions scale for personal-emotional problems is lower than ideal, the scale was included in the Study 2 analyses, as it is in the following Study 3 and 4 analyses, to maintain analytical consistency across Studies 1 to 4 and to provide some basis for a comparison of results within Studies.)

Finally, the Study 2 GHSQ asks participants to indicate by a “yes” or “no” response if they have ever consulted a mental health professional (e.g., school counsellor, counsellor, psychologist, psychiatrist). Again, this response constitutes the prior help-seeking variable.

**Results**

**Data screening and assumption testing**

As for Study 1, prior to the main analyses, scores for the GHSQ, SIQ, and BHS were examined through SPSS programs for the extent to which the data met the assumptions of the analyses conducted. Again, normality could not be assumed for any variables. GHSQ item scores tended to range between 5 and 7 for informal
Table 3.6. Means (M) and standard errors of the original GHSQ item scores for high school students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 2).

<table>
<thead>
<tr>
<th>Help Source</th>
<th>Per-Emot</th>
<th>Suicide-Thts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Partner</td>
<td>4.87</td>
<td>.14</td>
</tr>
<tr>
<td>Friend</td>
<td>5.92</td>
<td>.01</td>
</tr>
<tr>
<td>Parent</td>
<td>4.64</td>
<td>.13</td>
</tr>
<tr>
<td>Other Relative</td>
<td>3.91</td>
<td>.12</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2.66</td>
<td>.11</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>1.38</td>
<td>.01</td>
</tr>
<tr>
<td>Doctor/GP</td>
<td>1.50</td>
<td>.01</td>
</tr>
<tr>
<td>Teacher</td>
<td>2.59</td>
<td>.10</td>
</tr>
<tr>
<td>Religious leader</td>
<td>2.05</td>
<td>.01</td>
</tr>
<tr>
<td>Youth Worker</td>
<td>2.69</td>
<td>.12</td>
</tr>
<tr>
<td>Would not seek help</td>
<td>2.87</td>
<td>.13</td>
</tr>
</tbody>
</table>

N = 269 except for “Partner” (N = 192). Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”).
sources, 1 and 3 for formal sources and seeking help from no-one, and SIQ and BHS scores had a notable negative skew (see Tables A.13 & A.14, Appendix IV). Data were treated in the same manner as in Study 1. Means and standard errors of the original GHSQ item scores are provided in Table 3.6. Loglinear transformation was applied to SIQ and BHS variables to correct for skew, and Log SIQ and Log BHS were used in all reported analyses. Again, for ease of expression, Log SIQ and Log BHS are referred to as suicidal ideation and hopelessness when described in the results. As for Study 1, transformation could not correct GHSQ distributions therefore, all GHSQ analyses were conducted with both transformed and untransformed data, and where possible, GHSQ analyses were conducted using both parametric and non-parametric methods. Using untransformed data and parametric analytical methods did not alter the significance or pattern of findings. Consequently, the reported results are based on untransformed GHSQ data and parametric analyses. As for Study 1, this decision is supported by large cell sizes indicating that the GHSQ violation to the assumption of univariate normality was of minimal concern for the interpretation of multivariate results (Coakes & Steed, 1999). As a further precaution, both Pillais’ Trace and Wilks’ Lambda were examined for multivariate analyses first without covariates and second, with hopelessness and prior help included as covariates. All multivariate statistics were significant for each analysis at \( p < .001 \) for help-source and the interaction between problem-type and help-source. The interpretability of multivariate results was again assumed (Coakes & Steed, 1999). (Detailed results of the Study 2 data screening and assumption tests are provided in Appendix IV, along with GHSQ and SIQ Frequency Tables, and non-parametric findings.)

Preliminary analyses

The mean score, standard deviation, and Cronbach’s alpha for the original SIQ data was calculated for the total sample, \( M(269) = 25.81, SD = 33.48, \alpha = .98 \), and found to be non-significantly (\( p = .149 \)) higher than a previous New Zealand high school study (Carlton & Deane, 2000, \( M(219) = 22.86, SD = 28.51, \alpha = .97 \)) but significantly (\( p < .001 \)) higher than a previous American high school study (Reynolds, 1988, \( M(890) = 17.79, SD = 26.78, \alpha = .97 \)). The mean score, standard deviation, and
Cronbach’s alpha for original SIQ data for each gender was calculated and found that girls had non-significantly ($p = .293$) higher SIQ mean scores, $M_{(170)} = 27.06$, $SD = 32.88$, $\alpha = .98$, than boys, $M_{(98)} = 22.33$, $SD = 32.07$, $\alpha = .98$. Nine percent ($N = 25$) of the sample reported a level of suicidal ideation similar to that of suicidal attempters with chronic psychiatric problems (Reynolds, 1987), indicating that the majority of participants were in the normal range on the suicidal ideation measure. The mean score, standard deviation, and Cronbach’s alpha for the original BHS data was also calculated for the total sample, $M_{(269)} = 5.07$, $SD = 4.78$, $\alpha = .80$, and for each gender. In contrast to SIQ results, girls had lower BHS mean scores, $M_{(170)} = 4.95$, $SD = 4.85$, $\alpha = .76$, than boys, $M_{(98)} = 5.12$, $SD = 4.45$, $\alpha = .87$. This difference was non-significant ($p = .769$).

As for Study 1, preliminary analyses were conducted to determine whether students’ help-seeking intentions differed significantly for different help-source variables and therefore, whether the main analyses should initially examine the help-negation hypothesis in relation to intentions for each help-source rather than as single scales for each problem-type. A GLM repeated measures ANOVA examined the impact of the 9 help-source variables (partners, friends, family, mental health professionals, physical health professionals, phone help-line, teachers, community, and no-one) and problem-type (personal-emotional and suicidal ideation) on students’ help-seeking intentions. Results found a significant main effect for helping source, $F(8, 952) = 116.01$, $p < .001$, that was qualified by a significant interaction with problem-type, $F(8, 952) = 21.89$, $p < .001$, indicating that consistent with Study 1, students’ help-source preference depended on problem-type (see Table 3.7). Again, to compare between the parametric and non-parametric results, two Friedman tests were conducted. First, for suicidal thoughts and second, for personal-emotional problems using the same help-source variables as in the parametric analyses. Consistent with the parametric results, non-parametric results found significant differences between help-seeking intentions for suicidal problems, $\chi^2(8, N = 156) = 340.16$, $p < .001$, and personal-emotional problems, $\chi^2(8, N = 145) = 631.75$, $p < .001$. 
Table 3.7. Means (M) and standard errors of high school students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 2).

<table>
<thead>
<tr>
<th>Help Source</th>
<th>Per-Emot</th>
<th>Suicide-Thts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Partner</td>
<td>4.87</td>
<td>.14</td>
</tr>
<tr>
<td>Friend</td>
<td>5.92</td>
<td>.01</td>
</tr>
<tr>
<td>Family</td>
<td>4.41</td>
<td>.09</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2.66_a</td>
<td>.11</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>1.38_b</td>
<td>.01</td>
</tr>
<tr>
<td>Physical Health</td>
<td>1.50_b</td>
<td>.01</td>
</tr>
<tr>
<td>Teacher</td>
<td>2.59_a</td>
<td>.10</td>
</tr>
<tr>
<td>Community</td>
<td>2.43_a</td>
<td>.09</td>
</tr>
<tr>
<td>No-one</td>
<td>2.87_a</td>
<td>.13</td>
</tr>
</tbody>
</table>

N = 269 except for “Partner” (N = 192). Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”). *Means differ between personal-emotional problems and suicidal thoughts in the same row at p < .01. a,bMeans differ non-significantly between corresponding help-sources in the same column (Means without subscripts differ at p < .01).
As for Study 1, pairwise comparisons were conducted to evaluate this interaction further using a Bonferroni adjustment to control for Type I error at $p < .05$. The results are presented in Table 3.7. Students were significantly less likely to seek help from partners, friends, and family, and significantly more likely to seek help from a mental health professional or telephone help-line for suicidal thoughts than for personal-emotional problems. Again as a precaution, Wilcoxon t-tests were calculated to compare parametric and non-parametric results for each problem-type. Z-scores and p-values are reported in Table A.15, Appendix IV. Non-parametric analyses found the same pattern of significant differences between different help-sources for personal-emotional and suicidal problems as parametric analyses (see Table A.15), confirming that students’ had significantly different preferences for a number of specific help-sources for each problem-type. Thus, the help-negation effect was examined for each help-source variable in the first set of main analyses.

Finally, given the gender differences in the Study 2 sample, preliminary analyses were conducted to determine the extent to which gender might influence the following help-negation analyses. The correlation between gender and suicidal ideation was non-significant ($p = .089$) and there were no gender differences on measures for intentions to seek help from any help-sources for suicidal thoughts, all $p$s $> .1$. Being female however, was correlated with higher intentions to seek help for personal-emotional problems from friends, $r(269) = .20, p < .01$. Consistent with Study 1, the extent to which gender might either explain or strengthen the help-negation relationship was explored using the covariance and moderation methods outlined in the following main analyses. Again, the results found that gender did not make a significant contribution to the help-negation effect found in the Study 2 sample thus, gender is not mentioned further.
Table 3.8. Correlations (r) between suicidal ideation (SIQ), hopelessness (BHS), and help-seeking intentions for personal-emotional and suicidal problems, and different sources of help for high school students (Study 2).

<table>
<thead>
<tr>
<th>Help-Seeking Intentions</th>
<th>Suicidal Ideation</th>
<th>Hopelessness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicidal thoughts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-.47**</td>
<td>-.35**</td>
</tr>
<tr>
<td>Friend</td>
<td>-.33**</td>
<td>-.26**</td>
</tr>
<tr>
<td>Partner\textsubscript{a}</td>
<td>-.30**</td>
<td>-.27**</td>
</tr>
<tr>
<td>Teacher</td>
<td>-.30**</td>
<td>-.25**</td>
</tr>
<tr>
<td>Community</td>
<td>-.30**</td>
<td>-.27**</td>
</tr>
<tr>
<td>Mental Health Professional</td>
<td>-.25**</td>
<td>-.23**</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.25**</td>
<td>-.16*</td>
</tr>
<tr>
<td>Physical Health Professional</td>
<td>-.15*</td>
<td>-.16*</td>
</tr>
<tr>
<td>No-one</td>
<td>.30**</td>
<td>.26**</td>
</tr>
<tr>
<td>Personal-emotional problems:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-.36**</td>
<td>-.35**</td>
</tr>
<tr>
<td>Friend</td>
<td>-.16*</td>
<td>-.19**</td>
</tr>
<tr>
<td>Partner\textsubscript{a}</td>
<td>-.05</td>
<td>.06</td>
</tr>
<tr>
<td>Teacher</td>
<td>-.25**</td>
<td>-.23**</td>
</tr>
<tr>
<td>Community</td>
<td>-.22**</td>
<td>-.24**</td>
</tr>
<tr>
<td>Mental Health Professional</td>
<td>-.04</td>
<td>-.13*</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.10</td>
<td>-.07</td>
</tr>
<tr>
<td>Physical Health Professional</td>
<td>-.23**</td>
<td>-.18**</td>
</tr>
<tr>
<td>No-one</td>
<td>.39**</td>
<td>.41**</td>
</tr>
</tbody>
</table>

N = 269, except \(N = 192\). **p < .001, *p < .05.
Help-negation

As for Study 1, the main analyses first used correlations to test of the possibility that students would show evidence of the help negation effect. This would be confirmed by a significant and inverse relationship between suicidal ideation and help-seeking intentions. Replicating Study 1, comparative parametric ($r$) and non-parametric ($r_s$) analyses were conducted. Correlations found coefficients that were low to moderate in magnitude, significant for suicidal thoughts and consistent between analyses. Again, for clarity, only parametric results are reported. As presented in Table 3.8, suicidal ideation had a significant negative correlation with each of the help-seeking variables, providing evidence of the help-negation effect. Higher levels of suicidal ideation were associated with lower intentions to seek help for suicidal thoughts from all sources of help. Higher levels of suicidal ideation were also associated with lower intentions to seek help from most sources for personal-emotional problems, and higher intentions to seek help from no-one for both suicidal thoughts and personal-emotional problems.

Hopelessness and prior help

Covariate analyses

To test the hypotheses that adolescents contemplating suicide might negate help because they feel hopeless or because they haven’t had formal help-seeking experiences, four GLM MANCOVAs were again conducted. Consistent with the first study, GLM was used because it allowed the use of continuous versions of the independent and dependent variables and did not require the sample to be divided into groups. MANCOVA was also used because preliminary analyses confirmed the need to examine the impact of hopelessness and prior help-seeking experience on the help-negation relationship for each help-source variable.

Replicating the analytical procedure used in Study 1, the first MANCOVA examined help-seeking intentions for suicidal thoughts while controlling for hopelessness. The second examined help-seeking intentions for personal-emotional problems while
controlling for hopelessness. The third and fourth MANCOVAs examined help-seeking intentions for suicidal thoughts and personal-emotional problems while controlling for prior help-seeking experience. Within MANCOVAs one and two, suicidal ideation was used to predict the nine help-seeking intention variables for each problem-type. Within MANCOVAs three and four, suicidal ideation was used to predict only mental health professional and no-one for each problem-type. Suicidal ideation and hopelessness were used in the first and second MANCOVAs as covariates, as were suicidal ideation and prior help-seeking experience in the third and fourth MANCOVAs. With hopelessness controlled, suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, Wilk’s Lambda = .871, \( p < .01 \), and personal-emotional problems, Wilk’s Lambda = .866, \( p < .01 \). Similarly, with prior help-seeking experience controlled, suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, Wilk’s Lambda = .850, \( p < .001 \), and personal-emotional problems, Wilk’s Lambda = .831, \( p < .001 \).

As for Study 1, univariate tests were conducted for each variable. As presented in Table 3.9, with hopelessness and prior help-seeking experience controlled, suicidal ideation was associated with lower intentions to seek help from specific help-sources and higher intentions to seek help from no-one for suicidal thoughts. It is noteworthy that most associations were significant at \( p < .05 \) (Table 3.9).

Again, the same MANCOVAs as above were conducted, but with one exception. Suicidal ideation was dichotomized so that the high scorers in the top 9% (\( N = 25 \)) (equivalent to a suicidal attempter, Reynolds, 1987) were excluded from the analysis. Consistent with Study 1, with the reduced sample, the analysis replicated the pattern of findings for help-seeking intentions for suicidal thoughts that is described in Table 3.9. This result confirmed that the Study 2 results apply to high school students at sub-clinical levels of suicidal ideation.
Table 3.9. Summary of MANCOVA analysis for suicidal ideation (SIQ) predicting help-seeking intentions for suicidal thoughts and personal-emotional problems while controlling for hopelessness and prior help in a high school sample (Study 2).

<table>
<thead>
<tr>
<th>Help-Source</th>
<th>Suicidal Thoughts&lt;sub&gt;a&lt;/sub&gt;</th>
<th>P-E Problems&lt;sub&gt;b&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>A: Hopelessness controlled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-1.40**</td>
<td>.37</td>
</tr>
<tr>
<td>Friend</td>
<td>-1.07*</td>
<td>.41</td>
</tr>
<tr>
<td>Community</td>
<td>- .90*</td>
<td>.38</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>- .83*</td>
<td>.42</td>
</tr>
<tr>
<td>Mental Health</td>
<td>- .81*</td>
<td>.43</td>
</tr>
<tr>
<td>Partner</td>
<td>- .80</td>
<td>.48</td>
</tr>
<tr>
<td>Teacher</td>
<td>- .69*</td>
<td>.33</td>
</tr>
<tr>
<td>Physical Health</td>
<td>- .18</td>
<td>.22</td>
</tr>
<tr>
<td>No-one</td>
<td>.98*</td>
<td>.44</td>
</tr>
<tr>
<td>B: Prior help-seeking experience controlled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>-1.25**</td>
<td>.28</td>
</tr>
<tr>
<td>No-one</td>
<td>1.55**</td>
<td>.32</td>
</tr>
</tbody>
</table>

<sup>a</sup>df (A) = 1, 153;  <sup>b</sup>df (A) = 1, 142.  
<sup>a</sup>df (B) = 1, 237;  <sup>b</sup>df (B) = 1, 246.  
** p < .001, * p < .05.
Since neither hopelessness nor prior help-seeking could fully explain the help-negation effect in the Study 2 sample, the possibility that hopelessness or prior help-seeking experience might contribute to the overall strength of the help-negation relationship was explored. The criteria for a moderation effect between hopelessness and the help-negation relationship and between prior help-seeking and the help-negation relationship were examined following the same procedures as in Study 1.

Multiple regression analyses were used to evaluate whether hopelessness moderated the help-negation relationship (Cohen et al., 2003). Two regression analyses were conducted using suicidal ideation, hopelessness, and the product terms between suicidal ideation and hopelessness; first, to predict help-seeking intentions for suicidal thoughts, and second, for personal-emotional problems. The independent variables were entered into each regression model in the following order: suicidal ideation, hopelessness, then, the corresponding cross-product term. The nine help-source variables for suicidal thoughts were reduced to a single scale, as were the nine help-source variables for personal-emotional problems, before use as the dependent variable in analyses one and two. All continuous variables were converted to z-scores before analysis (Aiken & West, 1991). In contrast to Study 1, as shown in Table 3.10, the criteria for a significant moderation effect between hopelessness and help-negation for suicidal thoughts were met, indicating that higher levels of hopelessness were significantly associated with greater adolescent reluctance to seek help for suicidal thoughts as levels of suicidal ideation increased. There were significant and inverse direct relationships between suicidal ideation and help-seeking intentions and between hopelessness and help-seeking intentions for suicidal thoughts and personal-emotional problems, together with a significant interaction effect between suicidal ideation and hopelessness for intentions to seek help for suicidal thoughts. However, this interaction effect is somewhat qualified by the finding that the direct relationship between hopelessness and help-seeking intentions for suicidal thoughts was of greater magnitude than hopelessness’ interaction with suicidal ideation (Table 3.10).
Table 3.10. The impact of hopelessness and prior help-seeking experience on help-negation in a high school sample (Study 2).

<table>
<thead>
<tr>
<th>Help-seeking Intentions</th>
<th>Suicidal Thoughts</th>
<th>P-E Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>A: Suicidal Ideation</td>
<td>-.44</td>
<td>.07</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>-.19</td>
<td>.07</td>
</tr>
<tr>
<td>Sui. Ide. x Hopelessness</td>
<td>.11</td>
<td>.05</td>
</tr>
<tr>
<td>B: Suicidal Ide. (No Prior Help)</td>
<td>-.27</td>
<td>.07</td>
</tr>
<tr>
<td>Suicidal Ide. (Prior Help)</td>
<td>-.31</td>
<td>.10</td>
</tr>
<tr>
<td>Sui. Ide. x Prior Help</td>
<td>.04</td>
<td>.12</td>
</tr>
</tbody>
</table>

\[
\begin{align*}
\text{a} R^2 (A) &= .25, \text{a Adj. } R^2 (A) = .24, \text{a df (A)} = 3, 263. \\
\text{b} R^2 (A) &= .20, \text{b Adj. } R^2 (A) = .19, \text{b df (A)} = 3, 263. \\
\text{a,} R^2 (B) &= .05, \text{a Adj. } R^2 (B) = .05, \text{a df (B)} = 1, 269. \\
\text{a,} R^2 (B) &= .11, \text{a Adj. } R^2 (B) = .09, \text{a df (B)} = 1,77. \\
\text{a,} R^2 (B) &= .01, \text{a Adj. } R^2 (B) = .01, \text{b df (B)} = 1, 269. \\
\text{b,} R^2 (B) &= .01, \text{b Adj. } R^2 (B) = .01, \text{b df (B)} = 1,77. \\
\text{a,} R^2 (B) &= .01, \text{a Adj. } R^2 (B) = .01, \text{b df (B)} = 1, 269. \\
\text{b,} R^2 (B) &= .01, \text{b Adj. } R^2 (B) = .01, \text{b df (B)} = 1,77. \\
\text{a,} \text{No significant difference between groups (95% CI: -.20 to .28)} \\
\text{b,} \text{No significant difference between groups (95% CI: -.25 to .31)}
\end{align*}
\]

*** p < .001, ** p < .01, * p < .05.
Multiple regression analyses, together with confidence intervals, were again used to evaluate whether prior help-seeking experience moderated the help-negation relationship (Aiken & West, 1991; Baron & Kenny, 1986). Four regression analyses were conducted. Analyses one and two used suicidal ideation in students who had no prior help-seeking experience to predict help-seeking intentions; first, for suicidal thoughts and second, for personal-emotional problems. Analyses three and four used suicidal ideation in students who had prior help-seeking experience, to predict each problem-type. Since prior help-seeking experience was measured on a dichotomous item that related specifically to professional psychological help-seeking, all prior help-seeking moderation analyses again used only “mental health professional” as the dependent intention variable for either problem-type. Confidence Intervals (CIs) for the differences between predictor variables were calculated following the procedure outlined by Cohen et al. (2003). As in Study 1, the difference between predictor variables is reported in Table 3.10 as the interaction term “Sui. Ide. x Prior Help”. Consistent with Study 1, the criteria for a significant moderation effect between prior help-seeking experience and the help-negation relationship for suicidal thoughts were not met. As shown in Table 3.10, there were significant negative direct relationships between suicidal ideation and help-seeking intentions for students who had prior help-seeking experience in addition to those who did not. However, all 95% CIs included 0, indicating that there was no significant difference in the strength of the help-negation effect between these groups in the high school sample (Table 3.10).

Summary

Preliminary results

Although not proposed as hypotheses, the preliminary analyses in both Studies 1 and 2 examined students' help-seeking intention patterns without the impact of suicidal ideation, along with the role that gender may have on the help-negation relationship. The results appear worthy of comment and thus, are reviewed below before the review and discussion of the main findings in Studies 1 and 2.
Help-seeking intention patterns

Overall, students’ help-seeking intention patterns were consistent with those outlined in Chapter 1 and found by Wilson et al. (2003). Students in both Studies 1 and 2 reported intentions to seek help from informal sources (e.g., friends and family) that were higher than for formal sources (e.g., mental or physical health professional). Many students also indicated that they would not seek help from anyone for either personal-emotional problems or suicidal thoughts. Consistent with several supporting studies, preferred help sources were different for different types of problems (e.g., Offer et al., 1991; Boldero & Fallon, 1995; Wilson et al., 2003), and help-seeking intentions were significantly different for suicide and non-suicide related problems (e.g., Schweitzer et al., 1995; Wilson et al., 2003). University and high school students reported that they were less likely to seek help from friends and family, and more likely to seek help from a mental health professional for suicidal thoughts than for personal-emotional problems (Tables 3.2 & 3.7). It should be noted however, that students in both studies indicated that they were most likely to seek help from friend for suicidal thoughts. High school students also indicated that they were likely to seek help from a family member for help with suicidal thoughts. Together, these results suggest a prevention role that friends and family can have for young people with suicidal thoughts (Kalafat, 1997). The results also reinforce the need to prepare key individuals such as peers, parents and other family members as “gatekeepers” (Frederico & Davis, 1996) so they may be equipped to facilitate access to professional sources when such help is warranted (Kalafat, 1997; Popenhagen & Qualley, 1998; Wilson & Deane, 2001).

Gender

Given that females in both Studies 1 and 2 reported higher levels of suicidal ideation than the males, and both studies included a higher percentage of females than males, the extent to which gender might influence the help-negation relationship was examined. It is noteworthy that neither Study 1 nor 2 found a significant relationship between gender and the help-negation effect. It is also noteworthy that no evidence was found to suggest that gender has a role in either explaining or strengthening the help-negation effect in university or high school students. Together, these results
suggest that the help-negation effect might highlight a broader process of help avoidance that occurs across populations with different characteristics, and which intensifies as levels of suicidal ideation increase.

**Help-negation**

Within the main results, a help-negation effect consistent with that identified by Carlton and Deane (2000), was found in both Studies 1 and 2. As expected, higher levels of suicidal ideation were significantly associated with lower intentions to seek help from a number of specific sources, and higher intentions to seek help from no-one. However, the strength of these relationships was unexpectedly high (Tables 3.4 & 3.9). In both Studies 1 and 2, there was a clear relationship between suicidal ideation and lower intentions to seek help for suicidal thoughts from specific sources, including mental health professionals, telephone help-lines and other formal help-sources such as General Practitioners. Although university participants had undergraduate training in first year psychology and might reasonably be expected to know the benefits of seeking psychological help, when experiencing suicidal thoughts, even at sub-clinical levels, university students were unlikely to seek help from a mental health professional. Similarly, although high school students had been told the benefits of seeking help from welfare teachers and the school counsellor (the school curriculum included interactive welfare classes and counsellor outreach), when experiencing suicidal ideation at sub-clinical levels, high school students were unlikely to seek help for suicidal thoughts from either professional source. In both Studies 1 and 2, as levels of suicidal ideation increased, so too did the tendency to seek help from no-one. Students in both samples indicated they were most likely to seek help from no-one for suicidal thoughts at higher levels of suicidal ideation (Tables 3.4 & 3.9).

From these results, it seems safe to speculate that suicidal ideation appears to inhibit help-seeking. Based on the known characteristics of the suicidal state (e.g., Clark & Fawcett, 1992), three hypotheses offer promise for examining the help-negation effect further. First, aspects of the irrational cognitive-affective state that co-occur in the presence of suicidal thoughts, might inhibit the retrieval of rational help-seeking intentions through processes of cognitive distortion that have been linked to suicide
(e.g., selective abstraction, cognitive rigidity) (Weishaar, 1996). Second, the suicidal state might impede the recognition of suicidal thoughts as problems for which help is needed and subsequently, the appraisal of help as a suitable problem-solving option (Deane et al., 2001). Third, the results might reflect an explicit rational response to beliefs about suicide. Students may rationalise to themselves, “If I was suicidal, I would not want to get help,” and respond accordingly (Deane et al., 2001, p. 9). This reason may be particularly salient for adolescents.

Adolescence is a time of increasing psychological separation when young people start to make independent decisions, direct and manage more of their practical affairs, spend less time with their parents, and increasing time alone and with friends (Balters & Silverberg, 1994; Larson & Richards, 1991; Steinberg & Morris, 2001). As noted in Chapter 1, adolescents’ beliefs that young people should or would solve their own problems have been identified as important barriers to high school students seeking professional psychological help (e.g., Kulh et al., 1997; Wilson et al., 2001a, 2002). It is possible that lower intentions to seek help, particularly from formal sources, are at least partly associated with stages of adolescent maturation and egocentrism (Carlton & Deane, 2000; Wadsworth, 1984). Young people may think they “can” or “should” deal with problems alone, even if their problems are suicidal.

**Hopelessness and prior help-seeking experience**

Based on previous findings (e.g., Rudd et al., 1995; Clark & Fawcett, 1992; Hughes & Neimeyer, 1993), Studies 1 and 2 investigated the possibility that hopelessness might contribute to the inverse relationship between suicidal ideation and help-seeking intentions. Contrary to expectations, in both Studies 1 and 2, hopelessness and prior help-seeking experience were unable to fully account for the help-negation effect. Results found that with hopelessness and prior help-seeking experience controlled, suicidal ideation significantly and negatively predicted intentions to seek help from a number of specific sources for suicidal thoughts. Additional results revealed that with hopelessness controlled, as suicidal ideation increased, students’ intentions to seek help for suicidal thoughts decreased for all help-sources. This association was particularly strong for family and mental health professionals in the university sample (Table 3.4), and family and friends in the high school sample (Table 3.9). Similarly,
with prior professional psychological help-seeking controlled, as suicidal ideation increased, university and high school students’ intentions to seek help for suicidal thoughts from a mental health professional decreased. In both studies, the help-negation effect for specific sources was reinforced by a significant and positive association between suicidal ideation and intentions to seek help from no-one (Table 3.4 & 3.9).

Within Study 1, interaction analyses found no evidence that hopelessness or prior help-seeking experience moderated the help-negation relationship. As shown in Table 3.5, although the main effects between suicidal ideation and help-seeking intentions, between hopelessness and help-seeking intentions, and between prior help-seeking and help-seeking intentions were significant and negative, the interaction variables were not (Table 3.5). In this university sample, neither hopelessness nor prior help-seeking appeared to have a role in strengthening the help-negation relationship. Similarly, Study 2 found no evidence that prior help-seeking moderated the help-negation relationship in high school students (Table 3.10). However, in contrast to Study 1, Study 2 found evidence that hopelessness may moderate the help-negation effect in adolescents. As shown in Table 3.10, there were significant and negative main effects between suicidal ideation and help-seeking intentions and between hopelessness and help-seeking intentions, along with a significant interaction between suicidal ideation and hopelessness. Together, these results indicate that hopelessness made a partial contribution to the overall strength of the help-negation relationship in this high school sample, such that higher levels of hopelessness contributed to greater student reluctance to seek help for suicidal thoughts as levels of suicidal ideation increased. However, this result is also qualified by the finding that the direct relationship between suicidal ideation and help-seeking intentions was of greater magnitude than the hopelessness-suicidal ideation interaction (Table 3.10). In the Study 2 sample, while hopelessness appeared to strengthen the help-negation relationship, other variables that are associated with the suicidal state and help-seeking intentions may also have influenced the help-negation relationship. For example, it is possible that the direct negative relationship between suicidal ideation and help-seeking intentions reflects features of co-occurring disorders such as apathy or lethargy which are commonly found in clinical or sub-clinical depression (Parker, 2002).
The potential role of hopelessness in the help-negation relationship

Hopelessness has been related to adolescent help-seeking barriers that describe negative appraisals about seeking professional psychological help (e.g., “nothing will change the problems I have,” and “adults can’t understand adolescent problems”) (Wilson et al., 2002). It is possible that hopelessness contributes to the strength of the help-negation effect in adolescents through negative appraisals about available and appropriate help for managing or solving suicidal problems. Lending support, MacLeod and Cropley (1995) found that hopelessness was primarily associated with future-directed thinking which lacked the anticipation of positive events. High levels of hopelessness directly related to a reduced belief in the likelihood of positive future events or outcomes.

In one of the first studies of its kind, Beck et al. (1975) found that hopelessness mediated the relationship between depression and suicidal intent among suicidal attempters. From these results, Abramson et al. (1989) speculated that within individuals with personality styles that presume negative outcomes (i.e. pessimistic personality styles), hopelessness might exacerbate existing risk factors by mediating the development of suicidal pathways from ideation to completion. As noted, Rudd et al. (1995) suggested that while help-negation in acutely suicidal patients appeared to be at least in part a function of hopelessness, this characteristic is most likely “indicative of the individual’s general adaptive coping interpersonal style” (p. 503). It is possible that although hopelessness could not fully explain help-negation in the Study 2 high school sample, hopelessness might contribute to help-negation in at least younger samples, through its effects on problem-solving. Thus, as Rudd et al. (1995) speculated, help-negation might result from a general coping or problem-solving style that is avoidant, negativistic, or passive-aggressive, even at sub-clinical levels of suicidal ideation. Offering support, Orbach and colleagues (1990) found that suicidal ideators showed an avoidant coping style while “at the same time tended to use the same solution repetitively” (Orbach, Bar-Joseph, & Dror, 1990, p. 62). The researchers also found that suicidal ideators tended to depend on others in their solutions, be passive in their motivation to actually solve their problem, and showed more giving up attitudes in their solutions. Moreover, there is evidence that problem-
solving passivity may extend to sub-clinical samples. When asked “If you were thinking about harming yourself, why wouldn’t you seek help from anyone?” high school students in a focus group study have explained “[you’re] past that point already…so this is the only way you can see….If you are to the point where you wanna actually harm yourself, you’re just not going to care what everyone else thinks…ya just don’t think that anything you do will work” (Wilson & Deane, 2001a).

Implications for Studies 3 and 4

Some researchers view suicidal behaviour as primarily a function of poor social problem-solving and cognitive distortion (e.g., Weishaar, 1996). Baumeister (1990) suggested that for some young people, suicide might be viewed as a favourable way to escape their distress. Weishaar (1996) concurred, suggesting that “suicide may appear as a solution when a person is unable to shift to a new strategy, is incapable of tolerating the anxiety of problem-solving, or has faulty assumptions about suicide’s effectiveness to solve problems” (p. 237). Deane et al. (2001) expanded this view suggesting that persistent and repetitive suicidal thoughts might promote suicide as a desirable solution for managing distress. It is possible that as the suicidal state becomes more intense and as levels of suicidal ideation increase, an individual’s adaptive problem-solving capacity becomes constricted and/or focused on maladaptive solutions. If so, it is possible that help-negation might occur for three broad reasons. First, an individual may have an inhibited ability to view the suicidal state as a problem to be solved. Second, the individual may not appraise appropriate help-seeking as a useful problem solution. Third, the individual might appraise maladaptive solutions, such as seeking help from no-one or help avoidance, as the most effective way to manage their suicidal thoughts. There is evidence that poor problem recognition and the negative appraisal of help as a problem-solving option can act as significant barriers to clients seeking psychotherapy (Saunders 1993). These possibilities are elaborated further in Chapter 4. Following the theoretical case for the role of social problem-solving in the help-negation relationship, the impact of social problem-solving on the help-negation effect is examined in two new sub-clinical samples in Studies 3 and 4 (Chapter 5).
Chapter 4

Help-Negation, Problem Recognition, and Problem-Solving

Appraisal: A Theoretical Account

If professional psychological help-seeking is considered an adaptive coping response for managing emotional or psychological problems such as suicidal thoughts, it can be related to social problem-solving in two ways. First, as a solution to a problematic situation that has no immediately apparent solution (D’Zurilla, 1986; Saunders, 1993), and second, as a support strategy that can strengthen an individual’s existing problem-solving capacity and cognitive ability throughout the problem-solving process (D’Zurilla & Nezu, 1999). Theoretically, problem recognition and problem-solving appraisal are variables that have both been identified as fundamental to the success of the help-seeking and social problem-solving processes (e.g., D’Zurilla, 1986; Saunders, 1993). Poor problem recognition and problem-solving appraisal have also been identified as barriers to formal help-seeking (Table A.8, Appendix I). Empirically, the relationship between professional psychological help-seeking and social problem-solving is yet to be established (Deane et al., 2001). This chapter examines the ways in which help-seeking and social problem-solving appear linked before outlining a theoretical account of the way in which poor problem recognition and problem-solving appraisal might explain the help-negation effect in sub-clinical university and high school samples.

Social problem-solving defined

Due primarily to the work of D’Zurilla and colleagues, everyday interpersonal problem-solving has become known as “social problem-solving” across the clinical and counselling literature (e.g., D’Zurilla, 1986; D’Zurilla & Nezu, 1982, 1999;
D’Zurilla & Goldfried, 1971; Nezu & D’Zurilla, 1989). Social problem-solving plays a prominent role in the conceptualisation of social competence and psychopathology (Tisdelle & St. Lawrence, 1986). From a prevention perspective, social problem-solving is an important general coping strategy that is both a social-learning process and a self-management technique that can be applied to a wide variety of problems with little or no external direction or control (D’Zurilla, 1986; Gagne, 1966).

According to D’Zurilla, social problem-solving is the self-generated cognitive-affective-behavioural process by which an individual attempts to identify, discover or invent effective or adaptive strategies for coping with everyday problems (D’Zurilla 1986, 1990; D’Zurilla & Nezu, 1999). Theoretically, social problem-solving comprises two complementary but partially independent processes: problem orientation and problem-solving proper. Each process effects problem-solving performance in different but equally important ways (D’Zurilla & Nezu, 1999). Problem orientation is considered to be the motivational aspect of social problem-solving, comprising a set of metacognitive processes described as “orienting responses”, that function to activate problem-solving proper (D’Zurilla & Nezu, 1999). Orienting responses are viewed as the cognitive-emotional responses that an individual experiences when first faced with a problem. In contrast, problem-solving proper is defined as the performance aspect of the social problem-solving process, comprising both performance and ability variables that are viewed as “problem-solving skills” (D’Zurilla & Goldfried, 1971; D’Zurilla, 1986). These are the skills or goal-directed tasks that must be successfully completed for effective and adaptive problem solution. There are also a number of ability variables underpinning performance variables. Ability variables are thought to influence the individual’s capacity to learn and implement problem-solving tasks, and are described as the basic cognitive abilities necessary for the application of strategies or techniques that are required to achieve effective problem solution (D’Zurilla & Nezu, 1999).

**Social problem-solving and suicide**

Social problem-solving is underpinned at every level and in every aspect by an array of complex interactions, involving a number of cognitive abilities that may be affected by the suicidal state. Unfortunately, little is known about the specific aspects
of social problem-solving that relate directly to suicidality (Christiansen, Lovejoy, Szymanski, & Lang, 1996). Most studies that have examined the relationship between social problem-solving and suicidal indicators have been correlational in design and have tended to examine the unified problem-solving process. Few studies have examined specific relationships between components of social problem-solving and specific suicidal variables. Consequently, the aspects of social problem-solving that have the strongest impact on different suicidal variables have yet to be consistently identified. Nonetheless, there is strong convergent evidence supporting the existence of a relationship between social problem-solving and suicide that is further supported by evidence linking social problem-solving and known correlates of suicide such as depression. (A research summary is provided in Table A.9, Appendix I).

In one of the first reports of its kind, Clum et al. (1979) theoretically linked poor problem-solving to suicidal behaviour. The researchers proposed that deficits in problem-solving would increase the likelihood that a vulnerable individual would become suicidal by reducing the probability that the individual would solve their problem successfully. In the decades following Clum’s initial report, a variety of studies have empirically related deficits in overall social problem-solving capacity to suicidal variables in different samples (e.g., Biggam & Power, 1999a; Carris, Sheeber, & Howe, 1998; Chang, 1998). For example, Biggam and Power (1999a) found that problem-solving deficits significantly related to suicidality in a sample of 100 incarcerated young offenders. Carris et al. (1998) found a significant association between global problem-solving and suicidal ideation in a sample of 297 college students, and Chang (1998) showed that overall social problem-solving capacity was a significant predictor of suicidal potential in a sample of 185 college students.

Some studies have found that cognitive difficulties, including limited cognitive functioning and distortions such as rigidity, distinguish suicidal from non-suicidal participants (see Table A.9, Appendix I for a review of studies). Rotheram-Borus and colleagues (1990) found that overall problem-solving capacity distinguished suicide attempters from non-suicidal participants in their sample of 77 adolescent females. Suicide attempters were distinguished from the control group in that they reported significantly fewer alternatives for solving interpersonal problems, significantly
higher focus on problems, and greater likelihood to report a wishful thinking style of coping than non-suicidal participants (Rotheram-Borus, Trautman, Dopkins, & Shrout, 1990).

Other studies have found that suicidal participants have difficulty generating relevant solution alternatives then identifying the positive consequences that might result from each alternative (e.g., Biggam & Power, 1999b; Priester & Clum, 1993; Sadowski & Kelly, 1993). Sadowski and Kelly (1993) found that their sample of 60 suicide attempters had difficulties generating alternative solutions, making decisions, and implementing and verifying solutions. Consistent with more recent speculation (e.g., Johns & Holden, 1997; Weishaar, 1996), Sadowski and Kelly concluded that distressed young people might select suicide as an appropriate solution when it has been accepted as a suitable coping option. Priester and Clum (1993) expanded this view by suggesting that if problem-solving deficits are profound enough, these deficits may lead to increased suicidal ideation regardless of other variables. Biggam and Power (1999b) concurred suggesting that problem-solving might be a state corollary of suicidality, whereby problem-solving deficits become apparent in problematic situations among a subset of individuals who are already at risk for suicide.

**Professional psychological help-seeking**

It is widely agreed that appropriate help-seeking involves a number of components in common with social problem-solving. Within several models of help-seeking, problem-recognition and appraisal are posited as core aspects of the help-seeking process (e.g., Alegria, Robles, Freeman, Vera, Jimenez, Rios et al., 1991; Andersen, 1995; Saunders, 1993). In the first of the three help-seeking theories reviewed below, Alegria et al. (1991) conceptualised professional healthcare seeking as a dynamic process comprising five progressive but fundamental steps that occur within the context of enabling, predisposing, and need-based contingencies. Alegria et al. described the five consecutive steps as: (1) symptom appearance; (2) problem recognition; (3) appraising professional psychological help as useful; (4) selecting a professional mental health service; and (5) engaging in professional psychological help.
In the second and similar theory of healthcare seeking, Saunders (1993) also conceptualised help-seeking as a dynamic process. However, Saunders’ theory differed from Alegria et al.’s in that it comprised only four consecutive steps: (1) problem recognition; (2) appraising professional psychological help as an appropriate solution to a health problem; (3) deciding to seek professional psychological help; and (4) engaging in professional psychological help. Saunders tested his theory by examining the difficulty associated with each help-seeking step within a sample of community participants who sought psychotherapy. The results showed that over half of the participants (56%) reported that problem recognition was at least somewhat hard, and almost 64% felt that the last step was at least somewhat easy. This finding was also true for participants who had previously engaged in mental health care (i.e., patients who had experienced prior help), indicating that “the most difficult aspect of the [help-seeking] process is recognising the existence of the problem, which even persons with previous therapy experience tended to find difficult” (p. 562). The second most difficult aspect was the appraisal of professional psychological help as a useful option for problem solution.

In the third and more recent contingency-based theory of healthcare seeking, Andersen (1995) proposed that help-seeking is a complex, interactive, and somewhat unpredictable behaviour, determined primarily by the three contingencies posited by Alegria et al. (i.e., enabling, predisposing, and need-based contingencies). In contrast however, Andersen contended that effective help-seeking results from the interplay of need, enabling characteristics, and predisposing characteristics within the context of a number of variables including organisational structure, goals, and policies of healthcare systems, the insurance industry, and state regulation; with consideration given to the effects of service use and how previous experience influences each core contingency. From Andersen’s perspective, predisposing characteristics are the social and cultural factors that influence the individual’s decision to seek help; enabling characteristics are the means and knowledge that facilitate access to and engagement in appropriate treatment (Andersen, 1995). As in the earlier theories (Alegria et al., 1991; Saunders, 1993), Andersen posited problem recognition as the fundamental prerequisite for effective health care seeking, and suggested that the recognition of
need for care results from a combination of previous help-seeking experience and an accurate perception of symptoms.

**Problem recognition and help-negation**

There is some theoretical disagreement about the relative importance of each aspect of the help-seeking process. Nevertheless, consistent with social problem-solving theory (D’Zurilla, 1986; D’Zurilla & Nezu, 1999), there is strong agreement about the centrality of problem recognition for appropriate and effective help-seeking (Alegria et al., 1991; Andersen, 1995; Saunders, 1993). According to social problem-solving theory (D’Zurilla & Nezu, 1999), problem recognition, defined as the accurate definition and labelling of problems, is a vital prerequisite for effective problem solution. Problem recognition is viewed as a key motivational variable for enabling the individual to manage their problem by activating problem-solving schema and increasing the likelihood of effective problem-solving activity (D’Zurilla, 1990). Providing evidence of the link between problem-recognition and subsequent help-seeking, Boldero and Fallon (1995) found that the recognition of different personal and emotional problem-types predicted asking for help in a sample of 1,013 high school students.

Conversely, together with at least three help-seeking studies that have identified poor problem recognition as a barrier to seeking professional psychological help (Amato & Bradshaw, 1985; Fuller, Edwards, Procter, & Moss, 2000; Wilson & Deane, 2001a), Saunders’ (1993) results support the view that poor problem recognition is “a primary barrier” to receiving mental health care for emotional problems (p. 561). Amato and Bradshaw (1985) examined the reasons that 70 participants gave to explain their help-seeking avoidance. Results found that participants delayed or avoided help-seeking because of several general barriers, one of which was being reluctant to recognise the existence of a problem. Fuller et al. (2000) found that community members were reluctant to recognise different forms of psychological and emotional distress as problems in need of professional psychological help. And, Wilson and Deane (2001a) reported that high school students described poor problem recognition as a notable barrier to seeking appropriate help for personal or emotional problems.
According to D’Zurilla and Nezu (1999), there are four main difficulties that can impede problem recognition in the social problem-solving process. Within suicidal individuals, even if levels of suicidal ideation are sub-clinical, it seems possible that the following difficulties may be compounded by the cognitive restriction associated with the suicidal state (Clark & Fawcett, 1992).

**Difficulties associated with problem recognition**

First, according to D’Zurilla and Nezu (1999), personal or emotional problems are often “messy”, poorly defined so not always easily recognised, even to the problem-sensitive individual. Personal problems are often embedded within social contexts that involve non-problem related interactions that are “masked by ambiguity or unrecognisable because of unavailable or incomplete information” (D’Zurilla, 1986, p. 22). Problematic situations may also include relevant and irrelevant information that must be delineated before the individual can accurately define and label their problems that are in need of solution (D’Zurilla & Nezu, 1999).

These difficulties may be magnified when the individual becomes suicidal (Beck, 1967). Beck’s (1967) cognitive model of depression has at its core the premise that depression and suicidal thoughts stem from negatively distorted information processing. From the cognitive perspective, schema are thought to comprise an organised cluster of knowledge about solving problems that has been gained through an accumulation of life experiences. Functionally, schemata are believed to provide a filter through which incoming stimuli are recognised, evaluated, and interpreted. In the case of the depressed or suicidal young person, there is evidence that conceptualisations and evaluations of stimuli are often distorted to “fit” existing and already distorted schemata (Stark, Ostrander, Kurowski, Swearer, & Bowen, 1995). Within the context of help-negation, this suggests that a suicidal young person might negate professional psychological help for suicidal thoughts because they do not accurately define and label their thoughts as suicidal and theoretically, do not appraise their suicidal problem as risky and worthy of help. Conversely, a suicidal young person might negate professional psychological help for suicidal thoughts, if they accurately define and label their suicidal problem but appraise avoidant solutions such as seeking help from no-one as the most effective way to manage their distress (Deane
et al., 2001; Wilson & Deane, 2001). If the young person accurately recognises their problem but believes “If I wanted to kill myself, I would not seek help”, the young person’s appraisal of their suicidal problem may be distorted to fit their belief. In this case, the young person might avoid help-seeking because they believe that being suicidal means they are supposed to avoid seeking help (Deane et al., 2001; Wilson & Deane, 2001a).

The second difficulty is thought to occur when young people are faced with everyday problems that are difficult and threatening or stressful in nature (D’Zurilla & Nezu, 1999). Young people often respond with avoidance behaviours and avoid or deny their problems rather than dealing with them directly (Clark & Fawcett, 1992; Janis & Mann, 1977; Lazarus, 1983; Rudd et al., 1995; Wilson & Deane, 2001, 2001a). Within the context of help-negation, the results of Studies 1 and 2 suggest avoidance behaviour might be exacerbated by the suicidal state. In normal populations, a common correlate of avoidance is the experience of negative responses such as aversive emotions (D’Zurilla & Nezu, 1999). This response may be exacerbated when the problem is suicide related. For example, Sadowski and Kelly (1993) found that suicide attempters thought about their problem inaccurately, responded with high levels of emotional arousal, and adopted subsequent avoidant responses to problematic situations. In normal populations, aversive responses can evoke further problem avoidance or denial that may subsequently increase the intensity and pervasiveness of the problem (D’Zurilla, 1986, 1990; Mather, 1970; Philips, 1978). Again, this may be particularly true in suicidal samples, at all levels of suicidal ideation. The help-negation effect shows that suicidal individuals, even at sub-clinical levels of ideation, tend to avoid help. Yet, evidence suggests that risk for suicide completion is exacerbated if young people do not seek and receive appropriate treatment or advice (Rosenberg et al., 1989), but continue to experience suicidal thoughts until levels of suicidal ideation are acute (Beck et al., 1999). Beck et al. (1999) found that suicidal ideation at its worst point identified suicidal ideators at high risk for eventual suicide, whereas low levels of suicidal ideation did not.

The third major difficulty is thought to occur within normal populations when individuals inaccurately define and/or label a problem by considering their aversive responses to the problem to be their actual problem rather than indicators of the true
problem (D’Zurilla, 1990). Within suicidal populations, this problem recognition difficulty may be exacerbated through processes of cognitive distortion (Weishaar, 1996). For example, if fear or shame were experienced in response to the recognition of suicidal thoughts, both responses would be exacerbated by cognitive distortions such as rumination or rigidity. In this example, if either fear or shame were mislabelled as the true problem, according to D’Zurilla and Nezu (1999), efforts to solve the “real” problem, in this case suicidal ideation, would likely remain uninitiated. Within the context of help-negation, this suggests that aversive emotions such as fear and shame, discussed elsewhere as barriers to appropriate help-seeking (e.g., Deane & Chamberlain, 1994; Kushner & Sher, 1989; 1991), might be defined and labelled by the suicidal individual as their problem instead of the suicidal thoughts and consequently ‘managed’ with avoidant problem-solution behaviours (i.e., seeking help from no-one).

The fourth difficulty associated with problem-recognition is thought to occur when problem definitions or labels, rather than the actual problem, trigger orienting cognitions that subsequently evoke problem avoidance behaviours (D’Zurilla & Nezu, 1999). From an individual’s attitudes, beliefs, and knowledge, specific problem definitions and labels are assigned significance and meaning. As D’Zurilla (1986) stated, “to some individuals, the label problem itself is threatening and leads to avoidance and denial” (p. 23). Within the context of help-negation, an individual may be willing to solve a low-risk “personal-emotional” problem by seeking help, but may be reluctant to seek help for a “suicidal” problem because of beliefs they associate with their personal definition of suicide and the label. For example, Wilson and Deane (2001a) reported that students explained they might avoid seeking help from parents or a health care professional if their problem was suicidal but not if the problem was personal or emotional, because their “parents might be too upset”, or the professional “might lock you up”.

In sum, theory and research provide support for the possibility that young people might negate help for suicidal thoughts, regardless of their actual ability to seek help, because they do not recognise (i.e., accurately define and label) their thoughts as suicidal or because they do not recognise their suicidal thoughts as a problem. If problem recognition contributes to the help-negation relationship, the magnitude of
the help-negation effect would be substantially reduced with problem recognition controlled. Poor problem recognition might strengthen the help-negation relationship as young people become more distressed and levels of suicidal ideation increase. If so, problem recognition would moderate the help-negation effect. These possibilities are examined in Studies 3 and 4 (Chapter 5).

Problem-solving appraisal and help-negation

Appraisal is a second variable that is common to both professional psychological help-seeking and problem-solving theory (Alegria et al., 1991; D’Zurilla & Nezu, 1999; Saunders, 1993). A number of studies indicate that processes of appraisal that influence both problem-orientation and problem-solving proper, appear more closely related to suicidal thoughts and behaviours than other problem-solving variables (Wilson, Stelzer, Bergman, Kral, Inayatullah, & Elliott, 1995). Rudd and colleagues (1994) found that deficits in problem-solving appraisal significantly related to the self-appraisal of problem-solving abilities and suicidal ideation in a sample of 332 outpatient suicidal ideators and attempters (Rudd, Rajab, & Dahm, 1994). Dixon and colleagues (1994) found that problem-solving appraisal related significantly to suicidal ideation in a sample of 217 suicidal outpatients, through its impact on hopelessness as a mediational variable (Dixon, Heppner, & Rudd, 1994). Wilson et al. (1995) found that in a sample of 40 suicidal adolescent inpatients, as levels of hopelessness increased patients reported inaccurate appraisals of the extent to which problematic situations could be influenced and controlled. Consistent with Dixon et al. (1994), Wilson et al. concluded that under stress, the appraisal aspects of problem-solving, defined as judgements about the significance of problems for well-being and ways to manage the problem, might influence an individual’s adaptive efforts to cope and therefore, the development of suicidality (Wilson et al., 1995).

According to D’Zurilla and Nezu (1999), appraisals occur throughout the problem-solving process and largely determine the efficacy of problem solution. Positive appraisal is viewed as facilitative whereas negative appraisal is viewed as inhibitive (D’Zurilla, 1996). An individual who appraises their problem and problem-solution options positively is likely to perceive the problem as a “challenge” or a potential benefit to well-being as an opportunity for personal growth. Such an individual is
likely to approach the problem then initiate effortful and planful problem-solving activity (D’Zurilla, 1986; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Conversely, an individual who appraises their problem and/or solution options negatively is likely to view the problem along with proactive problem-solving options, as threatening. Such an individual is likely to experience aversive affect such as anxiety then subsequently avoid or disrupt their proactive problem-solving performance (D’Zurilla & Nezu, 1999; Janis & Mann, 1977; Meichenbaum, Henshaw, & Himel, 1982). Within the context of help-negation, it is possible that help-negation reflects an individual’s avoidant response to negative appraisals about their suicidal problem and/or help-seeking as a problem-solving option. This possibility is supported by a study that examined problem-solving difficulties distinguishing parasuicide “repeaters” from “non-repeaters” (McAuliffe, Keeley, & Corcoran, 2002). McAuliffe et al. (2002) found that parasuicide repeaters scored significantly lower than non-repeaters on the “active handling,” “comforting cognitions,” and “seek social support” dimensions of their problem-solving measure.

Problem-solving appraisal is thought to comprise a number of aspects. As an orienting variable, the most important aspect appears to be goal commitment (D’Zurilla & Nezu, 1999). Theoretically, an individual with a strong goal commitment will strive hard to solve their problem, despite discouragement or adversity. Conversely, an individual with low goal commitment will perceive neither the adaptational importance of their problem nor the need for problem solution (Lazarus, 1999). Consequently, it is likely that the individual will continue with their routine patterns of living and coping until there is an indication that a problem of adaptational importance exists. At which time, the individual interrupts their routine because of the potential for harm or loss, threat or challenge (Mandler, 1984). Within the context of help-negation, this suggests that the individual might allow their suicidal state to develop beyond sub-clinical levels because they do not accurately appraise the adaptational risk associated with suicidal ideation until acute indicators become apparent (e.g., persistent thoughts of a suicidal attempt plan). Even if the suicidal individual correctly defines and labels their thoughts as a problem, they might ask, "Do these suicidal thoughts represent potential harm or benefit to me?" Theoretically, if the individual’s answer to this question is “very little harm”, it is unlikely they will proceed with a proactive problem-solving process. Moreover, as
the suicidal state becomes more intense and levels of suicidal ideation increase, the individual’s capacity for accurate harm appraisal may be restricted. Put simply, even at sub-clinical levels, as the suicidal state becomes more intense and levels of suicidal ideation increase, the suicidal young person might negate help because they do not have the capacity to appraise professional psychological help as necessary or appropriate for managing suicidal thoughts. Alternatively, at sub-clinical levels, suicidal thoughts may not be prominent enough within the individual’s cognitive processing for the individual to appraise their thoughts as risky and therefore as warranting proactive management or problem-solution through appropriate help-seeking.

As an orienting variable, appraisal is viewed as a generalised version of Lazarus’ situation-specific concept of “primary appraisal” (Lazarus & Folkman, 1984). It is described by Lazarus as a vital component in the coping process, along with secondary appraisal. Secondary appraisal is described as the individual’s cognitive-evaluative process for coping with a problem that primary appraisal identifies as worthy of attention and mobilisation (Lazarus & Folkman, 1984). According to Lazarus, secondary appraisals are most often the cognitive underpinnings for coping and include variables such as knowledge, assumptions, attitudes, and beliefs (Lazarus, 1999). Within the context of help-negation, Lazarus’ theory reinforces the view that the suicidal individual’s decision to seek help for their suicidal thoughts will be largely determined by variables such as their attitudes and beliefs about appropriate help-seeking for problem-solution. As suggested by Clark and Fawcett (1992), it is possible that suicidal individuals negate help because they don’t believe appropriate help will be helpful, either for their specific type of problem or as a generic problem-solving option. Conversely, it is possible that suicidal individuals negate help because they believe they should solve their problems alone. As highlighted in Table A.8, Appendix I, a number of negative beliefs about the efficacy of appropriate help-seeking together with positive beliefs about solving one’s own problem, have been identified as barriers to professional psychological help-seeking. Examples of negative belief-based barriers include “A therapist wouldn’t understand the problem” and “Professional help is not the best way to solve a problem”. Examples of positive belief-based barriers include “Individuals should take care of their own problems” and “The problem will get better by itself” (see Table A.8, Appendix I).
At this point, it is important to note that unlike D’Zurilla and Nezu’s (1999) social problem-solving theory, Lazarus’ appraisal theory does not delineate primary from secondary appraisal. Neither does it assume that one aspect of appraisal can exist without the other. Supporting this view, an array of empirical evidence suggests that primary and secondary appraisals function concurrently rather than independently to determine how an individual will manage their problem (see Lazarus, 1999). There is evidence that primary and secondary appraisals often occur together and instantaneously, in response to subtle environmental cues, previous experiences, and personality variables such as goals, intentions, and personal resources; and often without conscious awareness of the complex network of variables that are influencing the appraisals (e.g., Lazarus, 1999; Lazarus & Lazarus, 1994). Within the context of social problem-solving, primary and secondary appraisals appear to underpin an automatic method of problem-solving within which, the individual applies problem-solving strategies that have been used successfully in the past, in addition to the more formal evaluation-type problem-solving strategies that are described by D’Zurilla and Nezu (1999) (Black & Frauenknecht, 1990; Frauenknecht & Black, 1995; Frauenknecht & Black, 2003). Frauenknecht and Black (1995) contend that formal social problem-solving processes are used when informal processes provide no apparent or successful problem solution. On this basis, the theoretical framework for Studies 3 and 4 considers situation-specific secondary appraisal as an integral component of all aspects of the social problem-solving process where appraisal plays a part. Situation-specific secondary appraisals are conceptualised as the cognitive schema that underpin an individual’s focus on what can be done about their problem. It is argued that appropriate help-seeking is linked with social problem-solving through secondary appraisal. In terms of formal help-seeking, secondary appraisals are posited as the cognitive schema that underpin an individual’s tendency to approach or avoid professional psychological help for problem solution. It is also posited that cognitive schema may either facilitate professional psychological help-seeking or function as barriers to seeking professional psychological help.

In sum, negative primary and secondary problem-solving appraisals may make it difficult for young people to view appropriate help-seeking and particularly professional psychological help-seeking, as a useful way to manage suicidal thoughts.
If problem-solving appraisals contribute to the help-negation relationship, the magnitude of the help-negation effect would be substantially reduced with problem-solving appraisal controlled. Negative problem-solving appraisals might also strengthen the help-negation relationship as young people become more distressed and levels of suicidal ideation increase. If so, problem-solving appraisal would moderate the help-negation effect. These possibilities are examined in Studies 3 and 4 (Chapter 5).

Summary

This chapter provides evidence to hypothesise that young people might negate help for suicidal thoughts, for two broad reasons. First, they may have difficulty recognising their suicidal thoughts as a problem that is worthy of help, and second, young people may not appraise appropriate help as a useful option for managing their suicidal thoughts. The extent to which problem recognition and problem-solving appraisal may vary in relation to help-negation, and the extent to which either problem-solving variable strengthens the help-negation relationship is examined in Chapter 5 in a second non-clinical university sample (Study 3), and a public high school sample (Study 4). To provide a basis for comparison, the extent to which total problem-solving capacity may vary in relation to help-negation, and the extent to which problem-solving capacity strengthens the help-negation relationship is also examined in Studies 3 and 4.
Chapter 5

Help-Negation, Problem Recognition, and Problem-Solving Appraisal in Sub-Clinical Samples: Studies 3 and 4

Theory and research appear to link problem recognition and problem-solving appraisal to both help-seeking and suicidality. These links provide sufficient justification to hypothesise that problem recognition and problem-solving appraisal may explain the help-negation relationship in sub-clinical samples. Chapter 5 presents Studies 3 and 4. Results indicate that neither problem recognition or problem-solving appraisal fully account for the help-negation effect in university students. Findings are inconclusive for high school students, but indicate the potential of total problem-solving capacity to impact on the help-negation effect within adolescent samples.

Aim

The purpose of Studies 3 and 4 was to extend the help-negation effect to a sub-clinical university (Study 3) and high school sample (Study 4) before examining the impact of problem recognition and problem-solving appraisal on the help-negation relationship, then for comparison, the impact of total problem-solving capacity on the help-negation relationship.

Hypotheses

- A significant inverse relationship between suicidal ideation and help-seeking intentions will be found in both Studies 3 and 4.
If problem recognition and problem-solving appraisal can account for the help-negation effect, suicidal ideation will be unable to significantly predict help-seeking intentions once these social problem-solving variables are controlled in both Studies 3 and 4.

If total problem-solving capacity can account for the help-negation effect, suicidal ideation will be unable to significantly predict help-seeking intentions once total problem-solving is controlled in both Studies 3 and 4.

If problem recognition contributes to the strength of the help-negation relationship as a moderator variable, levels of problem recognition will significantly interact with suicidal ideation in both Studies 3 and 4.

If problem-solving appraisal contributes to the strength of the help-negation relationship as a moderator variable, levels of problem-solving appraisal will significantly interact with suicidal ideation in both Studies 3 and 4.

If total problem-solving capacity contributes to the strength of the help-negation relationship as a moderator variable, levels of total problem-solving will significantly interact with suicidal ideation in both Studies 3 and 4.

**Study 3**

**Method**

**Participants and procedure**

The Study 3 university sample approximated the size, age, and gender composition of the Study 1 university sample. A total of 351 psychology undergraduates completed the research questionnaire. Two hundred and sixty-eight participants (76%) were female and 83 participants (24%) were male. The mean age was 22.06 years (SD = 6.39 years) ranging from 17 to 52 years. Almost 78% of the sample were 21 years or younger (77.8%) and 84.6% of the sample were 25 years or younger.
As for Study 1, Study 3 was described in an advertisement on a Department of Psychology research project participation board. Participants signed up for inclusion in the study in exchange for research credit points. However, participation was voluntary. This was emphasised in the study Information Sheet (Appendix V) and during the introduction to data collection. After providing consent on a study Consent Form (Appendix V), each participant completed the study questionnaire individually but under the supervision of a postgraduate research assistant. Completed questionnaires were placed by participants in unmarked envelopes and sealed to conserve confidentiality before collection by the research assistant. A Debrief Sheet (Appendix V) outlining available help services was supplied to each participant upon the completion of the questionnaire.

Measures

The Study 3 survey included a modified version of the GHSQ (Wilson et al., 2003), and the same measure of suicidal ideation (SIQ) that was used in Studies 1 and 2. The study survey also included an abbreviated measure of social problem-solving (Social Problem-Solving Inventory for Adolescents [SPSI-A]; Frauenknecht & Black, 2003) and the general demographic information reported in the previous studies (see Appendix V).

*Study 3 GHSQ*

The Study 3 GHSQ used the same problem prompts as those used in Study 2 (e.g., ‘If you were having a personal-emotional problem, how likely is it that you would seek help from the following people?’). It also used the same help-source items as the Study 2 GHSQ but with two expectations. Two items were replaced with university equivalents. “Teacher (e.g., classroom teacher, welfare teacher, Year Advisor)” became “Lecturer (e.g., subject lecturer, tutor, Course Advisor)” and “school counsellor” became “university counselling service” (see Appendix V).

Following the procedure outlined in Study 2, prior to the Study 3 preliminary and main analyses, the 11 original help-source items were reduced as 9 new help-source
variables for each problem-type. “Parent” and “non-parent relative” were collapsed and labelled “family” (suicidal thoughts, $\alpha = .75$; personal-emotional problems, $\alpha = .70$), and “Pastor/Priest” and “Youth Worker” were collapsed and labelled “community” (suicidal thoughts, $\alpha = .70$; personal-emotional problems, $\alpha = .70$). “Boyfriend/girlfriend” was relabelled “partner”, “doctor/GP” was relabelled “medical health professional” and “would not seek help from anyone” was relabelled “no-one”. “Friend”, “lecturer”, “mental health professional”, “phone help line” were left unchanged. Additional analyses confirmed that once “no-one” was reverse scored, the Study 3 GHSQ could be reduced as two individual scales: help-seeking intentions for suicidal thoughts ($\alpha = .81$) and help-seeking intentions for personal-emotional problems ($\alpha = .72$). (Intentions reduced as two sub-scales were used in the main analyses reported later in these results.)

**Social problem-solving**

In the past, a variety of studies have reported measures that have examined the relationship between social problem-solving and mental health (see D’Zurilla, 1986, 1990; Heppner & Anderson, 1985; Nezu & D’Zurilla, 1989; Tisdelle & St. Lawrence, 1986). Only a few studies however, have used a measure that is based on a strong theoretical framework and that tests different aspects of the problem-solving process. The SPSI-A (Frauenknecht & Black, 2003) is based on the problem-solving theories of D’Zurilla and Nezu (1990) and Black and Frauenknecht (1990), and in contrast to other potential measures (e.g., Means-Ends Problem Solving Procedure [MEPS], Platt & Spivack, 1975; Problem-Solving Inventory [PSI], Heppner & Petersen, 1982; and Revised Social Problem-Solving Inventory [SPSI-R], Maydeu-Olivares & D’Zurilla, 1996), the SPSI-A was developed specifically to measure the problem-solving capacity of adolescents and young people rather than adults. One reason the SPSI-A was chosen for use in Studies 3 and 4 was because the largest percentage of participants in Study 3 were between the ages 17 and 21 (78%) and all participants in Study 4 were between ages 12 and 21. In addition, while there have been conceptual and methodological problems associated with other problem-solving measures (e.g., D’Zurilla & Maydeu-Olivares, 1995, have queried the construct validity of measures such as the MEPS), the SPSI-A appears capable of
testing the theoretical constructs that are proposed in Chapter 4 and which subsequently provide the basis for Studies 3 and 4. The SPSI-A also appears to place greater emphasis on testing the influence of distress and avoidance on the social problem-solving process than other available measures. For example, SPSI-A items include “I often become sad and do not feel like doing anything when I have a problem to solve” and “I avoid dealing with problems in my life”.

There are two forms of the SPSI-A (Frauenknecht & Black, 2003): a long form that comprises 65 items and a short form comprising 30 key items that have been extracted from the long form to provide a condensed evaluation of participants’ problem-solving capacity and to “reduce administration time and fatigue from test taking” (Frauenknecht & Black, 2003, p.31). The SPSI-A short form was chosen for use in Studies 3 and 4 because time constraints were placed on the data collection in both studies and there was a need for an abbreviated measure that could provide data on students’ problem recognition and problem-solving appraisal, in addition to their total problem-solving capacity. Examination of the 30 items in the SPSI-A short form also found that each item clearly related to constructs described in Chapter 4. The SPSI-A short form examines participants’ positive and negative attitudes and beliefs about the problem-solving process. An example of a positive item is “When I solve a problem, I use the skills I have developed that have worked for me in the past”. A negative item is “I often doubt there is a good way to solve the problems I have”. Participants rate the extent to which they agree or disagree with each of the 65 items in the long form or each of the 30 items in the short form, on a 5-point Likert scale (0 = “Not at all true of me” to 4 = “Extremely true of me”). In Studies 3 and 4, negative items were left in the original direction and positive items were reverse scored so higher scores indicate poorer self-perceived problem solving ability (i.e., a potential barrier to effective problem solution).

Both forms of the SPSI-A can be scored as nine sub-scales, three scales, or a total inventory score that indicates the individual’s overall problem-solving capacity (Frauenknecht & Black, 2003). Of the nine short form sub-scales, “Problem Identification” (PID), “Alternative Generation” (ALT), and “Consequence Prediction” (CON), are used in Studies 3 and 4. For consistency with the terminology used in Chapter 4, the PID sub-scale (SPSI-A short form items 13, 14, 15) is averaged as a
single variable and referred to as “problem recognition” in the results. Similarly, items included in the ALT sub-scale (SPSI-A short form items 16, 17, 18) and CON sub-scale (SPSI-A short form items 19, 20, 21) are averaged as a single sub-scale and referred to as “problem-solving appraisal” in the results. (The reduction of the ALT and CON sub-scales as a new problem-solving appraisal sub-scale is reported as preliminary results in Studies 3 and 4.) As indicated, students’ total problem-solving short form scores are also used in Studies 3 and 4. Total raw scores or sub-scale raw scores are calculated by summing item responses then dividing by the total number of items or the number of items in each sub-scale. Possible total or sub-scale scores range from 0 to 4.

The SPSI-A long form appears to have adequate reliability and validity, and indications suggest that this may also be true for the short form. Internal reliability of the SPSI-A long form has been demonstrated by Cronbach’s alphas for the total scale that ranged from .93 to .95 across different high school samples (Frauenknecht & Black, 1995). Within these samples, Cronbach’s alphas for the PID sub-scale were found to be .82, Cronbach’s alphas for the ALT sub-scale ranged from .82 to .85, and Cronbach’s alphas for the CON sub-scale ranged from .80 to .90 (all alphas based on long form data) (Frauenknecht & Black, 2003). Test-retest reliability over a two-week period has been demonstrated for the total long form scale by correlations ranging from .94 at time one to .95 at time two (Frauenknecht & Black, 1995). Construct validity has been supported by a strong and significant association, \( r = .82, \ p < .001 \), with the Problem Solving Inventory (PSI; Heppner & Peterson, 1982). On the basis of D’Zurilla’s (1986) problem-solving model, concurrent validity has also been supported by a significant negative association, \( r = -.23 \) to \( r = -.27, \ p < .001 \), with psychological distress as measured by the Brief Symptoms Inventory (BSI; Derogatis & Spencer, 1982, cited in Frauenknecht & Black, 1995). Internal reliability of the SPSI-A short form has been demonstrated by Cronbach’s alphas for the total scale that ranged from .91 to .94 across different high school samples (Frauenknecht & Black, 2003). Within these samples however, internal consistency was lower than for the same sub-scales in the long form. Cronbach’s alphas for the PID sub-scale ranged from .66 to .67, Cronbach’s alphas for the ALT sub-scale ranged from .80 to .82, and Cronbach’s alphas for the CON sub-scale ranged from .79 to .82 (Frauenknecht & Black, 2003). Nevertheless, intercorrelations between the PID sub-
scale and the total scale were the same for both the long and short forms ($r = .66$). Intercorrelations between the ALT sub-scale and the total scale and between the CON sub-scale and the total scale were similar for the long and short forms (ALT long form = .71; ALT short form = .65; CON long form = .63; CON short form = .60). And, intercorrelations between the ALT and CON sub-scales were the same for both the long and short forms ($r = .62$). In defense of the short form, Frauenknecht and Black (2003) state “the short version of the SPSI-A scales and sub-scales yielded lower reliability coefficients than the long version due to the reduced number of test items. As the length of a test increases, the chance of measurement error decreases. The benefit of using the 30-item version is the reduction of time needed to administer the test and the decrease of fatigue that occurs when young people are required to sit for a shorter period of time” (p. 41). Additional reliability and validity statistics for the SPSI-A short form are reported in Study 3 as preliminary results.

**Results**

**Data screening and assumption testing**

Prior to analysis, scores for the GHSQ, SIQ, and SPSI-A were examined through SPSS programs for the extent to which the data met the assumptions of the analyses conducted. SPSI-A data did approximate normality. However, as in Studies 1 and 2, normality could not be assumed for GHSQ or SIQ variables. GHSQ scores tended to range between 5 and 7 for informal sources, 1 and 3 for formal sources and seeking help from no-one, and SIQ scores had a notable negative skew, indicating that most cases had low levels of suicidal ideation (see Table A.16, Appendix V). Data were treated in the same manner as in Studies 1 and 2. Means and standard errors of the original GHSQ item scores are provided in Table 5.1. As in the earlier studies, loglinear transformation was applied to SIQ variables to correct for skew and Log SIQ is used in all reported analyses. Again, for ease of expression, Log SIQ is
Table 5.1. Means (M) and standard errors of help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot), suicidal thoughts (Suicide-Thts), and different sources of help in a university sample (Study 3).

<table>
<thead>
<tr>
<th>Help Source</th>
<th>Per-Emot</th>
<th>Suicide-Thts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M</strong></td>
<td><strong>SE</strong></td>
<td><strong>M</strong></td>
</tr>
<tr>
<td>Partner</td>
<td>6.50</td>
<td>.01</td>
</tr>
<tr>
<td>Friend</td>
<td>5.98</td>
<td>.01</td>
</tr>
<tr>
<td>Parent</td>
<td>5.18</td>
<td>.01</td>
</tr>
<tr>
<td>Family (non-parent)</td>
<td>4.34</td>
<td>.01</td>
</tr>
<tr>
<td>Mental Health</td>
<td>3.28</td>
<td>.01</td>
</tr>
<tr>
<td>Help Line</td>
<td>1.96</td>
<td>.01</td>
</tr>
<tr>
<td>GP</td>
<td>3.00</td>
<td>.01</td>
</tr>
<tr>
<td>Lecturer</td>
<td>2.65</td>
<td>.01</td>
</tr>
<tr>
<td>Religious Leader</td>
<td>1.81</td>
<td>.01</td>
</tr>
<tr>
<td>Youth Worker</td>
<td>1.84</td>
<td>.01</td>
</tr>
<tr>
<td>Would not seek help</td>
<td>2.01</td>
<td>.01</td>
</tr>
</tbody>
</table>

N = 351 except for “Partner” (N = 348). Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”).
referred to as suicidal ideation when described in the results. Transformation could not correct GHSQ distributions, therefore all GHSQ analyses were conducted with both transformed and untransformed data and, where possible, GHSQ analyses were conducted using both parametric and non-parametric methods. Using untransformed data and parametric analytical methods did not alter the significance or pattern of findings. Consequently, the reported results are based on untransformed GHSQ data and parametric analyses. As in Studies 1 and 2, this decision is supported by large cell sizes indicating that the GHSQ violation to the assumption of univariate normality was of minimal concern for the interpretation of multivariate results (Coakes & Steed, 1999). However, again as a further precaution, both Pillai’s Trace and Wilks’ Lambda were examined for multivariate analyses; first, without covariates and second, with social-problem solving variables included as covariates. All multivariate statistics were significant for each analysis at p < .001 for help-source and the interaction between problem-type and help-source. The interpretability of multivariate results was assumed. (Detailed results of the Study 3 data screening and assumption tests are provided in Appendix V, along with GHSQ and SIQ Frequency Tables, and non-parametric findings.)

Preliminary analyses

The mean score, standard deviation, and Cronbach’s alpha for the original SIQ data was calculated for the total sample, $M(351) = 18.61, SD = 20.36, \alpha = .96$, and found to be non-significantly ($p = .377$) lower than in the Study 1 sample, $M(298) = 19.57, SD = 20.84, \alpha = .96$. The mean score, standard deviation, and Cronbach’s alpha for original SIQ data for each gender was calculated and found that females had non-significantly ($p = .905$) higher SIQ mean scores, $M(268) = 18.82, SD = 21.28, \alpha = .97$, than males, $M(83) = 17.94, SD = 17.12, \alpha = .92$. Seven percent ($N = 25$) of the sample reported a level of suicidal ideation similar to that of suicidal attempters with chronic psychiatric problems (Reynolds, 1987), indicating that the majority of participants were in the normal range on the suicidal ideation measure. The mean score, standard deviation, and Cronbach’s alpha for the SPSI-A data was also calculated for the total sample, $M(351) = 1.61, SD = .53, \alpha = .89$, and for each gender. Females had non-significantly ($p = .732$) higher SPSI-A mean scores, $M(268) = 1.65,$
Chapter 5

When compared to males, SD = .54, α = .89, the university students in the current study perceived themselves as average problem solvers. This moderate problem-solving capacity was reflected in the overall mean score and standard deviation, M(351) = 1.80, SD = .81, α = .61, and problem-solving appraisal mean score and standard deviation, M(351) = 1.52, SD = .82, α = .85, for the total sample.

As for Studies 1 and 2, preliminary analyses were conducted to determine whether the following main analyses should initially examine the help-negation hypothesis in relation to intentions for each help-source rather than as single scales for each problem-type. Again, a GLM repeated measures ANOVA examined the impact of the 9 help-source variables (partner, friend, family, mental health professional, phone help-line, physical health professional, lecturer, community, and no-one) and problem-type (personal-emotional and suicidal ideation) on students’ help-seeking intentions. Results found a significant main effect for helping source, F(8, 1696) = 305.97, p < .001, that was qualified by a significant interaction with problem-type, F(8, 1696) = 63.79, p < .001, indicating that consistent with the earlier studies, students’ help-source preferences depended on the type of problem they were facing (see Table 5.2). Again, to compare between the parametric and non-parametric results, two Friedman tests were conducted. First, for suicidal thoughts and second, for personal-emotional problems using the same help-source variables as in the parametric analyses. Consistent with the parametric results, non-parametric results found significant differences between help-seeking intentions for suicidal problems, \( \chi^2(8, N = 268) = 691.52, p < .001 \), and personal-emotional problems, \( \chi^2(8, N = 258) = 1356.88, p < .001 \).

As for Studies 1 and 2, pairwise comparisons were conducted to evaluate this interaction further using a Bonferroni adjustment to control for Type I error at p < .05. The results are presented in Table 5.2. Students were significantly less likely to seek help from partners, friends, family and lecturers, and significantly more likely to seek help from a mental health professional or phone help-line, in addition to no-one, for suicidal thoughts than for personal-emotional problems. Again as a precaution, Wilcoxon t-tests were calculated to compare parametric and non-parametric results.
Table 5.2. Means (M) and standard errors of university students’ help seeking intentions for personal-emotional problems (Per-Emot) and suicidal thoughts (Suicide-Thts), from different sources of help (Study 3).

<table>
<thead>
<tr>
<th>Help Source</th>
<th>Per-Emot M</th>
<th>Per-Emot SE</th>
<th>Suicide-Thts M</th>
<th>Suicide-Thts SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner</td>
<td>6.50</td>
<td>.01</td>
<td>5.16&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.11</td>
</tr>
<tr>
<td>Friend</td>
<td>5.98</td>
<td>.01</td>
<td>4.98&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.11</td>
</tr>
<tr>
<td>Family</td>
<td>4.76</td>
<td>.09</td>
<td>3.84&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.11</td>
</tr>
<tr>
<td>Mental Health</td>
<td>3.28&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.01</td>
<td>4.24&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.12</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>1.96&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.01</td>
<td>3.14&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.11</td>
</tr>
<tr>
<td>Physical Health</td>
<td>3.00&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.10</td>
<td>3.07&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.11</td>
</tr>
<tr>
<td>Lecturer</td>
<td>2.65&lt;sub&gt;a,c&lt;/sub&gt;</td>
<td>.09</td>
<td>1.89&lt;sup&gt;d&lt;/sup&gt;</td>
<td>.07</td>
</tr>
<tr>
<td>Community</td>
<td>1.87&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.06</td>
<td>1.79&lt;sup&gt;d&lt;/sup&gt;</td>
<td>.06</td>
</tr>
<tr>
<td>No-one</td>
<td>2.01&lt;sub&gt;b,c&lt;/sub&gt;</td>
<td>.09</td>
<td>2.52&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.12</td>
</tr>
</tbody>
</table>

N = 351 except for “Partner” (N = 348). Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”). *Means differ between personal-emotional problems and suicidal thoughts in the same row at p < .001. <sup>a,b,c,d</sup>Means differ non-significantly between corresponding help-sources in the same column (Means without subscripts differ at p < .01).
for each problem-type. Z-scores and p-values are reported in Table A.18, Appendix IV. Non-parametric analyses found the same pattern of significant differences between different help-sources for personal-emotional and suicidal problems as parametric analyses (see Table A.18), confirming that students had significantly different preferences for a number of specific help-sources and for each problem-type. Consequently, the help-negation effect was examined for each help-source variable in the first set of main analyses.

The SPSI-A ALT and CON items appear to ask respondents to rate statements about primary and secondary problem-solving appraisals. Therefore, the possibility that these sub-scales might be collapsed as one “problem-solving appraisal” sub-scale was examined. First, the associations between items within each sub-scale were calculated. Correlational analyses found that all ALT items significantly associated with CON items at $p < .001$ ($r = .36$ to $r = .60$). The possibility that ALT and CON items might load on a single factor that was distinct from other SPSI-A sub-scales was also examined. The 30 SPSI-A short form items were submitted to an exploratory principal-component analyses that found seven factors with eigenvalues greater than 1, and which explained 64% of the variance (Kaiser-Meyer-Olkin measure of sampling adequacy = .87, Bartlett’s test of sphericity, approx. $\chi^2(435) = 4754.79$, $p < .001$). Oblimin rotation found that all ALT and CON items (SPSI-A items 16 to 21) loaded together on factor 1, with the exclusion of other items (i.e., only ALT and CON items loaded on factor 1), and with loadings that ranged from .62 to .79. This result suggested that the ALT and CON items could be combined as an appraisal sub-scale that was distinct from other SPSI-A sub-scales. As noted above, additional analyses found that ALT and CON items could be collapsed as a reliable problem-solving appraisal sub-scale ($\alpha = .85$) for use in the following analyses. Additional correlational analyses using the total SPSI-A scale found that poorer total problem-solving capacity related to higher levels of suicidal ideation, $r(351) = .32$, $p < .001$, lower help-seeking intentions for suicidal problems, $r(351) = -.16$, $p < .01$, and lower help-seeking intentions for personal-emotional problems, $r(351) = -.22$, $p < .001$.

Finally, given the gender differences in the Study 3 sample, preliminary analyses were conducted to determine the extent to which gender might influence the following
help-negation analyses. The correlation between gender and suicidal ideation was non-significant \( (p = .751) \) and there were no gender differences on measures for intentions to seek help from any help-sources for suicidal thoughts, all \( ps > .1 \). Being female however, was correlated with higher intentions to seek help for personal-emotional problems from partners, \( r(309) = .23, p < .001 \), parents, \( r(350) = .13, p < .05 \), family, \( r(350) = .14, p < .05 \), mental health professionals, \( r(350) = .12, p < .01 \), and physical health professional, \( r(350) = .13, p < .05 \). Consistent with the previous studies, the extent to which gender might either explain or strengthen the help-negation relationship was explored using the covariate and moderation procedures outlined in the following main analyses along with procedures outlined in Aiken and West (1991) and Cohen et al. (2003). Consistent with Studies 1 and 2, the results found that gender did not make a significant contribution to the help-negation effect found in the Study 3 sample. Consequently, gender is not mentioned further.

**Help-negation**

As for Studies 1 and 2, correlational analyses were first used to test the possibility that students high in suicidal ideation would show evidence of the help negation relationship through a significant inverse relationship between suicidal ideation and help-seeking intentions. As presented in Table 5.3, suicidal ideation negatively and significantly correlated with each of the help-seeking variables for suicidal thoughts. This result extends the help-negation effect to the Study 3 university sample. Higher levels of suicidal ideation were associated with lower intentions to seek help for suicidal problems from all help-sources, lower intentions to seek help from most sources for personal-emotional problems, and higher intentions to seek help from no-one for both problem-types.

**Social problem-solving**

**Covariate analyses**

To test the hypotheses that young people contemplating suicide might negate help because they don’t recognise their suicidal problem or because they don’t appraise
Table 5.3. Correlations (r) between suicidal ideation (SIQ), problem-solving appraisal and problem recognition (SPSI-A), and help-seeking intentions for suicidal and non-suicidal problems and different sources of help in a university sample (Study 3).

<table>
<thead>
<tr>
<th>Help-Seeking Intentions</th>
<th>Suicidal Ideation</th>
<th>Appraisal</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicidal thoughts:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-.31**</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>Physical Health Professional</td>
<td>-.25**</td>
<td>-.06</td>
<td>-.18**</td>
</tr>
<tr>
<td>Friend</td>
<td>-.24**</td>
<td>-.03</td>
<td>-.10</td>
</tr>
<tr>
<td>Partner_a</td>
<td>-.22**</td>
<td>-.02</td>
<td>.10</td>
</tr>
<tr>
<td>Mental Health Professional</td>
<td>-.18**</td>
<td>.06</td>
<td>.10</td>
</tr>
<tr>
<td>Community</td>
<td>-.15**</td>
<td>.07</td>
<td>-.06</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.14*</td>
<td>-.07</td>
<td>.01</td>
</tr>
<tr>
<td>Lecturer</td>
<td>-.11*</td>
<td>.09</td>
<td>.01</td>
</tr>
<tr>
<td>No-one</td>
<td>.36**</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>Personal-emotional problems:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-.31**</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Friend</td>
<td>-.12*</td>
<td>.09</td>
<td>-.16*</td>
</tr>
<tr>
<td>Partner_a</td>
<td>-.12*</td>
<td>-.01</td>
<td>-.12*</td>
</tr>
<tr>
<td>Physical Health Professional</td>
<td>-.06</td>
<td>-.15**</td>
<td>-.23**</td>
</tr>
<tr>
<td>Mental Health Professional</td>
<td>.04</td>
<td>.14</td>
<td>-.18*</td>
</tr>
<tr>
<td>Community</td>
<td>-.08</td>
<td>.03</td>
<td>-.05</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.01</td>
<td>-.08</td>
<td>-.02</td>
</tr>
<tr>
<td>Lecturer</td>
<td>-.07</td>
<td>-.01</td>
<td>-.08</td>
</tr>
<tr>
<td>No-one</td>
<td>.29**</td>
<td>.03</td>
<td>.07</td>
</tr>
</tbody>
</table>

N = 351, except N = 348. **p < .001, *p < .05.
help-seeking as a suitable way to manage their suicidal thoughts, four GLM MANCOVAs were conducted. GLM was chosen for the reasons outlined in Studies 1 and 2, and MANCOVA was used because the preliminary analyses confirmed the need to examine the impact of problem recognition and problem-solving appraisal on the help-negation relationship for each help-seeking variable.

The first MANCOVA examined help-seeking intentions for suicidal problems while controlling for problem recognition. The second examined help-seeking intentions for personal-emotional problems while controlling for problem recognition. In a similar way, the third and fourth MANCOVAs examined help-seeking intentions for suicidal thoughts and personal-emotional problems while controlling for problem-solving appraisal. Within each MANCOVA, suicidal ideation was used to predict the nine help-seeking intention variables for each problem-type. Suicidal ideation and problem recognition were used in the first and second MANCOVAs as covariates, as were suicidal ideation and problem-solving appraisal in the third and fourth MANCOVAs. With problem recognition controlled, suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, Wilk’s Lambda = .835, p < .001, and personal-emotional problems, Wilk’s Lambda = .859, p < .001. Similarly, with problem-solving appraisal controlled, suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, Wilk’s Lambda = .828, p < .001, and personal-emotional problems, Wilk’s Lambda = .856, p < .001.

To examine these results further, univariate tests were conducted for each variable. As presented in Table 5.4, with problem recognition and problem-solving appraisal controlled, higher levels of suicidal ideation were associated with lower intentions to seek help from specific help-sources and higher intentions to seek help from no-one for suicidal thoughts. Particularly noteworthy are the significant negative relationships between suicidal ideation and intentions to seek help from family, friends and health care professionals, with either problem-solving variable controlled (Table 5.4).

To examine these results still further, the same MANCOVAs as above were conducted but with one exception. Instead of using suicidal ideation (SIQ) as a
Table 5.4. Summary of MANCOVA analysis for suicidal ideation (SIQ) predicting help-seeking intentions while controlling for social problem-solving appraisal and problem recognition (SPSI-A) in a university sample (Study 3).

<table>
<thead>
<tr>
<th>Source of Help</th>
<th>Help-seeking Intentions</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>SE</td>
<td>R²</td>
<td>Adj. R²</td>
<td>B</td>
<td>SE</td>
<td>R²</td>
<td>Adj. R²</td>
</tr>
<tr>
<td></td>
<td>Suicidal Thoughts&lt;sub&gt;a&lt;/sub&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A: Problem recognition controlled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-1.62***</td>
<td>.38</td>
<td>.06</td>
<td>.06</td>
<td></td>
<td>-1.29***</td>
<td>.30</td>
<td>.07</td>
<td>.06</td>
</tr>
<tr>
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<td>.09</td>
<td>.08</td>
<td></td>
<td>-.01</td>
<td>.36</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td>Partner</td>
<td>-1.11**</td>
<td>.41</td>
<td>.04</td>
<td>.03</td>
<td></td>
<td>-3.6*</td>
<td>.15</td>
<td>.04</td>
<td>.03</td>
</tr>
<tr>
<td>Friend</td>
<td>-1.02**</td>
<td>.40</td>
<td>.04</td>
<td>.04</td>
<td></td>
<td>-4.8*</td>
<td>.23</td>
<td>.03</td>
<td>.02</td>
</tr>
<tr>
<td>Mental Health</td>
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<td>.42</td>
<td>.03</td>
<td>.02</td>
<td></td>
<td>-.01</td>
<td>.38</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.90*</td>
<td>.40</td>
<td>.02</td>
<td>.01</td>
<td></td>
<td>.10</td>
<td>.25</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Lecturer</td>
<td>-.35</td>
<td>.24</td>
<td>.01</td>
<td>.00</td>
<td></td>
<td>-.01</td>
<td>.35</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Community</td>
<td>-.35</td>
<td>.20</td>
<td>.02</td>
<td>.01</td>
<td></td>
<td>-.29</td>
<td>.24</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>No-one</td>
<td>2.47***</td>
<td>.40</td>
<td>.13</td>
<td>.12</td>
<td></td>
<td>1.50***</td>
<td>.30</td>
<td>.09</td>
<td>.08</td>
</tr>
<tr>
<td>B: Problem-solving appraisal controlled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>-1.61***</td>
<td>.38</td>
<td>.06</td>
<td>.06</td>
<td></td>
<td>-1.30***</td>
<td>.30</td>
<td>.07</td>
<td>.06</td>
</tr>
<tr>
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<td>.07</td>
<td>.06</td>
<td></td>
<td>-.12</td>
<td>.36</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Partner</td>
<td>-1.20**</td>
<td>.46</td>
<td>.03</td>
<td>.02</td>
<td></td>
<td>-.37*</td>
<td>.15</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Friend</td>
<td>-1.14**</td>
<td>.40</td>
<td>.03</td>
<td>.02</td>
<td></td>
<td>-4.7*</td>
<td>.23</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>Mental Health</td>
<td>-1.03**</td>
<td>.42</td>
<td>.03</td>
<td>.02</td>
<td></td>
<td>.01</td>
<td>.37</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>-.90*</td>
<td>.39</td>
<td>.03</td>
<td>.02</td>
<td></td>
<td>.01</td>
<td>.25</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Community</td>
<td>-.40*</td>
<td>.20</td>
<td>.02</td>
<td>.01</td>
<td></td>
<td>-.30</td>
<td>.24</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Lecturer</td>
<td>-.37</td>
<td>.24</td>
<td>.01</td>
<td>.01</td>
<td></td>
<td>-.01</td>
<td>.35</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>No-one</td>
<td>2.47***</td>
<td>.39</td>
<td>.13</td>
<td>.12</td>
<td></td>
<td>1.51***</td>
<td>.30</td>
<td>.09</td>
<td>.08</td>
</tr>
</tbody>
</table>

<sub>a</sub>df (A) = 1, 265; <sub>b</sub>df (A) = 1, 255.  <sub>a</sub>df (B) = 1, 265; <sub>b</sub>df (B) = 1, 302.

*** p < .001, ** p < .01, * p < .05.
continuous variable, suicidal ideation was dichotomized so that the high scorers in the top 7% ($N = 25$) (equivalent to a suicidal attempter, Reynolds, 1987) were excluded from the analysis. With the reduced sample, the analysis replicated the pattern of findings for help-seeking intentions for suicidal thoughts described in Table 5.5, and confirmed that consistent with Studies 1 and 2, the current results apply to university students at sub-clinical levels of suicidal ideation.

Finally, since neither problem-solving appraisal nor problem recognition could fully explain the help-negation effect in university students, two additional GLM MANCOVAs were conducted to test the possibility that poor total problem-solving capacity might account for the help-negation relationship. The first model was for suicidal problems and the second, for personal-emotional problems. Within both models, suicidal ideation was used to predict the nine help-seeking intention variables while controlling for the total problem-solving capacity. The 30 SPSI-A short form items were averaged to form a single scale for use within both models. With total problem-solving capacity controlled, suicidal ideation was still able to significantly predict help-seeking intentions for suicidal thoughts, Wilk’s Lambda = .865, $p < .001$, and personal-emotional problems, Wilk’s Lambda = .878, $p < .001$, indicating that the university students in the current sample tended to negate help for suicidal thoughts regardless of their overall social problem-solving capacity.

Moderation analyses for help-seeking intentions as two scales

Although neither problem recognition or problem-solving appraisal could fully explain help-negation in the current sample, as in the previous studies, the possibility that either variable may contribute to the overall strength of the help-negation relationship was explored. For this reason, the criteria for a moderation effect between problem recognition and the help-negation relationship, and between problem-solving appraisal and the help-negation relationship were examined. As outlined in Studies 1 and 2, moderation can be assumed if three criteria are met (Baron & Kenny, 1986). Within the context of the help-negation effect: first, suicidal ideation must significantly predict help-seeking intentions; second, problem recognition and problem-solving appraisal must significantly predict help-seeking intentions; and third, suicidal ideation and problem recognition, and suicidal ideation
and problem-solving appraisal must significantly interact to predict help-seeking intentions. As in Studies 1 and 2, multiple regression analyses were used to evaluate whether problem recognition and problem-solving appraisal moderated the help-negation relationship. Four regression analyses were conducted. Analyses one and two used suicidal ideation, problem recognition, and the product terms between suicidal ideation and problem recognition to predict help-seeking intentions first for suicidal thoughts then for personal-emotional problems. Analyses three and four used suicidal ideation, problem-solving appraisal, and the product terms between suicidal ideation and problem-solving appraisal to predict help-seeking intentions, for each problem-type. The independent variables were entered into each regression model in the following order: suicidal ideation; problem recognition or problem-solving appraisal; then, the corresponding cross-product term. The nine intention variables for suicidal thoughts were reduced to a single scale, as were the nine intention variables for personal-emotional problems, before use within the interaction analyses. All continuous variables were converted to z-scores before analysis.

As shown in Table 5.5, the criteria for a significant moderation effect between problem recognition and the help-negation effect, and between problem-solving appraisal and the help-negation effect were not met. The only significant direct relationships were the negative associations between suicidal ideation and help-seeking intentions for suicidal thoughts and personal-emotional problems, in the models that examined the interaction between problem-solving appraisal and the help-negation relationship. Additional analyses also revealed that total problem-solving capacity was unable to moderate the help-negation effect in the Study 3 sample. Again, as shown in Table 5.5, the criteria for a significant moderation effect between total problem-solving capacity and the help-negation effect were not met. The only significant direct relationship was between suicidal ideation and help-seeking intentions for suicidal thoughts. Together, these results suggest that neither specific aspects of social problem-solving nor total social problem-solving capacity strengthened the help-negation effect found in the Study 3 university sample.
Table 5.5. The impact of problem-solving appraisal and problem-recognition on help-negation in a university student sample (Study 3).

<table>
<thead>
<tr>
<th></th>
<th>Suicidal Thoughts$_a$</th>
<th>Per-Emo Problems$_b$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>-.26</td>
<td>.14</td>
</tr>
<tr>
<td>Problem Recognition</td>
<td>-.02</td>
<td>.09</td>
</tr>
<tr>
<td>Sui. Ide. x Prob. Recog.</td>
<td>-.08</td>
<td>.16</td>
</tr>
<tr>
<td>B:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>-.40</td>
<td>.11</td>
</tr>
<tr>
<td>Problem-Solv. Appraisal</td>
<td>.01</td>
<td>.09</td>
</tr>
<tr>
<td>Sui. Ide. x Prob. Solv. App.</td>
<td>.08</td>
<td>.13</td>
</tr>
<tr>
<td>C:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>-.37</td>
<td>.16</td>
</tr>
<tr>
<td>Problem-Solv. Capacity</td>
<td>-.09</td>
<td>.08</td>
</tr>
<tr>
<td>Sui. Ide. x Prob. Solv. Cap.</td>
<td>.07</td>
<td>.19</td>
</tr>
</tbody>
</table>

Note. Problem-Solving Capacity refers to the total score on the SPSI-A short form.

$^a$R$^2$ (A) = .12, $^a$Adj. R$^2$ (A) = .11, $^b$R$^2$ (A) = .09, $^b$Adj. R$^2$ (A) = .08.

$^a$R$^2$ (B) = .10, $^a$Adj. R$^2$ (B) = .17, $^b$R$^2$ (B) = .06, $^b$Adj. R$^2$ (B) = .05.

$^a$R$^2$ (C) = .12, $^a$Adj. R$^2$ (C) = .11, $^b$R$^2$ (C) = .07, $^b$Adj. R$^2$ (C) = .07.

$^a,b$df (A, B, & C) = 3, 346.

* $p < .001$, ** $p < .05$. 
Study 4

Method

Participants and Procedure

One hundred and five students completed the Study 4 questionnaire. Students were recruited from the junior to senior classes of a public high school (grades 7 to 11). Forty-seven participants (45%) were male and 58 participants (55%) were female. The mean age was 14.54 years (SD = 1.53 years), ranging from 12 to 17 years.

A requirement for UoW Human Ethics Committee and NSW DET approval was the provision of a way for the study to screen participants for risk of suicide. Consequently, the protocol previously implemented by Deane et al. (2001a) was followed and Study 4 was divided into two parts. Part A of the study comprised an anonymous questionnaire, the results of which are reported here. Part B comprised a non-anonymous survey that included the GHSQ question for suicidal thoughts along with eight core assessment questions from the SIQ. Both parts of the study were described in an Information Sheet that was posted to parents (see Appendix VI).

Students who took part in the study volunteered to participate and obtained full consent from their parents for both Parts A and B (see Appendix VI). From the potential participant pool of 790 students, the parents of only 13% of the school population responded to the Information Sheet and consented to their child participating in the study. This low rate of participation occurred despite several study promotions that were made by welfare staff at weekly Year meetings. Students were asked to remind their parents to read and respond to the Information Sheet. However, only a total of 105 high school students were allowed to complete the Study 4 questionnaire. This group tended to represent classes with the highest and lowest academic grades from each Year group. (The streamed Year class to which students were assigned indicated their academic performance and theoretically, their potential problem-solving capacity.) Along with parental consent for Study 4, students provided their own written consent for Study 4 Parts A and B (see Appendix VI). Before data collection, participants were informed that Part A involved the
completion of a questionnaire that was anonymous but Part B involved completion of a questionnaire that was not anonymous and that their name was required. Participants were told that the non-anonymous questionnaire included a measure of suicidal ideation and an additional question explicitly asking them if they would like confidential assistance from the school counsellor or the Head Teacher of Student Welfare (see Appendix VI).

Each participant completed the anonymous and non-anonymous research questionnaires individually under the supervision of a graduate research assistant and a classroom teacher. Once completed, participants sealed their questionnaires in manila envelopes marked “Part A” and “Part B” and placed the envelopes in separately marked boxes as they left the data collection. A copy of the “Do It Together” Kit (DIT Kit; Wilson 2000), a resource that outlines available help services and ways to seek appropriate help was supplied to each participant after the questionnaire was completed. The school counsellor and welfare staff were available “on call” should participants require counselling during or after data collection.

Following the data collection, Part B surveys were reviewed for levels of suicidal ideation (indicated by scores of 5 or greater on SIQ items), along with requests for formal help. Identified students were referred to the school counsellor for follow-up (N = 5).

Measures

Data from the Part A survey were used in analyses reported as Study 4 results. The Part A survey included the version of the GHSQ used Study 2, the measure of suicidal ideation (SIQ) used in Studies 1 to 3, and the measure of social problem-solving (SPSI-A short form) used in Study 3, along with the self-report demographic information collected in Study 2 (see Appendix VI).

Study 4 GHSQ

Following the procedure outlined in Study 2, prior to the Study 4 preliminary and main analyses the 11 original GHSQ help-source items were reduced as 9 new help-
source variables for each problem-type. “Parent” and “non-parent relative” were collapsed and labelled “family” (suicidal thoughts, $\alpha = .82$; personal-emotional problems, $\alpha = .64$), and “Pastor/Priest” and “Youth Worker” were collapsed and labelled “community” (suicidal thoughts, $\alpha = .83$; personal-emotional problems, $\alpha = .74$). “Boyfriend/girlfriend” was relabelled “partner”, “doctor/GP” was relabelled “medical health professional” and “would not seek help from anyone” was relabelled “no-one”. “Friend”, “teacher”, “mental health professional”, “phone help line” were left unchanged. Additional analyses again confirmed that once “no-one” was reverse scored, the Study 4 GHSQ could be reduced as two individual scales: help-seeking intentions for suicidal thoughts ($\alpha = .81$) and help-seeking intentions for personal-emotional problems ($\alpha = .75$). (Intentions reduced as two sub-scales were used in the main analyses reported later in these results.)

Results

Data screening and assumption testing

Prior to analysis, scores for the GHSQ, SIQ, and SPSI-A were examined through SPSS programs for the extent to which the data met the assumptions of the analyses conducted. SPSI-A data approximated normality, however, as in all preceding studies, normality could not be assumed for GHSQ or SIQ variables. GHSQ scores tended to range between 5 and 7 for informal sources, 1 and 3 for formal sources and no-one, and SIQ scores had a notable negative skew, indicating that most cases had low levels of suicidal ideation (see Appendix VI). Data were treated in the same manner as Studies 1 to 3. Means and standard errors of the original GHSQ item scores are provided in Table 5.6. Loglinear transformation was again applied to SIQ variables to correct for skew and Log SIQ was used in all reported analyses. For ease of expression, Study 4 uses the term “suicidal ideation” to describe Log SIQ in the results. As in Studies 1 to 3, transformation could not correct GHSQ distributions, therefore all GHSQ analyses were conducted with both transformed and untransformed data, and where possible, GHSQ analyses were conducted using both
Table 5.6. Means (M) and standard errors of help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot), suicidal thoughts (Suicide-Thts), and different sources of help for a high school sample (Study 4).

<table>
<thead>
<tr>
<th>Help Source</th>
<th>Per-Emot M</th>
<th>Per-Emot SE</th>
<th>Suicide-Thts M</th>
<th>Suicide-Thts SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner</td>
<td>3.50</td>
<td>.23</td>
<td>2.96</td>
<td>.23</td>
</tr>
<tr>
<td>Friend</td>
<td>4.75</td>
<td>.17</td>
<td>3.85</td>
<td>.20</td>
</tr>
<tr>
<td>Parent</td>
<td>5.33</td>
<td>.18</td>
<td>4.17</td>
<td>.23</td>
</tr>
<tr>
<td>Other Relative</td>
<td>4.23</td>
<td>.19</td>
<td>3.47</td>
<td>.21</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2.77</td>
<td>.18</td>
<td>2.93</td>
<td>.19</td>
</tr>
<tr>
<td>Help Line</td>
<td>2.39</td>
<td>.18</td>
<td>2.51</td>
<td>.19</td>
</tr>
<tr>
<td>GP</td>
<td>2.71</td>
<td>.17</td>
<td>2.56</td>
<td>.18</td>
</tr>
<tr>
<td>Teacher</td>
<td>2.65</td>
<td>.17</td>
<td>2.20</td>
<td>.17</td>
</tr>
<tr>
<td>Religious leader</td>
<td>1.90</td>
<td>.15</td>
<td>1.84</td>
<td>.15</td>
</tr>
<tr>
<td>Youth Worker</td>
<td>2.04</td>
<td>.15</td>
<td>2.15</td>
<td>.16</td>
</tr>
<tr>
<td>Would not seek help</td>
<td>2.28</td>
<td>.19</td>
<td>2.14</td>
<td>.19</td>
</tr>
</tbody>
</table>

N = 105 except for “Partner” (N = 81). Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”).
parametric and non-parametric methods. Using untransformed data and parametric analytical methods did not alter the significance or pattern of findings. Consequently, for consistency and comparison with Studies 1 to 3, the reported results are based on untransformed GHSQ data and parametric analyses. Although small cell sizes indicated that cautious interpretation of multivariate results is required (Coakes & Steed, 1999), both Pillai’s Trace and Wilks’ Lambda for multivariate analyses with and without covariates were significant for each analysis at $p < .001$ for help-source and the interaction between problem-type and help-source. Therefore, since Pillai’s Trace criterion is considered to have acceptable power and to be the most robust multivariate statistic against violations of assumptions (Coakes & Steed, 1999), the cautious interpretation of multivariate results was assumed. (Detailed results of the Study 4 data screening and assumption tests are provided in Appendix VI, along with GHSQ and SIQ Frequency Tables, and non-parametric findings.)

**Preliminary analyses**

The mean scores, standard deviations, and Cronbach’s alphas for suicidal ideation were calculated, $M(105) = 13.30$, $SD = 23.18$, $\alpha = .97$, and found to be significantly ($p < .001$) lower than those in the Study 2 high school sample, $M(269) = 25.81$, $SD = 33.48$, $\alpha = .98$. The mean score, standard deviation, and Cronbach’s alpha for original SIQ data for each gender was also calculated and found that females had significantly ($p < .001$) higher SIQ mean scores, $M(58) = 19.78$, $SD = 27.31$, $\alpha = .97$, than males, $M(47) = 5.30$, $SD = 13.12$, $\alpha = .96$. Approximating Study 2, eight percent ($N = 8$) of the Study 4 sample reported a level of suicidal ideation similar to that of suicidal attempters with chronic psychiatric problems (Reynolds, 1987), indicating that the majority of students in the Study 4 reported levels of suicidal ideation that were sub-clinical. The mean score, standard deviation, and Cronbach’s alpha for the SPSI-A data was calculated for the total sample, $M(105) = 1.75$, $SD = .60$, $\alpha = .91$, and for each gender. Females had similar SPSI-A mean scores, $M(58) = 1.78$, $SD = .68$, $\alpha = .93$, to males, $M(47) = 1.78$, $SD = .49$, $\alpha = .85$, indicating that overall, the high school students in Study 4 perceived themselves to be average problem solvers and with similar problem-solving capacity to those university students who participated in Study 3. This moderate problem-solving capacity was reflected in
students’ problem recognition mean score and standard deviation, \( M(105) = 1.97, SD = .90, \alpha = .71 \), and problem-solving appraisal mean score and standard deviation, \( M(105) = 2.24, SD = .92, \alpha = .86 \), for the total sample.

As for Studies 1 to 3, preliminary analyses were conducted to determine whether the following main analyses should initially examine the help-negation hypothesis in relation to intentions for each help-source variable rather than as single scales for each problem-type. A GLM repeated measures ANOVA examined the impact of the 9 help-source variables (partner, friends, family, mental health professional, phone help-line, physical health professional, teacher, community, and no-one) and problem-type (personal-emotional and suicidal ideation) on students’ help-seeking intentions. Results found a significant main effect for helping source, \( F(8, 584) = 55.33, p < .001 \), that was qualified by a significant interaction with problem-type, \( F(8, 584) = 8.50, p < .001 \), indicating that consistent with the earlier studies, students’ help-source preference depended on problem-type (see Table 5.7). Again, to compare between the parametric and non-parametric results, two Friedman tests were conducted. First, for suicidal thoughts and second, for personal-emotional problems using the same help-source variables as in the parametric analyses. Consistent with the parametric results, non-parametric results found significant differences between help-seeking intentions for suicidal problems, \( \chi^2(8, N = 78) = 213.33, p < .001 \), and personal-emotional problems, \( \chi^2(8, N = 77) = 263.30, p < .001 \).

As for Studies 1 to 3, pairwise comparisons were conducted to evaluate this interaction further using a Bonferroni adjustment to control for Type I error at \( p < .05 \). The results are presented in Table 5.7 and indicate that students were less likely to seek help from friends, family and teachers, and more likely to seek help from a mental health professional for suicidal thoughts than for personal-emotional problems. Again as a precaution, Wilcoxon t-tests were calculated to compare parametric and non-parametric results for each problem-type. Z-scores and p-values are reported in Table A.21, Appendix IV. Non-parametric analyses found the same pattern of significant differences between different help-sources for personal-emotional and suicidal problems as parametric analyses (see Table A.21), confirming that students had significantly different preferences for at least some specific help-sources for each
Table 5.7. Means (M) and standard errors of help seeking intentions (GHSQ) for personal-emotional problems (Per-Emot), suicidal thoughts (Suicide-Thts), and different sources of help for a high school sample (Study 4).

<table>
<thead>
<tr>
<th>Help Source</th>
<th>Per-Emot</th>
<th>Suicide-Thts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Partner</td>
<td>3.50 a</td>
<td>.23</td>
</tr>
<tr>
<td>Friend</td>
<td>4.75 a,b</td>
<td>.17</td>
</tr>
<tr>
<td>Family</td>
<td>4.78 a,b</td>
<td>.16</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2.77 a,c</td>
<td>.18</td>
</tr>
<tr>
<td>Phone Help-Line</td>
<td>2.39 c</td>
<td>.18</td>
</tr>
<tr>
<td>Physical Health</td>
<td>2.71 a,c</td>
<td>.17</td>
</tr>
<tr>
<td>Teacher</td>
<td>2.65 a,c</td>
<td>.17</td>
</tr>
<tr>
<td>Community</td>
<td>1.97 c</td>
<td>.13</td>
</tr>
<tr>
<td>No-one</td>
<td>2.28 b</td>
<td>.19</td>
</tr>
</tbody>
</table>

N = 105 except for “Partner” (N = 81). Note. Evaluations were made on a 7-point scale (1 = “Extremely unlikely” to 7 = “Extremely likely”). **Means differ between personal-emotional problems and suicidal ideation in the same row at p < .001 and *p < .05 using Bonferroni correction. a,b,cMeans within columns differ from each other at p < .01, with the exception of those that share a letter.
type of problem. The help-negation effect was initially examined for each help-source variable in the main analyses.

As for Study 3, the possibility that the SPSI-A ALT and CON sub-scales might be combined to create a problem-solving appraisal variable was examined. First, the relationship between items in each sub-scale was examined. Correlational analyses found that all ALT items significantly associated with CON items at $p < .001$ ($r = .34$ to $r = .67$). Next, the possibility that ALT and CON items might load on a single factor that was distinct from other SPSI-A sub-scales was examined. Consistent with Study 3, the 30 SPSI-A items were submitted to an exploratory PCA. The results revealed eight factors with eigenvalues greater than 1, and which explained 71% of the variance (Kaiser-Meyer-Olkin measure of sampling adequacy = .82, Bartlett’s test of sphericity, approx. $\chi^2(435) = 1705.83$, $p < .001$). In contrast to the Study 3 results however, Oblimin rotation found that while all ALT and CON items (SPSI-A items 16 to 21) loaded together on one factor, two ALT items also loaded on a second factor that included PID items, with loadings > .3. However, for consistency and cautious comparison, the decision was made to collapse the ALT and CON items as the problem-solving appraisal variable to be used in the following analyses ($\alpha = .86$). As for Study 3, additional correlational analyses found that poorer total problem-solving capacity related to higher levels of suicidal ideation, $r(105) = .41$, $p < .001$, lower help-seeking intentions for suicidal problems, $r(105) = -.46$, $p < .001$, and lower help-seeking intentions for personal-emotional problems, $r(105) = -.50$, $p < .001$.

Finally, to maintain consistency with the previous studies, although the ratio of males ($N = 47$) to females ($N = 58$) that was relatively even in the Study 4 sample (45% to 55% respectively), preliminary analyses were conducted to determine the extent to which gender might influence the following help-negation analyses. In contrast to the previous studies, the correlation between gender and suicidal ideation was significant ($r = .31$, $p < .01$). Being female was associated with higher intentions to seek help from friends, $r(105) = .37$, $p < .001$, and teachers, $r(105) = .21$, $p < .05$, for suicidal thoughts and higher intentions to seek help from friends, $r(105) = .34$, $p < .001$, for personal-emotional problems, all other $p$s > .1. The extent to which gender might either explain or strengthen the help-negation relationship in the Study 4 sample was
Table 5.8. Correlations (r) between suicidal ideation (SIQ), problem-solving appraisal and problem recognition (SPSI-A), and help-seeking intentions for suicidal and non-suicidal problems and different sources of help in a high school sample (Study 4).

<table>
<thead>
<tr>
<th>Help-Seeking Intentions</th>
<th>Suicidal Ideation</th>
<th>Appraisal</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Problem-Solving</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Suicidal thoughts:**
- Family: -0.27***, -0.17, -0.25*
- Physical Health Professional: -0.18, -0.35***, -0.42***
- Phone Help-Line: -0.16, -0.33**, -0.29*
- Partnera: -0.13, -0.32**, -0.28**
- Community: -0.11, -0.32***, -0.41***
- Teacher: -0.01, -0.25**, -0.44***
- Friend: 0.01, -0.34**, -0.30**
- Mental Health Professional: 0.02, -0.24**, -0.35***
- No-one: 0.04, -0.10, -0.03

**Personal-emotional problems:**
- Family: -0.28***, -0.26**, -0.24**
- Physical Health Professional: -0.16, -0.41***, -0.42***
- Phone Help-Line: -0.16, -0.31**, -0.37***
- Partnera: 0.05, -0.16, -0.18
- Community: -0.09, -0.25**, -0.28***
- Mental Health Professional: 0.02, -0.32**, -0.37***
- Friend: 0.01, -0.22*, -0.30**
- Teacher: -0.04, -0.24**, -0.45***
- No-one: 0.25**, -0.11, -0.04

N = 105, except aN = 81. *** p < .001, ** p < .01, * p < .05.
again examined using the covariate and moderation procedures outlined in the following main analyses along with procedures outlined by Aiken and West (1991) and Cohen et al. (2003). Consistent with Studies 1 to 3, the results found that gender did not make a significant contribution to the help-negation effect found in the Study 4 sample, so as in previous studies, is not mentioned further.

Help-negation.

Consistent with Studies 1 to 3, correlational analyses were used to test the possibility that students high in suicidal ideation would show evidence of the help-negation relationship through a significant inverse relationship between suicidal ideation and help-seeking intentions. Again, parametric ($r$) and non-parametric ($r_s$) correlations were conducted and again, both types of analyses revealed coefficients that were of similar magnitude and patterns that were consistent between parametric and non-parametric analyses. Only parametric results are reported in Table 5.8. Overall, higher levels of suicidal ideation associated with lower intentions to seek help for suicidal problems and higher intentions to seek help from no-one. However, in contrast to Studies 1 to 3, for both suicidal and personal emotional problems, the only significant association between suicidal ideation and a specific help-source was between suicidal ideation and intentions to seek help from “family”. This suggests that in this sample, the help-negation effect applied to seeking help from family only.

Note. The criteria for a help-negation effect is a “significant negative relationship between suicidal ideation and help-seeking intentions”. In this sample, only the association between suicidal ideation and intentions to seek help from “family” was significant; therefore, only intentions to seek help from family were used in the following covariate and moderation analyses.

Social problem-solving

Covariate analyses

To test the hypotheses that young people contemplating suicide might negate help from their family because they don’t recognise their suicidal problem or because they
don’t appraise help-seeking from their family as an option for managing suicidal thoughts, four GLM ANCOVAs were conducted. As for Study 3, GLM was used because it allowed the use of continuous versions of the independent and dependent variables and did not require the sample to be divided into groups (Rutherford, 2001). The first ANCOVA examined help-seeking intentions for suicidal problems while controlling for problem recognition. The second ANCOVA examined help-seeking intentions for personal-emotional problems while controlling for problem recognition. In a similar way, the third and fourth ANCOVAs examined help-seeking intentions for suicidal thoughts and personal-emotional problems while controlling for problem-solving appraisal. Within each ANCOVA, suicidal ideation was used to predict intentions to seek help from family for each problem-type. Suicidal ideation and problem recognition were used in the first and second ANCOVAs as covariates, as were suicidal ideation and problem-solving appraisal in the third and fourth ANCOVAs. With problem recognition controlled, suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, $F(1, 99) = 8.13, p < .01$, and personal-emotional problems, $F(1, 101) = 8.22, p < .01$. Similarly, with problem-solving appraisal controlled, suicidal ideation significantly predicted help-seeking intentions for suicidal thoughts, $F(1, 99) = 6.74, p < .01$, and personal-emotional problems, $F(1, 101) = 6.21, p < .01$.

To examine these results further, the same ANCOVAs as above were conducted but with suicidal ideation dichotomized so that the high scorers in the top 8% ($N = 8$) (equivalent to a suicidal attempter, Reynolds, 1987) were excluded from the analysis. With the reduced sample, the above results were replicated indicating that the current findings apply to high school students in the Study 4 sample with low levels of suicidal ideation.

Since neither problem-solving appraisal nor problem recognition could fully explain students’ help-negation from family, the possibility that total problem-solving capacity might account for the help-negation effect was examined. Two additional GLM ANCOVAs were conducted. The first, for suicidal problems and the second, for non-suicidal problems. Within both models, suicidal ideation was used to predict intentions to seek help from family while controlling for the total problem-solving capacity. As for Study 3, the 30 SPSI-A short-form items were averaged to form a
single scale for use within both models. In contrast to Study 3, with total problem-solving capacity controlled, suicidal ideation was unable to predict intentions to seek help from family for suicidal thoughts, $F(1, 100) = 3.68, p = .058$, or personal-emotional problems, $F(1, 100) = 2.65, p = .107$. In the Study 4 high school sample, students’ total problem-solving capacity appeared to explain their help-negation from family, over and above the impact of suicidal ideation.

**Post-hoc analyses**

Post-hoc analyses were conducted to examine this result further. It was hypothesised that students who perceived their problem-solving capacity as poor might turn to family for help with their suicidal thoughts as levels of suicidal ideation increased, whereas students who perceived themselves to be capable problem-solvers may not. The total sample was divided into three groups that each comprised approximately 33% of the participants and which were categorised as poor, average and able problem-solvers. The same ANCOVA as above was to be conducted in the poor and able problem-solving groups and results compared. However, preliminary correlational analyses revealed that the help-negation effect that had been found in the total sample became non-significant in these smaller groups. Consequently, no further post-hoc analyses were conducted.

**Moderation analyses with intentions to seek help from family**

Although problem recognition and problem-solving appraisal were unable to individually explain the help-negation effect over and above the impact of suicidal ideation in the Study 4 sample, the possibility that either variable might contribute to the overall strength of this sample’s help-negation from family was explored. For this reason, following the procedure outlined in Study 3, the criteria for a moderation effect between problem recognition and the help-negation relationship, and between problem-solving appraisal and the help-negation relationship were examined. Four multiple regression analyses were conducted. Analyses one and two used suicidal ideation, problem recognition, and the product terms between suicidal ideation and problem recognition to predict intentions to seek help from family first for suicidal thoughts and second, for personal-emotional problems. Analyses three and four used
suicidal ideation, problem-solving appraisal, and the product terms between suicidal ideation and problem-solving appraisal to predict intentions to seek help from family, also for each problem-type. The independent variables were entered into each regression model in the following order: suicidal ideation; problem recognition or problem-solving appraisal; then, the corresponding cross-product term, and all continuous variables were converted to z-scores before analysis.

As shown in Table 5.9, the criteria for a significant moderation effect between problem recognition and the help-negation effect, and between problem-solving appraisal and the help-negation effect were not met. The only significant direct relationships were those between problem recognition and help-seeking intentions and between problem-solving appraisal and help-seeking intentions for personal-emotional problems. Consistent with Study 3, as shown in Table 5.9, additional analyses revealed that the criteria for a moderation effect between total problem-solving capacity and the help-negation relationship were not met. Together these results indicate that neither specific aspects of social problem-solving nor total problem-solving capacity appeared to contribute to the overall strength of the help-negation effect found in the Study 4 high school sample.

Summary

Preliminary results

Although not posited as hypotheses, consistent with Studies 1 and 2, the preliminary analyses in both Studies 3 and 4 examined students’ help-seeking intention patterns before levels of suicidal ideation were considered, along with the impact that gender may have on the help-negation relationship. A brief review and discussion of the preliminary results is provided below, before a summary of the main Study 3 and 4 findings. A full review and discussion of the main findings for Studies 3 and 4, together with those for Studies 1 and 2 is provided in Chapter 6.
Table 5.9. The impact of problem-solving appraisal and problem-recognition on help-negation in a high school student sample (Study 4).

<table>
<thead>
<tr>
<th>Help-seeking Intentions</th>
<th>Suicidal Thoughts&lt;sub&gt;a&lt;/sub&gt;</th>
<th>Per-Emot Problems&lt;sub&gt;b&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>-.24</td>
<td>.28</td>
</tr>
<tr>
<td>Problem Recognition</td>
<td>-.23</td>
<td>.12</td>
</tr>
<tr>
<td>Sui. Ide. x Prob. Recog.</td>
<td>-.03</td>
<td>.30</td>
</tr>
<tr>
<td>B:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>-.22</td>
<td>.19</td>
</tr>
<tr>
<td>Problem-Solv. Appraisal</td>
<td>-.13</td>
<td>.12</td>
</tr>
<tr>
<td>Sui. Ide. x Prob. Solv. App.</td>
<td>-.03</td>
<td>.19</td>
</tr>
<tr>
<td>C:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>-.24</td>
<td>.35</td>
</tr>
<tr>
<td>Problem-Solv. Capacity</td>
<td>-.20</td>
<td>.13</td>
</tr>
<tr>
<td>Sui. Ide. x Prob. Solv. Cap.</td>
<td>.05</td>
<td>.38</td>
</tr>
</tbody>
</table>

Note. Problem-Solving Capacity refers to the total score on the SPSI-A short form.

<sub>a</sub><sup>df</sup> (A & B) = 3, 98; <sub>b</sub><sup>df</sup> (A & B) = 3, 100; <sub>a</sub><sup>df</sup> (C) = 3, 99; <sub>b</sub><sup>df</sup> (C) = 3, 101.

<sub>a</sub>R<sup>2</sup> (A) = .13, <sub>a</sub>Adj. R<sup>2</sup> (A) = .11, <sub>b</sub>R<sup>2</sup> (A) = .13, <sub>b</sub>Adj. R<sup>2</sup> (A) = .11.

<sub>a</sub>R<sup>2</sup> (B) = .09, <sub>a</sub>Adj. R<sup>2</sup> (B) = .06, <sub>b</sub>R<sup>2</sup> (B) = .13, <sub>b</sub>Adj. R<sup>2</sup> (B) = .10.

<sub>a</sub>R<sup>2</sup> (C) = .11, <sub>a</sub>Adj. R<sup>2</sup> (C) = .08, <sub>b</sub>R<sup>2</sup> (C) = .15, <sub>b</sub>Adj. R<sup>2</sup> (C) = .12.

**p < .01, *p < .05.
Chapter 5

Help-seeking intention patterns

In both Studies 3 and 4, students’ general help-seeking intention patterns were consistent with those found in Studies 1 and 2. Students reported intentions to seek help from informal sources (e.g., friends and family) that were higher than for formal sources (e.g., mental or physical health professional). As for Studies 1 and 2, students in both Studies 3 and 4, reported help source preferences that were different for most help-sources, and which varied for different problem-types (Tables 5.2 & 5.7). As in all studies, students reported intentions to seek help from friends and parents for personal-emotional and suicidal problems that were significantly higher than from any other help source, indicating that the students would seek help from informal rather than formal sources, and someone rather than no-one, for both problem-types.

As noted in Chapter 3, this pattern of results reinforces the potential gatekeeper role that friends and family can have for young people with suicidal thoughts. In addition to the implications discussed in Chapter 3, these results highlight the potential that friends and family have to increase young peoples’ suicidal risk if they are not adequately prepared as gatekeepers (Kalafat, 1997). That is, as “people in the community who are able to assist distressed young people to access appropriate professional support services” (Frederico & Davis, 1996, p. 1). While there is evidence that appropriate advice and treatment can reduce suicidal risk (Rudd et al., 1996), it is well documented that young peoples’ social networks have an important influence on their help-seeking practices (Lessard & Moretti, 1998; Pescosolido, 1992; Pescosolido & Boyer, 1999; Rogler & Cortes, 1993; Srebnik, Cauce, & Baydar, 1996; Wilson & Deane, 2001). It is also recognized that risk for suicide completion is exacerbated if young people do not seek and receive appropriate treatment or advice (Rosenberg et al., 1989). While it seems positive that overall, students in Studies 1 to 4 reported a willingness to talk to someone about their distress, students’ preference for informal help raises concerns about the accuracy of advice that might be given (Offer et al., 1991). It also raises concerns about the willingness of informal help-sources to promote or facilitate appropriate help-seeking when young people are distressed or suicidal (Berman & Jobes, 1995; Deane et al., 2002; Frederico & Davis, 1996). Peers for example, may be poorly equipped to provide helpful responses to difficult questions, particularly if the questions are related to suicidal problems.
Suicidal young people are known to form “poor quality friendships” (Cole et al., 1992, p. 817), many disturbed young people show a strong liking for fellow disturbed peers over non-disturbed peers (Sarbornie & Kauffman, 1985), and many distressed young people form friendships involving conflict and poor problem-solving (Cole et al., 1992; Marcus, 1996). Consequently, many disturbed young people may not obtain the quality of help they need (Offer et al., 1991). If suicidal young people seek help from disturbed or suicidal peers, how beneficial is this help likely to be? Will peer help-seeking increase the potential for negative or maladaptive responses if peer helpers are unable to provide effective assistance for their suicidal friend (e.g., encouraging imitation or guilt)? Moreover, will seeking help from peers with their own psychological difficulties reinforce the hopelessness that Study 2 found could strengthen the help-negation relationship in some samples?

Students’ preference for seeking help from no-one also raises concern about the suicidal risk that might be increased by maladaptive cognitive processes such as rumination, or distortions such as overgeneralisation, selective abstraction, or cognitive rigidity (Levenson & Neuringer, 1971; Marx et al., 1992; Prezant & Neimeyer, 1988; Weishaar, 1996). For example, Prezant and Neimeyer (1988) found that among moderately depressed participants, once the level of depression was controlled, overgeneralisation and selective abstraction predicted suicidal ideation and attempt.

In short, the preliminary results reinforce the need for prevention strategies to include gatekeeper training, particularly for peers and family (Kalafat, 1997). The results also highlight the need to promote formal help-seeking for a range of personal and emotional problems that include suicidal thoughts (Wilson & Deane, 2001). Further research is needed to examine the developmental trajectories of key factors that influence young peoples’ help-seeking preferences for different problem-types (Deane et al., 2002; Kalafat, 1997). On the basis of such information, it may be possible to develop promotion and education strategies that make seeking help from mental health sources more attractive to young people for managing their personal-emotional and suicidal problems.
Gender

Consistent with Studies 1 and 2, females in both Studies 3 and 4 reported higher levels of suicidal ideation than the males. Therefore, Studies 3 and 4 also examined the extent to which gender might influence the help-negation effect found in these samples. Neither Study 3 nor 4 found a significant relationship between gender and the help-negation effect, despite the finding in Study 4 that gender was significantly associated with suicidal ideation and help-seeking intentions for some sources. Neither Study 3 nor 4 found evidence to suggest that gender had a role in either explaining or strengthening the help-negation effect in university or high school students. This result raises the possibility that the help-negation effect may be related to factors that are common between the sexes and which are influenced in similar ways by increasing levels of suicidal ideation. Potential factors and directions for further research are discussed in Chapter 6.

Help-negation

The help-negation effect was evident for all help-sources in Study 3 and for “family” only in Study 4. In both studies, significant negative relationships were found between suicidal ideation and help-seeking intentions for suicidal thoughts. Higher levels of suicidal ideation predicted lower help-seeking intentions from a number of specific sources in Study 3 (Table 5.4), and from family in Study 4. Higher levels of suicidal ideation also predicted higher intentions to seek help from no-one in Study 3 (Table 5.4). As for Study 1, university students in Study 3 had undergraduate training in psychology and again, might be expected to know the benefits of seeking psychological help. Yet, consistent with Study 1, results revealed that as levels of suicidal ideation increased, students’ intentions to seek help from a health care professional decreased and their intentions to seek help from no-one increased (Table 5.4). With respect to Study 4, even in a sample with significantly lower levels of suicidal ideation than those found in Study 2, there was a negative relationship between suicidal ideation and intentions to seek help from family for managing suicidal thoughts. This relationship was also found for personal-emotional problems (Table 5.8). These results are discussed in Chapter 6.
Problem recognition and problem-solving appraisal

Contrary to expectations, within the university sample (Study 3), neither problem recognition nor problem-solving appraisal, either alone or with all other aspects of problem-solving capacity, could fully account for the help-negation effect. With social problem-solving variables controlled, results found that suicidal ideation significantly and negatively predicted help-seeking intentions for suicidal thoughts. Additional results revealed that with both problem recognition and problem-solving appraisal controlled, as levels of suicidal ideation increased, students’ intentions to seek help for suicidal thoughts decreased for all help-sources, and particularly for family, friends and health professionals. Supporting this trend, university students’ intentions to seek help from no-one increased (Table 5.4). Similarly, within the high school sample (Study 4), neither problem recognition nor problem-solving appraisal could fully account for the help-negation effect. However, this was not the case for total problem-solving capacity. In this high school sample, the association between suicidal ideation and intentions to seek help from family for suicidal thoughts and personal-emotional problems became non-significant once total problem-solving capacity was controlled. Given that the Study 4 sample may not have been representative of the wider high school population, the extent to which these results can be generalised is inconclusive. This issue is discussed further in Chapter 6, and as noted earlier, these results should be interpreted with caution.

Finally, in both Studies 3 and 4, interaction analyses found no evidence to support the hypothesis that any aspects of social problem-solving capacity moderated the help-negation effect (Tables 5.5 & 5.9). This suggests that in university and high school students, social problem-solving does not appear to have a role in strengthening the help-negation relationship. Again, potential explanations for this finding are discussed in Chapter 6.
Chapter 6

Discussion:

The Help-Negation Effect in Sub-Clinical Populations

Studies 1 to 4 found evidence of the help-negation effect in different samples of sub-clinical university and high school students. Results also found that levels of hopelessness, prior help-seeking experience, problem recognition, and problem-solving appraisal did not appear to explain the help-negation effect. However, findings in Study 2 revealed that hopelessness might strengthen the help-negation relationship in adolescent samples. In the Study 2 sample, as levels of suicidal ideation increased, adolescents’ levels of hopelessness interacted with suicidal ideation to predict lower help-seeking intentions for suicidal thoughts. Similarly, additional results in Study 4 found that total problem-solving capacity might explain adolescents’ help-negation from family. In the Study 4 sample, with total problem-solving capacity controlled, the help-negation effect for family became non-significant. Chapter 6 discusses the main findings for Studies 1 to 4, along with limitations and implications for suicide prevention and clinical practice. Results are discussed in terms of individuation and autonomy, help-seeking fears, coping style, and personality characteristics. The chapter concludes with a theoretical account of the way in which co-occurring psychopathology and reduced impulse control might influence the help-negation relationship in sub-clinical samples, along with a summary of hypotheses for ongoing help-negation research.
Main result review

Help-negation

Attesting to the robust nature of the help-negation effect for suicidal thoughts, Studies 1 to 4 found a help-negation effect that was consistent with the effect identified by Carlton and Deane (2000). As expected, all studies found that higher levels of suicidal ideation associated with lower help-seeking intentions for at least one help-source.

Hopelessness

Based on previous findings (e.g., Rudd et al., 1995; Clark & Fawcett, 1992; Hughes & Neimeyer, 1993), Studies 1 and 2 examined the possibility that hopelessness might contribute to the help-negation effect in university and high school students. It was proposed that if higher levels of hopelessness contribute to the help-negation effect, the magnitude of the effect would be substantially reduced with levels of hopelessness controlled. It was also proposed that if higher levels of hopelessness strengthen the help-negation effect, levels of hopelessness would moderate the help-negation relationship.

Within both the university and high school samples, levels of hopelessness were unable to fully account for the help-negation effect. Interaction analyses found no evidence that levels of hopelessness moderated the help-negation relationship in the university sample (Study 1). However, the reverse was true in the high school sample (Study 2). Significant and negative main effects were found between suicidal ideation and help-seeking intentions and between levels of hopelessness and help-seeking intentions, along with a significant interaction between higher levels of suicidal ideation and hopelessness. These results indicate that as levels of suicidal ideation increased, higher levels of hopelessness contributed to greater adolescent reluctance to seek help for suicidal thoughts. However, these results were also qualified by finding that the direct relationship between suicidal ideation and help-seeking intentions was of greater magnitude than the hopelessness-suicidal ideation interaction. Thus, while higher levels of hopelessness appeared to have a role in
strengthening the help-negation effect in the high school sample, other variables that are associated with suicidal ideation or help-seeking intentions may have also contributed to the effect.

**Prior help-seeking experience**

Studies 1 and 2 examined the possibility that prior help-seeking experience might contribute to the help-negation effect for mental health professionals in university and high school students. It was proposed that if prior help-seeking experience contributes to the help-negation effect, the magnitude of the effect would be substantially reduced with prior help-seeking experience controlled. It was also proposed that lack of prior help-seeking experience might strengthen young peoples’ reluctance to seek help for suicidal thoughts as their levels of suicidal ideation increase, and if so, prior help-seeking experience would moderate the help-negation relationship.

In both university and high school samples, prior help-seeking experience was unable to fully account for the help-negation effect. Similarly, in both samples there was no evidence that prior help-seeking experience moderated the help-negation effect, indicating that prior help-seeking experience had no apparent role in either explaining or strengthening the help-negation relationship in either university or high school students.

**Social problem-solving**

Based on similarities between models of social problem-solving and help-seeking (e.g., D’Zurilla & Nezu, 1999; Saunders 1993), Studies 3 and 4 examined the possibility that problem recognition and problem-solving appraisal might contribute to the help-negation effect in university and high school students. For comparison, these studies also examined the possibility that total problem-solving capacity might contribute to the help-negation effect in each sample. It was proposed that if poor self-perceived problem recognition and/or problem-solving appraisal ability (and/or problem-solving capacity) contribute to the help-negation relationship, the magnitude of the help-negation effect would be substantially reduced with these problem-solving
variables controlled. It was also proposed that if self-perceived problem-recognition and/or problem-solving appraisal ability (and/or problem-solving capacity) strengthened the help-negation relationship, these problem-solving variables would moderate the help-negation effect.

In the university sample (Study 3), preliminary analyses revealed that poor total problem-solving capacity correlated positively and significantly with suicidal ideation, and negatively and significantly with help-seeking intentions for suicidal thoughts and personal-emotional problems. However, exploratory results in the main analyses found significant and negative correlations between problem recognition and intentions to seek help from a friend and a physical health professional for suicidal thoughts only (see Table 5.3). Similarly, significant negative correlations were only found between poor problem recognition and intentions to seek help from a friend, physical health professional and mental health professional for personal-emotional problems (Table 5.3). These results suggest that the university students’ intentions to seek help from at least friends and GPs for suicidal thoughts and personal-emotional problems were related to their ability to recognise (i.e., define and label) their problem. In contrast, no significant correlations were found between poor problem-solving appraisal and help-seeking intentions for suicidal thoughts, and only one significant association was found between poor problem-solving appraisal and intentions to seek help from a GP for personal-emotional problems (Table 5.3). It is possible that the small magnitude of the correlations between poor social problem-solving appraisal and help-seeking intentions indicates that the university students did not consider help-seeking as a problem-solving option for managing suicidal thoughts.

Neither problem recognition nor problem-solving appraisal, either alone or with all other aspects of problem-solving capacity, could fully account for the help-negation effect in the university sample. With social problem-solving variables controlled, results found that suicidal ideation significantly and negatively predicted help-seeking intentions for suicidal thoughts. Additional results revealed that with problem recognition, problem-solving appraisal and total problem-solving capacity controlled, as levels of suicidal ideation increased, the university students’ intentions to seek help for suicidal thoughts decreased for all help-sources, and particularly for family,
friends and health-care professionals. Conversely, students’ intentions to seek help from no-one increased. Interaction analyses found no evidence that any aspect of social problem-solving capacity moderated the help-negation effect in the university sample. This interaction result was replicated in the high school sample and suggests that social problem-solving did not appear to have a role in strengthening the help-negation relationship in either university or high school students.

In contrast to the university sample, in the high school student sample (Study 4), exploratory analyses found significant negative correlations between problem recognition and students’ intentions to seek help from all specific sources for suicidal and personal-emotional problems (see Table 5.8). This result suggests that these high school students’ help-seeking intentions for all sources were related to their ability to define and label their suicidal or personal-emotional problem. In the high school sample, poor problem-solving appraisal significantly and negatively related to help-seeking intentions for most specific help-sources for suicidal thoughts (“family” being the only exception) and all specific help-sources for personal-emotional problems (Table 5.8). It is possible these results indicate that the high school students who participated in Study 4 viewed help-seeking (from sources other than family) as a problem-solving option for managing suicidal thoughts and personal-emotional problems.

Consistent with the university sample (Study 3), Study 4 found that neither problem recognition nor problem-solving appraisal could fully account for the help-negation effect in the high school sample. With problem recognition and problem-solving appraisal controlled, results revealed that as levels of suicidal ideation increased, students’ intentions to seek help from family for suicidal thoughts significantly decreased. However, in contrast to the university sample, additional results found that in the high school sample, the association between levels of suicidal ideation and intentions to seek help from family for suicidal thoughts and personal-emotional problems became non-significant once total problem-solving capacity was controlled. It is possible this result indicates that high school students negate help from family because they do not view help from family as a problem-solving option for managing suicidal thoughts. However, as noted, this result must be interpreted with caution because the Study 4 sample may not have been representative of the wider high
school population. The extent to which these results can be generalised is inconclusive and replication of the study in a more representative sample is needed.

**Limitations**

There are several additional limitations associated with Studies 1 to 4. While all studies have replicated the help-negation effect in university or high school samples, since actual help-seeking behaviours were not examined, it is unclear if reluctance to seek help, as indicated by reported intentions, will translate into what young people actually do when they are suicidal. While there is emerging evidence that intentions relate significantly to both retrospective and prospective help-seeking behaviour (Deane et al., 2001a; Wilson et al., 2003), subsequent studies may better address this issue by including a measure of actual help-seeking behaviours. As outlined by Wilson et al. (2003), an intentions measure such as the General Help-Seeking Questionnaire (GHSQ; Deane et al., 2001; Wilson et al., 2003) might be supplemented by a measure that asks participants to report their actual help-seeking from each help-source and problem-type that is measured for intentions. Wilson et al.’s (2003) methodology might be used to assess both retrospective and prospective help-seeking behaviour. Over two time-periods, the researchers assessed help-seeking intentions and actual behaviours in the previous three weeks. Associations between intentions and behaviours reported at Time 1 provided evidence of a retrospective relationship between the variables. Associations between intentions at Time 1 and behaviours at Time 2 provided evidence of a prospective relationship between the variables. Finally, Deane et al.’s (2001a) methodology for capturing participants’ immediate responses to an offer of help might be extended to each help-source listed in the GHSQ. This method might be used to establish the direction of associations between help-seeking intentions and immediate behaviours.

Following the general methodology of prior studies and measures (e.g., Intention of Seeking Counseling Inventory; Cash, Begley, McCown, & Weise, 1975; Cepeda-Benito, & Short, 1998; see Wilson et al., 2003, Appendix II, for a review), Studies 1 to 4 used a measure of help-seeking intentions that specified different help-sources for different problem-types (GHSQ; Deane et al., 2001; Wilson et al., 2003). However, the measure asked participants about problems that they might experience
hypothetically. It is unclear to what extent participants were actually able to identify
with the problem when making their ratings. Subsequent studies might address this
issue by supplementing the GHSQ with aspects of Hinson and Swanson’s (1993)
methodology for assessing willingness to seek help. The researchers manipulated
problem severity by providing two help-seeking scenarios, and then asking
participants a series of questions about the vividness with which they could imagine
the problem, seriousness, appropriateness of problem for help-seeking, and the extent
to which respondents had experienced the problem in their own life.

With respect to Studies 3 and 4, although results suggest that problem-solving may
not explain the help-negation effect in sub-clinical university students, given the
selective nature of the high school sample, there is a need to reexamine this
relationship in a potentially more representative adolescent sample. This may mean
less stringent recruitment strategies than used in Study 4. Within this thesis, there was
a need to generalise the core help-negation findings from a private Christian high
school (Study 2) to a public high school (Study 4). However, the recruitment and
screening procedures that were required by the New South Wales Department of
Education and Training for the research to be conducted in the public high school
were far more complicated than the procedures required for the same research in the
private high school. It is likely that the more complicated procedure led to a reduced
rate of student participation in Study 4 (only 13% of the available high school
population). In further research, there is a need for recruitment procedures that are
less complicated than those used in the public high school sample. For example,
parental consent procedures for non-anonymous and anonymous aspects of future
studies may be simplified if parents can provide written consent for each study part on
one form rather than on a several forms as required in Study 4.

With regard to the measurement of social problem-solving variables, since problem-
solving was measured by self-report, it is unclear to what extent students’ ratings
accurately reflected their problem-solving ability. Subsequent studies may benefit by
supplementing the SPSI-A with aspects of Platt and Spivack’s (1985) Means-Ends
Problem-Solving procedure (MEPS) for assessing interpersonal cognitive problem-
solving skill. The MEPS measures the individual’s ability to conceptualise step-by-
step means (strategies) to achieving a problem-solution. The original procedure
consists of 10 vignettes that first describe a problem situation and then the steps involved in the resolution of that problem situation. More recent versions of the procedure ask participants to describe the “ideal strategy” that is needed for the solution to be reached effectively (e.g., Goddard, Dritschel, & Burton, 1996; Marx, Williams, & Claridge, 1992). Subsequent studies that examine problem-solving in relation to mental health may also benefit from a modified MEPS procedure that asks participants to describe the strategies they would use to solve or manage mental health problems such as suicidal thoughts.

Finally, since each study used a convenience sample, it is unclear if the help-negation effect generalises to other sub-clinical youth or adult samples. There is a continuing need to see whether the help-negation effect can be generalized, for example, to older samples, non-student samples, and samples of different ethno-cultural background.

Despite these limitations, some of the findings were sufficiently robust to offer implications for prevention and clinical practice.

The help-negation effect: Implications for prevention and clinical intervention

Martin (2002) recently wrote, “Suicide is a behaviour. Our best opportunity [to prevent youth suicide] may be to increase the level of mental health in Australia, so that suicide never crosses anyone’s mind. We have good public policy in place, we have the tools to promote community capacity, and at the individual level we have more clarity about what elements make up mental health, better evaluation measures, and a history of innovative and effective programs” (p. 255). At this point, we know that appropriate help-seeking offers promise for more effective suicide prevention and early intervention. Thus, the refusal or avoidance of help are processes that may reduce the effectiveness of prevention and early intervention programs.

Arguably, one of the most important findings for further directions in suicide prevention research and clinical intervention relates to understanding the help-negation effect for suicidal thoughts. As studies in this thesis have found, across different university and high school samples, young peoples’ help-seeking intentions tend to decrease as their levels of suicidal ideation increase, even when these ideation
levels are sub-clinical. Suicidal ideation is considered a proxy measure for suicide and one of the two best indicators of eventual suicide completion (Martin, 2002). Therefore, negating help when suicidal, regardless of whether levels of suicidal ideation are acute or not, raises important implications for both suicide prevention and clinical practice. Even with a strong public policy, strengthening community capacity and effective targeted individual programs, one question must be asked. How successful can these initiatives be if young people remain reluctant to access and engage in protective and available resources, particularly when they are suicidal and needing appropriate support and accurate advice? For prevention programs, this thesis highlights the need for strategies that increase young peoples’ intentions to use the appropriate resources that are available to them. The results also reinforce the need to better understand the factors that contribute to the help-negation process in sub-clinical samples, along with the factors that are most influential at different points in young peoples’ development. For clinicians, these results also reinforce the need to be aware that clients are often ambivalent about seeking help and may actively reject or refuse help even before they are acutely suicidal.

Within both the contexts of prevention and clinical intervention, educating young people about the help-negation effect might be of benefit. For example, by preparing young people to anticipate help-rejecting cognitions to suicidal thoughts, it may be possible to decrease the probability that they will either avoid appropriate help or disengage from therapeutic help when they become suicidal. Education in both the prevention and therapeutic contexts might involve exploring and challenging distorted and inaccurate beliefs about seeking or engaging in help for suicidal thoughts. Similarly, education might involve the rehearsal of strategies to raise young peoples’ attention to changes in their willingness to seek or engage in help. By teaching about the early warning signs of the help-negation process, it might be possible to reduce the conviction that young people have for beliefs and other help-seeking barriers that may either explain or strengthen the help-negation relationship.

**Individuation and autonomy**

It is noteworthy that across all four studies, as students’ levels of suicidal ideation increased, despite their levels of hopelessness or their self-perceived problem-solving
ability, students in all studies indicated that they were least likely to seek help from family for suicidal thoughts. The consistency of this result, even in the Study 4 sample where levels of suicidal ideation were well below the levels found in comparative samples, raises the possibility that students’ reluctance to seek help from family for suicidal thoughts (and personal-emotional problems) might reflect aspects of individuation and the development of adult autonomy. As levels of suicidal ideation increased, students in all studies may have become more reluctant to seek help from family because of an underpinning belief that part of growing up means they should manage problems, including suicidal thoughts, without the involvement of family.

Whereas the child is joined with parents and family as their primary sources of help and support, a key task for successful maturation through adolescence and into adulthood is individuation. This process involves moving into a separate space and becoming a separate individual, together with reducing dependence on family relationships, and weakening ties to individuals such as parents who are primarily important to the young person as a child (Geldard & Geldard, 2000). According to Archer (1992), the major goal of individuation is the increase of a young person’s capacity to assume a functional role as a member of adult society. Clearly, the goal of individuation has implications for help-seeking and the process of help-negation that occurs before an individual is acutely suicidal. As speculated in Chapter 3, it is possible that lower help-seeking intentions for different problems may be associated with processes of individuation and the development of adult autonomy (e.g., Carlton & Deane, 2000). Within these processes, high school and university students may think they “can” or “should” deal with problems alone, even if their problems are suicidal (Deane et al., 2001). Since a young person’s adaptive maturation is based on a balance between individuation on one hand, and the need for social acceptance and connection on the other (Adams & Marshall, 1996; Wadsworth, 1984), it is possible that the help-negation effect reflects an attempt to reconcile these dialectic needs. If so, help-negation in young people might reflect their striving for individuation, together with the belief that social acceptance requires one to manage their own problems (regardless of the potential risks associated with doing so).
A number of studies suggest that young people desire to manage problems on their own or without professional help (see Table A.8, Appendix I). Dubow et al. (1990) for example, examined health-related concerns and perceptions of available help-sources in a sample of 1,384 high-school students. Approximately 75% to 85% of the students surveyed, who experienced personal-emotional problems but failed to seek help, indicated, “that they could handle their problem on their own” (p. 52). Wells and colleagues (1994) examined the reasons given by a community sample for not seeking professional psychological help for emotional distress. The results found that many participants believed “they should be strong enough to cope without professional help” (Wells, Robins, Bushnell, Jarosz, & Oakley-Browne, 1994, p. 155). Similarly, Wilson and Deane (2001a) reported that high school students wouldn’t seek professional psychological help for a number of reasons including “I don’t need to talk to anyone”, “I can deal with being hassled”, and “You should just rely on yourself.”

Three studies that have identified young peoples’ barriers to seeking professional help that may also reflect the processes of individuation and the development of autonomy. Using the Barriers to Adolescents Seeking Help (BASH) questionnaire, Kulh et al. (1997) found that high school students (N = 280) ranked the belief “I should work out my own problems” second out of the 30 barriers that were examined. Using an 11-item version of the BASH, Wilson et al. (2002) found similar results in a sample of 608 high school students. The two items ranked first and second by participating students also related to the belief that adolescents should solve their own problems: “I would solve my problem myself” and “I should work out my own problems”. Similarly, using the Barriers to Engagement in Treatment Screen (BETS; Wilson, Fogarty, & Deane, 2002a), Wilson, Bignell, & Clancy (2003c) found that the item “I have to work out my problems alone” significantly and negatively predicted intentions to consult a GP for physical or psychological problems in a sample of 66 high school students.

Autonomous dimension of personality

Within Studies 1 to 3, the possibility that the help-negation effect is underpinned by a need to maintain autonomy is further supported by students’ strong intentions to seek
help from no-one. It is noteworthy that these studies, with hopelessness, prior help-seeking experience and social problem-solving controlled, as students’ levels of suicidal ideation increased, so did their intentions to seek help from no-one for suicidal thoughts. It is possible that this preference reflects aspects of the autonomous dimension of personality. The autonomous personality dimension is one of two major personality dimensions that have been related to depression and other types of negative emotional response (Beck, Epstein, & Harrison, 1983). It is organised around independence, goal setting, self-determination, and self-imposed obligations, which are notably all tasks with similar purposes to adolescent individuation. Within the context of help-negation, it is possible that autonomous personality traits make seeking help from no-one more attractive to young people for managing distressing or suicidal problems as levels of suicidal ideation increase.

In sum, although we can only speculate about the extent to which the help-negation effect might reflect processes of individuation and autonomy, together, these results reinforce the need to examine the impact of each variable on the help-negation effect in sub-clinical adolescent and older youth samples. The results also highlight several implications for clinical practice and the promotion of appropriate help-seeking in young people. First, prevention programs that encourage appropriate help-seeking, particularly for suicidal thoughts, may be improved by targeting barriers that are related to autonomy, independence, and individuation. Although autonomous problem-solving is commonly seen as a desirable goal for good mental health (e.g., D’Zurilla, 1986), it is important that young people understand that seeking and engaging in appropriate help, particularly professional psychological help, is often the best way to manage distressing personal-emotional and suicidal problems (e.g., Greenberg et al., 2001; Kalafat, 1997; Rudd et al., 1996). Messages that promote appropriate help-seeking need to be integrated into existing social problem-solving programs that are in place across the community (Wilson & Deane, 2001). These messages need to convey the notion that part of being independent and self-directed is knowing the times and circumstances to seek appropriate help and support (e.g., “Standing on your own two feet includes knowing when to lean on others”) (Wilson et al., 2002).
Fears related to seeking professional psychological help

The individuation and autonomy hypotheses suggest reasons that might explain why the help-negation effect occurs for family and why young people might find seeking help from no-one to be attractive. However, these explanations do not address the specific question of why in Studies 1 to 3, the help-negation effect was strong for mental health sources. It is possible that fears associated with professional psychological help-seeking and/or loss of personal control might be factors.

As noted in Chapter 1, an array of fear-based barriers has been found to impede processes of professional psychological help-seeking (see Table A.8, Appendix I). In short, help-seeking fears appear to fall within four general themes: (1) fears about the views and reactions of others within the social network (e.g., Kushner & Sher, 1989; Sawyer et al., 2000); (2) fears about the procedures involved in therapy (e.g., Donald et al., 2000; West, Kayser, Overton, & Saltmarsh, 1991); (3) fears about embarrassment and shame (e.g., Wells et al., 1994; West et al., 1991; Wilson et al., 2003a); and (4) fears about difficulty expressing emotion (e.g., Good, Dell, & Mintz, 1989). For example, Sawyer et al. (2000) found that approximately 5% of the participants in their study reported that they would not seek professional help because they were “Afraid of what people think” (p. 33). Donald et al. (2000) found that fear of confidentiality was the largest barrier to professional help-seeking for up to 31% of the young people who participated in their study. Wells et al. (1994) found that up to 40% of participants were reluctant to seek help because “You were too embarrassed to discuss it with anyone” (p. 161). Wilson et al. (2003c) found that the item “I’m embarrassed to talk about my problems” significantly and negatively predicted students’ intentions to consult a GP for physical and psychological problems. And, Good et al. (1989) found that concern about expressing emotions related to negative attitudes about seeking professional psychological help, and restrictive emotionality predicted decreased likelihood of future professional psychological help-seeking.

There is also speculation that reluctance to seek help for suicidal thoughts may result from an increased need to maintain personal control (e.g., Deane et al., 1999), and perhaps, increased fear of losing personal control when distressed. It is possible that as levels of suicidal ideation increase, young people might become increasingly
focused on retaining control over their destiny, and that this focus involves explicitly rejecting or avoiding appropriate and available help, particularly help from a professional psychological source. For example, students may fear that if they contact a mental health professional for help with their suicidal thoughts, they may risk further loss of control through therapy or hospitalisation (Deane et al., 2001). Within the context of help-negation, it is possible that help-seeking fears and the need for personal control are exacerbated as levels of suicidal ideation increase. If so, these variables may subsequently reduce young peoples’ intentions to seek help for suicidal thoughts, such that help-seeking fears and need for control contribute to the overall strength of the help-negation relationship. Certainly, further research is needed to examine these possibilities in sub-clinical samples. In the meantime, the findings suggest that efforts to increase young peoples’ engagement in mental health services may benefit by strategies aimed at addressing their help-seeking fears. For example, prevention strategies may be improved by providing explicit information to young people about what a consultation with a mental health professional involves, the benefits that might accrue, and the processes involved in solving personal, emotional, and suicidal problems through psychotherapy (Deane, Wilson & Biro, 2002). Providing young people with statistics about the efficacy of professional treatment may also be of benefit (Wilson & Deane, 2001). And, clinical intervention may be more effective with additional emphasis placed on the application of pretherapy preparation procedures (Deane, Spicer & Leathom, 1992).

Hopelessness

This thesis found no evidence that hopelessness could fully explain the help-negation effect in university or high school students. However, the finding that hopelessness moderated the help-negation relationship in an adolescent sample raises several questions for further research. There is a need to clarify the specific elements of hopelessness that are important for strengthening adolescent help-negation and that appear to have little or no effect in older samples. For example, is adolescents’ hopelessness related generally to change in the future? Or, might adolescents’ hopelessness be related specifically to limited help-seeking experience or an egocentric view of the efficacy of appropriate help?
These results also raise several implications for prevention and clinical practice. The possibility that levels of hopelessness might strengthen the help-negation relationship in adolescents highlights a need for clinicians and prevention programs to impart a sense of hope about the help that can be provided from different sources, and particularly, from professional mental health sources. While it is important that all young people have accurate and realistic expectations about the help that professional sources can provide, it is particularly important that they have at least a basic understanding that professional help can actually be helpful. Young people may benefit from education that aims to make mental health care more acceptable and which provides positive examples of appropriate help-seeking for a range of different personal and emotional problems, and within the context of suicide. This may be achieved by educating about the ways in which different professionals can assist with different types of problems (including suicidal problems) and by providing opportunities to rehearse specific components of the professional help-seeking process (Wilson & Deane, 2001). It is possible that professional psychological health care would become more acceptable if it is promoted in different aspects of school and community life and if information is disseminated by methods that are already used by young people (e.g., through peer networks) (Wilson & Deane, 2001). Clinicians can also talk with young people about the benefits of the help they provide for different types of problems as part of their initial session to improve engagement.

Finally, these results highlight several implications for services and outreach. There is a need for health care professionals to provide services that young people can actually feel positive about. Put simply, services and practitioners need to be “youth friendly” (Wilson, Fogarty, & Deane, 2002a). Prevention programs and the success of clinical intervention may be improved by the provision of opportunities for young people to reassess and where necessary, redevelop their attitudes and beliefs about professional help. As noted, young people may also benefit from education about the help-negation process before the relationship is exacerbated by acute suicidal states. Through prevention programs and personal contact with practitioners, a clear message needs to be conveyed to young people, that no problem is insignificant if it causes distress, and that professional help is often a good way to start reducing distress, particularly within the context of suicide (Wilson & Deane, 2001). While this may be done within the practice setting, it may also be done through outreach. There is
evidence that young peoples’ help-seeking behaviours and intentions may be improved through outreach that is as simple as asking students if they would like professional help (e.g., Deane et al., 2001a) or as elaborate as a presentation that targets identified help-seeking barriers (Wilson & Fogarty, 2002). Deane et al. (2001a) found that simply asking 173 high school boys if they would “like to be confidentially approached by your school counselor to talk about how you are feeling?” lead to 39 (22.5%) of these boys, indicating “yes”. Wilson et al. (2003c) conducted a controlled evaluation of a GP outreach program (Building Bridges to General Practice, Wilson & Fogarty, 2002b,c) that aimed to reduce young peoples’ help-seeking barriers and increase their intentions to consult a GP for different problems. The results found that five and ten weeks after the GP presentation, the trial group of sixty-six Year 11 high school students reported significant decreases in their barriers to consulting a GP, and significant increases in their intentions to consult a GP for physical problems and psychological problems (operationalised as personal problems, emotional problems, and suicidal thoughts). These results contrasted with the control group of fifty-six Year 10 students who reported significant increases in their barriers over the same follow-up periods, and no significant change in their intentions to consult a GP for either problem-type across time (Wilson, 2003; Wilson et al., 2003c).

Prior help-seeking experience

This thesis found no evidence that prior help-seeking experience influenced the help-negation effect. However, it is possible that the perceived quality of prior help (rather than the experience per se) may have had a role. There is evidence that negative or unhelpful prior help-seeking experiences might be associated with reduced help-seeking. In their study of prison inmates, Deane et al. (1999) examined the relationship between prior help-seeking experience and future help-seeking intentions. Results found that the perceived quality of prior help was important for help-seeking intentions. Prior “helpful” contact with a mental-health professional was positively associated with intentions to seek help for a personal-emotional problem and suicidal thoughts. The reverse may also be true. If young people view a previous professional helping episode as “unhelpful”, they may be less likely to seek professional help for
any type of problem in the future, and particularly a problem as sensitive as suicidal ideation. This possibility remains for further research.

**Social problem-solving**

Although the preliminary results in Studies 3 and 4 found that help-seeking intentions were significantly associated with students’ total problem-solving capacity, it is noteworthy that in the main analyses, help-seeking intentions were associated with problem-recognition and problem-solving appraisal in the high school sample but not the university sample. While findings from the high school sample are interpreted with caution, there may be two reasons for this difference between samples. The first relates to adolescents’ versus adults’ coping style, and the second, avoidant personality characteristics.

**Coping style**

A variety of researchers have found that strategies used for coping are a function of age differences in the underlying interpretations of the problem or coping situation (e.g., Berg, Klaczynski, Calderone, & Strough, 1994; Blanchard-Fields & Norris, 1994; Lazarus & Folkman, 1984; Sansone & Berg, 1993). According to Frydenberg and Lewis (1993), adolescent coping can be broadly described within three categories: “solving the problem” (proactive use of own social problem-solving skills), “referring to others” (proactive use of help-seeking as a problem-solving strategy), and “non-productive coping” (problem-solving avoidance). In comparison, adult coping may rely less on others and more on self (e.g., Lazarus, 1999; Deane et al., 2002). For example, teachers have suggested that a function of being adult is to solve your problems alone (Wilson & Deane, 2000). Within the context of help-negation, these results suggest that adolescents might consider help-seeking as problem-solving option whereas older young people may not. Thus, it is possible that the university students in Study 3 may not have even considered help-seeking as an option for managing their suicidal thoughts or personal-emotional problems. Additional research is needed to further examine the relationship between problem-solving appraisal and the help-negation effect. Answers to this question may provide information for targeted help-seeking messages for different high-risk age groups.
Future studies may benefit by the inclusion of qualitative methods such as structured interviews in addition to survey methods that measure participants’ current levels of psychological distress. Such research design would allow participants to explain their help-seeking intentions and problem-solving strategies for a range of personal, emotional, and psychological problems which may in turn be mapped to different levels of suicidal ideation and other indicators of mental ill-health. By using a combined qualitative and quantitative approach to examine problem-solving appraisal within the context of the help-negation effect, it may be possible to determine specific points where help-seeking intentions change in relation to problem-solving and psychological distress, and thus, key points for clinical intervention and prevention. In the meantime, appropriate help-seeking should be promoted in all age groups as a useful strategy for solving problems, and particularly, problems that are suicidal in nature (Deane et al., 2002).

Additional theoretical explanations for the help-negation effect

By discounting the role that hopelessness, prior help-seeking experience, and in some populations, problem-solving capacity, may have in explaining the help-negation process, this thesis raises the possibility that the help-negation relationship may be a function of “something about the nature of suicidal ideation [that] acts as a barrier to help-seeking, particularly from mental health professionals” (Deane et al., 2001, p. 10). This possibility is supported to some extent by an inconsistency found between the preliminary and main results in Studies 1 to 3. Within the preliminary results for Studies 1 to 3, students reported that they were significantly more likely to seek help from a mental health professional for suicidal thoughts than for personal-emotional problems (Tables 3.2, 3.7, & 5.2). However, in the main results for each study, when the help-negation hypotheses were examined and students’ levels of suicidal ideation were considered, Studies 1 to 3 found that higher levels of suicidal ideation significantly predicted lower intentions to seek help from a mental health professional and higher intentions to seek help from no-one for suicidal thoughts (Tables 3.4, 3.9, & 5.4). That is, students who were experiencing higher levels of suicidal ideation indicated that they were less willing than others to seek help for suicidal thoughts, and preferred no help at all. (A similar result pattern was found in Study 4, however the Study 4 main results found that the relationship between suicidal ideation and
intentions to seek help from a mental health professional was non-significant for suicidal thoughts). The following section suggests two theoretical possibilities for the way that suicidal ideation might act as a barrier to help-seeking for suicidal thoughts, and particularly from mental health professionals, in sub-clinical samples. The first possibility makes a case for the role of co-occurring psychopathology in the help-negation relationship. The second describes a way in which such psychological distress might influence the help-negation effect when levels of suicidal ideation are non-acute.

**Co-occurring psychopathology**

Since suicidal ideation without other psychological disturbance is rare in young people (Marttunen, Hillevi, Hendriks, & Lonnqvist, 1991), it is possible that the help-negation effect in sub-clinical samples might be explained to some extent by variables that are found in co-occurring disorders such as depression. For example, given that apathy is a common indicator of depression, together with symptoms of anxiety and aggression (Parker, 2002), it is possible that increased levels of apathy, and/or anxiety might influence the help-negation effect in samples with sub-clinical levels of suicidal ideation. As levels of depression increase, young people may experience increased levels of apathy or anxiety, in addition to increased but sub-clinical levels of suicidal thoughts. This implies that even when levels of suicidal ideation are not acute, a young person might experience increased levels of indifference towards help-seeking or increased levels of help-seeking fears. In this example, increased levels of either apathy or anxiety might either explain the help-negation relationship or strengthen it by interacting with suicidal ideation to reduce help-seeking intentions for suicidal thoughts. These possibilities remain for further research.

**Reduced impulse control**

Co-occurring psychological distress might impede appropriate help-seeking for suicidal thoughts through processes of reduced impulse control. For example, there is evidence that as an individual’s distress intensifies, they can lack the capacity to control their impulse to achieve short-term goals in favour of more important long-
term goals (Lazarus, 1999). According to Janis (1982, 1983), high emotional stress or distress can generate cognitive deficits that include: a narrowed generation of solution alternatives; overlooked long-term consequences; inefficient information seeking; incorrect outcome expectancies; and oversimplified decision rules that do not consider relevant factors for choosing an adaptive solution. Thus, as an individual’s distress intensifies, it is possible that cognitive deficits make obvious and short-term problem solution options more attractive than their adaptive long-term alternatives (Mandler, 1982). Within the context of help-negation, a young person who is experiencing increased levels of psychological distress but sub-clinical levels of suicidal ideation, might also experience reduced impulse control. If so, the help-negation effect might reflect the young person’s attempt to reduce their immediate distress through avoidance or escape behaviour (i.e., avoiding help or seeking help from no-one) rather than by seeking appropriate help for long-term problem solution. Again, this question remains for further research.

Conclusions and future directions

The results of these studies underscore the robust nature of the help-negation process for suicidal thoughts in several sub-clinical samples. It is noteworthy that even with the very low levels of suicidal ideation reported by the high school students in Study 4, a significant help-negation effect was still found for one help-source (i.e., family). Findings across studies show that help-negation is not merely the result of hopelessness, prior help-seeking experiences, or aspects of poor social problem-solving but suggest that other variables might explain or contribute to the help-negation effect in sub-clinical samples. Together, the findings have also raised a number of hypotheses for examination in subsequent studies. Ultimately, there is a need for prospective behavioural studies that systematically examine each possible explanation for the help-negation effect. In the mean time however, cross-sectional designs as were used in this series of studies, are needed to identify the potential moderating variables in the help-negation process. Immediate studies should address the following questions:
Chapter 6

- What factors influence the development of different help-seeking preferences for different problem-types?

- Is the help-negation effect a function of individuation and the development of autonomy?

- What aspects of hopelessness or associated variables might account for a moderation effect between help-negation and hopelessness in high school students but not university students?

- Might the perceived quality of prior help account for the help-negation effect?

- Does social problem-solving capacity explain help-negation in more representative adolescent samples?

- Do suicidal young people negate professional psychological help because they are fearful of treatment or feel the need to maintain personal control?

- Is help-negation a state or trait phenomenon?

- Could help-negation be a function of personality characteristics such as autonomy?

- Might the help-negation effect be related to coping style? And,

- Does the help-negation effect reflect levels of co-occurring psychopathology or reduced impulse control?

Answers to these questions may make it possible for clinicians and practitioners who are involved in prevention to better target interventions to reduce the impact of suicidal ideation on help-seeking intentions. Through targeted interventions and prevention strategies, it is possible that appropriate help-seeking may become a more attractive option for young people when they are distressed or suicidal.
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Appendix I

Research Summaries

- **Suicidal ideation**
  - Australian Studies, Table A.1
  - International Studies, Tables A.2 – A.6

- **Help-seeking patterns**
  - Table A.7

- **Help-seeking barriers**
  - Table A.8

- **Social problem-solving and suicide**
  - Table A.9
Please see print copy for Appendix 1
Appendix II


Please see print copy for Appendix 2
Appendix III

Study 1:
Establishing the Help-Negation Effect in Sub-Clinical Samples

- Protocol
  - Information Sheet
  - Consent Form
  - Debrief Sheet
  - Research Survey

- Data Screening and Assumption Tests
  - GHSQ Frequencies, Table A.10
  - SIQ Frequencies, Table A.11

- Wilcoxon Z Scores, Table A.12
Please see print copy for Appendix 3
Appendix IV

Study 2: Establishing the Help-Negation Effect in Sub-Clinical Samples

- Protocol
  - Information Sheet
  - Consent Form
  - Debrief Sheet
  - Research Survey

- Data Screening and Assumption Tests
  - GHSQ Frequencies, Table A.13
  - SIQ Frequencies, Table A.14

- Wilcoxon Z Scores, Table A.15
Please see print copy for Appendix 4
Appendix V

Study 3: Help-negation, Problem Recognition, and Problem-Solving Appraisal in Sub-Clinical Populations

• Protocol
  – Information Sheet
  – Consent Form
  – Debrief Sheet
  – Research Survey

• Data Screening and Assumption Tests
  – GHSQ Frequencies, Table A.16
  – SIQ Frequencies, Table A.17

• Wilcoxon Z Scores, Table A.18
Please see print copy for Appendix 5
Appendix VI

Study 4:
Help-negation, Problem Recognition, and Problem-Solving Appraisal in Sub-Clinical Populations

• Protocol
  – Information Sheet
  – Consent Form
  – Research Survey

• Data Screening and Assumption Tests
  – GHSQ Frequencies, Table A.19
  – SIQ Frequencies, Table A.20

• Wilcoxon Z Scores, Table A.21
Please see print copy for Appendix 6