This is the author version of an article published as:


© 2021. This is an Accepted Manuscript of an article published by Taylor & Francis in Journal of Applied School Psychology on 26/06/2021, available online https://doi.org/10.1080/15377903.2021.1941470

It is deposited under the terms of the Creative Commons Attribution-NonCommercial License (http://creativecommons.org/licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited.
Barriers to universal mental health screening in schools: The perspective of school psychologists

John R Burns\textsuperscript{1,2} and Ronald M Rapee\textsuperscript{1}.

1. Centre for Emotional Health, Macquarie University, Sydney, AUSTRALIA

2. Shore, North Sydney, AUSTRALIA
Abstract

Many young people with mental disorders are not identified until some years after the first onset of symptoms and then frequently do not receive professional intervention. One promising strategy to better identify these young people is mental health screening in schools. Despite a growing literature on the benefits of school-based screening, it remains a relatively uncommon practice and little is known about the practices of those schools that do screen. Moreover, the barriers that prevent schools from screening are not well understood. This study reports on the perceptions of school psychologists about universal mental health screening in schools regarding the prevalence of screening; the practices within schools that do screen; and the perceived barriers to implementing screening. Results indicated that screening remains uncommon, with only 14.8% of psychologists working in schools that screened in the previous 12 months. The most significant barriers to screening related to being adequately resourced to implement programs, and particularly concerns about how to follow-up students identified as being at-risk. Despite these barriers, school psychologists endorsed the potential benefit of screening and reported being likely to run screening programs if perceived barriers could be reduced.

Keywords: screening; mental health; early intervention; child; adolescent
Impact and Implications statement

- Universal mental health screening in schools remains uncommon.
- The main perceived barriers relate to adequate resources – partly in terms of available time - and to management of at-risk students.
- Despite these barriers, school psychologists see school-based screening as useful for student wellbeing.
Introduction

Mental disorders affect a substantial minority of young people (Lawrence et al., 2015; Merikangas et al., 2010) and there is some evidence that their prevalence has been increasing in recent years (Sadler et al., 2018; Twenge, Cooper, Joiner, Duffy, & Binau, 2019). Of greatest concern, many young people with symptoms of mental disorders are not receiving professional help (Costello, He, Sampson, Kessler, & Merikangas, 2014; Lawrence et al., 2015). When help for a mental disorder is sought, this often doesn’t occur until many years after onset (McGorry, Purcell, Goldstone, & Amminger, 2011). Mental health screening in schools has been suggested as one strategy to more efficiently identify young people at risk of mental disorders and provide them with relevant help earlier in life (Humphrey & Wigelsworth, 2016; Stiffler & Dever, 2015). The case for universal mental health screening in schools rests on a number of key arguments:

1. **Suitable screening instruments are available:** Over the past 25 years there have been considerable advances in the quality and quantity of universal screening instruments suitable for use in schools. The breadth and status of these tools has been evaluated in detail elsewhere (Levitt, Saka, Romanelli, & Hoagwood, 2007; Stiffler & Dever, 2015). These reviews outline the evidence-base for a range of validated instruments that cover different levels of screening (universal, selective, and indicated), a variety of student ages, and a variety of informants (parents, teachers and self-report).

2. **Young people generally do not seek help of their own volition:** Many studies over the past two decades have revealed that young people are reluctant to seek help for mental health problems (for example, Chan & Quinn, 2012; Yap, Reavley, & Jorm, 2013). The reasons for this reluctance include perceived stigma
and embarrassment of seeking help, failure to recognize a need for help (i.e., poor mental health literacy), a preference for self-reliance, and previous bad experiences with mental health professionals (Gulliver, Griffiths, & Christensen, 2010; Rickwood, Deane, Wilson, & Ciarrochi, 2005). Hence society needs to proactively ensure that young people at risk of - or already experiencing – a mental disorder are identified and provided with appropriate treatment.

3. **Parents and teachers are not always competent to identify and act:**

The ability of adults to correctly recognize mental disorders in young people is limited. One national study in the United States, involving 1,393 adults, found that only around 59% of the sample could correctly identify depression and 42% could correctly identify ADHD when presented with case vignettes (Pescosolido et al., 2008). Parents don’t usually know when their children are self-harming (Mojtabai & Olfson, 2008), nor do they adequately understand the value of encouraging professional help-seeking for young people (Jorm, Wright, & Morgan, 2007). Similarly, teachers report a lack of experience and training in relation to students with mental health concerns (Reinke, 2011). For example, Scott and colleagues found that less than half the students identified by diagnostic interview to have a mental disorder were identified by school professionals (Scott et al., 2009). Similarly, in a sample of elementary students, Cunningham and Suldo (2014) found that teachers could only identify approximately half of the students who were reporting at-risk levels of anxiety and depression.

4. **Help is available for at-risk students:** According to the World Health Organization one necessary condition to be met before screening is carried out is availability of accepted treatment for those identified with a recognized disease (Wilson & Jungner, 1968). In the case of mental disorders, a wide range of group
and online programs exist that may be offered within schools (Calear & Christensen, 2010; Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017) and many communities also have access to external services that provide appropriate intervention (Weisz & Kazdin, 2010).

Surprisingly, despite a strong case for the potential value of universal screening in schools, screening remains uncommon. For example, Romer and McIntosh (2005) found that only 2% of a sample of 2000 American public schools screened all their students while 7% screened most of their students for mental health problems. Foster and colleagues (2005) reported only 15% of public K-12 schools in the United States carried out some form of school-wide screening for behavioral and emotional problems, while a more recent survey of over 400 school administrators in the US found that 12.6% of K-12 schools or districts carried out universal screening (Bruhn, Woods-Groves, & Huddle, 2014). The reasons schools are reluctant to carry out universal screening are not well understood but have been described as falling within two broad domains: (1) practical challenges and measurement selection, and (2) misconceptions and concerns (Siceloff, Bradley, & Flory, 2017). In relation to practical and measurement concerns, proposed barriers include finding contextually and developmentally appropriate screening instruments; having appropriately trained and available personnel; and having adequate resources to collect data and implement intervention. In relation to misconceptions and concerns, the major proposed barriers relate to ‘buy-in’ from major stakeholders, primarily teachers and parents.

Few studies have empirically evaluated barriers to school-based screening. In a trial of school-based suicide screening, Hallfors and colleagues (2006) found that participating schools were concerned by the large number of students (29%) deemed at high enough suicide risk to require follow-up. Moreover, they reported that schools
found the logistics of following up identified students to be arduous; that many of those student identified were difficult to locate as they were truanting; and then of those students who were individually followed up, many were only assessed to be at low to moderate risk. One study found that teachers refused to complete the chosen screening tool (the Strengths and Difficulties Questionnaire) because of the amount of time taken for completion (Lane, Kalberg, Parks, & Carter, 2008). The most direct study into barriers for screening comes from a study by Bruhn and colleagues (2014) who surveyed school and district level administrators on screening practices in their schools. The most frequent reason for not employing screening (by 37% of the sample) was lack of awareness of screening measures, followed by lack of adequate funds. Given that these data were collected from school administrators, it is possible that these barriers are not shared by mental health professionals working in schools. Hence, the current study aimed to investigate the perspectives of school psychologists towards universal mental health screening practices. More specifically, this study sought to investigate how widespread mental health screening is in Australian schools; the practices followed by schools that have screening programs; and the barriers perceived by psychologists to the implementation of screening programs in schools. Based on the limited evidence, we predicted that few schools would regularly implement screening and that concerns about time, logistics, and resources, rather than lack of knowledge would be the main perceived obstacles to implementation.

**Method**

**Participants**

Participants in this study were recruited through three overlapping avenues: (1) email invitation to all members of the Australian Psychological Society’s (APS) Psychologists in
BARRIERS TO MENTAL HEALTH SCREENING

Schools Interest Group (approximately 600 members); (2) advertisement on the APS website; and (3) advertisement in the Australian Psychologists in Schools Facebook group. From an original sample of 191 responses, 22 participants were removed on the basis that they did not provide any information beyond their demographic details, leaving a final sample of 169 participants. The mean age was 45.6 years (range 25 to 76 years) and most (83%) were female. Participants had been working in schools on average for 13.5 years (SD = 11.5). Half of respondents were working full-time in the school sector, 43.5% were part-time and 6.5% were not currently working in schools. Respondents were employed across the three sectors of the Australian education system – government (38.6%), catholic (20.5%) and independent (40.9%) schools. By way of comparison, the Australian Bureau of Statistics (ABS) reports that nationally 65.7% of students are enrolled in government schools, 19.7% in catholic schools and 14.6% in independent schools (Australian Bureau of Statistics, 2018).

Respondents came from all states and territories across Australia, although the majority came from Australia’s three largest states - New South Wales (47.4%), Victoria (26.9%) and Queensland (13.1%). Most participants represented schools in suburban areas (58.8%), with 15.3% coming from inner-city schools and 26% coming from rural/regional schools.

Measures

Data were obtained from a survey specifically created by the authors for this study. Questions were devised in part by reference to barriers to screening identified in the literature, and in part informed by the authors’ own experiences of school screening. A draft of the survey was sent to some practicing school psychologists with some minor revisions made on the basis of their feedback. The survey was administered via the online survey tool SurveyMonkey ( surveymonkey.com ). The survey was structured into four sections. Section 1 sought demographic information about participants. Section 2 asked whether participants had
run a school-based mental health screening program during the preceding calendar year, based on the following definition of screening:

*the systematic assessment of all students within a given class, grade, school or school district on social/emotional/behavioral indicators of mental health functioning with a view to initiate further assessment and intervention for those identified as at-risk* (adapted from Ikeda, Neessen & Witt, 2008, p. 113).

Section 3 was only completed by participants who had screened in the previous year. It contained a series of questions to elicit information about the specific screening practices used in their school(s). Some examples of questions asked are given below.

*In your school, who do you screen for information about a student’s mental health: (tick as many as apply):*

- We screened students about their own mental health
- We screened teachers about their students’ mental health
- We screened parents about their children’s mental health

*What type of cohort did you screen? Indicate the largest relevant group?*

- All students in a class
- All students in a grade
- All students in a school
- All students in a school district

*What was the primary action taken by your school in response to students who were identified as at-risk by your screening? (choose one only)*

- Identified students were individually assessed by our school psychologist/mental health professional
Identified students were individually assessed by wellbeing/pastoral care teachers
Identified students were referred by the school to a mental health professional/clinic outside the school
Identified student’s parents were alerted and advised to seek further assessment
Identified students were directed into school-based group program
No action was taken for identified students

Section 4 was completed by all participants and asked about their perceptions of barriers to universal screening in schools. They were presented with a list of potential barriers identified in the literature and asked to determine the degree to which they believed these factors acted as barriers to implementing screening programs in their schools (see Table 2 for identified barriers). Section 4 also asked some more general questions about participants’ views on school-based screening, such as whether they believed it to be a useful strategy and whether they would be likely to run a screening program if barriers could be addressed.

Results

Screening prevalence and practices

Within our sample, 14.8% (n = 25) of participants said that in a school where they worked there had been a universal mental health screening program in the preceding calendar year. Screening programs were most commonly initiated by school psychologists (45.5%), followed by the school executive (31.8%), with other less common options including teachers/wellbeing coordinators¹ (13.6%) or external agencies, such as universities or mental health services (9.1%). Internet-based survey tools were the most common form of

¹ In Australian schools, a Wellbeing Coordinator is a usually a middle or senior management level position held by a teacher with oversight of wellbeing programs within the school.
administration method, used by 73% of respondents, while a smaller number of schools (27%) used pencil and paper format. In schools that screened, almost one third (29%) had screened more than five times, 20% had screened 3-5 times, and half had only screened once or twice. Most schools (91%) ran screening on an annual basis, with 9% reporting screening once per school term (i.e., quarterly). Most schools (88%) screened students directly, with far fewer schools screening teachers or parents (16% for both cases) for information about students. School grades most frequently screened were Grades 7-9 (all by more than 50% of the subsample), followed by Grades 10-12 (by 40% or more of the subsample). The grades least frequently screened were K-2 (12%). The most common difficulties screened for were general emotional distress (64% of sub-sample), stress/anxiety (60%) and risk factors (52%) while less than 10% of schools screened for trauma or externalizing symptoms (including ADHD, Conduct Disorder or substance use). Administration of screening was most commonly done by teachers, while scoring, analysis and follow up more commonly were done by the school psychologist (Table 1).

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Administration</th>
<th>Scoring</th>
<th>Analysis</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist</td>
<td>3 (14)</td>
<td>8 (38.1)</td>
<td>12 (54.5)</td>
<td>11 (50)</td>
</tr>
<tr>
<td>Teacher</td>
<td>16 (76.2)</td>
<td>2 (9.5)</td>
<td>3 (13.6)</td>
<td>3 (13.6)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (9.4)</td>
<td>11 (52.4)</td>
<td>7 (31.8)</td>
<td>8 (36.4)</td>
</tr>
</tbody>
</table>

The primary action taken by schools in response to students who were identified as at risk was further assessment by the school psychologist (48%) or by school wellbeing teachers (24%) and in 10% of cases identified students were directed into school-based group programs. No respondents indicated that the primary action taken for students identified as at
risk was referral to community-based services nor to notify the student’s parents. Sixteen percent of the sample indicated that no action was taken for students identified as at-risk. Two thirds (65%) of respondents rated their programs as either very or partially successful, while one third (32%) rated their programs as either partially or very unsuccessful.

Barriers to mental health screening

Table 2 lists the proportion of the sample endorsing the various barriers. Issues around lack of time and resources were the most frequently endorsed, while concerns about acceptance and lack of responsibility were least endorsed.

Table 2
Barriers to screening

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree/Agree n (%)</th>
<th>Neutral n (%)</th>
<th>Disagree/Strongly Disagree n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I couldn’t cope with a flood of more referrals from screening</td>
<td>103 (65.6)</td>
<td>20 (12.7)</td>
<td>34 (21.7)</td>
</tr>
<tr>
<td>I don’t have enough time to implement a mental health screening program</td>
<td>92 (58.6)</td>
<td>20 (12.7)</td>
<td>45 (28.7)</td>
</tr>
<tr>
<td>I would be concerned about how to follow-up students who are identified as at-risk by a mental health screening program</td>
<td>88 (55.3)</td>
<td>12 (7.5)</td>
<td>59 (37.1)</td>
</tr>
<tr>
<td>I don’t know how/I’ve never been taught how to run a screening program</td>
<td>72 (46.2)</td>
<td>16 (10.3)</td>
<td>68 (43.6)</td>
</tr>
<tr>
<td>It would cost too much/ I don’t have money for mental health screening</td>
<td>64 (40.5)</td>
<td>42 (26.6)</td>
<td>52 (32.9)</td>
</tr>
<tr>
<td>The school executive wouldn’t approve mental health screening</td>
<td>56 (35.4)</td>
<td>51 (32.3)</td>
<td>51 (32.3)</td>
</tr>
<tr>
<td>Students identified as at-risk through mental health screening could be stigmatized</td>
<td>43 (27.4)</td>
<td>19 (12.1)</td>
<td>95 (60.5)</td>
</tr>
<tr>
<td>The parent body wouldn’t accept mental health screening</td>
<td>24 (15.2)</td>
<td>52 (32.9)</td>
<td>82 (51.9)</td>
</tr>
</tbody>
</table>
Chi-square analyses were carried out to examine potential differences in the view towards school-based screening across different groups of school psychologists. Separate analyses were carried out to investigate differences depending on years working in schools (≤10 years vs. 11+ years), and screening status (those who did vs those who didn’t screen in the previous 12 months). To minimize the chance of Type 1 error, a significance level of 0.01 was adopted. Only one analysis reached significance, indicating a significant association between years in schools and the belief ‘there is not enough time to screen’: χ² (2, \( N = 143 \)) = 12.93, \( p = .002 \). To break down this effect, additional partitioned chi-square tests were performed on SA/A + N x D/SD and SA/A x N + D/SD. A significant result was returned for SA/A + N x D/SD - χ² (1, \( N = 143 \)) = 5.71, \( p = .02 \) – indicating that significantly more participants (66.7%) in the ≤10 years group agreed or were neutral towards the sentiment that ‘there is not enough time to screen ’compared to those in the 11+ years group (46.8%).

Table 3 displays participants’ responses concerning their likelihood to screen if barriers could be reduced, with the majority stating either ‘definitely ’(39.6%) or probably ’(35.8%).

<table>
<thead>
<tr>
<th>Perception</th>
<th>≤10 years</th>
<th>11+ years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student body wouldn’t accept mental health screening</td>
<td>24 (15.2)</td>
<td>52 (32.9)</td>
<td>82 (51.9)</td>
</tr>
<tr>
<td>Mental health screening isn’t a school’s responsibility</td>
<td>12 (7.7)</td>
<td>33 (21.2)</td>
<td>111 (71.2)</td>
</tr>
</tbody>
</table>
Table 3

*If the barriers to screening were reduced, how likely would you be to run mental health screening of the students in your school?*

<table>
<thead>
<tr>
<th></th>
<th>Definitely n (%)</th>
<th>Probably n (%)</th>
<th>Possibly n (%)</th>
<th>Definitely Not n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>63 (39.6)</td>
<td>57 (35.8)</td>
<td>36 (22.6)</td>
<td>3 (1.9)</td>
</tr>
<tr>
<td><strong>Years of Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤10</td>
<td>33 (40.7)</td>
<td>30 (37.0)</td>
<td>18 (22.2)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>11+</td>
<td>23 (35.9)</td>
<td>21 (32.8)</td>
<td>18 (28.1)</td>
<td>2 (3.1)</td>
</tr>
<tr>
<td><strong>Screen?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Screen</td>
<td>49 (35.5)</td>
<td>51 (37.0)</td>
<td>35 (25.4)</td>
<td>3 (2.2)</td>
</tr>
<tr>
<td>Screen</td>
<td>14 (66.7)</td>
<td>6 (28.6)</td>
<td>1 (4.8)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

Note: No Screen = did not screen within the last year, Screen = screened with the last year

Chi square analysis was used to investigate where responses varied across different participant groups. No significant differences were found based on length of time working in schools - $\chi^2(3, N = 145) = 3.43, p = .33$. However, a significant difference was found between those who did vs didn’t screen in the preceding year: $\chi^2(3, N = 159) = 8.70, p = .034$. Post-hoc chi square analysis using partitioning found that those who had screened in the previous year were significantly more likely to endorse the “definitely” than “possibly” response than the group who hadn’t screened: $\chi^2(1, N = 99) = 6.74, p = .009$.

About 75% of respondents believed that the principle of mental health screening is ‘extremely’ or ‘very’ important for students’ wellbeing (Table 4). Chi-square analysis found that views on the usefulness of screening did not differ according to length of service, $\chi^2(2, N = 145) = 1.90, p = .39$; nor screening status $\chi^2(2, N = 159) = 3.66, p = .16$. 
Table 4

How useful do you think the principle of mental health screening is for student’s wellbeing?

<table>
<thead>
<tr>
<th></th>
<th>Extremely/Very n (%)</th>
<th>Somewhat n (%)</th>
<th>Not so/not at all n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>117 (73.6)</td>
<td>37 (23.3)</td>
<td>5 (3.1)</td>
</tr>
<tr>
<td>Years of service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤10</td>
<td>61 (75.3)</td>
<td>19 (23.5)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>11+</td>
<td>44 (68.8)</td>
<td>17 (26.6)</td>
<td>3 (4.7)</td>
</tr>
<tr>
<td>Screened?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Screen</td>
<td>98 (71.0)</td>
<td>35 (25.4)</td>
<td>5 (3.6)</td>
</tr>
<tr>
<td>Screen</td>
<td>19 (90.5)</td>
<td>2 (9.5)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

Note: No Screen = did not screen within the last year, Screen = screened with the last year

Discussion

The purpose of this study was to investigate the views and experiences of school psychologists regarding three important aspects of mental health screening – the prevalence of screening programs, the practices within those programs, and the barriers to implementing screening programs. Within our sample, only around one in seven (14.8%) school psychologists reported that they had worked in a school in which a mental health screening program had been conducted in the previous calendar year. This prevalence is similar to two recent estimates from the United States (12-15%) (Bruhn et al., 2014; Foster et al., 2005). Given cogent arguments for the value and importance of school-based screening (Humphrey & Wigelsworth, 2016) and its potential role in combatting the low rates of help-seeking
among youth with mental health problems (Husky et al., 2011), the rates of screening are disappointingly low. Among those schools that did engage in screening (n = 25), only around half conducted screening on more than two occasions – in other words, only around 7% of the schools in our sample appeared to maintain a regular screening regime. Considering the developmental nature of mental health disorders in young people, there is a sound case for screening on a frequent periodic basis. Determining the most appropriate frequency for screening, however, will depend on various factors. In light of their finding that mental health risk remains quite stable from Grade 8 through Grade 11, Dowdy and colleagues (2014) take the view that screening students regularly throughout the academic year is unnecessary. The age of the students and the difficulties being screened for will also have some bearing on frequency of screening. One final consideration is the logistics of sustainability – a school/district should only commit to screen at a frequency that is sustainable across time given resources available to implement screening and manage identified students. On balance, we encourage schools/districts to develop screening systems that allow for screening on an annual basis when possible.

Our data raised some questions about the quality of the screening that did occur. For example, in response to a question asking respondents to briefly describe the screening they engaged in, several responses suggested non-empirically-validated measures (e.g., a “self-created school belonging questionnaire to assess level of peer connectedness”). None-the-less, some interesting trends emerged among schools that engaged in screening. Unsurprisingly, most schools used internet-based methods of data collection in preference to pencil and paper methods. It was also evident that the focus of screening is on students as reporters of their mental health status in preference to teacher or parent reports. Evidence points to quite different perspectives on a young person’s symptom status according to different respondents (Miller, Martinez, Shumka, & Baker, 2014; Orchard, Pass, Cocks,
Chessell, & Reynolds, 2019) suggesting that complementing student reports with teacher and/or parent reports may be of value, but of course is much harder to organize. Our data showed that screening is more common following the elementary school years. Screening in the adolescent period is certainly important, as many mental health problems, including depression, social anxiety and eating disorders increase during adolescence (Merikangas et al., 2010; Rapee et al., 2019). However, many mental disorders, including certain anxiety disorders and externalizing difficulties are prevalent during childhood (Lawrence et al., 2015; Merikangas et al., 2010) and appropriate screening during these earlier years has a critical role to play in mental health promotion (Deighton et al., 2012). Within our sample, there was a strong preference to screen for particular types of signs, most notably general emotional distress, anxiety/stress, mental health risk factors, and to a lesser degree, depression/mood symptoms. Conversely, screening for externalizing problems (ADHD, conduct/behavioral disorders, substance abuse) was relatively uncommon in our sample. Screening for internalizing disorders is logical given that they are, by definition, ‘internal’ and therefore less apparent for teachers and parents to observe. However, a strong case exists for schools to include measures for screening for externalizing disorders based on evidence of direct developmental pathways from childhood externalizing disorders to adult disorders (for example, Reef, Diamantopoulou, van Meurs, Verhulst, & van der Ende, 2011) and strong findings on the long-term cost benefits of prevention and early intervention for externalizing disorders (Nystrand, Hultkrantz, Vimefall, & Feldman, 2020).

The disappointingly low rates of school-based screening identified within our study can begin to be understood in light of a range of barriers. The primary theme that emerged is that school psychologists feel under-resourced to carry out screening programs. This was evidenced in the number of psychologists who said they couldn’t cope with referrals arising from screening (65.6%), didn’t have enough time to run screening programs (58.6%), and...
were concerned that screening would cost too much (40.5%). Overcoming resource barriers is a very complex issue that requires attention from the very highest levels. Screening is resource-intensive at the individual school level but has the potential to be broadly cost-effective at the societal level (Hamilton et al., 2017; National Mental Health Commission, 2020). Therefore, the incentive for schools to engage in regular mental health screening must come from the governmental level and must be accompanied by adequate resourcing. Future research that is able to demonstrate the ultimate cost-savings to government from school-based screening is needed to encourage policymakers to see this as a valuable direction to pursue. Unfortunately, there is not yet strong data to demonstrate the cost effectiveness of screening and case-identification programs for the individual schools who run screening. Some have sought to document the costs of screening programs (Chatterji, Caffray, Crowe, Freeman, & Jensen, 2004; Kuo, Stoep, McCauley, & Kernic, 2009), although such costs will vary greatly depending on the screening methods, instruments and follow-up plans used. The argument that can be made is that schools already expend considerable resources on students with mental disorders (including teacher time spent managing students with emotional and behavioral disorders; following up on truancy; school counselling/psychology programs; costs associated with staff stress/sick leave related to managing difficult students; and services provided by school nurses/health centers) and therefore any costs incurred in the early identification and treatment of these students are likely to reduce the costs of managing them at a later date if/as their disorders become more apparent.

A critical issue for health screening is the availability and provision of appropriate help for those identified as at risk (Wilson & Jungner, 1968). Therefore, it was concerning that more than half our respondents reported a lack of clarity about how to follow up identified students. Among schools that engaged in screening, the main mechanism of follow-up was within the school, either by the school psychologist or by a wellbeing teacher. Naturally, this
strategy has the effect of adding further burden to limited school-based mental health resources. Surprisingly, no respondents indicated that identified students were referred to community-based services nor that parents were alerted. Moreover, no action or follow-up was reported for students identified as at-risk among 16% of our sample who reported engaging in screening. These data indicate that, even when screening does occur, inadequate attention is given to follow-up strategies post-screening. Providing schools with strategies to deliver school-based screening must include processes to develop clear pathways to care, with schools reaching out to develop pathways into the community, and community-based mental health services reaching in to strengthen pathways from schools. One promising model to improve the pathway of care from school to community care has been offered by Wei and colleagues (Kutcher & Wei, 2013; Wei, Kutcher, & Szumilas, 2011) who highlight the related roles of teachers, school-based health professionals, parents and community based mental health providers in collaboratively caring for young people. One very important component of this model (Model Component 5 – Establishment of the pathway into care and referral mechanisms) brings together “go-to” educators in schools with local mental health providers to collaboratively identify strategies to promote linkages between schools and community-based services. In fact, one of the most practical things that any school can do in establishing a screening program is to make direct connections with the local health providers, with whom they can share the responsibility of ensuring follow-up.

Providing school staff with training to run screening programs is also likely to be valuable, given that almost half of our sample of school psychologists indicated that they don’t know how/have never been taught how to run a screening program. A total screening package would include not only guiding toward empirically validated screening instruments, but also providing instruction on the processes of promoting screening to relevant stakeholders, gaining consent, the mechanics of administration, clear guidelines on scoring
and cut-offs, and most importantly, methods to facilitate follow-up assessment and treatment for those identified. A range of resources are available for school psychologists seeking to better educate themselves on the implementation of mental health screening in schools. Most comprehensive is Siffler and Dever’s (2015) book *Mental Health Screening at School: Instrumentation, implementation and critical issues*, while more accessible and practical resources on implementing screening programs are provided by Dever, Raines and Barclay (2012) and Burns and Rapee (2021). A central question when considering establishing a screening program is the extent to which such a practice would be considered acceptable by key stakeholders – primarily school management, parents and students. Our sample was undecided about the degree to which they believed the school executive would approve of screening, with approximately one third believing they would approve, one third believing they would not and one third remaining neutral. In relation to parents, only 15% believed that the parent body would not accept screening, which is in accord with other studies (Fox, Eisenberg, McMorris, Pettingell, & Borowsky, 2013; Soneson et al., 2018). Similarly, school psychologists’ perceptions of student approval are consistent with that of students themselves, who have expressed strong acceptance for screening (Robinson et al., 2011). From a practical point of view, we strongly encourage school psychologists to be transparent with students and parents regarding the aims and processes of screening. Screening can be very neatly dovetailed within broader mental health literacy programs for parents and students, as advocated within the previously described School-Based Pathway to Care model. Overall, despite the barriers and concerns expressed by school psychologists, the sample in this study very strongly endorsed the in-principle value of mental health screening in schools (75% seeing it as extremely or very useful) and the likelihood of running programs if the perceived barriers were reduced.
Limitations and further research

The participants for the current study comprised a convenience sample of school psychologists who were recruited through a specialist professional society. As such, they did not represent the full population of professionals who are responsible for the delivery of mental health services within schools. Psychologists from the independent school system (which is typically better resourced) were overrepresented in our sample (40.9% compared with a national average of 14.6%) and screening was more likely within the independent school sector. Therefore, even the low figure of 15% school screening in our survey may overestimate the true, national prevalence across Australian schools. Due to the low prevalence of school-based screening, the data related to conducting school-based screening was derived from an especially small sample. The fact that the data were based on retrospective report and were not independently verified might raise some questions over its validity. Finally, the fact that this study was conducted within the Australian system and that educational systems around the world are so varied means that conclusions cannot necessarily be generalized across all countries.

Conclusions

School-based mental health screening remains an under-utilized approach to the identification of young people at risk of developing mental disorders. This is despite the fact that school psychologists see great promise in the use of screening and generally believe that other key stakeholders would raise few objections to implementing such programs. The biggest barrier to school psychologists running mental health screening is a concern of not being adequately resourced. To some degree this relates to not having the time or money to screen, which reflects the fact that school screening is not currently a priority within educational policy. An even greater barrier to screening is concern about how to follow-up
identified students. This concern appears driven by school psychologist seeing themselves as holding primary responsibility for follow-up of identified students while simultaneously overlooking the role of parents and community-based mental health services in follow-up. There is also a sizeable percentage of school psychologists who believe they don’t have the necessary skills to run mental health screening. Additional training for school personnel in how to run screening programs appears warranted as one mechanism to increase uptake of screening in schools. A ‘total package’ that not only outlines the logistics of screening, but that gives specific attention to pathways to care in the community is likely to not only reduce the burden on school personnel but see a better outcome for young people.
References


Burns, J.R. and Rapee, R.M. (2021) From barriers to implementation: Advancing universal mental health screening in schools, Manuscript submitted for publication


doi:[http://dx.doi.org/10.1016/j.jad.2012.11.014](http://dx.doi.org/10.1016/j.jad.2012.11.014)