ORIGINAL PAPER

The Influence of Stigma and Trust in Young People Seeking Support for Their Own or a Friend's Symptoms: The Role of Threat Appraisals

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Abstract

Background Stigma and trust influence how adolescents seek support for mental illness, though it is unclear how these influence their decisions to approach a range of potential sources of support. Moreover, even less is known about the ways in which these issues are related when a friend discloses symptoms of mental illness.

Objective The study's aims were to understand the role of stigma, trust, and threat appraisals in adolescents' support seeking when exposed to their own, or to a friend's, symptoms of mental illness.

Method A vignette-based study comparing reports of support (friends, parents, teachers, professionals, and online) was completed with reference to either (i) experiencing symptoms of mental illness or (ii) having a friend disclose these types of symptoms. Two hundred and fifty adolescents (M = 12.75 years) answered questions pertaining to stigma (public and self), trust levels, threat appraisals, and support seeking.

Results When dealing with their own symptoms, threat accounted for 4.8 and 2.5% of the variance when seeking support from parents and professionals, respectively. Self-stigma accounted for 2.4% of variance when seeking support from parents and 0.8% of variance when seeking support from professionals. Trust moderated the association between threat and the use of online support. When responding to a friend's disclosure, higher levels of public-stigma were associated with lower support seeking from friends, parents, and professionals.

Conclusions This study showed a distinction in how adolescents deal with their own or a friend's symptoms of mental illness, and what resources they choose to ask for support from. Self-stigma, threat, and trust levels were particularly relevant when experiencing their own symptoms, while dealing with a friend's disclosure was related to levels of public-stigma.

Keywords Stigma · Trust · Young people · Support seeking · Disclosure

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Introduction

One in five adolescents aged 11–14 years old experience symptoms of mental illness (Deighton et al., 2018). At the same time, young people experiencing these symptoms report difficulties accessing and seeking support (Collinson, 2017; Naughton et al., 2018; Velasco et al., 2020). Chandra and Minkovitz (2006) concluded that young people's top three barriers to accessing and seeking support were the possibility of experiencing mental illness stigma, a reluctance to talk about their symptoms, and a lack of trust in the sources of support available. In their qualitative study, Pimenta et al. (2021) also identified the importance that young people placed on trusting others when considering the disclosure of symptoms of mental illness. As young people are most likely to trust their friends and to feel comfortable disclosing symptoms of mental illness to them (Camara et al., 2017; Sears, 2020), it is important to understand how they seek support for both their own symptoms, and how they seek support when a friend discloses symptoms to them. Thus, this study aims to better understand young peoples' support seeking, and specifically their use of available sources of support, when dealing with their own or with a friend's symptoms of mental illness.

Transactional Theory of Coping (TTC)

Dealing with mental illness can be stressful (Galaif et al., 2003). The Transactional Theory of Coping (TTC: Lazarus & Folkman, 1984) describes how an individual deals with stressful events and represents a useful way to understand the processes involved when young people are seeking support. The theory proposes two different components: cognitive appraisals and coping strategies. Primary appraisal refers to the evaluation that an individual makes about a situation (Lazarus & Folkman, 1984), and threat is likely to represent the most relevant primary appraisal in the context of experiencing symptoms of mental illness. A threat appraisal occurs when there is potential for physical or emotional harm (Lazarus, 1999), and studies have reported an increase in threat appraisals when young people experience symptoms of mental illness (Dougherty et al., 2019; Lee, 2020; Muris et al., 2000; Thompson et al., 2016).

Coping is defined by the actions and intentions behind what an individual does to overcome stress (Lazarus & Folkman, 1984). Two overarching categories of coping are of interest for this study: problem-focused coping (i.e., dealing with the cause of the distress) and emotion-focused coping (i.e., regulating the emotion resulting from the distress) (Lazarus & Folkman, 1984). Problem-focused coping strategies may include seeking information about, or creating possible solutions to deal with, the symptoms being experienced (Compas et al., 2001; Lazarus & Folkman, 1984). Examples of emotion-focused strategies might be denial or wishful thinking (Compas et al., 2001). Different mental illness can lead adolescents to use different coping strategies (Cong et al., 2019; Horwitz et al., 2011), and higher levels of threat appraisal, in the form of fear, leads to the use of more problem-focused strategies, while higher self-reported anxiety leads to more emotion-focused strategies being used (Skinner et al., 2003; Zimmer-Gembeck & Skinner, 2010). In the current study, the focus was on five key sources of support (parents, friends, teachers, professionals, and online) and on how perceptions of threat might relate to the intended use of these.

Mental Illness Stigma and Trust in Resources

Stigma is defined by the beliefs, attitudes, and behaviours that one has that reveal prejudice towards a particular condition (Corrigan et al., 2004) and these can reduce young people's support seeking behaviours (Heary et al., 2017; Moses, 2010; Talebi et al., 2016). Stigma is mainly expressed as public-stigma and as self-stigma. Public-stigma is characterized by the endorsement of prejudice or discriminatory beliefs towards a particular group, while self-stigma is the internalisation of public-stigma (Corrigan et al., 2004). Self- and public-stigma have been highlighted by young people as having a negative impact on their support seeking behaviours (Cheng et al., 2018; Gulliver et al., 2010; Rüsch et al., 2014). This negative association is also present when young people are dealing with a friend or a family member's mental health problem (Yap & Jorm, 2011). Also, higher levels of stigma can increase a young person's threat levels when dealing with mental illness (Major & O'Brien, 2005; Yang et al., 2007).

Young people's trust in a given form of social support may reduce the influence of threat levels on support seeking. Trust has been defined as "*optimistic acceptance of a vulnerable situation in which the truster believes the trustee will care for the truster's interests*" (Hall et al., 2001, p. 615). When young people do not trust those around them to confide in and talk to, they are likely to be reluctant to seek their support (Leavey et al., 2011; Sears, 2020). This is most evident regarding adults who are not family members. With regards to teachers, adolescents report that they would only approach those who they trusted and with whom they felt "*an established and valued relationship*" (Jobe & Gorin, 2013, p. 433). Similarly, professionals (e.g., psychologists, doctor) are not considered as a primary source of support because of a perceived lack of confidentiality and inherent lack of trust (Leavey et al., 2011; Rickwood et al., 2015; Verhaeghe & Bracke, 2011). Concerning support from online sources, Gibson and Trnka (2020) showed that young people only share information online with people who they feel they can trust, though it may be the case that young people trust online sources too much (Pretorius et al., 2019).

Dealing with Disclosures of Symptomatology from Friends

When it comes to dealing with a friend's symptoms of mental illness, the research is scarce (Lubman et al., 2017). Support seeking behaviours are a result of previous experiences and adolescent development (Rickwood et al., 2015), perhaps explaining why older adolescents are more willing to refer a friend for professional support when they share symptoms of mental illness with them (Raviv et al., 2000; Rickwood et al., 2005; Yap et al., 2011). Mental health literacy, and the ability to recognise symptoms, are important for understanding a young person's ability to support their friend (Burns & Rapee, 2006; Lubman et al., 2017; Singh et al., 2019). The focus of the current study is to understand how young people deal with a friend's disclosure. There is very little relevant literature in this regard, though there has been some exploration of it in the field of suicide and self-harm research. Young people giving support to peers who self-harm are more likely to turn to other peers than to adults (e.g., school staff, parents) when seeking assistance for how to deal with these disclosures (Fisher et al., 2017; Fortune et al., 2008). In particular, fears of confidentiality, loss of friendship, and the ability to help effectively all influenced adolescents' judgements about discussing a disclosure with an adult (Fisher et al., 2017).
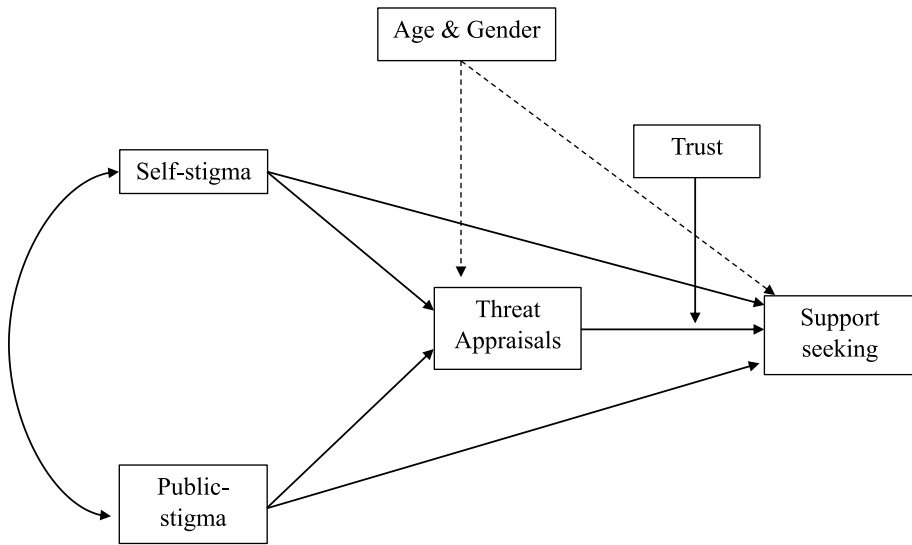
Fig. 1 Hypothesised model of the influence of stigma, threat, and trust on support seeking: an adaption from the TTC

A Model of the Role of Stigma, Trust, and Threat on Support Seeking for Symptoms of Mental Illness

The study model is shown Fig. 1. Based on literature suggesting that young people refrain from disclosing symptoms to others due to fears of judgment and embarrassment (Faulkner et al., 2010; Moses, 2010; Yap & Jorm, 2011), the first hypothesis in this study explores the direct effect of two forms of stigma on support seeking:

H1 Self- and public-stigma will be negatively associated with support seeking.

Similarly, higher levels of threat have been associated with higher levels of stigma in the literature (Link et al., 2004; Major & O'Brien, 2005; Yang et al., 2007). Fear of judgment and possible prejudice from others (i.e., public-stigma) can increase the level of threat reported by young people (Major & O'Brien, 2005; Rüsch et al., 2014). Stigma can threaten a young person's identity by, for example, reducing their self-esteem (Major & O'Brien, 2005) or increasing their fear of being excluded from a community or social group (Rubin et al., 2015). As such, experiencing stigma may lead to a reduction in support seeking behaviours via threat appraisal.

H2 Self- and public-stigma will be positively associated with threat, which in turn will be negatively associated with support seeking.

Young people's trust in a given form of social support may buffer them against the influence of stigma on help-seeking (Khesht-Masjedi et al., 2017; Mueller et al., 2006). As such, the role of trust as a moderator of the effect of public- and self-stigma on support seeking is explored in this study.

H3 Trust will moderate the relationship between threat and support seeking (i.e., threat appraisals will be negatively associated with support seeking when there are lower levels of trust, but when there are high levels of trust the relationship between threat and support seeking will be positive).

The same analytic models will be applied in the 'Friend' condition, but these will be exploratory in nature due to the limited research in the field (as detailed earlier). It is expected that hypothesis one will hold true for the 'Friend' condition due to similar research exploring stigma effects on young people responses to a friend or family member's mental illness (Yap & Jorm, 2011). Similarly, it is expected that hypothesis three will also hold true for the 'Friend' condition given comparable research developed in the field of suicide and self-harm. However, when it comes to hypothesis two, it is unclear how stigma will influence threat levels in the scenario where a friend discloses symptoms of mental illness. It is also not clear how threat and stigma will be associated with support-seeking.

Finally, age and gender will be use as covariates and are hypothesised to influence both threat levels and support seeking (as seen in Fig. 1). As young people grow older, more complex forms of support seeking behaviours are reported (Renk & Creasey, 2003). Also, as a result of maturation, older adolescents are expected to report lower levels of threat (Sillars & Davis, 2018). As such, it is expected that older adolescents will report lower levels of threat and higher levels of support seeking. Finally, girls are more likely to report higher levels of threat (Mak et al., 2004; Sillars & Davis, 2018), to suggest that a peer seeks help from formal sources and online for depression (Kelly et al., 2006; Lubman et al., 2017), and to seek emotional support (Frydenberg, 2019; Horwitz et al., 2011). Thus, it is expected that girls will report higher levels of both threat and support seeking than boys.

Method

Participants

There were 250 young people from 11 to 15 years old: 110 were male (44.0%), 140 female (56.0%) (M = 12.75 years; SD = 0.94). An additional 8 participants preferred not to disclose their gender and were omitted from our analytic sample because our analyses examined binary gender as a variable. Two hundred and fifty-five of the participants reported their nationality to be British (i.e., from England, Scotland, or Northern Ireland), while three participants reported their nationality to be Polish, South African, or Greek. In terms of ethnicity, 97.2% of participants identified themselves as being from England, Scotland, or Northern Ireland, and 2.8% of the sample identified themselves as having other heritage including Pakistani, Russian, Portuguese, South African, Polish, Turkish, and Australian.

Measures

The survey was composed of two sections: non-vignette specific and vignette specific measures. The non-vignette specific measures included demographics, stigma (i.e., public- and self-stigma), and trust in sources of support. The vignette specific measures included two vignettes, threat appraisals, and reports of intentions to seek support from five possible sources.

Non-Vignette Specific Measures

Demographics Gender, age, ethnicity, and nationality were assessed at the beginning of the questionnaire. Participants were given three options for gender *Male (boy)*, *Female (girl)*, and *Prefer not to say*. Young people were asked for their age in years. Finally, for nationality and ethnicity, they were asked two separate open-ended questions (*What is your nationality? For example, you might be British or Polish or Indian*, and *What is your ethnic identity? For example, you might be British or Scottish or Scottish-Pakistani.*, respectively).

Stigma Moses' (2009) Societal devaluation scale (14 items, example item: *Most adolescents my age will tease/harass kids if they know he/she is receiving mental health treatment.*) was used to assess public-stigma. This was modified to use hypothetical language, e.g. *If you had a mental health problem…how often would you feel different from other kids your age?*. Responses in the original scale ranged from 1 to 4 (*Strongly agree* to *Strongly disagree* for public-stigma, and *Almost Never* to *Very often* for self-stigma). However, Nadler et al. (2015) have provided evidence that labelling mid-points on scales helps to reduce ambiguity concerning what they mean. One additional scale point was therefore added (public-stigma: 1=*Strongly disagree*, 2=*Disagree*, 3=*Neither agree nor disagree*, 4=*Agree*, and 5=*Strongly agree*; self-stigma: 1=*Almost Never*, 2=*Sometimes*, 3=*About half the times*, 4=*Frequently*, and 5=*Very often*). Scale scores were calculated by creating a mean score of the items for public- and self-stigma. Internal reliability was estimated using Omega, and both subscales had good internal consistency (ω=0.84 and 0.89, respectively).

Trust The degree of trust that participants had in each of their sources of support was assessed using items that were based on the four trust dimensions proposed by Hall et al. (2001), namely Confidentiality, Honesty, Fidelity, and Competency. Confidentiality was assessed using three items, the first of which was taken from Flanagan and Stout's (2010) Interpersonal trust scale (*how often classmates keep secrets*), and was amended to *My friends keep secrets from me*. This item was adapted to be relevant to parents as a resource by phrasing it *My parents keep secrets from me*. For professionals, teachers, and online interactions, this item was phrased as *My teachers/ Professionals/ Online information tell me everything I need to know*. The remaining two items for Confidentiality were taken from Betts and Rotenberg's (2008) Peer trust measure, which were adapted to fit the different resources and aims of the scale (*I have friends that I can trust to keep a secret* and *I have friends that I can trust to keep their promises*). The dimensions of Honesty, Competency and Fidelity were assessed by developing appropriate items: *My friends are honest about what they are thinking*, *I believe that my friends know how to help me* and *My friends try to understand me*, respectively. With the exception of the item described above (i.e., Confidentiality), the word "friends" was replaced by each of the other four resources (i.e., parents, teachers, professionals, and people online) when assessing trust in each of them.

The scale score ranged from 1 to 5 (1=*Strongly disagree*, 2=*Disagree*, 3=*Neither agree nor disagree*, 4=*Agree*, and 5=*Strongly agree*) and the total trust score of each resource was created by calculating the mean of all the six items of trust in each resource. Internal reliability was good for all five scales ($\omega_{Friends}$=0.84, $\omega_{Parents}$=0.87, $\omega_{Teachers}$=0.88, $\omega_{Professionals}$=0.91, and ω_{Online}=0.85).

Vignette Specific Measures

Following the trust items, each young person read two vignettes in either a 'Self' or 'Friend' condition (cf. Appendix). In the 'Self' condition, participants answered questions

concerning vignettes describing situations where they themselves experienced symptoms of mental illness. In the 'Friend' condition, the same questions were asked but they were about a friend's symptoms. In both the 'Self' and the 'Friend' conditions, one vignette described symptoms of depression and the other described symptoms of anxiety; responses for both threat appraisal and support seeking were collapsed across vignettes in order to assess young people's support seeking when dealing with commonly experienced symptoms of mental illness rather than focusing on a specific disorder.

Threat appraisals After reading each vignette, six threat items from the Cognitive Appraisal of Health Scale (CAHS) (Kessler, 1998) were used. Items were reworded in order to meet the target population as well as to fit the hypothetical scenario. For example, *Frightening to me* was amended to *In this situation, would you be frightened?* Responses varied from 1 to 5 (1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Neither agree nor disagree*, 4 = *Agree*, and 5 = *Strongly agree*) and the overall score was calculated by creating the overall mean threat appraisal of the 12 items across both vignettes. The scale had good internal reliability ($\omega = 0.85$).

Support seeking Participants were presented with an adapted version of Carver's (1997) Brief COPE. In the present study, two items on the emotional component of support seeking (*Get emotional support from them* and *Get comfort and understanding from them*), and two items on the problem focussed component of support seeking (*Try to get advice or help about what to do from them* and *Get help and advice from them*) were used. Each of these items were adapted to focus on the five sources of support relevant here (i.e., parents, friends, teachers, professionals, and online) and were rephrased to fit the vignette methodology. For example, *I've been getting emotional support from others*, was amended in the parent/guardian context by presenting the stem *Thinking about your parents or guardians. Would you…* followed by the items. Since the same four items were repeated 10 times for the same participant (i.e., once for each of the five sources of support in the first vignette and once for each of the five sources of support in the second vignette), the items and resources were presented in different orders in each vignette to counterbalance any exposure or fatigue effects. Scores varied from 1 to 5 (1 = *No*, 2 = *Probably not*, 3 = *Maybe*, 4 = *Probably yes*, and 5 = *Yes*). The overall score was determined by creating the mean support seeking score for each resource; for example, by taking the mean of all eight items relating to both emotional and problem support from parents across both vignettes. There was good internal consistency for each of the five resources ($\omega_{friends} = 0.94$; $\omega_{parents} = 0.95$; $\omega_{teachers} = 0.95$; $\omega_{professionals} = 0.96$; $\omega_{online} = 0.93$).

Procedure

Ethical clearance was obtained from the lead author's institution. A total of 31 Local Education Authorities (LEAs)[1] in Scotland were contacted for approval to invite schools to be involved. Upon approval from 12 LEAs, 95 schools were approached and 4 schools (4.2%) agreed to take part. Parents/guardians' positive consent was sought in paper format. After parental consent was obtained, every pupil's own consent was also required for them to participate. Participants had access to the assent form in the same web link as the survey

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[1] In Scotland, LEAs are in charge of making sure that policies and guidelines are applied in each school. Additionally, they are also responsible for managing research requests and giving permission for schools in specific administrative areas to be contacted in regards to taking part in research (Scotland Act, 2010).

and had to give assent prior to completing the survey. Overall, out of the four schools approached, the rate of students participating in the study was of 13.8%.

The survey was piloted in paper format with 27 participants to check for comprehension of questions and to accurately estimate the time it would take to complete. No participants reported comprehension difficulties, and the average time of completion was around 45 min. The survey was delivered online using Qualtrics.com. Pupils were asked to complete the survey during school hours in a separate room from the rest of the class. The survey was competed on each pupil's own mobile phone to ensure privacy and anonymity of the answers. When the use of mobile phones was not possible, laptops were used, and participants were placed so as to block the view of the screen from others. The first author was present during all data collection and took four extra tablets to the school for students to borrow if they needed.

Participants first completed demographic questions, the stigma questions, and then the trust questions. Qualtrics then randomly allocated participants to either the 'Self' or the 'Friend' vignettes condition. After reading the vignette presented to them, participants were presented with the threat appraisal question followed by the support seeking questions. All the materials used in this study are available online: https://osf.io/et28h/. Participants were not offered compensation for participating in the study.

Analysis

A path analysis (as per Fig. 1) was estimated using Amos 25 and employing Maximum-Likelihood parameter estimation and bootstrapping techniques. Model fit was assessed using the Chi-square, Root-Mean-Square Error of Approximation (RMSEA), and the Comparative Fit Index (CFI). The Chi-square statistic is dependent on sample size, model, and normal distribution of data, and a non-significant result reflects a good fitting model. A value of < 0.06 for the RMSEA indicates a close fit, however a value < 0.08 is considered an acceptable fit. A CFI value of 0.95 or above is considered a good fit while values greater than 0.90 reflect acceptable fit (Hu & Bentler, 1999).

Five models were estimated, one for each form of support (i.e., friends, parents, teachers, professionals, and online). Both mediation and moderation were tested. Using the parental support model as an exemplar, it was expected that both self- and public-stigma would have a direct effect on the degree to which parents were approached for support. Additionally, it was expected that the effect of self- and public-stigma on seeking support would be mediated by threat.

Additionally, given existing concerns around the feasibility of mediation analysis when using cross-sectional studies (e.g., Maxwell & Cole, 2007; Maxwell et al., 2011), a unique variance analysis was used in this study. This identifies the unique variance attributed to each variable in the model (Weems & Stickle, 2012). A multiple regression analysis was estimated using SPSS. This examined the relationship between public-stigma, self-stigma, threat, trust in parents, as well as the interaction term between threat and trust in parents (i.e., independent variables) and support seeking from parents. Age and gender were included in the model as possible covariates.

Finally, as hypothesised, the effect of threat on seeking support from parents was expected to be moderated by how much trust participants had in their parents. This was done by testing the effect that an interaction term between threat and trust in parents had on support seeking from parents. Where there was a statistically significant interaction, simple slopes analyses were planned to understand how these variables influence each other. The

Table 1 Model fit results for each of the five models

Model	Chi-square (df)	p	CFI	RMSEA (90%CI)
Friends	34.50 (20)	0.023	0.909	0.054 (0.02, 0.08)
Parents	44.46 (20)	0.001	0.893	0.070 (0.04, 0.10)
Teachers	31.66 (20)	0.047	0.944	0.048 (0.01, 0.08)
Professionals	26.13 (20)	0.162	0.974	0.035 (0.00, 0.07)
Online	22.17 (20)	0.331	0.987	0.021 (0.00, 0.06)

two forms of stigma were allowed to correlate. Gender and age were included as covariate and were regressed on both threat and support seeking from parents.

In order to analyse differences between the estimated paths for both groups (i.e., 'Self' and 'Friend' conditions) a multigroup approach was used. This approach estimates the standardised difference between model parameters (Byrne, 2010), allowing comparison between parameters in the 'Self' and the 'Friend' conditions. A statistically significant difference between groups was inferred when the standardised estimates of the difference between any given parameter for the 'Self' version and the 'Friend' version was above ± 1.96.

Finally, six independent *t*-tests were performed to investigate group differences. The grouping variable had two levels (i.e., 'Self' and 'Friend') and the dependent variables were threat level and support seeking from each of the five resources (i.e., friends, parents, professionals, teachers, and online).

Results

The eight participants who selected "Prefer not to say" in response to the gender question were excluded from the analyses and the gender variable was coded such that *Male* = 0 and *Female* = 1. The level of missing data were under 5% and so listwise deletion was used to deal with it (Young et al., 2011), meaning that data were available for 110 participants in the 'Self' condition and 140 in the 'Friend' condition (N_{total} = 250).

Model Fit

The model in Fig. 1 was tested five times, one time for each resource (friends, parents, teachers, professionals, online interactions). Each analysis also incorporated a multi-group comparison: 'Self' versus 'Friend' condition. Table 1 shows the model fit results for each of these models. All models, except that for support from parents, had adequate fit (i.e., at least two out of the three measures of fit were within the required range). The parent support model had a sub-optimal fit: a significant Chi-square, a CFI narrowly under the desired value, and an acceptable RMSEA. The results for the parent support model are therefore reported while acknowledging that fit was marginal.

'Self' Condition

In all models there was a significant, positive direct effect of self-stigma on threat (see Table 2). Additionally, trust had a significant, positive direct effect on support

Table 2 Significant bootstrapped paths (and 90% Confidence Intervals) for each model for the Self condition

Model	Pathways	β (90% CI)	p
Direct effects			
Friends	Self-stigma -> Threat	0.41 (0.24, 0.55)	0.013
	Trust -> Support seeking	0.52 (0.41, 0.63)	0.008
Parents	Self- stigma -> Threat	0.39 (0.22, 0.54)	0.012
	Threat -> Support seeking	0.25 (0.10, 0.34)	0.030
	Self- stigma -> Support seeking	-0.10 $(-0.32, -0.03)$	0.030
	Age -> Support seeking	-0.20 $(-0.33, -0.07)$	0.023
	Trust -> Support seeking	0.60 (0.50, 0.69)	0.008
Teachers	Self- stigma -> Threat	0.40 (0.23, 0.54)	0.012
	Trust -> Support seeking	0.67 (0.57, 0.75)	0.009
Professionals	Self- stigma -> Threat	0.38 (0.20, 0.52)	0.015
	Threat -> Support seeking	0.18 (0.03, 0.28)	0.041
	Trust -> Support seeking	0.64 (0.55, 0.73)	0.009
Online	Self- stigma -> Threat	0.38 (0.22, 0.53)	0.013
	Trust*Threat -> Support seeking	0.33 (0.15, 0.45)	0.025
	Trust -> Support seeking	0.34 (0.20, 0.46)	0.011
Indirect effects			
Parents	Self- stigma -> Support seeking	0.10 (0.04, 0.18)	0.010
Professionals	Self- stigma -> Support seeking	0.07 (0.02, 0.14)	0.017

seeking in all models. In the parent support model, threat had a significant direct effect on support seeking ($\beta = 0.25$, $p = 0.030$) and self-stigma had both a significant direct ($\beta = -0.10$, $p = 0.030$) and indirect effect via threat ($\beta = 0.10$, $p = 0.010$) on asking for support from parents. For the professional support model, threat had a significant direct effect on seeking support from a professional ($\beta = 0.18$, $p = 0.030$). Also, self-stigma had a significant indirect effect via threat on asking for support from a professional ($\beta = 0.07$, $p = 0.017$). Finally, age was negatively related to seeking support from parents ($\beta = -0.20$, $p = 0.023$).

'Friend' Condition

In the 'Friend' version, trust had a direct significant effect on support seeking in all five models (see Table 3). Self-stigma had a significant direct effect on support seeking in the Friends model ($\beta = 0.16$, $p = 0.034$). Public-stigma had a significant direct effect on asking parents ($\beta = -0.15$, $p = 0.044$), friends ($\beta = -0.17$, $p = 0.042$), and professionals ($\beta = -0.17$, $p = 0.030$) for support. There were no significant indirect effects.

Finally, gender negatively influenced support seeking from professionals ($\beta = -0.17$, $p = 0.035$) and online ($\beta = -0.15$, $p = 0.048$), indicating that girls were less likely to seek support from professionals and online. Finally, age had a significant direct effect on support seeking from parents ($\beta = -0.15$, $p = 0.032$).

Table 3 Significant bootstrapped paths (and 90% Confidence Intervals) for each model for the Friend condition

Model	Pathways	β (90% CI)	p
Direct effects			
Friends	Self- stigma -> Support seeking	0.16 (0.04, 0.36)	0.034
	Public-stigma -> Support seeking	-0.17 (-0.31, -0.04)	0.042
	Trust -> Support seeking	0.46 (0.31, 0.59)	0.010
Parents	Public-stigma -> Support seeking	-0.15 (-0.28, -0.03)	0.044
	Age -> Support seeking	-0.15 (-0.00, -0.04)	0.032
	Trust -> Support seeking	0.52 (0.35, 0.64)	0.013
Teachers	Trust -> Support seeking	0.45 (0.57, 0.75)	0.011
	Gender -> Support seeking	-0.17 (-0.28, -0.04)	0.030
Professionals	Public-stigma -> Support seeking	-0.17 (-0.31, -0.05)	0.030
	Trust -> Support seeking	0.52 (0.37, 0.64)	0.015
	Gender -> Support seeking	-0.17 (-0.27, -0.04)	0.035
Online	Age -> Support seeking	0.18 (0.04, 0.30)	0.051
	Trust -> Support seeking	0.42 (0.30, 0.57)	0.006
	Gender -> Support seeking	-0.15 (-0.26, -0.03)	0.048

Unique Variance Analysis

All regressions estimated in SPSS accounted for a significant portion of the variance in the relevant outcomes. For the Self models, the multiple regressions indicated that there was a significant effect between the independent variables (i.e., self-stigma, public-stigma, threat, and trust), both covariates (i.e., age and gender) and support seeking from friends ($R^2 = 0.28$, $F(7, 102) = 5.57$, $p < 0.001$), support seeking from parents ($R^2 = 0.51$, $F(7, 102) = 15.33$, $p < 0.001$), support seeking from teachers ($R^2 = 0.50$, $F(7, 102) = 14.67$, $p < 0.001$), support seeking from professionals ($R^2 = 0.49$, $F(7, 102) = 14.10$, $p < 0.001$), and support seeking online ($R^2 = 0.28$, $F(7, 102) = 5.58$, $p < 0.001$).

The Friend models showed a similar result with the multiple regressions indicating a significant effect between self-stigma, public-stigma, threat, trust, gender, age, and support seeking from friends ($R^2 = 0.21$, $F(7, 132) = 5.10$, $p < 0.001$), support seeking from parents ($R^2 = 0.33$, $F(7, 132) = 9.46$, $p < 0.001$), support seeking from teachers ($R^2 = 0.22$, $F(7, 132) = 5.38$, $p < 0.001$), support seeking professionals ($R^2 = 0.39$, $F(7, 132) = 12.11$, $p < 0.001$), and support seeking online ($R^2 = 0.24$, $F(7, 132) = 6.02$, $p < 0.001$).

Further, the multiple regressions showed that threat accounted for 0.4–4.8% of variance in the Self models and for 0.1–0.3% for the Friend models. Self-stigma accounted for 0.1–2.4% variance in the Self condition and for 0.3–1.8% in the Friend condition. Public-stigma variance in the Self models was between 0.1 and 0.9%, while for the Friend models the variance was of 0.3–2.6%. Finally, the trust in sources of support accounted for 10.2–37.0% of the variance in the Self models and 14.5–18.6% in the Friend models (cf. Tables 4, 5, 6, 7, 8).

Table 4 Zero-order and semi-partial correlations with dependent variable seeking support from friends

	Self		Friend	
	Zero-order	Semi-partial	Zero-order	Semi-partial
Public- stigma	−0.01	0.10	−0.16	−0.16*
Self-stigma	−0.02	0.01	−0.03	0.14
Threat	0.11	0.06	0.02	−0.04
Trust friends	0.50**	0.50***	0.41**	0.41***
Gender	−0.04	0.01	0.06	0.06
Age	0.02	−0.07	0.01	−0.03

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 5 Zero-order and semi-partial correlations with dependent variable seeking support from parents

	Self		Friend	
	Zero-order	Semi-partial	Zero-order	Semi-partial
Public- stigma	−0.17	−0.10	−0.26**	−0.13
Self-stigma	−0.20*	−0.15*	−0.25**	0.02
Threat	0.13	0.22**	−0.09	−0.00
Trust parents	0.64**	0.58***	0.51**	0.43***
Gender	−0.20*	−0.09	−0.16	−0.07
Age	−0.67	−0.19**	−0.24**	−0.14

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 6 Zero-order and semi-partial correlations with dependent variable seeking support from teachers

	Self		Friend	
	Zero-order	Semi-partial	Zero-order	Semi-partial
Public- stigma	−0.11	0.04	−0.08	0.00
Self-stigma	−0.10	−0.02	−0.09	0.06
Threat	0.03	0.08	−0.00	0.03
Trust teachers	0.69**	0.61***	0.43**	0.40***
Gender	−0.01	−0.05	−0.20*	−0.16*
Age	−0.15	−0.16*	−0.08	−0.05

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Moderation of Threat by Trust

Only one moderation effect was observed, where there was a significant effect of the interaction term (trust*threat) on support seeking online in the 'Self' condition ($\beta = 0.33$, $p = 0.025$). A simple slopes procedure (Dawson, 2014) was followed to test if the relationship between threat and support seeking was significant when trust was either high (+ 1SD) or low (− 1SD) (see Fig. 2). This demonstrated that when trust in the online resource is low, levels of threat are unrelated to reports of going online to

Table 7 Zero-order and semi-partial correlations with dependent variable seeking support from professionals
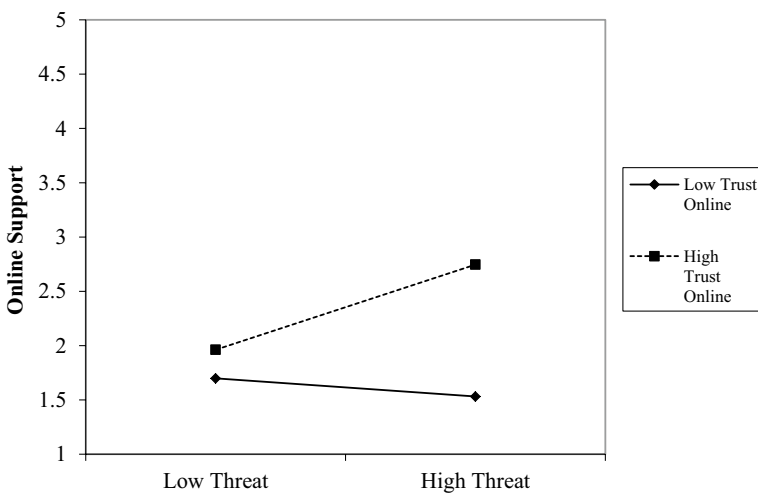
	Self		Friend	
	Zero-order	Semi-partial	Zero-order	Semi-partial
Public− stigma	−0.12	−0.09	−0.26**	−0.15*
Self− stigma	−0.04	−0.09	−0.045	0.07
Threat	0.15	0.16*	−0.13	−0.05
Trust professionals	0.67**	0.60***	0.57**	0.43***
Gender	0.01	0.00	−0.30**	−0.16*
Age	−0.00	−0.07	0.04	0.09

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 8 Zero-order and semi-partial correlations with dependent variable seeking support online

	Self		Friend	
	Zero-order	Semi-partial	Zero-order	Semi-partial
Public- stigma	0.03	0.03	0.01	−0.06
Self-stigma	−0.08	−0.12	0.03	0.05
Threat	0.01	0.12	0.09	0.01
Trust online	0.36**	0.32***	0.43**	0.38***
Gender	−0.10	−0.14	−0.16	−0.15
Age	0.11	0.04	0.23**	0.17*

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Fig. 2 Simple slopes for the direct effect of the interaction term (trust online* threat) and seeking online support for the Self condition

Table 9 Significant pairwise comparisons for each model

Model	Pathways	Condition				z-score
		Self		Friend		
		β	p	β	p	
Friends	Public-stigma ->Support seeking	0.10	0.227	−0.17	0.033	−2.23
Parents	Self-stigma ->Threat	0.39	0.000	0.17	0.055	−1.99
	Threat ->Support seeking	0.25	0.001	0.00	0.982	−2.46
	Self-stigma ->Support seeking	−0.18	0.018	0.02	0.758	2.04
Teachers	Self-stigma ->Threat	0.40	0.000	0.16	0.069	−2.11
Professionals	Self-stigma ->Threat	0.38	0.000	0.15	0.100	−2.09
	Threat ->Support seeking	0.18	0.021	−0.06	0.419	−2.27
Online	Trust*Threat ->Support seeking	0.33	0.000	0.04	0.635	−2.21

seek support ($\beta = -0.12$, $p = 0.421$). In contrast, when trust in online is high, threat is positively related to reports of going online to seek support ($\beta = 0.56$, $p < 0.05$).

Differences Between Groups

Table 9 reports significant differences between paths in the models. The path from self-stigma to threat was significantly different in the models for parent ($z = -1.99$), teacher ($z = -2.11$), and professionals ($z = -2.09$) support. In all three cases, there were significant, positive effects of self-stigma on threat in the 'Self' condition but not in the 'Friend' condition. There was also a significant difference in the path between threat and support seeking in the models evaluating support from parents ($z = -2.46$) and professionals ($z = -2.27$). In both cases, there was a significant positive effect of threat on support seeking in the 'Self' condition but not in the 'Friend's condition. In only the parent support model, the path between self-stigma and support seeking was significantly different between groups ($z = 2.04$). There was a significant negative effect of self-stigma on support seeking only on the 'Self' version of the questionnaire.

Only the model assessing support from friends showed a significantly difference in the path between public-stigma and support seeking ($z = -2.23$). A significant negative effect of public-stigma on support seeking from a friend was found in the 'Friend' condition but not in the 'Self' condition. In the online support model, the interaction term and support seeking also showed a significant difference between groups ($z = -2.21$). This translates into a significant positive effect of the interaction term on support seeking in the 'Self' version and not in the 'Friend'.

Finally, a *t*-test showed that threat levels differed between conditions, $t(248) = 4.27$, $p < 0.001$. Participants reported higher levels of threat in the 'Self' condition (M = 3.44, SD = 0.70) than in the 'Friend' condition (M = 3.09, SD = 0.59). The other five t-tests conducted to test if support seeking differed between groups revealed no significant differences.

Discussion

This study is the first to examine the ways that young people would deal with their own symptoms of mental illness or with a friend's disclosure of symptoms of mental illness. This was investigated by testing a model of support seeking which integrated mental illness stigma, threat, trust, and the extent to which five different resources (parents, friends, teachers, professionals, and online) might be approached for support. Overall, there was some support for each of the hypotheses though this differed according to the source of support in question. This study is slightly underpowered and results should be interpreted taking this into consideration.

'Self' Condition

It was expected that both self- and public-stigma would be negatively associated with support seeking. However, for the 'Self' condition, only self-stigma was negatively associated with seeking support from parents. There was no association between seeking support from any of the other four resources and self-stigma, and no association between all five resources and public-stigma, as initially hypothesised. Higher levels of self-stigma have been shown to reduce support seeking behaviours (e.g., Heary et al., 2017; Talebi et al., 2016). Young people might feel that their role in the family is threatened and that parents will start treating them differently, reducing their levels of self-esteem and self-worth, which in turn reduces the likelihood of seeking support from them. Thus, seeking support from a parent can be particularly challenging for a young person who has internalised public stereotypes about mental illness due to fear of judgement and embarrassment.

There was also mixed support for the mediation hypothesis. Higher levels of self-stigma were associated with higher levels of threat, which in turn were associated with a higher likelihood of seeking support from parents and professionals. These are interesting findings for two reasons. First, these contradict results relating to hypothesis 1, where higher self-stigma was shown to be associated with lower support seeking from parents. Thus, this mediation effect goes against the direct effect described earlier. Second, these results contradict some of the literature that highlights a lack of willingness from young people to ask for support from formal sources such as mental health professionals (Camara et al., 2017; Rickwood et al., 2015). These different findings could be a result of the combination of the variables used in this study, or even efforts in the UK context to improve young people's knowledge about available sources and to reduce stigma when seeking support for mental illness (e.g., mental health campaigns such as *See Me* (Scotland) focused on educating young people and reducing stigma). Furthermore, the fact that this study focusses on hypothetical scenarios rather than lived experiences of support seeking may have contributed to the contradictions found in the results. In any case, these are encouraging results since they show young people's willingness to seek support when in need.

Finally, there was support for the moderation hypothesis in the context of online support in the 'Self' condition. Specifically, threat was positively associated with support seeking from online sources, but only when levels of trust in this resource were high. Online, young people may feel that they can have a high level of control over the information shared, and whom they talk to about their symptoms (Gibson & Trnka, 2020). Similarly, it is also possible that young people will feel less control over the information shared online when seeking support from parents or professionals, given the positive association between threat

and support from parents and professionals. On the other hand, they might also feel more invested in the need for a positive outcome, when compared to a friend experiencing symptoms. Given that this effect was only found for online support, it is possible that other variables could play a more meaningful role for other sources of support, for example severity of symptoms is one candidate variable (Cong et al., 2019; Horwitz et al., 2011; Pimenta et al., 2021; Sears, 2020).

'Friend' Condition

Public-stigma was found to be negatively associated with support seeking from friends, parents, and professionals when dealing with a friend's disclosure of symptoms of mental illness. Young people might refrain from seeking support from another friend as a result of characteristics of friendships like empathy and the ability to imagine themselves in their friend's situation (Meuwese et al., 2017). Young people might imagine what they would do and feel in a similar situation and consider the negative consequences of sharing the symptoms with another person, in this case a friend. These consequences might include judgment or embarrassment (Major & O'Brien, 2005; Rüsch et al., 2014). On the other hand, fears of misunderstanding or criticism (Moses, 2010) might be behind the findings pertaining to public-stigma being negatively associated with using parents and professionals as a source of support.

Self-stigma was positively associated with support seeking from friends. This particular pathway contradicts the literature that shows that high levels of self-stigma reduces willingness to seek support for a mental illness (Cheng et al., 2018). This could be due to previous experiences where adolescents confided in their friends and were able to overcome their stress, leading young people to value a friend's advice and support (Poulin & Pedersen, 2007). Similarly, feelings of security (Meuwese et al., 2017) and familiarity that characterise friendships could be influencing this outcome. Finally, there was no support for either the mediation or moderation hypotheses in the 'Friend' condition. Since research in this context is still scarce, it is possible that other more relevant variables (e.g., what symptoms are experienced, mental health literacy) are at play when a friend discloses symptoms of mental illness.

Differences Between Conditions

Levels of threat differed across the two conditions, with reports higher in the 'Self' condition. With this in mind, it is possible that threat might not be as relevant in the 'Friend' condition, but it is also possible that other variables are playing a more significant role in the decision to seek support when a friend is experiencing symptoms. For example, support seeking behaviours might be influenced by both knowledge about, and availability of, resources (Gulliver et al., 2010; Velasco et al., 2020). Young people are more likely to seek support if they perceive that there are services available to them. As such, it might be the case that adolescents' perceptions about the resources that are available is influencing their choices. Thus, more research is needed on this particular topic.

Likewise, there were no differences between conditions when it came to choosing a source of support. When it comes to seeking support from professional sources, research has suggested that young people are more likely to refer a friend who is experiencing mental illness to a professional than to refer themselves when experiencing similar symptoms (Raviv et al., 2000; Rickwood et al., 2005). Thus, when it comes to seeking

support from professional sources, the current study contradicts existing literature. Research on seeking support from the other four sources is still scarce, and the possible reasons for a non-significant result are still unclear. Future research might usefully consider forms of support beyond those considered in our study (emotion and problem focused). Research has suggested that several specific behaviours could be included in each of these categories of support (Compas et al., 2001). Indeed, the items used in this study to measure support seeking were adapted from a scale that includes a total of 14 two-items categories (Carver, 1997). Perhaps a more comprehensive and detailed look at different forms of support seeking suggested by these authors might lead to different results. For example, exploring how the model would perform when including items for active coping, planning, or positive reframing, could aid in the further understanding of adolescents' support seeking.

This study had both strengths and limitations. First, this study is slightly underpowered with an achieved sample of 250 rather than the 380 identified in a priori power analysis (Stone-Romero & Anderson, 1994). This meant that the results and conclusions from this study may be affected as an underpowered sample makes it difficult to test specific interactions and effects (Maxwell, 2004; van de Schoot & Miocevic, 2020). Considering that this study intended to perform a multigroup comparison, an underpowered sample could have contributed to the inconsistent results (Maxwell, 2004). For example, this may explain why the moderation effect was only found in the Self condition. Given the multiple and simultaneous tests in both conditions (i.e., ten times in total), this single result could simply be a Type 1 error.

In addition, this study used a cross-sectional design which limits inferences about the findings. Mediation analysis using cross-sectional studies have been shown to yield different results from mediation analysis using longitudinal approaches (e.g., Maxwell & Cole, 2007; Maxwell et al., 2011). Mitigations were put in place to address this (e.g., use of unique variance analysis), but future studies should explore the relationships in this study using a longitudinal approach to provide further understanding about these associations. Additionally, this study used vignettes to assess young people's support seeking. This methodology allows control over the situation and the context being presented to the participants (Leighton, 2010; Rickwood & Thomas, 2012) but also has limitations. Most notably, responses to hypothetical situations may not reflect how young people react in real life (Burns & Rapee, 2006; Marshall & Dunstan, 2013). Future research could expand on this in order to further understand the elements that influence adolescents support seeking in both contexts with a lived-experienced sample.

In conclusion, this study provided evidence that young people are likely to cope differently with faced with their own symptoms of mental illness as compared to when they are coping with a friend's symptoms of mental illness. When coping with their own symptoms of mental illness, it seems that self-stigma, threat levels, and trust play a key role in support seeking. Comparatively, public-stigma seem to have more impact when young people are dealing with a friend's symptoms of mental illness. Additionally, threat and trust do not seem to have as much of an influence when a friend reports experiencing such symptoms. It is possible that other variables might be more important when adolescents deal with a friend's symptoms of mental illness. This study adds to existing knowledge by concluding that young people responding to a disclosure by a friend are also impacted by stigma and trust. As such, a focus on responses by young people to a friend's disclosure when developing interventions and mental health awareness campaigns could be beneficial so that specific elements hindering support seeking can be addressed early on.

Appendix

Self Vignettes

Situation 1

You have been feeling unusually sad and in a low mood for the last few weeks, and nothing special has happened to trigger this. You are tired all the time and you have trouble sleeping nearly every night. Also, your appetite has changed and you have lost some weight. In school, you are having some difficulties concentrating and your results are not as good as they normally are.

Situation 2

You have always felt shy and self-conscious around others, and never felt that you knew what to say or how to act. Lately, you started to feel physically tense, nervous, sick, and flushed, even during breaks from classes. You often replay these situations in your head in a very self-critical way. You are sometimes described by others as "odd" or "a loner", also you avoid almost all social situations.

Friend Vignettes

Situation 1

A friend has been feeling unusually sad and in a low mood for the last few weeks, and nothing special has happened to trigger this. They are tired all the time and have trouble sleeping nearly every night. Also, their appetite has changed and they have lost some weight. In school, they are having some difficulties concentrating and their results are not as good as they normally are.

Situation 2

A friend of yours was always shy and self-conscious around others, and never feels that they know what to say or how to act. Lately, they started to feel physically tense, nervous, sick, and flushed, even during breaks from classes. They will often replay these situations in their head in a very self-critical way, and they have mentioned this to you before. Sometimes they are described by others as "odd" or "a loner". They avoid almost all social situations.

Authorities that gave permission for the study to take place in their councils and the schools who agreed to take part in this study.

Declarations

References

Betts, L. R., & Rotenberg, K. J. (2008). A social relations analysis of children's trust in their peers across the early years of school. *Social Development, 17*(4), 1039–1055. https://doi.org/10.1111/j.1467-9507.2008.00479.x

Burns, J., & Rapee, R. M. (2006). Adolescent mental health literacy: Young people's knowledge of depression and help seeking. *Journal of Adolescence, 29*, 225–239. https://doi.org/10.1016/j.adolescence.2005.05.004

Byrne, B. M. (2010). Applications in multiple-group analysis. In B. M. Byrne (Ed.), *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (pp. 195–272). Taylor & Francis Group.

Camara, M., Bacigalupe, G., & Padilla, P. (2017). The role of social support in adolescents: Are you helping me or stressing me out? *International Journal of Adolescence and Youth, 22*(2), 123–136. https://doi.org/10.1080/02673843.2013.875480

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief cope. *International Journal of Behavioral Medicine, 4*(1), 92–100.

Chandra, A., & Minkovitz, C. S. (2006). Stigma starts early: Gender differences in teen willingness to use mental health services. *The Journal of Adolescent Health*. https://doi.org/10.1016/j.adohealth.2005.08.011

Cheng, H. L., Wang, C., McDermott, R. C., Kridel, M., & Rislin, J. L. (2018). Self-stigma, mental health literacy, and attitudes toward seeking psychological help. *Journal of Counseling & Development, 96*(1), 64–74. https://doi.org/10.1002/jcad.12178

Collinson, D. (2017). *Mental health bulletin: 2016–2017 annual report*.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*(1), 87–127. https://doi.org/10.1037//0033-2909.127.1.87

Cong, C. W., Ling, W. S., & Aun, T. S. (2019). Problem-focused coping and depression among adolescents: Mediating effect of self-esteem. *Current Psychology*. https://doi.org/10.1007/s12144-019-00522-4

Corrigan, P. W., Markowitz, F. E., & Watson, A. C. (2004). Structural levels of mental illness stigma and discrimination. *Schizophrenia Bulletin, 30*(3), 481–491.

Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology, 29*(1), 1–19. https://doi.org/10.1007/s10869-013-9308-7

Deighton, J., Lereya, T., Patalay, P., Casey, P., Humphrey, N., & Wolpert, M. (2018). Mental health problems in young people, aged 11 to 14: Results from the first HeadStart annual survey of 30,000 children.

Dougherty, E. N., Badillo, K., Johnson, N. K., & Haedt-Matt, A. A. (2019). Threat appraisal partially mediates the relation between neuroticism and bulimic symptoms. *Eating Disorders*. https://doi.org/10.1080/10640266.2019.1632590

Faulkner, G., Irving, H., Paglia-Boak, A., & Adlaf, E. (2010). Adolescent knowledge of schizophrenia and social distancing: A province-wide survey. *Journal of Community Psychology, 38*(8), 933–942. https://doi.org/10.1002/jcop.20406

Fisher, K., Fitzgerald, J., & Tuffin, K. (2017). Peer responses to non-suicidal self-injury: Young women speak about the complexity of the support-provider role. *New Zealand Journal of Psychology, 46*(3), 146–155.

Flanagan, C. A., & Stout, M. (2010). Developmental patterns of social trust between early and late adolescence: Age and school climate effects. *Journal of Research on Adolescence, 20*(3), 748–773. https://doi.org/10.1111/j.1532-7795.2010.00658.x

Fortune, S., Sinclair, J., & Hawton, K. (2008). Help-seeking before and after episodes of self-harm: A descriptive study in school pupils in England. *BMC Public Health, 8*, 369–382. https://doi.org/10.1186/1471-2458-8-369

Frydenberg, E. (2019). *Adolescent coping: Promoting resilience and well-being*. Routledge.

Galaif, E. R., Sussman, S., Chou, C., & Wills, T. A. (2003). Longitudinal relations among depression, stress, and coping in high risk youth. *Journal of Youth and Adolescence, 32*(4), 243–258.

Gibson, K., & Trnka, S. (2020). Young people's priorities for support on social media: "It takes trust to talk about these issues." *Computers in Human Behavior, 102*, 238–247. https://doi.org/10.1016/j.chb.2019.08.030

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry, 10*, 113–122. https://doi.org/10.1186/1471-244X-10-113

Hall, M. A., Dugan, E., Zheng, B., & Mishra, A. K. (2001). Trust in physicians and medical institutions: What is it, can it be measured, and does it matter? *The Milbank Quarterly, 79*(4), 613–639.

Heary, C., Hennessy, E., Swords, L., & Corrigan, P. (2017). Stigma towards mental health problems during childhood and adolescence: Theory, research and intervention approaches. *Journal of Child and Family Studies, 26*, 2949–2959. https://doi.org/10.1007/s10826-017-0829-y

Horwitz, A. G., Hill, R. M., & King, C. A. (2011). Specific coping behaviors in relation to adolescent depression and suicidal ideation. *Journal of Adolescence, 34*(5), 1077–1085. https://doi.org/10.1016/j.adolescence.2010.10.004

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Jobe, A., & Gorin, S. (2013). "If kids don't feel safe they don't do anything": Young people's views on seeking and receiving help from Children's Social Care Services in England. *Child & Family Social Work, 18*(4), 429–438. https://doi.org/10.1111/j.1365-2206.2012.00862.x

Kelly, C. M., Jorm, A. F., & Rodgers, B. (2006). Adolescents' responses to peers with depression or conduct disorder. *The Australian and New Zealand Journal of Psychiatry, 40*(1), 63–66.

Kessler, T. A. (1998). The Cognitive Appraisal of Health Scale: Development of psychometric evaluation. *Research in Nursing & Health, 21*(1), 73–82.

Khesht-Masjedi, M. F., Shokrgozar, S., Abdollahi, E., Golshahi, M., & Zamiri, A. (2017). Exploring social factors of mental illness stigmatization in adolescents with mental disorders. *Journal of Clinical & Diagnostic Research, 11*(11), VC01–VC04. https://doi.org/10.7860/JCDR/2017/27906.10832

Lazarus, R. (1999). *Stress and emotion: a new synthesis*. Free Association Books.

Lazarus, R., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.

Leavey, G., Rothi, D., & Paul, R. (2011). Trust, autonomy and relationships: The help-seeking preferences of young people in secondary level schools in London (UK). *Journal of Adolescence, 34*(4), 685–693. https://doi.org/10.1016/j.adolescence.2010.09.004

Lee, J. (2020). When we seek and share information about mental illness: The impact of threat appraisal, negative emotions, and efficacy. *The Social Science Journal.* https://doi.org/10.1080/03623319.2020.1727248

Leighton, S. (2010). Using a vignette-based questionnaire to explore adolescents' understanding of mental health issues. *Clinical Child Psychology and Psychiatry, 15*(2), 231–250. https://doi.org/10.1177/1359104509340234

Link, B. G., Yang, L. H., Phelan, J. C., & Collins, P. Y. (2004). Measuring mental illness stigma. *Schizophrenia Bulletin, 30*(3), 511–541.

Lubman, D., Cheetham, A., Jorm, A. F., Berridge, B. J., Wilson, C., Blee, F., Mckay-Brown, L., Allen, N., & Proimos, J. (2017). Australian adolescents' beliefs and help-seeking intentions towards peers experiencing symptoms of depression and alcohol misuse. *BMC Public Health, 17*(1), 1–12. https://doi.org/10.1186/s12889-017-4655-3

Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review Psychology, 56*, 393–421.

Mak, A. S., Blewitt, K., & Heaven, P. C. (2004). Gender and personality influences in adolescent threat and challenge appraisals and depressive symptoms. *Personality and Individual Differences, 36*(6), 1483–1496. https://doi.org/10.1016/S0191-8869(03)00243-5

Marshall, J. M., & Dunstan, D. A. (2013). Mental health literacy of Australian rural adolescents: An analysis using vignettes and short films. *Australian Psychologist, 48*(2), 119–127. https://doi.org/10.1111/j.1742-9544.2011.00048.x

Maxwell, S. E. (2004). The persistence of underpowered studies in psychological research: Causes, consequences, and remedies. *Psychological Methods, 9*(2), 147–163. https://doi.org/10.1037/1082-989X.9.2.147

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods, 12*, 23–44. https://doi.org/10.1037/1082-989X.12.1.23

Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research, 46*(5), 816–841. https://doi.org/10.1080/00273171.2011.606716

Meuwese, R., Cillessen, A. H., & Güroulgu, B. (2017). Friends in high places: A dyadic perspective on peer status as predictor of friendship quality and the mediating role of empathy and prosocial behavior. *Social Development, 26*(3), 503–519.

Moses, T. (2009). Stigma and self-concept among adolescents receiving mental health treatment. *The American Journal of Orthopsychiatry, 79*(2), 261–274. https://doi.org/10.1037/a0015696

Moses, T. (2010). Being treated differently: Stigma experiences with family, peers, and school staff among adolescents with mental health disorders. *Social Science & Medicine, 70*(7), 985–993. https://doi.org/10.1016/j.socscimed.2009.12.022

Mueller, B., Nordt, C., Lauber, C., Rueesch, P., Meyer, P. C., & Roessler, W. (2006). Social support modifies perceived stigmatization in the first years of mental illness: A longitudinal approach. *Social Science & Medicine, 62*, 39–49. https://doi.org/10.1016/j.socscimed.2005.05.014

Muris, P., Luermans, J., Merckelbach, H., & Mayer, B. (2000). "Danger is lurking everywhere". The relation between anxiety and threat perception abnormalities in normal children. *Journal of Behavior Therapy and Experimental Psychiatry, 31*(2), 123–136.

Nadler, J. T., Weston, R., & Voyles, E. C. (2015). Stuck in the middle: The use and interpretation of midpoints in items on questionnaires. *The Journal of General Psychology, 142*(2), 71–89. https://doi.org/10.1080/00221309.2014.994590

Naughton, M. F., Maybery, D. J., & Goodyear, M. (2018). Prevalence of mental illness within families in a regional child-focussed mental health service. *International Journal of Mental Health Nursing, 27*(2), 901–910. https://doi.org/10.1111/inm.12386

Pimenta, S. M., Hunter, S., Rasmussen, S., Cogan, N., & Martin, B. (2021). Young people's coping strategies when dealing with their own and a friend's symptoms of poor mental health: A qualitative study. *Journal of Adolescent Research.* https://doi.org/10.1177/07435584211062115

Poulin, F., & Pedersen, S. (2007). Developmental changes in gender composition of friendship networks in adolescent girls and boys. *Developmental Psychology, 43*(6), 1484–1496. https://doi.org/10.1037/0012-1649.43.6.1484

Pretorius, C., Chambers, D., & Coyle, D. (2019). Young people's online help-seeking and mental health difficulties: Systematic narrative review. *Journal of Medical Internet Research, 21*(11), 1–17. https://doi.org/10.2196/13873

Raviv, A., Sills, R., Raviv, A., & Wilansky, P. (2000). Adolescents' help-seeking behaviour: The difference between self- and other-referral. *Journal of Adolescence, 23*(6), 721–740. https://doi.org/10.1006/jado.2000.0355

Renk, K., & Creasey, G. (2003). The relationship of gender, gender identity, and coping strategies in late adolescents. *Journal of Adolescence, 26*(2), 159–168.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Advances in Mental Health, 4*(3), 218–251.

Rickwood, D., Mazzer, K. R., & Telford, N. R. (2015). Social influences on seeking help from mental health services, in-person and online, during adolescence and young adulthood. *BMC Psychiatry, 15*, 40–48. https://doi.org/10.1186/s12888-015-0429-6

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management, 5*, 173–183. https://doi.org/10.2147/PRBM.S38707

Rubin, K., Bukowski, W. M., & Bowker, J. C. (2015). Children in peer groups. In R. M. Lerner, L. S. Liben, & U. Mueller (Eds.), *Handbook of child psychology and developmental science, cognitive processes: Ecological Settings and Processes.* (Vol. 4). John Wiley & Sons.

Rüsch, N., Abbruzzese, E., Hagedorn, E., Hartenhauer, D., Kaufmann, I., Curschellas, J., Ventling, S., Zuaboni, G., Bridler, R., Olschewski, M., Kawohl, W., Rossler, W., Kleim, B., & Corrigan, P. W. (2014). Efficacy of Coming Out Proud to reduce stigma's impact among people with mental illness: Pilot randomised controlled trial. *The British Journal of Psychiatry, 204*(5), 391–397. https://doi.org/10.1192/bjp.bp.113.135772

Schools (Consultation) (Scotland) Act. (2010). https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2015/05/schools-consultation-scotland-act-2010-statutory-guidance/documents/00477028-pdf/00477028-pdf/govscot%3Adocument/00477028.pdf.

Sears, H. A. (2020). Adolescents' first choice for help: Distinguishing characteristics of youth who select a friend, a parent, or no one. *Journal of Youth and Adolescence, 49*, 1731–1746. https://doi.org/10.1007/s10964-020-01241-x

Sillars, A. A., & Davis, E. L. (2018). Children's challenge and threat appraisals vary by discrete emotion, age, and gender. *International Journal of Behavioral Development, 42*(5), 506–511. https://doi.org/10.1177/0165025417739178

Singh, S., Zaki, R. A., & Farid, N. D. N. (2019). A systematic review of depression literacy: Knowledge, help-seeking and stigmatising attitudes among adolescents. *Journal of Adolescence, 74*, 154–172. https://doi.org/10.1016/j.adolescence.2019.06.004

Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin, 129*(2), 216–269. https://doi.org/10.1037/0033-2909.129.2.216

Stone-Romero, E. F., & Anderson, L. E. (1994). Relative power of moderated multiple regression and the comparison of subgroup correlation coefficients for detecting moderating effects. *Journal of Applied Psychology, 79*(3), 354–359.

Talebi, M., Matheson, K., & Anisman, H. (2016). The stigma of seeking help for mental health issues: Mediating roles of support and coping and the moderating role of symptom profile. *Journal of Applied Social Psychology, 46*(8), 470–482. https://doi.org/10.1111/jasp.12376

Thompson, S. F., Lengua, L. J., & Garcia, C. M. (2016). Appraisal and coping as mediators of the effects of cumulative risk on preadolescent adjustment. *Journal of Child and Family Studies, 25*(5), 1416–1429. https://doi.org/10.1007/s10826-015-0338-9

Van de Schoot, R., & Miocevic, M. (2020). *Small sample size solutions: A Guide for Applied Researchers and Practitioners*. Routledge.

Velasco, A. A., Santa Cruz, I. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A Systematic Review. *BMC Psychiatry, 20*(1), 1–22. https://doi.org/10.1186/s12888-020-02659-0

Verhaeghe, M., & Bracke, P. (2011). Stigma and trust among mental health service users. *Archives of Psychiatric Nursing, 25*(4), 294–302. https://doi.org/10.1016/j.apnu.2011.02.001

Weems, C. F., & Stickle, T. R. (2012). Mediation, incremental validity, and novel intervention development: Introduction to a special issue on youth anxiety and related problems. *Child and Youth Care Forum, 41*, 509–516. https://doi.org/10.1007/s10566-012-9191-9

Yang, L. H., Kleinman, A., Link, B. G., Phelan, J. C., Lee, S., & Good, B. (2007). Culture and stigma: Adding moral experience to stigma theory. *Social Science & Medicine, 64*(7), 1524–1535. https://doi.org/10.1016/j.socscimed.2006.11.013

Yap, M. B. H., & Jorm, A. F. (2011). The influence of stigma on first aid actions taken by young people for mental health problems in a close friend or family member: Findings from an Australian national survey of youth. *Journal of Affective Disorders, 134*, 473–477. https://doi.org/10.1016/j.jad.2011.05.039

Yap, M. B. H., Wright, A., & Jorm, A. F. (2011). First aid actions taken by young people for mental health problems in a close friend or family member: Findings from an Australian national survey of youth. *Psychiatry Research, 188*(1), 123–128. https://doi.org/10.1016/j.psychres.2011.01.014

Young, W., Weckman, G., & Holland, W. (2011). A survey of methodologies for the treatment of missing values within datasets: Limitations and benefits. *Theoretical Issues in Ergonomics Science, 12*(1), 15–43. https://doi.org/10.1080/14639220903470205

Zimmer-Gembeck, M. J., & Skinner, E. A. (2010). Adolescents coping with stress: Development and diversity. *School Nurse News, 27*(2), 23–28.