

# Parental Authoritativeness, Social Support and Help-seeking for Mental Health Problems in Adolescents

Michelle Maiuolo<sup>1</sup> · Frank P. Deane<sup>1</sup> · Joseph Ciarrochi<sup>2</sup>

Received: 27 July 2018 / Accepted: 6 February 2019  
© Springer Science+Business Media, LLC, part of Springer Nature 2019

## Abstract

Adolescents experience high rates of mental health problems but are reluctant to seek professional help. Parents play an integral role in the help seeking process for their adolescent children. Parental authoritativeness and support have been identified as contributing to better mental health outcomes and a reduction in help seeking barriers in their children. The current study examined the influence of parental authoritativeness and support on help seeking intentions and behaviors in 1582 students (49% female) in 17 schools (mean age = 17.7, range 16–18). All data was available for 1032 participants across two time points collected one year apart. Concurrent indices of positive parenting were associated with greater help seeking intentions from professional sources, even when gender and psychological distress were controlled. Parental authoritativeness and parental support did not predict actual help seeking assessed one year later. The study highlights the potential role of parents in influencing help seeking and suggests further research is needed on other parent variables and the social antecedents to help-seeking.

## Introduction

Adolescence is a time of increased vulnerability to mental health issues (Venning et al., 2013) with 14.4% of young people between the ages of 12 and 17 diagnosed with a mental health problem each year (Lawrence et al., 2015). Of concern are the large proportions of individuals with mental health problems who have not accessed mental health services (Australian Bureau of Statistics, 2007) despite occasions where the number of services has increased (Sheppard et al., 2018). The effects of untreated mental illness during adolescence, a period of transition and development, can be profound and may affect the transition into adulthood (Rickwood et al., 2005).

Although many adolescents actively seek help from informal sources such as family or friends, formal help seeking from professionals is recognized as providing

protection against a variety of mental health risks and reducing psychological distress (Rickwood et al., 2005). It appears, however, that young people between the ages of 16 and 34 are the least likely to seek help for their mental health problems (Australian Bureau of Statistics, 2007). For example, a study of 4509 adolescents found that those meeting criteria for clinical levels of distress were very unlikely to seek help, with only 33% of participants seeking help in the last 6 months (Sawyer et al., 2007). Furthermore, a recent study of 1599 adolescents found that approximately one quarter of adolescents who met criteria for significant psychological distress had not accessed any form of professional mental health services (Sheppard et al., 2018).

There have been a number of models proposed to explain the decision making process leading to help seeking. Examples include the Health Belief Model (Rosenstock, 1974) and the more recent Cycle of Avoidance (Biddle et al., 2007). The Health Belief Model proposes that seeking professional help is determined by perceived susceptibility to an illness, perceived severity of consequences of the illness, perceived benefits of treatment or health action, and a range of barriers or costs to engaging in a health oriented action. A test of this model for mental health help seeking in young people found that high perceived benefits and low barriers toward seeking help were associated with higher intentions (O'Connor et al., 2014). Of particular relevance

✉ Frank P. Deane  
fdeane@uow.edu.au

<sup>1</sup> School of Psychology, Illawarra Institute for Mental Health, University of Wollongong, Wollongong, NSW, Australia

<sup>2</sup> Institute of Positive Psychology & Education, Australian Catholic University, Strathfield, NSW, Australia

to the current study, lower levels of social support predicted higher help seeking intentions (O'Connor et al., 2014).

The Cycle of Avoidance model is one of a number of models that highlights the importance of perceived severity of psychological distress (or problem severity). It is a threshold theory that argues individuals dichotomize distress into 'real' (pervasive, enduring and abnormal) and 'normal' (universally experienced) categories. Individuals are thought to engage in lay diagnosis using this binary framework and are reluctant to make a diagnosis of 'real distress' due to perceived negative beliefs (e.g., stigma) regarding such a decision. To avoid acknowledging 'real distress' it is theorized that they cycle through seeking external (other people) and internal (how am I compared to yesterday?) data in an effort to normalize their experiences until some kind of tipping point results in help seeking (Biddle et al., 2007).

However, in the context of help seeking by adolescents, such models do not sufficiently take into account the importance of parental roles (Logan and King, 2001). Logan and King's (2001) model of adolescent help seeking suggests that parents are involved in every step of the help seeking process, beginning with recognizing that the problem is psychological in nature and severe enough to warrant professional help. The model proposes that parents, along with their adolescent children, consider their options, and develop an intention to seek help before then seeking and securing services. Logan and King's model proposes that parental recognition of the problem and practical assistance in seeking professional help are integral in the adolescent help seeking process.

### Parents as Facilitators of Help Seeking

Wahlin and Deane, 2012 examined the help seeking process of 256 young people attending public sector community mental health services. They found that although young people seek help from a variety of sources, parents are significantly more influential than any other sources (e.g., friends, teachers) in the help seeking process to secure professional services. Further, ~90% of young people in the study endorsed parents as a source of influence in the help seeking process (Wahlin and Deane, 2012). Eighty-eight percent of parents indicated that they had influenced their young person to some extent to attend services. The higher the degree of disagreement between parent and child about the severity of the mental health problem, the higher the levels of parental influence on the help seeking process. This was particularly the case where parents thought the problem was more severe than did the young person. Both parent and child ratings of influence were related to the severity of externalizing problems.

A systematic review of 22 studies found that encouragement from family and friends was one of the top three facilitators of help seeking for mental health issues (Gulliver et al., 2010). Furthermore, in a sample of 8487 students across 15 university campuses, 41.8% of the 543 participants who reported suicidal ideation also reported being encouraged by family members to seek help (Downs and Eisenberg, 2012). A second systematic review of 28 published research studies found seven family factors associated with greater service use by young people with mental health problems. These factors included the extent of the burden placed on parents by the mental health issue, parent perception of the problem and needs, and parent psychopathology (Ryan et al., 2015). Two other factors identified by this review, the parent-child relationship quality and family functioning were found to provide contradictory results with regard to their relationship with help seeking. The authors argued that these factors reflect the quality of family support provided to the young person. They concluded that, 'Although quality of family support might also be related to whether or not young people will receive services for their problems, this relationship is more complex and not yet understood.' (Ryan et al., 2015, p. 443).

### Parenting Styles and Parent Social Support

It is clear that parent involvement can facilitate help seeking for mental health issues in adolescents. However there is a need to better understand the parenting factors that contribute to this process and increase adolescents' intentions to seek help. Parenting styles and social support are two constructs that may prove useful in this process.

Four main parenting styles were identified by Baumrind (1991) and they are characterized by their levels of demandingness, described as a parent's ability to set limits and monitor behavior, and responsiveness, described as a parent's ability to provide support and nurturing. Authoritative parenting consists of a balance between demandingness and responsiveness. In contrast, Authoritarian parenting consists of high levels of demandingness with low responsiveness. Permissive parenting styles are characterized by high responsiveness and low demand, and Rejecting-neglecting styles are evidenced by parents who are neither demanding nor responsive (Baumrind, 1991).

The Authoritative parenting style has been associated with a variety of positive outcomes for young people, including lower levels of externalizing and internalizing problems, higher academic performance and stronger parent-child bond (Čablová et al., 2014). It has been suggested that these relationships may be due to higher levels of parental warmth, which increases children's perceptions that other people are warm and reliable (Pinquart, 2017).

Furthermore, higher parental control based on consistent rules is likely to reduce the probability that a child will engage in externalizing behaviors (Pinquart, 2017). Authoritative parenting has been linked to higher psychological flexibility in adolescents (Williams et al., 2012). Individuals with greater psychological flexibility are more likely to engage in positive, goal-directed coping strategies to manage psychological distress (Gottman et al., 1996), which may include help seeking. Despite the connection between authoritative parenting style and positive outcomes for adolescents, no studies to date have examined the relationship between authoritative parenting and help seeking within this age group.

As noted, Baumrind's (1991) definition of authoritative parenting includes high demandingness and high responsiveness. These components have subsequently been divided into warmth/support, behavioral control (monitoring and expectations) and psychological control (vs. encouraging autonomy). The distinctiveness of these components has been empirically supported in adolescents (Spithoven et al., 2016). The social support component correlates with reactive control which is considered more punitive ( $r = -.27$ , Spithoven et al., 2016) but not with proactive control which involves monitoring and rule setting. Further, research has found significant correlations between the global authoritative parenting measures and social support from parents in adolescent samples and these too were of small to moderate magnitude (range  $r = .22$  to  $r = .33$ , Supple and Small, 2006). Thus, there is likely to be overlap but also distinctive differences between processes involved in provision of social support and authoritative parenting styles. For example, social support could be reflected in perceptions of the frequency that advice, praise or help is provided. Authoritative parenting refers to particular strategies used in delivering these supports. If advice is provided, it is more likely to be delivered with sensitivity to the young person's point of view, the amount or type of advice would be adjusted to allow greater autonomy and opportunity for the adolescent to learn (Gauvain et al., 2013). A similar amount of social support might be perceived by a young person whose parents are more permissive in their parenting styles, but the processes by which this support is provided may provide minimal structure or guidance. Similarly, authoritarian parents may deliver advice in a controlling manner with less room for negotiation along with expectations the advice will be followed. Thus, parenting style and authoritative parenting more specifically, is likely to overlap with social support but also offer additional information about likely processes involved in parenting. In the context of help seeking for mental health problems, authoritative parents would provide not just social support by way of empathizing with the experience of psychological distress, but they would also encourage communication, be respectful of their adolescent's views and support

autonomy in making decisions. Consequently, it is expected that higher levels of authoritative parenting will be associated with higher help seeking intentions and behaviors.

Parent-child relationship quality has also been associated with increased active coping with mental health problems, including help seeking (Kritzas and Grobler, 2005) as well as reducing key barriers to help seeking such as self-stigma towards help seeking for mental health problems (Zhao et al., 2015). Given the authoritative parenting style is linked to both psychological flexibility and parent-child relationship quality, which are both related to active coping styles, it would be expected that it too could be related to help seeking as an active coping mechanism.

Although individuals begin to rely increasingly on peers for support during adolescence, parental figures remain a large source of support and guidance for young people (Kandel, 1996). Parents have been found to provide the largest proportion of support for adolescents when compared to teachers and peers (Hombrados-Mendieta et al., 2012). Furthermore, parents provide a variety of different types of support including emotional, informational and instrumental support for their adolescent children (Hombrados-Mendieta et al., 2012). Greater perceived social support has also been shown to influence help seeking behavior (Talebi et al., 2016). Teenagers who have more positive perceptions of their social support network tend to use more active coping styles such as help seeking and report less self-stigma, a known barrier to help seeking behavior (Talebi et al., 2016). In a study examining depressive symptoms in teenage boys, social support was associated with decreased depressive symptoms as well as reduced mental health stigma (Lindsay et al., 2010), which may in turn increase the likelihood of seeking help for mental health problems.

Although the above studies provide indirect support for the potential relationship between social support and factors associated with help seeking, they do not differentiate between sources of social support. Furthermore, no prior research has assessed the relationship between parental social support and help seeking directly.

## Current Study

Parents are central to the process of facilitating professional help seeking amongst their adolescent children. They are often the first to recognize difficulties that they may suspect are mental health problems, they can encourage professional help seeking and they often provide practical assistance such as transport. However, there are other parenting factors that are likely to be important in this process. The parent-child relationship

will determine the frequency and form of communication and expectations regarding whether an adolescent should seek support and from whom. Parenting styles determine the demands and responsiveness of parents and an authoritative parenting style comprises a balance of parental limit setting and support and nurturing. Authoritative parenting has been associated with greater parent-child relationship quality which is in turn related to greater active coping in adolescents. Help seeking is one form of active coping. The present study examines the impact of authoritative and supportive parenting on adolescent help seeking for mental health problems. The primary research question is: Do adolescents' ratings of parental authoritativeness, social support from parents and psychological distress predict adolescents' intentions to seek help and actual help seeking behavior from professional sources? It is hypothesized that higher parental authoritativeness and parental social support will be positively related to intentions to seek help and actual help seeking from professional sources.

## Methods

### Participants

Data used in this study was collected longitudinally over two years from students attending 17 Catholic schools in New South Wales and Queensland who were participating in the Australian Character Study in 2013 and 2014. The initial 2013 sample consisted of 1720 year 11 students. An identical questionnaire, with the addition of items assessing help seeking, was administered to the same group of students in 2014 with a sample size of 1582.

Participants who did not complete the survey in 2014 were excluded from the analyses. The final sample consisted of 708 males and 774 females. As help-seeking items were administered to the 2014 sample only, this group constitutes the main sample for the cross-sectional analyses in this study. Age across the two years ranged from 16 to 18 years.

The demographic makeup of Catholic school students has been shown to reflect the demographic makeup of the general Australian population (Australian Bureau of Statistics, 2010). The average Index of Community Socio-Educational Advantage for Australian schools in 2013 was 1000 (Australian Curriculum Assessment and Reporting Authority, 2014) whilst that for schools participating in the ACS was 1026 suggesting slightly higher socio-educational advantage for the participating schools in the current study. Prior research with this sample of adolescents also examined their ethnic and religious background, finding that

most students identified as Christian (60.4%) and Caucasian or Western European (63.6%) (Sheppard et al., 2018).

All adolescents provided active consent and parents were also provided with the opportunity to have their child opt out of the research. Participation was entirely voluntary with no financial incentives for completing the study. Adolescents participated in the study using a pencil and paper survey in classrooms, supervised by teachers who also collected the surveys at completion. The research was reviewed by the University institutional Human Research Ethics Committee (HE10158).

### Attrition Analysis

An attrition analysis was conducted between participants who completed the survey in both 2013 and 2014 ( $n = 1588$ ) and those who did not complete the 2014 survey ( $n = 132$ ). The attrition analysis compared the two groups on the variables of interest including gender, parental authority, social support from parents, and psychological wellbeing. For gender, a chi-square test revealed no difference in the proportion of those who provided data at both time points compared to those not providing data for 2014,  $\chi^2 = 2.3$ ,  $p = .13$ . A series of independent sample  $t$ -test revealed no significant differences between groups on all study variables (all  $p > .05$ ).

### Measures

#### General psychological distress

The General Health Questionnaire (GHQ-12; Goldberg et al., 1997) was used to measure general psychological distress. The GHQ-12 is a 12-item self-report measure designed to assess mental health in the previous week. The measure is scored on 4-point Likert scale of 1 (Not at all) to 4 (much more than usual). It consists of 6 negatively worded items (e.g. Have you been feeling unhappy and stressed) and 6 positively worded items (e.g. Have you been able to face up to your problems, reverse scored). The wording of the response scale is reversed for each type of item so that higher scores always represent worse functioning. A total of all 12 items was used to obtain an overall measure of psychological distress with scores ranging from 12 to 48.

The GHQ-12 has been shown to have high internal consistency reliability when used in a school sample of Australian adolescents,  $\alpha = .90$ , and to have an invariant factor structure across high school (Ciarrochi et al., 2017). The scale also had adequate construct validity with strong correlations to other measures of psychological distress (Tait et al., 2003). In the current sample, the scale had excellent internal consistency reliability with Cronbach's alpha of .90.

## Help-seeking

Help seeking has been defined as the behavior of actively seeking help from other people, which may involve formal and informal sources (Rickwood et al., 2005). The General Help-Seeking Questionnaire (GHSQ, Deane et al., 2001) is a 12-item self-report measure that assesses help seeking for mental health difficulties from multiple sources. The GHSQ was used in the current study to determine intentions to seek help from professional sources and self-reported actual help seeking.

Given this project was focused on help seeking from mental health professionals, intentions to seek help for future mental health problems was measured using the item, 'If you were to experience a distressing mental health problem in the future, how likely is it that you would seek help from a mental health professional'. This item is scored on a Likert scale ranging from 1 (Extremely unlikely) to 7 (Extremely likely). Help seeking from professional services in the past 12 months was assessed using the dichotomous yes/no response item, 'In the past 12 months have you had a consultation with any professional for mental health problems?'

The GHSQ has been used extensively in adolescents (Ciarrochi et al., 2002; Deane et al., 2001; Wilson et al., 2005). Studies examining the psychometric properties of the GHSQ have determined that the measure has excellent internal consistency reliability ( $\alpha = .85$ ) and test-retest reliability with a coefficient of .92 (Wilson et al., 2005). Moderate correlations have been found between intentions to seek help as measured using this scale and actual help seeking within a 3-week period (Wilson et al., 2005).

## Parental authority

The Parental Authority Questionnaire (PAQ; Buri, 1991; Williams et al., 2012) is a shortened 5-item version (Williams et al., 2012) of the PAQ (Buri 1991) was used to measure the extent to which young people rated their parents as authoritative. Participants were asked to 'Indicate the degree to which each of these statements applies to your parents.' They then rate the extent to which they agree or disagree with each item on a 5-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). For example 'My parents always give me consistent direction and guidance in a way that is fair and reasonable'; 'There are certain rules in our family and my parents discuss with us the need for those rules'. A total of all items was used for analyses with a possible range from 5 to 25. The shortened version of the PAQ has been found to have adequate

internal consistency reliability in previous studies examining a year 12 sample,  $\alpha = .80$  (Williams et al., 2012). This was maintained in the current sample with a Cronbach's alpha reliability coefficient of  $\alpha = .79$ .

## Parent social support

The Student Social Support Scale (SSSS, Nolten, 1994) is a self-report form measuring perceived social support from three sources, parents, teachers and friends, within three subscales (Malecki and Elliott, 1999; Nolten, 1994). A shortened 21-item version of the measure was used in the survey package to measure perceptions of social support (Ciarrochi et al., 2017). The current study utilized the shortened 7-item version of the parent subscale (SSSS-P) to measure perceptions of social support from parents only. Items consisted of statements (e.g. My parents praise me when I do a good job), with students then rating their level of agreement or disagreement with the items using a 5-point Likert scale ranging from 1 (Never) to 6 (Always). A total of all items was used for analyses with a potential range from 5 to 42. Internal reliability was high with Cronbach's alpha of .94 in the current study.

## Data Analysis

Initially, the cross-sectional data from 2014 was analyzed. First, correlations were conducted and these were followed by a standard multiple regression with gender, parental authoritativeness, parental social support, psychological distress predicting intentions to seek help in the future. Only help seeking intentions were used in this cross-sectional analysis since the temporal order was appropriate (i.e., current parent relationships predicting future help seeking intentions). Similarly, the temporal logic followed for the longitudinal analysis where gender, parental authoritativeness, parental support and psychological distress ratings from 2013 were entered as independent variables in a binomial regression to predict actual help seeking over the past 12 months when rated in 2014.

## Data screening

Data was screened for out of range scores and missing data. Less than five missing data points were found within each variable. Screening identified a number of univariate outliers and parental social support and authoritativeness were both mildly negatively skewed (-.62 and -.68) and psychological distress had a moderate positive skew (.84). Consequently, these variables at both Time 1 and Time 2 were converted to ranks.

**Table 1** Correlations between study variables in 2014 ( $N=1529$  listwise)

Variable	Parental authoritativeness <sup>a</sup>	Parent social support <sup>b</sup>	Psychological distress <sup>c</sup>	Gender <sup>d</sup>
Parental authoritativeness	—			
Parent social support	.57**	—		
Psychological distress	-.19**	-.27**	—	
Gender	-.01	-.03	.15**	—
Help seeking intentions	.22**	.19**	-.16**	.04
rank				

Note. \*\* $p < .01$ , 2-tailed

<sup>a</sup>PAQ scores rank

<sup>b</sup>SSSS-P scores rank

<sup>c</sup>GHQ-12 scores rank

<sup>d</sup> Biserial correlations

## Results

### Cross-Sectional Analyses Predicting Help Seeking Intentions

Bivariate correlations were conducted between all of the variables of interest in the 2014 data set and are provided in Table 1. The correlation between parental authoritativeness and parent social support was significant indicating a moderate positive relationship whereby higher parental authoritativeness is related to greater perceived social support from parents. Both parental authoritativeness and parent social support were significantly correlated with psychological distress. This indicates that higher parental authoritativeness and social support is associated with lower psychological distress. Both parental authoritativeness and social support were associated with higher help seeking intentions.

A standard multiple regression was performed between the predictor variables of gender, parental authoritativeness, psychological distress, parent social support and the criterion variable of help seeking intentions.

With all variables entered into the equation, the model significantly predicted help seeking intentions,  $R = .27$ ,  $R^2 = .07$ , adjusted  $R^2 = .07$ ,  $F(4, 1524) = 29.23$ ,  $p < .001$ . Table 2 displays the standardized and unstandardized beta coefficients. Gender significantly contributed to the model with females more likely to have greater help seeking intentions. Having a higher score on parental authoritativeness or parent social support was also predictive of greater help seeking intentions. By contrast, a higher score on the GHQ, indicating greater psychological distress, was predictive of lower help seeking intentions. Inspection of residuals indicated that the assumptions of linearity and homoscedasticity were met. There was less than 1% of standardized residuals over 2 and all Cook's distance values were less than .007 suggesting no cases were overly influencing the model. The average leverage value was .0065

**Table 2** Standard multiple regression of gender, psychological distress, parental social support, and parental authoritativeness as predictors of help seeking intentions in 2014 ( $N=1529$ )

Predictor Variable	B	SE B	$\beta$	<i>t</i>
Constant	609.48	45.46		
Gender	57.27	21.86	.07	2.62**
Psychological distress <sup>a</sup>	-.12	0.03	-.13	-4.81***
Parent social support <sup>b</sup>	0.07	0.03	.07	2.25*
Parental authoritativeness <sup>c</sup>	0.15	0.03	.16	5.25***

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

<sup>a</sup>GHQ-12 scores rank

<sup>b</sup>SSSS-P rank

<sup>c</sup>PAQ scores rank

and there were no Mahalanobis distance values over 17. An average VIF of 1.29 and Tolerances ranging from 0.65 to 0.98 suggested there was no multicollinearity within the data. However, inspection of other collinearity diagnostics indicated that the parental authoritativeness and parental support both loaded moderately (0.67 and 0.79, respectively) on the same dimensional eigenvalue (Field, 2009). This may suggest mild collinearity between parental authoritativeness and parental support. Nevertheless, the two variables did predict unique variance in intentions (Table 2).

### Longitudinal Analysis Predicting Actual Help Seeking

Approximately 17.5% ( $n = 286$ ) of the sample sought professional help. Bivariate correlations were conducted between all variables of interest within the 2013 data set including parent social support, parental authoritativeness, psychological distress, and the 2014 variable of actual help seeking. Only gender and psychological distress were significantly correlated with actual help seeking (see Table 3). This indicated that females and those with higher

**Table 3** Correlations between parenting variables and psychological distress at 2013 (T1) and actual help seeking past 12 months (T2, 2014) ( $N = 1032$  listwise)

Variables	Parental authoritativeness <sup>a</sup> (T1)	Parent social support <sup>b</sup> (T1)	Psychological distress <sup>c</sup> (T1)	Gender <sup>d</sup>
Parental authoritativeness (T1)	–			
Parent social support (T1)	.61**	–		
Psychological distress (T1)	–.23**	–.35**	–	
Gender	.01	–.05	.23**	
Actual help seeking (T2) <sup>d</sup>	–.02	.00	.10**	.15**

Note. \*\* $p < .01$ , 2-tailed

<sup>a</sup>PAQ scores rank

<sup>b</sup>SSSS-P rank

<sup>c</sup>GHQ-12 scores rank

<sup>d</sup>Yes/no biserial correlations

psychological distress at the 2013 time point were more likely to report seeking professional help for a mental health problem one year later.

A binary logistic regression was conducted between the predictor variables of parental authoritativeness, parent social support, psychological distress and gender at time 1 entered together and actual help seeking at time 2. A test of the full model with all four predictors against the constant-only model was significant, Chi Square = 27.95,  $p < .001$ ,  $df = 4$ , indicating that the predictors, as a set, reliably distinguished between those who did and did not seek help in the previous year. Inspection of the standardized residuals indicate that less than 5% were above 2 and all Cook's distance values were less than 0.7 suggesting there were no specific points that exerted an undue influence on the model.

Nagelkerke's  $R^2$  indicates a small relationship between the predictors and whether an individual sought help or not ( $R^2 = .05$ ). The parenting variables did not significantly predict actual help seeking ( $p > .05$ ). Gender was a significant predictor (*Wald Statistic* = 16.32,  $expB = 0.49$ ,  $p < .001$ ), indicating that females were more likely to have sought out help than males. Psychological distress was also a significant predictor (*Wald statistic* = 5.09,  $expB = 1.01$ ,  $p = .02$ ) such that higher distress in 2013 was associated with a slightly increased likelihood of actually seeking help in 2014.

## Sensitivity Analyses

Sensitivity analyses were performed by replicating the regression analyses without using ranked variables (i.e., outliers were present). For the standard regression predicting help seeking intentions the results of the post-hoc sensitivity analysis was similar to the primary analysis with the overall model being significant,  $F(4, 1524) = 25.50$ , and accounting for a similar proportion of the variance

( $R^2 = .06$ ) with all predictors contributing unique variance of similar magnitude to the primary analysis. Similarly for the binary logistic regression that predicted actual help seeking the results of the sensitivity analysis were similar to the primary analysis with the overall model being significant (Chi-square = 28.20,  $p < .001$ , Nagelkerke's  $R^2 = .05$ ). The Wald statistics were slightly lower for Gender (16.06) and slightly higher for psychological distress (5.63) suggesting that the presence of outliers may slightly overestimate the effects of psychological distress and underestimate the effects of gender. Consistent with the primary analysis, parenting variables predicted intentions to seek help, but not actual help seeking.

## Discussion

Parents are frequently involved in every step of the help seeking process for adolescents who are experiencing mental health problems (Logan and King, 2001). This includes recognizing and determining whether the problem is psychological in nature, identifying appropriate sources of help and providing practical assistance to get to appointments. In these help seeking processes parents usually have to influence and encourage the young person to seek help (Wahlin and Deane, 2012). The quality of the parent-child relationship is likely to determine the effectiveness of parents' capacity to successfully influence their adolescent child to seek professional help. Further, the quality of the parent-child relationship and in particular the amount and quality of social support that parents provide may reduce the need for professional help (O'Connor et al., 2014). Conversely, it is possible that greater parental support is needed to get a young person to attend services when problems persist. These complexities may in part explain the contradictory findings in prior research that has explored the quality of parental support and mental health service

utilization by adolescents (Ryan et al., 2015). The current study aimed to clarify these influences by focusing on parental support and, for the first time, the parenting style of Authoritative parenting in order to determine their relationship to help seeking for mental health problems in adolescents. It was hypothesized that the positive parenting practices of Authoritative parenting style and parental social support would promote both increased intentions to seek help and increased actual help seeking. Partial support was found for this hypothesis. Authoritative parenting and emotionally supportive parenting both uniquely predicted intentions to seek help, even when controlling for gender and distress. However, these parenting variables did not predict actual help seeking. This lack of relationship might have occurred because base rate help seeking was relatively low (about 18%) and hard to predict, or because of other factors discussed in detail below.

### **Prediction of Help Seeking Intentions**

The results of the cross-sectional analyses indicated that greater parental authoritativeness and parent social support were associated with greater intentions to seek help for a mental health problem. These findings support the idea that higher parental authoritativeness may facilitate professional help seeking. This may be the result of better parent-child relationship quality which has been previously associated with greater help seeking intentions (Rowe et al., 2014). All variables in the regression were significant predictors with parental authoritativeness and psychological distress slightly stronger predictors than social support when all variables were in the equation. It may be that the demandingness components of authoritative parenting are important. Factors associated with authoritative parenting such as efforts to modify or direct attempts at mastery and autonomy and decision making amongst adolescents may support them to seek and accept professional help. This may be provided through reasoning and structured guidance that are components of authoritative parenting styles. However, the amount of variance in help seeking intentions explained by parental factors in the present study was modest, suggesting there are other important drivers of help seeking intention.

### **Prediction of Actual Help Seeking**

When examining whether parental authoritativeness and parent social support could predict behavior one year later, neither variable made significant contributions to the binary logistic regression model. However, gender was again a significant predictor indicating that being female was associated with a greater likelihood of having sought professional help for mental health problems in the prior year. Psychological distress also made a small but reliable

contribution to the prediction of actual help seeking. In this instance higher distress was associated with a greater likelihood that help had been sought.

The lack of a relationship between parental authoritativeness and social support with actual help seeking might be explained by changes in parent-child relationships over this critical developmental period. There is evidence to suggest that the influence of parents may change over time with young people perceiving them as less supportive during later adolescence compared to early and middle adolescence (Furman and Buhrmester, 1992). The opposite relationship between age and perceived support from peers has also been found (Furman and Buhrmester, 1992; De Goede et al., 2009) suggesting that peers may become more influential as adolescents mature. The authors concluded that whilst parents become less important over time, friends become more important (De Goede et al., 2009). As such, the lack of relationship between parental factors and help seeking over time in the current study may be explained by a relative decrease in the importance of parental factors for help seeking as age increases.

### **Gender, Parenting Variables, and Help Seeking**

The current study found that females generally had greater intentions to seek help and were more likely to have sought help in the past year. These gender differences are one of the more consistent findings in help seeking research (e.g., Kim et al., 2014; Zwaanswijk et al., 2003). There is evidence from previous studies to suggest that gender influences parents' responses to mental health problems with parents being more likely to seek help for their children if they are female (Thurston et al., 2015). This is despite parents being equally or more likely to identify a problem if their child is male (Zwaanswijk et al., 2003). It is also likely that the gender and help seeking relationship is at least in part a function of higher levels of psychological distress that are reported by female adolescents. For example, a survey of 713 boys and 720 girls (age range 15–25 years) using the General Health Questionnaire as in the current study found girls reported higher psychological distress than boys on this measure (e.g., Van Droogenbroeck et al., 2018). Further, it was found that those who perceived they had poorer quality social support also had higher psychological distress as was found in the current study.

The measure of psychological distress (GHQ) used in the current study has items that tap into internalizing problems rather than externalizing problems. Given findings that higher authoritative parenting is related to lower levels of externalizing problems (Pinquart, 2017), it would be useful for future research to consider a measure of externalizing problems which are more likely to be experienced by young males. This would clarify whether the gender effect found

in the current study was in part due to higher rates of internalizing problems experienced by females.

### Help Negation Effect

Of particular interest is the finding that greater reported psychological distress is associated with lower intentions to seek help. These findings reflect a possible help negation effect, which has been described as an inverse relationship between suicidal ideation and psychological distress and intentions to seek help for these problems (Deane et al., 2001). The help negation effect has been observed in non-clinical samples of young adults between the ages of 18 and 25 (Wilson and Deane, 2010) as well as adolescents (Wilson et al., 2005). It is likely that help negation hinders help seeking from both professional mental health services, and informal sources of help such as parents and friends (Wilson and Deane, 2010). It has been well established that parents provide an important gateway to professional help seeking (Downs and Eisenberg, 2012; Rickwood et al., 2005) and given the results of the current study, may also have some influence on help seeking intentions and behaviors.

This help negation finding for intentions was not found for actual help seeking. Rather, higher distress (one year earlier) was associated with a greater likelihood that an adolescent reported having sought professional help when asked a year later. It is possible that when adolescents are asked to rate their distress and intentions to seek help at the same time point, it is difficult for them to accurately perceive their current need for help in the moment. This may be a function of not knowing whether distress has reached a sufficiently high level to warrant professional help seeking as would be proposed by the Cycle of Avoidance help seeking model (Biddle et al., 2007). It is possible that over time as problems and distress persist, eventually there is realization and acceptance that what is being experienced is 'real distress' that warrants professional help seeking. Thus, the direction of the relationship between psychological distress and actual help seeking may change over time such that cumulative distress results in actual help seeking. Clearly there is a need for future research to test this hypothesis. Another speculative possibility is that whilst highly distressed adolescence may be less willing to seek help, their distress may prompt the people around them to seek professional help for them. Future research is needed to examine parents' willingness to seek professional support for their young person.

### Limitations and Future Directions

Although the current study provides a preliminary understanding of how parent factors may influence professional

help seeking, it captures only a limited range of parent variables and help seeking sources. The survey did not capture other sources of professional mental health services such as welfare teachers and general practitioners who may provide a more primary level of care. Furthermore, participants were asked to retrospectively rate whether or not they had received help over the last year, leaving the potential for participants to forget instances of help seeking, particularly if they were brief.

Given the findings of a possible help negation effect, future research should include a measure for suicidal ideation as well as a measure of psychological distress that differentiates between problem types. As such, future studies may explore whether the influence of parental factors differs with the severity of suicidal ideation and psychological distress. This is particularly important given the effect of suicidal ideation in lowering help seeking from both informal sources such as parents and professional sources of help.

The longitudinal portion of the study was conducted over a year. However, as previous research has demonstrated parent influence can change within short periods of time. The use of a one-year time gap between measures may be too long to capture the relationships between constructs accurately. It may be beneficial to examine these relationships over shorter intervals to capture the variability and volatility in an adolescents' rating of their parents. Daily diary studies may be particularly useful in this context.

The current study examined only relationships between parental factors and help seeking. However, previous research has suggested that close friendship groups play an increasingly important role in the lives of adolescents as they age (Furman and Buhrmester (1992); De Goede et al., 2009). Therefore, it is recommended that future research examine the role of peer support in facilitating help seeking for mental health issues.

A more comprehensive measure of authoritative parenting which distinguishes between the responsiveness and demandingness components may be needed to more clearly differentiate the measure from general social support from parents. It would also be helpful to expand the parenting variables under investigation (e.g., parent mental health problem recognition).

### Conclusions

Despite the assumption that parents are critical to facilitating young people's professional help seeking for mental health problems (Wahlin and Deane 2012), there is very little research regarding the role that parenting plays in the help seeking process. A novel contribution from the present study is the finding that parental authoritativeness and social

support predicted help seeking intentions even when gender and psychological distress were controlled. However, the overall variance in intentions accounted for by the predictors was modest (7%) and parenting variables did not predict actual help seeking over a subsequent one year period. As noted in the review by Ryan et al. (2015) other parenting variables such as parental burden, parent problem perception, parent perception of need, and parent psychopathology are likely to play prominent roles in adolescent help seeking. They conclude that the availability of psychological resources from the parent appears crucial and that low parent psychological availability is associated with increased use of professional services for young people. The results from the current study provide a somewhat different picture. If higher parental authoritativeness and social support are akin to higher psychological availability, then findings from the present study suggest that these aspects of psychological availability are associated with higher, not lower help seeking intentions. It may be that parents with authoritative parenting styles are able to structure their adolescent's decision making and facilitate their autonomy and thus strengthen positive views of help seeking.

Parental authoritativeness and social support were not able to predict actual help seeking over the next year. It appears that authoritativeness and social support have some influence on help seeking when assessed in close proximity (i.e., intentions to seek help) but there are likely multiple other factors (including other parenting factors as noted above) that also determine whether young people seek professional help for mental health problems over time. It is possible that authoritative parenting styles encourage young people to seek help from parents which in turn increases perceptions of support. This support may in many cases be sufficient to help the young person manage their psychological distress or situational problems leading to distress. As a result there may be less perceived need to seek help from professionals. This may explain why no relationship was found between these parenting variables and actual help seeking over time. Future intervention research could evaluate the possibility of providing information to parents about the benefits of professional help seeking and characterizing it as complementary to the help that they already provide. However, there is also a need to consider other parenting variables such as parent problem perception in conjunction with other contextual factors such as service availability to better understand the role that parents play in supporting adolescents help seeking from formal services.

## Data Availability

The datasets generated and/or analyzed during the current study are not publicly available but are available from the corresponding author on reasonable request.

**Authors' Contributions** All authors conceived the study. FD and JC were involved in study design. JC was responsible for coordinating data collection. MM and FD performed the statistical analysis. All authors were involved in interpretation of data. MM provided the first draft of the manuscript and all authors were involved in subsequent drafts. All authors read and approved the final manuscript.

**Funding** This research was partially funded by grants from the Australian Research Council (DP110100989, DP140103874, DE140100080).

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

**Ethical Approval** The research was reviewed by the University institutional Human Research Ethics Committee (HE10158).

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

**Statement of ethics** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Publisher's note:** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

## References

- Australian Bureau of Statistics (2007). National survey of mental health and wellbeing: Summary of Results (no. 4326.0). <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4326.0Main%20Features22007>. Accessed 6 Dec 2018.
- Australian Bureau of Statistics (2010). Schools, Australia, 2010; Students. <http://www.abs.gov.au/ausstats/abs@.nsf/lookup/4221.0Main+Features42010?OpenDocument>. Accessed 6 December 2018.
- Australian Curriculum Assessment and Reporting Authority (2014). 2013 school profile and population data. <https://myschool.edu.au/>. Accessed 6 Dec 2018.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11(1), 56–95. <https://doi.org/10.1177/0272431691111004>.
- Biddle, L., Donovan, J., Sharp, D., & Gunnell, D. (2007). Explaining non-help seeking amongst young adults with mental distress: a dynamic interpretive model of illness behavior. *Sociology of Health and Illness*, 29(7), 983–1002.
- Buri, J. (1991). Parental authority questionnaire. *Journal of Personality and Assessment*, 57(1), 110–119. [https://doi.org/10.1207/s15327752jpa5701\\_13](https://doi.org/10.1207/s15327752jpa5701_13).
- Ciarrochi, J., Deane, F., Wilson, C., & Rickwood, D. (2002). Adolescents who need help the most are the least likely to seek it: the relationship between low emotional competence and low intention to seek help. *British Journal of Guidance and Counselling*, 30, 173–188. <https://doi.org/10.1080/03069880220128047>.
- Ciarrochi, J., Morin, A. J., Sahdra, B. K., Litalien, D., & Parker, P. D. (2017). A longitudinal person-centered perspective on youth social support: relations with psychological wellbeing.

*Developmental Psychology*, 53(6), 1154 <https://doi.org/10.1037/dev0000462>.

Čablová, L., Pazderková, K., & Miovský, M. (2014). Parenting styles and alcohol use among children and adolescents: a systematic review. *Drugs: Education, Prevention and Policy*, 21(1), 1–13. <https://doi.org/10.3109/09687637.2013.817536>.

De Goede, I. H., Branje, S. J., Delsing, M. J., & Meeus, W. H. (2009). Linkages over time between adolescents' relationships with parents and friends. *Journal of Youth and Adolescence*, 38(10), 1304–1315. <https://doi.org/10.1007/s10964-009-9403-2>.

Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2001). Suicidal ideation and help-negation: not just hopelessness or prior help. *Journal of Clinical Psychology*, 57(7), 901–914. <https://doi.org/10.1002/jclp.1058.abs>.

Downs, M. F., & Eisenberg, D. (2012). Help seeking and treatment use among suicidal college students. *Journal of American College Health*, 60(2), 104–114. <https://doi.org/10.1080/07448481.2011.619611>.

Field, A. (2009). *Discovering statistics using SPSS*. 3rd edn. London: Sage.

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, 63(1), 103–115. <https://doi.org/10.2307/1130905>.

Gauvain, M., Perez, S. M., & Beebe, H. (2013). Authoritative parenting and parental support for children's cognitive development. In R. E. Larzelere, A. Sheffield Morris & A. W. Harrist (Eds.), *Authoritative parenting: Synthesizing nurturance and discipline for optimal child development* (pp. 211–233). Washington, DC: American Psychological Association.

Goldberg, D., Gater, R., Sartorius, N., Ustun, T., Piccinelli, M., Gureje, O., & Rutter, M. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine*, 27, 191–197. <https://doi.org/10.1017/s0033291796004242>.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10(3), 243 <https://doi.org/10.1037/0893-3200.10.3.243>.

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(1), 113 <https://doi.org/10.1186/1471-244X-10-113>.

Hombrados-Mendieta, M. I., Gomez-Jacinto, L., Dominguez-Fuentes, J. M., Garcia-Leiva, P., & Castro-Travé, M. (2012). Types of social support provided by parents, teachers, and classmates during adolescence. *Journal of Community Psychology*, 40(6), 645–664. <https://doi.org/10.1002/jcop.20523>.

Kandel, D. B. (1996). The parental and peer contexts of adolescent deviance: an algebra of interpersonal influences. *Journal of Drug Issues*, 26(2), 289–315. <https://doi.org/10.1177/002204269602600202>.

Kim, N. H., Lim, K. Y., Chung, Y. K., Noh, J. S., & Shin, Y. M. (2014). Gender differences in factors associated with perceived need and use of Korean adolescents mental health services. *Child Psychiatry and Human Development*, 45(6), 746–752. <https://doi.org/10.1007/s10578-014-0443-9>.

Kritzas, N., & Grobler, A. A. (2005). The relationship between perceived parenting styles and resilience during adolescence. *Journal of Child and Adolescent Mental Health*, 17(1), 1–12. <https://doi.org/10.2989/17280580509486586>.

Lawrence, D., Johnson, S., Hafekost, J., Boterhoven De Haan, K., Sawyer, M., Ainley, J., & Zubrick, S. (2015). The mental health of children and adolescents. *Report on the Second Australian Child and Adolescent Survey of Mental Health and Wellbeing*. Canberra: Department of Health.

Lindsey, M. A., Joe, S., & Neibitt, V. (2010). Family matters: the role of mental health stigma and social support on depressive symptoms and subsequent help seeking among African American boys. *Journal of Black Psychology*, 36(4), 458–482. <https://doi.org/10.1177/0095798409355796>.

Logan, D. E., & King, C. A. (2001). Parental facilitation of adolescent mental health services utilization: a conceptual and empirical review. *Clinical Psychology: Science and Practice*, 8(3), 319–333. <https://doi.org/10.1093/clipsy/8.3.319>.

Malecki, C. K., & Elliott, S. N. (1999). Adolescents' ratings of perceived social support and its importance: validation of the Student Social Support Scale. *Psychology in the Schools*, 36(6), 473–483. [https://doi.org/10.1002/\(sici\)1520-6807\(199911\)36:6<473::aid-pits3>3.0.co;2-0](https://doi.org/10.1002/(sici)1520-6807(199911)36:6<473::aid-pits3>3.0.co;2-0).

Nolten, P. W. (1994). Conceptualization and measurement of social support: the development of the student social support scale. Unpublished Doctoral Dissertation: University of Wisconsin-Madison.

O'Connor, P. J., Martin, B., Weeks, C. S., & Ong, L. (2014). Factors that influence young people's mental health help-seeking behavior: a study based on the Health Belief Model. *Journal of Advanced Nursing*, 70(11), 2577–2587. <https://doi.org/10.1111/jan.12423>.

Pinquart, M. (2017). Associations of parenting dimensions and styles with externalizing problems of children and adolescents: an updated meta-analysis. *Developmental Psychology*, 53(5), 873–923. <https://doi.org/10.1037/dev0000295>.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian E-Journal for the Advancement of Mental Health*, 4(3), 1–34. <https://doi.org/10.5172/jamh.4.3.218>.

Rosenstock, I. (1974). The health belief model and preventive health behavior. *Health Education & Behavior*, 2, 354–386. <https://doi.org/10.1177/109019817400200405>.

Rowe, S. L., French, R. S., Henderson, C., Ougrin, D., Slade, M., & Moran, P. (2014). Help-seeking behaviour and adolescent self-harm: a systematic review. *Australian and New Zealand Journal of Psychiatry*, 48(12), 1083–1095. <https://doi.org/10.1177/004867414555718>.

Ryan, S. M., Jorm, A. F., Toumbourou, J. W., & Lubman, D. I. (2015). Parent and family factors associated with service use by young people with mental health problems: a systematic review. *Early Intervention in Psychiatry*, 9(6), 433–446. <https://doi.org/10.1111/eip.12211>.

Sawyer, M. G., Miller-Lewis, L. R., & Clark, J. J. (2007). The mental health of 13–17 year-olds in Australia: findings from the national survey of mental health and well-being. *Journal of Youth and Adolescence*, 36(2), 185–194. <https://doi.org/10.1007/s10964-006-9122-x>.

Sheppard, R., Deane, F. P., & Ciarrochi, J. (2018). Unmet need for professional mental health care among adolescents with high psychological distress. *Australian and New Zealand Journal of Psychiatry*, 52(1), 59–67. <https://doi.org/10.1177/004867417707818>.

Spithoven, A. W. M., Bijttebier, P., Van Leeuwen, K., & Goossens, L. (2016). Factor structure of parenting behavior in early adolescence. *Journal of Adolescence*, 53, 91–94. <https://doi.org/10.1016/j.adolescence.2016.09.002>.

Supple, A. J., & Small, S. A. (2006). The influence of parental support, knowledge, and authoritative parenting on Hmong and European American development. *Journal of Family Issues*, 27, 1214–1232. <https://doi.org/10.1177/0192513X06289063>.

Tait, R. J., French, D. J., & Hulse, G. K. (2003). Validity and psychometric properties of the General Health Questionnaire-12 in young Australian adolescents. *Australian and New Zealand Journal of Psychiatry*, 37(3), 374–381. <https://doi.org/10.1046/j.1440-1614.2003.01133.x>.

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>.

Thurston, I. B., Phares, V., Coates, E. E., & Bogart, L. M. (2015). Child problem recognition and help-seeking intentions among black and white parents. *Journal of Clinical Child & Adolescent Psychology*, 44(4), 604–615.

Van Droogenbroeck, F., Spruyt, B., & Keppens, G. (2018). Gender differences in mental health problems among adolescents and the role of social support: results from the Belgian health interview surveys 2008 and 2013. *BMC Psychiatry*, 18(1), 6 <https://doi.org/10.1186/s12888-018-1591-4>.

Venning, A., Wilson, A., Kettler, L., & Elliott, J. (2013). Mental health among youth in South Australia: a survey of flourishing, languishing, struggling, and floundering. *Australian Psychologist*, 48(4), 299–310. <https://doi.org/10.1111/j.1742-9544.2012.00068.x>.

Wahlin, T., & Deane, F. P. (2012). Discrepancies between parent-and adolescent-perceived problem severity and influences on help seeking from mental health services. *Australian and New Zealand Journal of Psychiatry*, 46(6), 553–560. <https://doi.org/10.1177/004867412441929>.

Williams, K. E., Ciarrochi, J., & Heaven, P. C. (2012). Inflexible parents, inflexible kids: a 6-year longitudinal study of parenting style and the development of psychological flexibility in adolescents. *Journal of Youth and Adolescence*, 41(8), 1053–1066. <https://doi.org/10.1007/s10964-012-9744-0>.

Wilson, C. J., & Deane, F. P. (2010). Help-negation and suicidal ideation: the role of depression, anxiety and hopelessness. *Journal of Youth and Adolescence*, 39(3), 291–305. <https://doi.org/10.1007/s10964-009-9487-8>.

Wilson, C. J., Deane, F. P., Ciarrochi, J., & Rickwood, D. (2005). Measuring Help-Seeking Intentions: properties of the General Help-Seeking Questionnaire. *Canadian Journal of Counselling*, 39(1), 15–28. <https://doi.org/10.1016/j.eatbeh.2013.02.004>.

Zhao, W., Young, R. E., Breslow, L., Michel, N. M., Flett, G. L., & Goldberg, J. O. (2015). Attachment style, relationship factors, and mental health stigma among adolescents. *Canadian Journal of Behavioural Science/Revue canadienne des Sciences Délután Comportement*, 47(4), 263–271. <https://doi.org/10.1037/cbs0000018>.

Zwaanswijk, M., Verhaak, P. F., Bensing, J. M., Van der Ende, J., & Verhulst, F. C. (2003). Help seeking for emotional and behavioural problems in children and adolescents. *European Child & Adolescent Psychiatry*, 12(4), 153–161. <https://doi.org/10.1037/e536932011-153>.