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The effect of caregiver opinion leaders to increase demand for evidence-based practices for youth anxiety: A cluster randomized controlled trial

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Abstract

Background

Dissemination initiatives have the potential to increase consumer knowledge of and engagement with evidence-based treatments (e.g., cognitive behavioral therapy [CBT]). Opinion leaders (OLs) have been used in public health campaigns, but have not been examined for the dissemination of mental health treatments. This study uses the Theory of Planned Behavior to test the dissemination strategy of involving an OL in an educational presentation to increase caregiver demand for CBT for youth anxiety.

Method

Participants ($N = 262$; 92% female; 69% White, 82% non-Hispanic) were caregivers who registered for a virtual presentation on youth anxiety treatment through their child's school. Schools within 1.5-hr drive of Philadelphia, PA were cluster-randomized ($k = 25$; two-arm prospective randomization) to the OL condition (presented by a clinical researcher and local caregiver OL; $n = 119$ participants) or the researcher-only condition ($n = 143$ participants). Presentations occurred from May 2021 to May 2022. Measures were completed pre- and post-presentation and at 3-month follow-up.

Results

Relative to the researcher co-presenter, participants rated the OL as significantly more relatable, familiar, similar, and understanding of their community, but less credible than the researcher co-presenter. In both conditions, there was a significant pre-post increase in participants' knowledge of, attitudes about, subjective norms related to, and intention of seeking CBT for youth anxiety, but not stigma. Presentation conditions did not differ in change on these measures, or on rates of seeking youth anxiety CBT at follow-up.

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Conclusions

Although involvement of a caregiver OL did not increase caregiver demand for evidence-based treatment for youth anxiety, the outreach presentation was associated with increases in knowledge of, attitudes about, subjective norms related to, and intention to seek CBT for youth anxiety. Involving OLs in researcher-delivered dissemination efforts may not be necessary for all consumer audiences, but may be beneficial for engendering a sense of relatability, similarity, and connection with disseminators.

Plain Language Summary

Cognitive behavioral therapy (CBT) is an effective treatment for youth anxiety. However, most anxious youth do not receive CBT when they seek treatment. Research supports educational dissemination strategies to improve knowledge, attitudes, and stigma related to seeking treatment. It is unclear who is the best person to provide potential consumers with information about seeking treatment. Collaborating with opinion leaders (OLs) may be an effective dissemination strategy. OLs are trustworthy community members who use their influence to encourage others to make a change. This study tested use of a local caregiver OL versus a clinical researcher to deliver an educational presentation on youth anxiety for caregivers. We found that both types of presenters led to an increase in knowledge of, subjective norms about, attitudes about, and intention of seeking CBT. There was no difference between the two conditions on these factors. It is possible that the lack of difference between conditions was because the caregiver presenter may not have been a strong OL. Participants rated the OL as being more like them, more familiar to them, and more understanding of their community. They also thought that the OL was a less credible source of mental health information than the researcher. This study suggests that involving a local caregiver in dissemination efforts may not be necessary for many individuals. For people with low levels of stigma, presentations given by researchers may be effective at changing their attitudes about seeking treatment. Additionally, educational presentations are associated with improvements in knowledge, subjective norms, and intention to seek CBT among those who attend. More research is needed to identify ideal dissemination strategies to engage underserved populations.

Keywords

opinion leader, direct-to-consumer marketing, dissemination, mental health literacy, stigma, consumers, cognitive behavioral therapy, youth anxiety

Introduction

Anxiety disorders affect 10%–20% of youth, with prevalence rates increasing during the COVID-19 pandemic (Racine et al., 2021). Cognitive behavioral therapy (CBT) with exposure is an evidence-based treatment (EBT) for youth anxiety (Kendall et al., 2005; Weisz et al., 2017), but two-thirds of youth with mental health disorders do not receive any treatment (Davenport et al., 2023). Caregivers have reported difficulty finding therapists who offer CBT with exposures, resulting in significant delays accessing this EBT (Frank et al., 2023).

Direct-to-consumer (DTC) dissemination approaches aim to improve consumer understanding of mental health problems, shape treatment-seeking behavior, increase public demand for CBT, and motivate treatment providers to become trained in EBTs (Becker, 2015; Frank et al., 2022). Caregivers are considered the consumer of youth treatment, as they are the decision makers and carry the financial responsibility of youths' services (Becker, 2015; Kang et al., 2019). DTC initiatives can help overcome patient-barriers to youth receiving treatment such as stigma, lack of awareness that treatment is needed, insufficient knowledge on how to seek effective treatment, and lack of awareness that CBT with exposures is an effective treatment (Ryan et al., 2015). Additional strategies are needed to overcome structural barriers to treatment (e.g., cost, lack of therapist availability; Andrade et al., 2014).

DTC dissemination efforts use strategies to increase knowledge, stimulate emotion, increase attention, and facilitate social comparison (Baker et al., 2021). Dissemination research often uses the Theory of Planned Behavior to evaluate its impact (Purtle et al., 2020). According to the Theory of Planned Behavior, an individual's intention to complete a behavior and subsequent behavior is affected by their attitudes about a behavior, subjective norms about doing a behavior (i.e., belief that others do or value the behavior), and perceived behavioral control (Ajzen, 1991). Stigma (an important barrier to treatment seeking; Gulliver et al., 2010) may impact both subjective norms and attitudes about CBT.

Previous DTC research has primarily examined the effectiveness of educational campaigns (*what* is being delivered), with less attention to *how* the message is delivered, and *who* is delivering a message. Findings suggest that brief DTC educational presentations on mental health decrease stigma (improving attitudes); increase knowledge and improve mental health literacy (improving perceived behavioral control); and increase intention to seek therapy (Amsalem & Martin, 2022; Gallo et al., 2015; Hurley et al., 2020; Ponzini & Schofield, 2019). More generally, tailoring health messages to the audience improves the effectiveness of dissemination efforts (Kreuter & Wray, 2003). Regarding *how* to deliver dissemination campaigns, infographics, visual elements, and narratives can increase attention and stimulate emotion for the audience of dissemination efforts (Becker et al., 2020; Dahlstrom, 2014; Purtle et al., 2022). Prior research on infographic campaigns, webinars, and informational videos did not directly compare various modalities for *how* a dissemination campaign is delivered (e.g., comparing a webinar to an infographic). Further limitations of previous DTC research include the use of non-representative samples (e.g., undergraduate or online participant pools; Amsalem & Martin, 2022; Barnett et al., 2020; Brecht et al., 2010), and many studies on mental health literacy and contact strategies (i.e., interacting with someone with a stigmatized identity) lacked controlled designs (Hurley et al., 2020; Jorm, 2020).

Regarding *who* disseminates information about seeking treatment, evidence is mixed as to whether individuals with lived experience are optimal messengers in dissemination campaigns aimed at increasing engagement with treatment. Some studies found that use of those with lived experience is associated with increased intention to engage in therapy (Bearman et al., 2022; Corrigan et al., 2012), and other studies found no or negative effects of this strategy on treatment-seeking behavior or sustained reductions in stigma (Johnson et al., 2017; Jorm, 2020; Morawska et al., 2011). Finally, in a DTC survey, caregivers reported that they preferred receiving information from pediatricians or other parents (Becker et al., 2018).

One strategy used in implementation research, but not yet examined in DTC dissemination research, is collaborating with opinion leaders (OLs). OLs are trustworthy community members who use their social influence to enhance relevance, credibility, and acceptability of DTC initiatives (Flodgren et al., 2019; Valente & Pumpuang, 2007). OLs do not necessarily have lived experience with mental illness. OLs may be effective because they can help tailor DTC messages to their local community (Neal et al., 2011). Encouragement from an OL may be particularly influential in decreasing stigma and promoting treatment seeking, due to effects on social support and social norms (Flodgren et al., 2019; Grimshaw et al., 2012). OLs have been found to be effective health communicators in healthcare settings and in the community, with studies suggesting that use of OLs increases dissemination of health information, reduces stigma, and increases the likelihood EBT implementation (Atkins et al., 2008; Flodgren et al., 2019; Li et al., 2013). OLs have been theorized to change behavior through the mechanism of creating a positive attitude about an innovation and increasing willingness to try an innovation (Weiner et al., 2024).

This study (Project CHAT: Caregivers Hearing about Anxiety Treatments) evaluated the effects of involving a local caregiver OL in the modification and presentation of an educational outreach presentation for caregivers on youth anxiety (Crane et al., 2021). Project CHAT examined OL and clinical researcher (OL condition) versus clinical researcher (researcher-only condition) delivery of an educational presentation on youth anxiety for caregivers. A cluster randomized control design was used because schools were randomized to presentation condition; caregivers were assigned to the presentation condition based on their child's school. Main outcomes were examined at the individual (not cluster) level. We hypothesized that relative to the researcher-only condition, the OL condition would result in a greater (a) increase in caregivers seeking CBT with exposures for their youth at the 3-month follow-up (endpoint), (b) increase in subjective norms about seeking CBT, (c) improvement in attitudes about CBT, (d) increase in caregiver intention to seek CBT with exposures for their youth, and (e) decrease in caregiver stigma about mental illness. We also hypothesized that both conditions would result in a similar increase in knowledge about how to seek EBTs. Finally, we hypothesized that participants would view the clinical researcher more favorably when she presented with an OL, relative to when she presented with another researcher.

Method

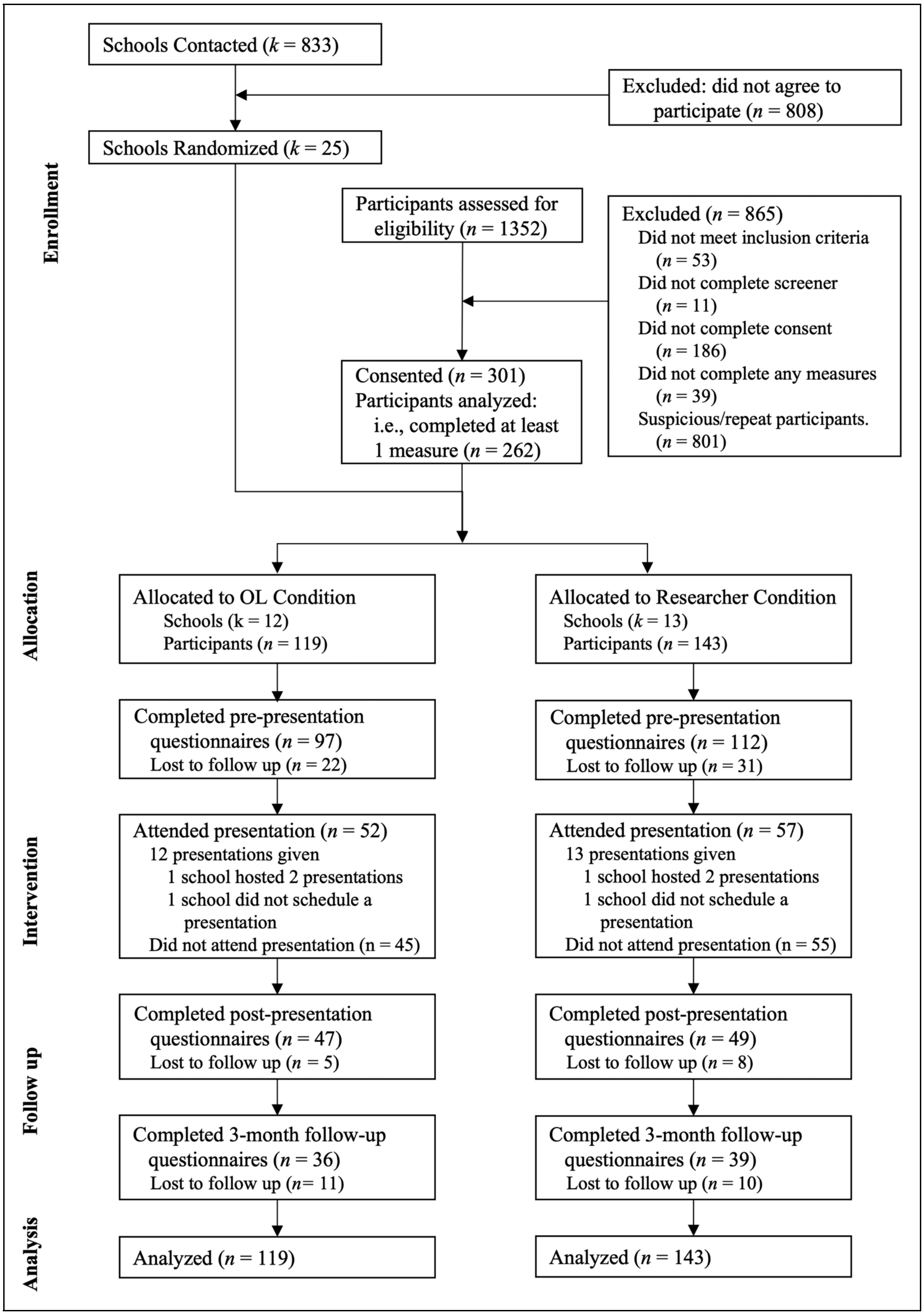
This manuscript followed the Consolidated Standards of Reporting Trials (CONSORT) and template for intervention description and replication (TiDieR) checklists for reporting results (Campbell et al., 2012; Hoffmann et al., 2014).

Participants

Participants ($N = 262$) were primary caregivers who registered to attend a presentation on youth anxiety at their child's school. Elementary, middle, and high schools located within a 1.5-hr drive of Philadelphia, PA were recruited by emailing their school mental health workers/other school administrators; 25 schools enrolled. The first author used Excel's random number generator to randomize schools to either the OL condition (odd numbers) or researcher-only condition (even numbers) using a 1:1 allocation ratio. Randomization occurred after the school agreed to participate, but before caregivers enrolled in the study (i.e., before they provided consent). Researchers, school administrators, and participants could not be masked to study condition; however, participants were unaware of study hypotheses. Administrators from enrolled schools advertised presentations/the study as they advertise other school events (e.g., email list, Facebook groups) using a template flier. Caregiver participants completed pre-presentation questionnaires to register for the presentation. Eligibility criteria were: being at least 18 years of age, being fluent in English, being the primary caregiver of a youth aged 5–18 years, and having a child at a school offering a presentation. Youth anxiety and lack of prior treatment experience were not inclusion/exclusion criteria to increase generalizability and reach of the presentation.

The CONSORT diagram is presented in Figure 1. Participants received $20 compensation to attend the presentation and complete pre- and post-presentation

Figure 1
CONSORT Diagram.



Note. OL = opinion leader. Schools were cluster randomized by school and presentation date; participants were assigned to a presentation condition based on the school their child attended.

questionnaires and $10 to complete the 3-month follow-up questionnaire. Participant demographics and clinical characteristics are presented in Table 1.

Power Analysis

Prior to data collection, Monte Carlo-based power was calculated for continuous outcomes using Mplus with 10,000

Table 1

Participant Demographics and Mental Health History.

	Caregivers			Youths		
	Researcher	Opinion leader	Overall	Researcher	Opinion leader	Overall
	$n = 113$	$n = 97$	$n = 210$	$n = 113$	$n = 97$	$n = 210$
Age: *M* (*SD*)	40.31 (7.19)	41.06 (6.29)	40.66 (6.78)	9.80 (3.37)	9.44 (3.16)	9.64 (3.27)
Number of children: *M* (*SD*)	2.46 (1.26)	2.48 (1.37)	2.47 (1.31)			
Satisfaction with previous therapy: *M* (*SD*)	3.60 (1.06)	3.62 (0.99)	3.61 (1.02)	3.49 (1.12)	3.42 (0.90)	3.46 (1.02)
RCADS-A: *M* (*SD*)				60.74 (15.41)	57.60 (14.40)	59.28 (15.00)
Gender: *n* (%)[a]						
Female	104 (92)	89 (93)	193 (92)	56 (50)	46 (47)	102 (49)
Male	9 (8)	7 (7)	16 (8)	53 (47)	44 (45)	97 (46)
Non-binary/transgender	0 (0)	0 (0)	0 (0)	2 (2)	1 (1)	3 (1)
Prefer not to say/unsure	0 (0)	2 (2)	1 (0.5)	2 (2)	6 (6)	8 (4)
Race: *n* (%)[a]						
American Indian or Alaska Native	0 (0)	1 (1)	1 (1)	3 (3)	2 (2)	5 (2)
Asian	3 (3)	3 (3)	6 (3)	7 (6)	6 (6)	13 (6)
Black or African American	23 (20)	16 (17)	39 (19)	32 (28)	21 (22)	53 (23)
White	80 (71)	60 (62)	140 (67)	80 (71)	66 (68)	146 (62)
A race not listed/prefer not to say	5 (4)	14 (14)	19 (9)	6 (5)	12 (12)	18 (8)
Ethnicity: *n* (%)[a]						
Hispanic	12 (11)	21 (22)	33 (16)	14 (12)	25 (26)	39 (18)
Not of Hispanic origin	99 (88)	74 (76)	173 (82)	97 (86)	69 (71)	166 (79)
Prefer not to say	2 (2)	2 (2)	4 (2)	3 (3)	3 (3)	6 (3)
Total household income: *n* (%)						
Less than $24,999	8 (7)	15 (15)	23 (13)			
$25,000–$49,999	17 (15)	11 (11)	28 (15)			
$50,000–$74,999	13 (12)	7 (6)	20 (11)			
$75,000–$99,999	19 (17)	15 (15)	34 (19)			
$100,000 and over	40 (35)	37 (36)	77 (42)			
Prefer not to say	16 (14)	12 (12)	28 (15)			
Child Health Insurance Coverage: *n* (%)[a]						
Employer/private health insurance				76 (67)	69 (71)	145 (67)
Public health insurance				40 (35)	27 (28)	67 (32)
None				0 (0)	2 (2)	2 (1)
Prefer not to say/unsure				5 (4)	3 (3)	8 (4)
Highest education completed: *n* (%)						
Less than 4 years of college	49 (43)	30 (31)	79 (38)			
College graduate (4 years)	31 (27)	30 (31)	61 (29)			
Graduate school	32 (28)	36 (37)	68 (32)			
Prefer not to say	1 (1)	1 (1)	2 (1)			

(Continued)

Table 1
(Continued)

	Caregivers			Youths		
	Researcher	Opinion leader	Overall	Researcher	Opinion leader	Overall
	n = 113	*n* = 97	*n* = 210	*n* = 113	*n* = 97	*n* = 210
Mental health history: *n* (%)						
Previous diagnosis of mental disorder: yes	51 (45)	40 (41)	91 (43)	38 (34)	27 (28)	65 (31)
Seen a mental health professional: yes	72 (64)	63 (65)	135 (64)	43 (38)	40 (41)	83 (40)
Therapist used CBT[b]						
Yes	29 (26)	15 (15)	44 (33)	18 (16)	14 (14)	32 (39)
No	17 (15)	21 (22)	38 (28)	6 (5)	9 (9)	15 (18)
Unsure	26 (23)	27 (28)	53 (39)	19 (17)	17 (18)	36 (43)
Therapist used exposures: *n* (%)[b]						
Yes	14 (12)	12 (12)	26 (19)	9 (8)	8 (8)	17 (20)
No	47 (42)	41 (42)	88 (65)	13 (12)	23 (24)	36 (43)
Unsure	11 (10)	10 (10)	21 (16)	21 (19)	9 (9)	30 (36)

Note. RCADS-A = Brief Revised Child Anxiety and Depression Scale-Parent Version, anxiety subscale *t*-score; CBT = cognitive behavioral therapy.

[a] Percentages may sum to over 100% because participants could select more than one option. [b] Out of the total number of participants who have been to a mental health professional

replications. Power was estimated to be .83 for a sample size of 180, assuming a Type I error rate of 5%, a two-tailed test, a medium effect ($r = .30$) of presentation within the OL condition and a small effect ($r = .15$) of presentation within the researcher-only condition. Power was estimated at the participant level given hypothesized low levels of clustering. For binary outcomes (difference in seeking CBT with exposure at 3-month follow-up), power was calculated using G*Power assuming 10% attrition, a Type I error rate of 5%, a two-tailed test, and a 25% rate of seeking CBT in the researcher-only condition; statistical power was .82 to detect a medium effect ($OR = 1.72$). Additional participants were recruited given higher than expected rates of attrition, potentially due to the COVID-19 pandemic.

Measures

For a copy of measures created for this study, see Crane et al., 2021.

Primary Outcome

Treatment-Seeking Evaluation. Pre- and post-presentation, caregivers rated how likely they were to seek a therapist who uses exposure therapy in the next 3 months on a scale ranging from 1 (*very unlikely*) to 5 (*very likely*). This question is consistent with how treatment-seeking intentions have been examined in prior DTC marketing studies (Becker et al., 2020). At the 3-month follow-up assessment, caregivers indicated if they had sought therapy for their youth since the presentation (yes or no). If yes, they were asked if their child had started therapy, if they requested a therapist who uses exposure therapy, and for their child's therapist's name. The first author coded whether the therapist offered exposure therapy using her existing knowledge of local therapists or by directly asking the therapist whether they offered exposure therapy.

Secondary Outcomes

Knowledge About Seeking CBT. The knowledge subscale of the Parent Engagement in Evidence-Based Services Questionnaire (PEEBS-K) measured caregivers' perceived understanding of how to seek EBTs (i.e., perceived behavioral control; Chang et al., 2019). A sample item is, "I know how to access treatments for my child." Items were rated on a scale of 1–5, reversed coded as indicated, and averaged to create five subscales (Choy & Nakamura, 2022). Higher scores on the knowledge subscale indicated higher levels of perceived knowledge about seeking EBTs. Evidence supports the PEEBS-K's internal consistency ($\alpha = .72$) and convergent validity ($r = .25$–$.41$; Choy & Nakamura, 2022). PEEBS-K internal consistency was .74 in this sample.

Internalized Stigma. The Parents' Internalized Stigma of Mental Illness Scale (PISMIS; Zisman-Ilani et al., 2013) is a 10-item measure of caregiver perception of internalized stigma for having a youth with a mental illness, adapted from the well-validated Internalized Stigma of Mental Illness Scale (Ritsher et al., 2003). Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher scores indicate higher levels of family stigma. The PISMIS has acceptable internal consistency ($\alpha = .76$) and has demonstrated sensitivity to change ($\alpha = .76$; Boyd et al., 2014; Zisman-Ilani et al., 2013). PISMIS internal consistency was .88 in this sample.

Caregiver Attitudes About CBT. The Caregiver Attitudes about CBT (CACBT) evaluates caregivers' perceptions of the helpfulness of 18 strategies used in CBT for youth anxiety. Items were rated on a scale of 1–5 and summed: higher scores indicated more favorable attitudes. The CACBT was developed for the present study modeled on the Knowledge of Evidence-Based Services Questionnaire (Stumpf et al., 2008). CACBT internal consistency was .96.

Therapy Subjective Norms. The Therapy Subjective Norms (TSN) Questionnaire is a six-item measure of caregiver perception of subjective norms for seeking CBT (TSN-CBT). This scale was developed for this study based on well-validated measures of subjective norms (Glanz et al., 2008; Park & Smith, 2007). Agreement with each item was rated on a scale of 1–7 options; all six items were summed with higher scores indicating more favorable subjective norms. TSN-CBT internal consistency was .95.

Impression of Presenters. On the Relatability Evaluation, caregivers rated each presenter on a scale of 1–5 on the following 10 dimensions: relatability, likeability, similarity, similarity in thinking, similarity of beliefs, credibility, trustworthiness, understanding of the local community, familiarity, and friendship. Items were evaluated separately. This measure was developed for the present study based on characteristics of homophily (McCroskey et al., 1975).

Additional Measures

Youth Anxiety. The Brief Revised Child Anxiety and Depression Scale-Parent Version (RCADS) is a 25-item caregiver report measure of anxiety and depressive symptoms on a scale of 0–3 (Ebesutani et al., 2017). This study used the 15-item Total Anxiety subscale (RCADS-A). Previous research supports the RCADS-A internal reliability ($\alpha = .80$–$.86$), retest reliability ($r = .85$), convergent validity ($r = .59$), and discriminant validity for anxiety diagnoses (AUC = .81; Ebesutani et al., 2017). RCADS-A internal consistency was .81 in this sample.

Client Satisfaction. Caregivers indicated their satisfaction with the presentation using the eight-item Client Satisfaction Questionnaire (CSQ; Attkisson & Zwick, 1982). Higher composite scores indicated greater program satisfaction. Psychometric analyses support the CSQ's internal consistency ($\alpha = .93$) and convergent validity ($r = -.40$ to $.23$; Attkisson & Zwick, 1982). CSQ internal consistency was .91 in this sample.

Table 2
Presenter Demographics.

		Presenter 2	
	Presenter 1	Researcher	Opinion leader
Age: *M* (*SD*)	29	27.33 (1.23)	40.46 (4.46)
Number of children: *M* (*SD*)	0	0.11 (0.33)	2.55 (1.13)
Gender: *n* (%)[a]			
Cisgender	1	9 (100)	11 (100)
Female	1	7 (78)	11 (100)
Male	0	2 (22)	0 (0)
Race: *n* (%)[a]			
Black or African American	0	1 (12)	2 (18)
White	1	8 (88)	8 (73)
Ethnicity: *n* (%)[a]			
Hispanic	0	0 (0)	1 (9)
Not of Hispanic origin	1	9 (100)	10 (91)
Country at birth: *n* (%)			
In the United States	1	9 (100)	11 (100)
Highest education completed: *n* (%)			
Some college	0	0 (0)	1 (9)
College graduate (4 years)	0	3 (33)	4 (36)
Master's degree or equivalent	1	6 (67)	4 (36)
Doctoral degree or equivalent	0	0 (0)	2 (18)

Note. Presenter 1 was the same person (MEC) in both conditions.
[a] Percentages may sum to over 100% because participants could select more than one identity.

Demographics. A demographics questionnaire assessed caregiver and youth age, gender, race, and ethnicity; caregiver level of education, income, and number of children; and youth health insurance status. The presenters also indicated their age, gender, number of children, and level of education to assess their similarity to participants.

Mental Health History. On the mental health history questionnaire, participants indicated whether they or their youth have been diagnosed with or treated for a mental disorder, whether they or their youth have received CBT with exposures (defined as "slowly facing fears"), and their level of satisfaction with their youth's previous treatment experience.

Fidelity and Manipulation Checks. A knowledge test (KT) and Fidelity checklist were used to assess whether the presentations in each condition were delivered consistently and whether participants learned a similar amount of information from the presenters. A research assistant (RA) functioned as an independent evaluator and completed a content checklist; two RAs were present for 25% of presentations to assess for interrater reliability. RAs also coded for presenter and audience member self-disclosure about experience receiving therapy for themselves or their child ($\kappa = .90$), and noted the total amount of time each presenter spoke. Presentation content was delivered with 100% fidelity ($\kappa = 1$).

Caregivers' knowledge of the content reviewed in the presentation was assessed using a 20-item KT. Items were true/false and multiple-choice format. Participants received 1 point for each correct answer for a maximum of 20 points.

Presentation

Caregivers in both conditions attended an outreach presentation (i.e., a live webinar) which lasted an average of 75.38 min ($SD = 10.3$), including an average of 16.88 min ($SD = 8.12$) for caregiver questions. Presentations were hosted from May 2021 to May 2022 during the school year. The presentation was cofacilitated by two presenters. Presenter 1 (MEC) was the same across all presentations, while Presenter 2 varied based on condition (either a clinical researcher or an OL). Table 2 describes presenter demographics. Table 3 describes details about the presentation format, differences between conditions, the process for engaging the OL, and rationale for presentation elements. Although there was one OL per school, one school in the OL condition offered the presentation twice. Thus, there were a total of 11 OLs in the study. OLs selected for this study had a range of occupations, family and personal experience with mental illness, and volunteer experience with the school's parent group. Prior to the presentation, OLs attended two training meetings with the first author with the goal of teaching them presentation content, tailoring the presentation as needed, and leveraging the OLs as

Table 3

Rational for Presentation Content Elements.

Both Conditions

- Presentations occurred via Zoom, primarily in the evening, although one presentation occurred during the day.
    - *Rationale*: Increase accessibility of presentation.
- Presentation content included information on identifying anxiety disorders.
    - *Rationale*: Increase awareness of potential need for treatment, and cue relevance (Petty et al., 1983).
- Presentation content included strategies for caregivers to help their youth with anxiety.
    - *Rationale*: Reduce stigma by demonstrating anxiety is treatable, and increase parent motivation to attend presentation.
- Presentation content included information about CBT for youth anxiety, and strategies for finding a therapist who uses CBT with exposures.
    - *Rationale*: Provide information on seeking CBT, and improve knowledge of and perceived behavioral control of how to find a therapist who offers CBT.
- Exposure therapy was emphasized.
    - *Rationale*: Exposure is core ingredient of CBT and is underutilized by therapists in the community (Chu et al., 2015).
- The text on the PowerPoint presentations is written at a 5.3-grade reading level.
    - *Rationale*: Use lay terminology to improve comprehension.
- After the presentation, participants were sent a PDF of the presentation, a referral list of local therapists who provide CBT with exposures, a list of self-help resources, a summary of the key strategies reviewed, and an infographic about youth anxiety and CBT (see Supplementary Appendix A).
    - *Rationale*: Make it easier for families to seek CBT with exposure, thus improving perceived behavioral control.

Research presenters

- The clinical researcher presenters (Presenter 1 and Presenter 2 in the researcher-only condition) were clinical psychology PhD students who had specialized training in CBT for youth anxiety and who worked as therapists in a specialty clinic for youth anxiety at Temple University.
    - *Rationale*: Researcher-facilitated outreach presentations are one strategy research groups use to disseminate information to the community (Gallo et al., 2015; Powell et al., 2011; Szymanski, 2012).
- Researcher presenters were introduced using these characteristics during the presentation.
    - *Rationale*: Introductions established credibility.
- Presentation content was the same for all schools randomized to the researcher-only condition, although examples were slightly modified based on brief feedback via email from the school staff member organizing the presentation.
    - *Rationale*: Standardized presentation content to ensure all participants receive the same information.

OL Presenters

OL selection

- To select the OLs, school parent groups (e.g., parent–teacher association) were contacted and asked, "please nominate a caregiver who is well-known and respected within your community, and who reflects the diversity of the school as a whole." If a school did not have an active parent group, the school staff selected the OL.
    - *Rationale*: Previous research supports OL nomination by knowledgeable community members and by nomination of an individual (Rogers & Cartano, 1962; Valente & Pumpuang, 2007).

OL training

- OLs discussed their experiences with youth anxiety.
    - *Rationale*: Build rapport with the OL. Help them consider if they want to self-disclose personal experiences to destigmatize youth anxiety and seeking treatment.
- OLs discussed factors about their communities that may affect how anxiety symptoms present or are understood, and how caregivers in their community typically seek therapy. The first author modified the outreach presentation separately for each school based on OL feedback.
    - *Rationale*: Tailor the presentation content to the local community to enhance relevance.
- During the training, the PI reviewed presentation materials and encouraged the OLs to discuss their reactions and provide feedback. The OLs considered which strategies they could endorse as effective (e.g., remaining calm when their child becomes emotional). Motivational interviewing techniques were used when an OL was skeptical about CBT's effectiveness (Miller & Rollnick, 2012).
    - *Rationale*: Increase OL buy-in of the benefits of CBT to leverage them as a CBT champion.
- The OLs were sent a draft of the presentation to review prior to the meeting. In the second meeting, OLs reviewed/approved modifications to the presentation, were given a chance to practice to ensure comprehension, and had remaining questions answered. OLs were offered additional practice sessions, but no OL took this opportunity.
    - *Rationale*: Increase OL knowledge of the presentation content.
- OL meetings took place via Zoom.
    - *Rationale*: Study was conducted during the COVID-19 pandemic.

(Continued)

Table 3
(Continued)

OL presentations

- During the presentation, the OLs were introduced as a parent of a child at the school who had worked with the researcher to tailor the presentation to their community.
  - *Rationale*: Ascribe creditability to the OLs as knowledgeable presenters and community members.
- Researcher co-facilitated the presentation with the OL.
  - *Rationale*: Answer clinical questions form participants, and decrease the level of content mastery required from the OLs.
- Presentation content was similar across schools but varied in terms of specific examples of how the material can apply to the school community; some OL presentations included additional slides to explain concepts in more detail based on OL feedback.
  - *Rationale*: Increase local relevance of the information, and improve participant comprehension.
- OLs were encouraged to share personal stories, including their experiences with youth anxiety and seeking treatment.
  - *Rationale*: Increase a sense of similarity to the OL; improve subjective norms, attitudes, and perceived behavioral control about seeking treatment; and decrease stigma.
- Presentations had scripted text in the notes that the OLs could read from or adapt.
  - *Rationale*: The scripted text allowed for the core content of the presentations to be standardized, and enabled OLs to present competently without needing too much practice or expertise.

Note. OL = opinion leader; CBT = cognitive behavioral therapy; PI = principal investigator.

champions of CBT. OLs were paid $200 for their involvement with the study (approximately $40/hr).

Procedure

All questionnaires were completed and stored on REDCap (a HIPAA secure platform; Harris et al., 2019). Participants and OLs provided informed consent via REDCap before completing the questionnaires. Before (pre) and after (post) the presentation, participants completed the Treatment-Seeking Evaluation, PEEBS, PISMIS, CACBT, TSN-CBT, and KT. They also completed the RCADS, demographics, and mental health history questionnaire before the presentation; the Relatability Scale and the CSQ after the presentation; and the Treatment-Seeking Evaluation at 3-month follow-up. After they completed the pre-questionnaires, they were sent the zoom link to the presentation. They completed the post-presentation questionnaires within 1 week of the presentation ($M_{\text{days}} = 2.12$, $SD_{\text{days}} = 2.56$). Follow-up questionnaires were sent to participants 3 months after the presentation and were completed an average of 3.12 months ($SD_{\text{months}} = 0.13$) after the presentation. Participants were sent reminders to complete unfinished questionnaires and with presentation details to reduce dropout. Participants who did not attend the presentation were considered to have dropped out of the trial and were not followed.

Analytic Plan

Study analyses were preregistered in the study protocol paper (Crane et al., 2021) and on clinicaltrials.gov (NCT04929262); preregistration occurred after 17 participants had enrolled in the study but prior to data analyses. Preliminary analyses summarized study predictors, demographics, and outcome variables using descriptive statistics of means, standard deviations, frequencies, and percentages. The correlations between youth anxiety at baseline and study outcomes were examined using Pearson's correlation. Differences in rates of school recruitment and attrition between groups were examined using independent sample *t*-tests, differences in participants relative to the schools they were recruited from were examined using one-sample *t*-tests; and difference in rates of presentation attendance was examined using chi-squared (for binary predictors and outcomes) and logistic regression (for the binary outcome of attendance and continuous predictors). Analyses used multilevel modeling using restricted maximum likelihood estimation (to handle missingness) with a random intercept to account for the nesting of repeated measures within caregivers.[1] A "per protocol" approach was used for study analyses, analyzing all data collected per participant, even if data is missing on some variables or at some time points. Multiple logistic regression analyses also examined whether key predictors at baseline (i.e., the six outcome variables and demographics) were associated with differences in study retention. In separate multilevel models, (a) intention to seek CBT, (b) TSN-CBT, (c) CACBT, (d) PISMIS, and (e) PEEBS-K subscale were regressed on time (i.e., pre- vs. post-presentation), condition, and the interaction between time and condition; a random intercept was included in all five multilevel models. To assess the main effect of time, these models were repeated without the interaction between time and condition. A binary logistic regression was conducted with CBT service seeking at the 3-month follow-up entered as the dependent variable, condition entered as the independent variable and school entered as a control variable. Youth anxiety (RCADS-A) was included as a control variable in the models examining intention to seek CBT and CBT service seeking. *t*-Tests were used to examine the difference between conditions

Table 4

Change in Dependent Variables Pre- to Post-Presentation.

	Opinion leader			Researcher				
	Pre *M* (*SD*) $n = 119$	Post *M* (*SD*) $n = 47$	Simple slope of time β [95% CI]	Pre *M* (*SD*) $n = 143$	Post *M* (*SD*) $n = 49$	Simple slope of time β [95% CI]	Main effect: Time β [95% CI]	Interaction: Time × Group β [95% CI]
KT	62.60 (24.58)	80.59 (25.57)	12.37* [6.26 to 18.49]	66.09 (20.64)	84.8 (18.05)	14.15* [9.77 to 18.52]	13.33* [9.58 to 17.09]	−2.68 [−10.19 to 4.83]
PEEBS-K	3.06 (0.74)	3.70 (0.72)	0.64* [0.43 to 0.85]	3.01 (0.74)	3.56 (0.61)	0.57* [0.37 to 0.78]	0.61* [0.46 to 0.76]	−0.05 [−0.24 to 0.35]
PISMIS	15.01 (5.00)	14.60 (5.90)	−0.63 [−1.65 to 0.39]	15.07 (4.26)	14.90 (4.30)	−0.27 [−1.33 to 0.79]	−0.44 [−1.18 to 0.29]	−0.31 [−1.78 to 1.16]
TSN-CBT	31.36 (7.40)	33.81 (6.35)	2.32* [0.53 to 4.11]	32.6 (6.98)	34.28 (6.71)	2.18* [0.95 to 3.41]	2.20* [0.97 to 3.43]	0.24 [−2.24 to 2.71]
CACBT	79.04 (8.63)	81.13 (7.52)	2.14* [0.27 to 4.02]	80.35 (11.94)	82.98 (8.24)	2.48 [−1.03 to 6.00]	2.18* [0.15 to 4.20]	−0.12 [−4.19 to 3.95]
Exposure seeking: intention	3.02 (1.22)	3.79 (1.18)	0.69* [0.33 to 1.04]	3.23 (1.18)	3.67 (1.20)	0.49* [0.23 to 0.75]	0.58* [0.36 to 0.79]	0.15 [−0.28 to 0.58]

Note. CI = confidence interval; KT = knowledge test; PEEBS-K = Parent Engagement in Evidence-Based Services Questionnaire, Knowledge Subtest; PISMIS = Parents' Internalized Stigma of Mental Illness Scale; TSN-CBT = Therapy Subjective Norms–Cognitive Behavioral Therapy CACBT = Caregiver Attitudes about Cognitive Behavioral Therapy.

$^*p < .05$.

Table 5

Descriptive Statistics for Dependent Variables: 3-Month Follow-up.

	Opinion leader *n* (%)	Researcher *n* (%)
	$n = 39$	$n = 36$
Sought treatment		
Yes	12 (31)	13 (36)
No	21 (54)	17 (47)
Child was already in therapy	6 (15)	6 (17)
Sought exposure therapy (self-report)[a]		
Yes	3 (25)	3 (23)
No	6 (50)	9 (69)
Unsure	3 (25)	1 (8)
Sought exposure therapy (coded)[b]		
Yes, new therapist	5 (29)	4 (22)
Yes, child was already seeing	3 (18)	4 (22)
No	3 (18)	3 (17)
Unable to determine	6 (35)	7 (39)

Note. Coded = research team coded the therapist as completing exposure therapy.

[a] Out of the total number of participants who sought therapy for their child; [b] Out of those who either sought a new therapist, or whose child was already seeing a therapist.

for each item on the Relatability Evaluation of Presenter 1 and Presenter 2 (exploratory analysis); effect size was calculated using Cohen's *d* (*d*). As an exploratory analysis, this study examined caregiver demographic factors, youth anxiety (RCADS-A), racial similarity to the presenter (Demographics, same race), and self-disclosure (Content Checklist, self-disclosure) as potential moderators of the effect of presentation condition on intention to seek CBT; in separate multilevel models, intention to seek CBT was regressed on time, condition, each potential moderator, and their three-way interaction.

Results

Preliminary Analyses

Preliminary analyses examined descriptive statistics and reach (including attrition). Descriptive statistics for study outcome variables are presented in Table 4 (pre and post) and Table 5 (follow-up).

Reach/Attrition

In total, 833 schools were contacted to participate in the study. The 25 (3%) schools enrolled in the study had a significantly higher proportion of students from a racial/ethnic minoritized background (percentage of students who are non-Hispanic White; $M_{\%} = 62.66$, $SD_{\%} = 34.70$) relative to the schools contacted ($M_{\%} = 53.57$, $SD_{\%} = 30.97$), $t(829) = 2.07$, $p = .04$, $d = 0.29$. Additionally, the schools enrolled in the study ($M_{\%} = 54.00$, $SD_{\%} = 33.10$) had a significantly higher proportion of students eligible for free school meals (approximately $25,000 annual income) relative to the schools contacted ($M_{\%} = 42.51$, $SD_{\%} = 34.37$), $t(749) = 2.44$, $p = .02$, $d = 0.35$.

Of the 301 caregivers who consented for the study, 209 (69%) completed presentation registration (i.e., completed pre-questionnaires), and of the participants who completed presentation registration, 109 (52%) attended the presentation. Caregivers who enrolled in the study were more likely to be White (69%) and less likely to have income that would qualify for free school meals (13%) than the racial/ethnic and economic background of the students who attended the schools hosting the presentations, $ts(181) \leq 13.51$, $p < .001$. Participants who were Black, had an income less than $50,000, and who had a college degree or fewer years of education were significantly less likely to attend the presentation, $\chi^2(1,\ n = 208) \geq 4.41$, $p \leq .04$; participants who had higher levels of knowledge of CBT (KT) were more likely to attend the presentation, $OR = 1.03$, $SE = .01$, $p = .02$. The other primary dependent variables (intention to seek CBT, TSN-CBT, CACBT, PISMIS, PEEBS-K), caregiver age, and youth anxiety were not significantly associated with presentation attendance, $ORs \leq 1.07$, $SEs \geq .02$, $ps \geq .19$, nor was caregiver gender, ethnicity, and condition, $\chi^2(1,\ n = 208) \leq 1.51$, $p \geq .21$. Attrition at follow-up was high and similar across groups (70% for the OL condition and 73% for the researcher-only condition).

Presentation

Presentations ($k = 25$) were attended by an average of 4.36 caregivers ($SD = 4.32$, range = 0–20). 66% ($n = 8$) of the OLs self-disclosed about personal/familial experience with mental health and/or therapy, while the researcher presenters (Presenter 1, and Presenter 2 in the research-only condition) did not self-disclose. There was no significant difference in presentation satisfaction (CSQ) between the researcher-only ($M = 28.04$, $SD = 3.74$) and OL ($M = 27.64$, $SD = 3.36$) conditions, with both conditions having favorable presentation ratings, $t(94) = 0.55$, $p = .58$, $d = 0.11$. As shown in Table 4, there was no significant interaction between condition and time on knowledge of presentation material (KT), but the main effect of time on knowledge of presentation material was significant, indicating participants' knowledge of presentation material increased in both conditions as hypothesized.

Theory of Planned Behavior

As shown in Table 4, there was no significant interaction between time (pre- to post-presentation) and condition (researcher vs. OL) on knowledge of seeking EBTs (PEEBS-K), subjective norms about seeking CBT (TSN, CBT total), stigma (PISMIS), attitudes about CBT (CACBT), and intention to seek exposure therapy. The main effect of time on stigma was not significant. There was a statistically significant main effect of time on knowledge of seeking EBTs, subjective norms about seeking CBT, attitudes about CBT, and intention to seek CBT. As shown in Table 5, there was no significant difference between conditions regarding the seeking CBT, $OR = .75$ (95% CI = [0. 28–1.99]), $SE = 0.50$, $p = .56$. None of the variables tested (caregiver gender, age, race, ethnicity, education level, income; youth anxiety; self-disclosures; and being the same race or ethnicity as Presenter 2) significantly moderated the interaction between condition and time on intention to seek exposure therapy, $bs \leq 0.63$, $SEs \leq 0.89$, $ps \geq .19$. Youth anxiety was significantly correlated with pre-presentation intention to seek exposure therapy $r = .4$, $p < .001$, but not pre-presentation knowledge of seeking EBTs (PEEBS-K), subjective norms about seeking CBT (TSN, CBT total), stigma (PISMIS), attitudes about CBT (CACBT), $rs < .09$, $ps > .05$.

Impressions of Presenters

Participants' impressions of the presenters are displayed in Table 6. Contrary to our hypothesis, participants' perceptions of Presenter 1 (MEC) were not significantly different when she presented with another researcher relative to when she presented with an OL, $ts(94) \geq 0.04$, $ps \geq .50$, $ds \leq .14$. To further explore this, we examined the difference between participants' perceptions of Presenter 2 (the second researcher vs. the OL). As expected for an OL, participants rated the OL as significantly more similar, more understanding of their community, more familiar, and more likely to be a friend relative to the researcher, $ts(94) = 2.45$, $ps \leq .046$, $ds \geq 0.50$. However, there was no significant difference between the OL and the researcher presenter in terms of being relatable, being likeable, thinking similarly, having similar beliefs about mental health, and being trustworthy, $ts(94) \leq 1.95$, $ps \geq .054$, $ds \leq 0.40$. Furthermore, participants rated the researcher presenter to be a significantly more credible source of mental health information than the OL, $t(94) = 3.35$, $p = .001$, $d = 0.68$.

Discussion

The present study examined the collaboration between a caregiver OL and researchers as a DTC strategy to increase caregiver demand for CBT for youth anxiety. Contrary to hypotheses, there was no significant difference between the researcher-only and researcher + OL facilitated presentations in terms of change in caregiver subjective norms about, attitudes about, knowledge of, stigma about, and intention to seek CBT for youth anxiety, or actual seeking of CBT for their child at 3-month follow-up. However, both versions of the presentation resulted in

Table 6
Perceptions of Presenters.

	Presenter 1			Presenter 2		
	Res. *M* (*SD*)	OL *M* (*SD*)	*d* [95% CI]	Res. *M* (*SD*)	OL *M* (*SD*)	*d* [95% CI]
Similar to me	3.71 (0.87)	3.72 (0.80)	−0.01 [−0.41 to 0.39]	3.61 (0.86)	4.02 (0.77)	−0.50* [−0.91 to −0.09]
Familiar with the presenter	1.41 (0.84)	1.70 (0.95)	−0.33 [−0.73 to 0.08]	1.31 (0.65)	2.53 (1.52)	−0.85* [−1.27 to −0.43]
Friends with the presenter	1.18 (0.49)	1.34 (0.52)	−0.31 [−0.71 to 0.09]	1.18 (0.49)	1.96 (1.20)	−1.06* [−1.48 to −0.63]
Understood my community	4.10 (0.85)	4.13 (0.82)	−0.03 [−0.43 to 0.37]	4.00 (0.84)	4.32 (0.69)	−0.41* [−0.82 to −0.006]
Relatable	4.12 (0.78)	4.19 (0.68)	−0.09 [−0.49 to 0.31]	4.00 (0.76)	4.28 (0.62)	−0.40 [−0.80 to 0.005]
Likable	4.61 (0.57)	4.62 (0.53)	0.009 [−0.41 to 0.39]	4.51 (0.58)	4.55 (0.54)	−0.08 [−0.48 to 0.32]
Thinks like me	3.94 (0.69)	3.85 (0.75)	0.12 [−0.28 to 0.52]	3.90 (0.71)	3.89 (0.79)	0.006 [−0.39 to 0.41]
Similar beliefs about MH	4.27 (0.67)	4.28 (0.62)	−0.02 [−0.42 to 0.38]	4.18 (0.70)	4.13 (0.61)	0.09 [−0.32 to 0.49]
Trustworthy	4.55 (0.61)	4.47 (0.58)	0.14 [−0.26 to 0.54]	4.47 (0.65)	4.23 (0.63)	0.37 [−0.04 to 0.77]
Credible MH info source	4.59 (0.57)	4.57 (0.58)	0.03 [−0.37 to 0.43]	4.51 (0.65)	4.00 (0.83)	0.68* [0.27 to 1.09]

Note. Presenter 1 is the same person (MEC) in both conditions. Presenter 2 differed across the presentations. Res. = researcher condition; OL = opinion leader condition; CI = confidence interval; MH = mental health.
*$p < .05$.

improvements in subjective norms, attitudes, knowledge, and intention to seek CBT. The improvements across conditions suggest that as an active control (see Table 3), the researcher-only condition also addressed the mechanisms of change associated with OLs (Weiner et al., 2024). This may have led to a ceiling effect for between-group differences; ceiling effects have been identified as a rationale in other studies that found OLs did not significantly improve outcomes (Flodgren et al., 2019). The lack of a significant effect of the OL condition on factors related to treatment seeking is in line with previous studies that have found no significant effect of testimonials (i.e., a messenger with lived experience) relative to mental health professionals (Barnett et al., 2020; Morawska et al., 2011). However, given the role of peer influence on stigma (Corrigan et al., 2014; Pescosolido et al., 2008), it is somewhat surprising that engaging an OL did not further improve subjective norms on seeking treatment.

Regardless of the presenter, the present findings support the use of educational presentations as a dissemination strategy to improve caregiver subjective norms about, knowledge of, and intention of seeking CBT for youth anxiety. Additionally, six participants had sought exposure therapy for their child after the presentation. These findings are in line with previous research supporting educational dissemination strategies to improve knowledge, attitudes, and help-seeking behavior for mental health (e.g., Barnett et al., 2020; Gallo et al., 2015; Hurley et al., 2020). The lack of a significant main effect of time on stigma may have been due to a floor effect, as participants had low levels of stigma about seeking therapy for their child before and after the presentation.

Contrary to previous research (e.g., Amsalem & Martin, 2022; Becker et al., 2020), this study did not identify significant moderators of presentation effects, suggesting all individuals who participated benefited similarly. However, analyses examining presentation reach suggest that this education presentation reached fewer individuals who identify as Black, who have lower levels of education, and who have lower incomes. Differences in reach were seen in participant recruitment and retention, not from the recruitment of schools. This finding suggests that attitudinal and structural barriers impacting participants, rather than schools, may affect the reach of educational presentations about mental health. Additional research is warranted to identify dissemination strategies that are more acceptable and feasible for individuals who are medically underserved or face more structural barriers to engaging in mental health care (Green et al., 2020).

Contrary to our hypothesis, participants' perceptions of Presenter 1 did not change when she co-presented with an OL versus another clinical researcher. Thus, in the present sample, collaborating with OLs may not have been necessary to increase perceived credibility and acceptability of clinical researchers. In this study, OLs were perceived as being similar to and familiar to the participants and being understanding of their community (Valente & Pumpuang, 2007). However, they also were viewed as being less credible sources of mental health information, thus suggesting that participants may not have viewed them as potent OLs for mental health information (Flodgren et al., 2019; Valente & Pumpuang, 2007). Of note, the present sample included individuals who were highly educated and had low levels of stigma and thus may have been more inclined to view a researcher as a valuable source of information, given the literature suggesting that scientific mistrust is higher among those with lower levels of education (Achterberg et al., 2017).

It is possible alternative methods of nominating an OL would have resulted in the OL presenters being viewed as more credible (Grimshaw et al., 2006). Alternative methods include restricting OL nomination to include a caregiver who they consider to be a reliable source of mental health information (rather than someone who is “well known and well respected” as in this study) or identifying OLs using sociometric identification (i.e., using peer nominations and social network analysis to identify an OL; Grimshaw et al., 2006). However, more complex OL identification methods (e.g., sociometric identification) may not have been as feasible (Valente & Pumpuang, 2007). OLs can be challenging to identify given OLs may vary based on the topic or an individual’s social network (Grimshaw et al., 2006). Grimshaw et al. (2006) suggested OLs are best used for specialized groups, but this is a difficult strategy to scale across settings. Given the use of OLs can be a costly implementation strategy (Szewczyk et al., 2022), OLs may not be preferable for universal dissemination campaigns. OLs may be more useful for individuals who have a higher degree of stigma or who are less trusting of alternative messengers.

Strengths and Limitations

This study has many strengths. First, it was a preregistered randomized controlled trial of a dissemination strategy with an active control condition. Second, participants in this study were caregivers interested in seeking information on youth anxiety, rather than online participants; this contrasts with previous DTC marketing studies that primarily used undergraduate or online participant pools (e.g., Amsalem & Martin, 2022; Gallo et al., 2015; Ponzini & Schofield, 2019). Third, this study examined actual treatment seeking 3 months after the intervention, rather than just treatment-seeking intentions. Finally, by examining participants’ perceptions of presenters, we could theorize about the potential reasons for the lack of significant effect of the OL condition.

There are limitations warranting discussion. There were high rates of attrition in this study: approximately half the participants who completed registration (pre-questionnaires) attended the presentation and, most concerningly, underserved and minoritized individuals were less likely to attend. Furthermore, participants who had lower levels of knowledge of CBT were less likely to attend the presentation. Participants who dropped out of the study were lost to follow-up, and thus, we do not know the reasons for non-attendance. The participant demographics were later in the questionnaire battery, limiting analyzes examining whether the research burden of the presentation registration (pre-questionnaires) differentially impacted certain individuals. Moderation analyses of the effect of demographic variables on the effect of condition were underpowered. Previous research suggests that race and ethnicity (likely representing underlying cultural factors and structural barriers associated with these demographic characteristics) are associated with stigma, knowledge of EBTs, and preferred messengers of health information (Barnett et al., 2020; Becker et al., 2018; Turner et al., 2015). Thus, OLs may have been more effective for individuals from specific backgrounds. Additionally, participants were predominantly female/mothers. Future research could examine how to engage fathers more in the treatment-seeking process. School and participant recruitment, and participant retention were likely negatively impacted by stressors of the COVID-19 pandemic. The characteristics of the presenter were assessed using a single item per characteristic. Finally, a 3-month follow-up may not have provided participants sufficient time to find an available provider who offers exposure therapy given waitlist lengths.

Conclusion and Future Directions

Given the need for more research on dissemination (Baker et al., 2021), there are numerous directions for future research. Research is needed to examine dissemination strategies (e.g., infographics, social media, presentations, media campaigns) and to examine both the reach and effectiveness of each method to ensure such initiatives equitably provide benefits. Celebrities, social media influencers, or documentaries may be helpful for increasing the scale of DTC efforts (Gronholm & Thornicroft, 2022). Future research could examine the feasibility of caregivers or OLs presenting educational DTC presentations on mental health without the presence of a clinical researcher, as well as other strategies to engage caregivers in dissemination initiatives using less resource-intensive methods (e.g., audience participation, posting on a discussion forum). School parent liaisons or other lay mental health workers may be a more feasible, engaging, and personalized method to involve parents in DTC marketing initiative than recruiting a parent for the purpose of a specific initiative (Sanders, 2008). It is possible that OLs and parents may be more impactful if they are involved with designing dissemination campaigns from the beginning, rather than just tailoring and presenting a predetermined presentation. Finally, in addition to DTC efforts to increase demand for CBT, implementation efforts must increase the supply of therapists who affordably offer CBT with exposure for youth anxiety.

In sum, this was the first study to examine the effects of collaborating with an OL to disseminate information about CBT for youth anxiety. Findings suggest the OL did not significantly improve the degree to which caregivers intended to or sought CBT for youth anxiety. However, presentation attendance was associated with increased knowledge of, subjective norms about, and intention to seek exposure therapy. This study offers useful information about selecting OLs, understanding how dissemination audiences perceive sources of information, and the use of educational presentations as a dissemination strategy.

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Declaration of Conflicting Interests

The authors declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: Philip C. Kendall receives royalties from the sales of published materials related to the treatment of youth, and his spouse operates and receives income from the publisher. All other authors have declared no conflicts of interest.

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Supplemental Material

Supplemental material for this article is available online.

Notes

1. Preliminary analyses found that the effect of school clustering on the actual treatment seeking variable was ICC = .16, on treatment seeking intention was ICC = .06, on PEEBS-K was ICC = .02. ICCs could not be computed for TSN-CBT, CACBT, and PISMIS models examining the effect of school-based clustering because the between-cluster variance was trivially small. Despite some variables having ICC > .05, three-level multilevel models (accounting for nesting of time points within individuals within schools) were not used because these models were unable to run for treatment seeking actual (due to small sample size), or for TSN-CBT, CACBT, and PISMIS (due to singular fit from low cluster-based variance). The three level model (including a random intercept for participant and school) for PEEBS-K and treatment seeking intention did not change the results (*b* and *p* values were identical). Thus, results of two-level multilevel models were reported to allow for consistency in modeling approach across analyses.

References

Achterberg, P., de Koster, W., & van der Waal, J. (2017). A science confidence gap: Education, trust in scientific methods, and trust in scientific institutions in the United States, 2014. *Public Understanding of Science*, *26*(6), 704–720. https://doi.org/10.1177/0963662515617367

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-t

Amsalem, D., & Martin, A. (2022). Reducing depression-related stigma and increasing treatment seeking among adolescents: Randomized controlled trial of a brief video intervention. *Journal of Child Psychology and Psychiatry*, *63*(2), 210–217. https://doi.org/10.1111/jcpp.13427

Andrade, L. H., Alonso, J., Mneimneh, Z., Wells, J. E., Al-Hamzawi, A., Borges, G., Bromet, E., Bruffaerts, R., de Girolamo, G., de Graaf, R., Florescu, S., Gureje, O., Hinkov, H. R., Hu, C., Huang, Y., Hwang, I., Jin, R., Karam, E. G., Kovess-Masfety, V., & … Kessler, R. C. (2014). Barriers to mental health treatment: Results from the WHO World Mental Health surveys. *Psychological Medicine*, *44*(6), 1303–1317. https://doi.org/10.1017/s0033291713001943

Atkins, M. S., Frazier, S. L., Leathers, S. J., Graczyk, P. A., Talbott, E., Jakobsons, L., Adil, J. A., Marinez-Lora, A., Demirtas, H., Gibbons, R. B., & Bell, C. C. (2008). Teacher key opinion leaders and mental health consultation in low-income urban schools. *Journal of Consulting and Clinical Psychology*, *76*(5), 905–908. https://doi.org/10.1037/a0013036

Attkisson, C. C., & Zwick, R. (1982). The client satisfaction questionnaire: Psychometric properties and correlations with service utilization and psychotherapy outcome. *Evaluation and Program Planning*, *5*(3), 233–237. https://doi.org/10.1016/0149-7189(82)90074-X

Baker, E. A., Brewer, S. K., Owens, J. S., Cook, C. R., & Lyon, A. R. (2021). Dissemination science in school mental health: A framework for future research. *School Mental Health*, *13*(4), 791–807. https://doi.org/10.1007/s12310-021-09446-6

Barnett, M. L., Bernal, N. A., & Sanchez, B. E. L. (2020). Direct-to-consumer marketing for parent-child interaction therapy: Impact of language and messenger. *Journal of Child and Family Studies*, *29*(1), 71–81. https://doi.org/10.1007/s10826-019-01575-6

Bearman, S. K., Jamison, J. M., Lopez, M. A., Baker, N. M., & Sanchez, J. E. (2022). Testing the impact of a peer-delivered family support program: A randomized clinical effectiveness trial. *Psychiatric Services*, *73*(7), 752–759. https://doi.org/10.1176/appi.ps.202100278

Becker, S. J. (2015). Direct-to-consumer marketing: A complementary approach to traditional dissemination and implementation efforts for mental health and substance abuse interventions. *Clinical Psychology: Science and Practice*, *22*(1), 85–100. https://doi.org/10.1111/cpsp.12086

Becker, S. J., Helseth, S. A., Frank, H. E., Escobar, K. I., & Weeks, B. J. (2018). Parent preferences and experiences with psychological treatment: Results from a direct-to-consumer survey using the marketing mix framework. *Professional Psychology: Research and Practice*, *49*(2), 167–176. https://doi.org/10.1037/pro0000186

Becker, S. J., Helseth, S. A., Tavares, T. L., Squires, D. D., Clark, M. A., Zeithaml, V. A., & Spirito, A. (2020). User-informed marketing versus standard description to drive demand for evidence-based therapy: A randomized controlled trial.

American Psychologist, *75*(8), 1038–1051. https://doi.org/10.1037/amp0000635

Boyd, J. E., Adler, E. P., Otilingam, P. G., & Peters, T. (2014). Internalized stigma of mental illness (ISMI) scale: A multinational review. *Comprehensive Psychiatry*, *55*(1), 221–231. https://doi.org/10.1016/j.comppsych.2013.06.005

Brecht, K., Swift, J. K., Worrall, J. M., & Parkin, S. R. (2010). A randomized controlled test of direct-to-consumer marketing using the American psychological association psychotherapy works videos. *Professional Psychology: Research and Practice*, *48*(6), 421–428. https://doi.org/10.1037/pro0000167

Campbell, M. K., Piaggio, G., Elbourne, D. R., … Altman, D. G., & CONSORT Group. (2012). Consort 2010 statement: Extension to cluster randomised trials. *BMJ*, *345*, Article e5661. https://doi.org/10.1136/bmj.e5661

Chang, J. P., Orimoto, T. E., Burgess, A., Choy, S. K. J., & Nakamura, B. J. (2019). The theory of planned behavior applied to consumer engagement in evidence-based services. *Journal of Child and Family Studies*, *28*(11), 2963–2976. https://doi.org/10.1007/s10826-019-01472-y

Choy, S. K. J., & Nakamura, B. J. (2023). A psychometric investigation of the Parent Engagement in Evidence-Based Services Questionnaire with a diverse community sample. *Professional Psychology: Research and Practice*, *54*(1), 49–59. https://doi.org/10.1037/pro0000475

Chu, B. C., Crocco, S. T., Arnold, C. C., Brown, R., Southam-Gerow, M. A., & Weisz, J. R. (2015). Sustained implementation of cognitive-behavioral therapy for youth anxiety and depression: Long-term effects of structured training and consultation on therapist practice in the field. *Professional Psychology: Research and Practice*, *46*(1), 70–79. https://doi.org/10.1037/a0038000

Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest*, *15*(2), 37–70. https://doi.org/10.1177/1529100614531398

Corrigan, P. W., Morris, S. B., Michaels, P. J., Rafacz, J. D., & Rüsch, N. (2012). Challenging the public stigma of mental illness: A meta-analysis of outcome studies. *Psychiatric Services*, *63*(10), 963–973. https://doi.org/10.1176/appi.ps.201100529

Crane, M. E., Atkins, M. S., Becker, S. J., Purtle, J., Olino, T. M., & Kendall, P. C. (2021). The effect of caregiver key opinion leaders on increasing caregiver demand for evidence-based practices to treat youth anxiety: Protocol for a randomized control trial. *Implementation Science Communications*, *2*(1), 107. https://doi.org/10.1186/s43058-021-00213-x

Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences*, *111*(Supplement 4), 13614–13620. https://doi.org/10.1073/pnas.1320645111

Davenport, S., Darby, B., Gray, T. J., & Spear, C. (2023). *Access across America: State-by-state insights into the accessibility of care for mental health and substance use disorders*. Milliman Report. https://www.milliman.com/en/insight/access-across-america-state-insights-accessibility-mental-health-substance-use

Ebesutani, C., Korathu-Larson, P., Nakamura, B. J., Higa-McMillan, C., & Chorpita, B. (2017). The revised child anxiety and depression scale 25–parent version: Scale development and validation in a school-based and clinical sample. *Assessment*, *24*(6), 712–728. https://doi.org/10.1177/1073191115627012

Flodgren, G., O'Brien, M. A., Parmelli, E., & Grimshaw, J. M. (2019). Local opinion leaders: Effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*, *2019*(6), Article CD000125. https://doi.org/10.1002/14651858.cd000125.pub5

Frank, H. E., Cain, G., Freeman, J., Benito, K. G., O'Connor, E., Kemp, J., & Kim, B. (2023). Parent-identified barriers to accessing exposure therapy: A qualitative study using process mapping. *Frontiers in Psychiatry*, *14*, Article 1068255. https://doi.org/10.3389/fpsyt.2023.1068255

Frank, H. E., Milgram, L., Freeman, J. B., & Benito, K. G. (2022). Expanding the reach of evidence-based mental health interventions to private practice: Qualitative assessment using a policy ecology framework. *Frontiers in Health Services*, *2*, Article 892294. https://doi.org/10.3389/frhs.2022.892294

Gallo, K. P., Comer, J. S., Barlow, D. H., Clarke, R. N., & Antony, M. M. (2015). Direct-to-consumer marketing of psychological treatments: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, *83*(5), 994–998. https://doi.org/10.1037/a0039470

Glanz, K., Rimer, B. K., & Viswanath, K. (eds) (2008). *Health behavior and health education: Theory, research, and practice* (4th ed.). John Wiley & Sons.

Green, J. G., McLaughlin, K. A., Fillbrunn, M., Fukuda, M., Jackson, J. S., Kessler, R. C., Sadikova, E., Sampson, N. A., Vilsaint, C., Williams, D. R., Cruz-Gonzalez, M., & Alegría, M. (2020). Barriers to mental health service use and predictors of treatment drop out: Racial/ethnic variation in a population-based study. *Administration and Policy in Mental Health and Mental Health Services Research*, *47*(4), 606–616. https://doi.org/10.1007/s10488-020-01021-6

Grimshaw, J. M., Eccles, M. P., Greener, J., Maclennan, G., Ibbotson, T., Kahan, J. P., & Sullivan, F. (2006). Is the involvement of opinion leaders in the implementation of research findings a feasible strategy? *Implementation Science*, *1*(1), Article 3. https://doi.org/10.1186/1748-5908-1-3

Grimshaw, J. M., Eccles, M. P., Lavis, J. N., Hill, S. J., & Squires, J. E. (2012). Knowledge translation of research findings. *Implementation Science*, *7*(1), Article 50. https://doi.org/10.1186/1748-5908-7-50

Gronholm, P. C., & Thornicroft, G. (2022). Impact of celebrity disclosure on mental health-related stigma. *Epidemiology and Psychiatric Sciences*, *31*, Article e62. https://doi.org/10.1017/s2045796022000488

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), Article 113. https://doi.org/10.1186/1471-244x-10-113

Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., McLeod, L., Delacqua, G., Delacqua, F., Kirby, J., & Duda, S. N. (2019). The REDCap consortium: Building an international community of software platform partners. *Journal of Biomedical Informatics*, *95*, Article 103208. https://doi.org/10.1016/j.jbi.2019.103208

Hoffmann, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., Altman, D. G., Barbour, V., Macdonald, H., Johnston, M., Lamb, S. E., Dixon-Woods, M., McCulloch, P., Wyatt, J. C., Chan, A.-W., & Michie, S. (2014). Better reporting of interventions: Template for intervention description and replication (TIDieR) checklist and guide. *British Medical Journal*, *348*, Article g1687. https://doi.org/10.1136/bmj.g1687

Hurley, D., Swann, C., Allen, M. S., Ferguson, H. L., & Vella, S. A. (2020). A systematic review of parent and caregiver mental health literacy. *Community Mental Health Journal*, *56*(1), 2–21. https://doi.org/10.1007/s10597-019-00454-0

Johnson, C., Burke, C., Brinkman, S., & Wade, T. (2017). A randomized controlled evaluation of a secondary school mindfulness program for early adolescents: Do we have the recipe right yet? *Behaviour Research and Therapy*, *32*(9), 1121–1132. https://doi.org/10.1016/j.brat.2017.09.001

Jorm, A. F. (2020). Effect of contact-based interventions on stigma and discrimination: A critical examination of the evidence. *Psychiatric Services*, *71*(7), 735–737. https://doi.org/10.1176/appi.ps.201900587

Kang, A. W., Escobar, K., Tavares, T., Helseth, S. A., Kelly, L. M., & Becker, S. J. (2019). Therapy-seeking behavior among parents concerned about their adolescent's substance use. *Substance Abuse*, *40*(4), 1–7. https://doi.org/10.1080/08897077.2019.1621240

Kendall, P. C., Robin, J. A., Hedtke, K. A., Suveg, C., Flannery-Schroeder, E., & Gosch, E. (2005). Considering CBT with anxious youth? Think exposures. *Cognitive and Behavioral Practice*, *12*(1), 136–148. https://doi.org/10.1016/s1077-7229(05)80048-3

Kreuter, M. W., & Wray, R. J. (2003). Tailored and targeted health communication: Strategies for enhancing information relevance. *American Journal of Health Behavior*, *27*(1), 227–232. https://doi.org/10.5993/ajhb.27.1.s3.6

Li, L., Lin, C., Guan, J., & Wu, Z. (2013). Implementing a stigma reduction intervention in healthcare settings. *Journal of the International AIDS Society*, *16*(3Suppl 2), Article 18710. https://doi.org/10.7448/ias.16.3.18710

McCroskey, J. C., Richmond, V. P., & Daly, J. A. (1975). The development of a measure of perceived homophily in interpersonal communication. *Human Communication Research*, *1*(4), 323–332. https://doi.org/10.1111/j.1468-2958.1975.tb00281.x

Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change* (3rd ed.). Guilford Press.

Morawska, A., Nitschke, F., & Burrows, S. (2011). Do testimonials improve parental perceptions and participation in parenting programmes? Results of two studies. *Journal of Child Health Care*, *15*(2), 85–98. https://doi.org/10.1177/1367493510397625

Neal, J. W., Neal, Z. P., Atkins, M. S., Henry, D. B., & Frazier, S. L. (2011). Channels of change: Contrasting network mechanisms in the use of interventions. *American Journal of Community Psychology*, *47*(3–4), 277–286. https://doi.org/10.1007/s10464-010-9403-0

Park, H. S., & Smith, S. W. (2007). Distinctiveness and influence of subjective norms, personal descriptive and injunctive norms, and societal descriptive and injunctive norms on behavioral intent: A case of two behaviors critical to organ donation. *Human Communication Research*, *33*(2), 194–218. https://doi.org/10.1111/j.1468-2958.2007.00296.x

Pescosolido, B. A., Martin, J. K., Lang, A., & Olafsdottir, S. (2008). Rethinking theoretical approaches to stigma: A Framework Integrating Normative Influences on Stigma (FINIS). *Social Science & Medicine*, *67*(3), 431–440. https://doi.org/10.1016/j.socscimed.2008.03.018

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, *10*(2), 135–146. https://doi.org/10.1086/208954

Ponzini, G. T., & Schofield, C. A. (2019). Randomized controlled trials evaluating the effectiveness of a direct-to-consumer marketing campaign for social anxiety disorder. *Stigma and Health*, *4*(4), 450–461. https://doi.org/10.1037/sah0000163

Powell, B. J., McMillen, J. C., Proctor, E. K., Carpenter, C. R., Griffey, R. T., Bunger, A. C., Glass, J. E., & York, J. L. (2012). A compilation of strategies for implementing clinical innovations in health and mental health. *Medical Care Research and Review*, *69*(2), 123–157. https://doi.org/10.1177/1077558711430690

Purtle, J., Crane, M. E., Nelson, K. L., & Brownson, R. C. (2022). Disseminating information about evidence-based interventions. In B. J. Weiner, C. C. Lewis, & K. Sherr (Eds.), *Practical implementation science: Moving evidence into action* (pp. 227–252). Springer.

Purtle, J., Marzalik, J. S., Halfond, R. W., Bufka, L. F., Teachman, B. A., & Aarons, G. A. (2020). Toward the data-driven dissemination of findings from psychological science. *American Psychologist*, *75*(8), 1052–1066. https://doi.org/10.1037/amp0000721

Racine, N., McArthur, B. A., Cooke, J. E., Eirich, R., Zhu, J., & Madigan, S. (2021). Global prevalence of depressive and anxiety symptoms in children and adolescents during COVID-19. *JAMA Pediatrics*, *175*(11), 1142–1150. https://doi.org/10.1001/jamapediatrics.2021.2482

Ritsher, J. B., Otilingam, P. G., & Grajales, M. (2003). Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research*, *121*(1), 31–49. https://doi.org/10.1016/j.psychres.2003.08.008

Rogers, E. M., & Cartano, D. G. (1962). Methods of measuring opinion leadership. *Public Opinion Quarterly*, *26*(3), 435–441. https://doi.org/10.2307/2747233

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

Sanders, M. G. (2008). How parent liaisons can help bridge the home-school gap. *The Journal of Educational Research*, *101*(5), 287–298. https://doi.org/10.3200/joer.101.5.287-298

Stumpf, R. E., Higa-McMillan, C. K., & Chorpita, B. F. (2008). Implementation of evidence-based services for youth. *Behavior Modification*, *33*(1), 48–65. https://doi.org/10.1177/0145445508322625

Szewczyk, Z., Reeves, P., Kingsland, M., Doherty, E., Elliott, E., Wolfenden, L., Tsang, T. W., Dunlop, A., Searles, A., & Wiggers, J. (2022). Cost, cost-consequence and cost-effectiveness evaluation of a practice change intervention to increase routine provision of antenatal care addressing maternal alcohol consumption. *Implementation Science*, *17*(1), Article 14. https://doi.org/10.1186/s13012-021-01180-6

Szymanski, J. (2012). Using direct-to-consumer marketing strategies with obsessive-compulsive disorder in the nonprofit sector. *Behavior Therapy*, *43*(2), 251–256. https://doi.org/10.1016/j.beth.2011.05.005

Turner, E. A., Jensen-Doss, A., & Heffer, R. W. (2015). Ethnicity as a moderator of how parents' attitudes and perceived stigma influence intentions to seek child mental health services. *Cultural Diversity and Ethnic Minority Psychology*, *21*(4), 613–618. http://doi.org/10.1037/cdp0000047

Valente, T. W., & Pumpuang, P. (2007). Identifying opinion leaders to promote behavior change. *Health Education & Behavior*, *34*(6), 881–896. https://doi.org/10.1177/1090198106297855

Weiner, B. J., Meza, R. D., Klasnja, P., Lengnick-Hall, R., Buchanan, G. J., Lyon, A. R., Mettert, K. D., Boynton, M. H., Powell, B. J., & Lewis, C. C. (2024). Changing hearts and minds: Theorizing how, when, and under what conditions three social influence implementation strategies work. *Frontiers in Health Services*, *4*, 1443955. https://doi.org/10.3389/frhs.2024.1443955

Weisz, J. R., Kuppens, S., Ng, M. Y., Eckshtain, D., Ugueto, A. M., Vaughn-Coaxum, R., Jensen-Doss, A., Hawley, K. M., Marchette, L. S. K., Chu, B. C., Weersing, V. R., & Fordwood, S. R. (2017). What five decades of research tells us about the effects of youth psychological therapy: A multilevel meta-analysis and implications for science and practice. *American Psychologist*, *72*(2), 79–117. https://doi.org/10.1037/a0040360

Zisman-Ilani, Y., Levy-Frank, I., Hasson-Ohayon, I., Kravetz, S., Mashiach-Eizenberg, M., & Roe, D. (2013). Measuring the internalized stigma of parents of persons with a serious mental illness. *The Journal of Nervous and Mental Disease*, *201*(3), 183–187. https://doi.org/10.1097/nmd.0b013e3182845d00