Formative research on a teacher accompaniment model to promote youth mental health in Haiti: Relevance to mental health task-sharing in low-resource school settings

Eddy Eustache, MA[1], Margaret E. Gerbasi, PhD[2], Jennifer Severe, MD[2,3], J. Reginald Fils-Aimé, MD, MMSc[1], Mary C. Smith Fawzi, ScD[2], Giuseppe J. Raviola, MD, MPH[2,4,5], Sarah Darghouth, PhD[6], Kate Boyd, MPH[7], Tatiana Thérosmé, BA[1], Rupinder Legha, MD[8], Ermaze L. Pierre[1], Emmeline Affricot, BA[1], Yoldie Alcindor, BA[1], David J. Grelotti, MD[9], and Anne E. Becker, MD, PhD, SM[2,6]

[1]Zanmi Lasante, Mental Health and Psychosocial Service, Mirebalais, Haiti

[2]Department of Global Health and Social Medicine, Harvard Medical School, Boston, MA, USA

[3]Department of Psychiatry, Baystate Medical Center, Tufts University School of Medicine, Springfield, MA, USA

[4]Partners In Health, Boston, MA, USA

[5]Department of Psychiatry, Boston Children's Hospital, Boston, MA, USA

[6]Department of Psychiatry, Massachusetts General Hospital, Boston, MA, USA

[7]Colorado School of Public Health, University of Colorado Anschutz Medical Campus, Aurora, CO, USA

[8]Department of Psychiatry, University of California Los Angeles, Los Angeles, CA, USA

[9]Department of Psychiatry, University of California San Diego, La Jolla, CA, USA

Abstract

Background—Task-sharing with teachers to promote youth mental health is a promising but underdeveloped strategy in improving care access in low-income countries.

Aims—To assess feasibility, acceptability, and utility of the teacher accompaniment phase of a school-based teacher *accompagnateur* pilot study (TAPS) in Haiti.

Methods—We assigned student participants, ages 18–22 (*n*=120) to a teacher participant (*n*=22) within four Haitian schools; we instructed participants to arrange meetings with their assigned counterparts to discuss mental health treatment, academic skills, and/or well-being. We measured student and teacher perceived feasibility, acceptability, and utility of meetings with self-report Likert-style questions. We examined overall program feasibility by the percentage of students with a documented meeting, acceptability by a composite measure of student satisfaction, and utility by the percentage with identified mental health need who discussed treatment with a teacher.

Results—Favorable ratings support feasibility, acceptability, and utility of teacher-*accompagnateur* meetings with students. The majority of students (54%) met with a teacher. Among students with an identified mental disorder, 43.2% discussed treatment during a meeting.

Conclusions—This accompaniment approach to mental health task-sharing with teachers provided a school-based opportunity for students with mental health need to discuss treatment and has potential relevance to other low-income settings.

Introduction

Mental and substance use disorders were the leading contributor to years lived with disability (YLDs) among all health conditions globally in 2015 (Institute for Health Metrics and Evaluation [IHME], 2016). Likewise, they led contributions to YLDs in both low-income and lower middle-income countries (LMICs) (IHME, 2016), where the majority of individuals with severe mental disorders receive no treatment for these conditions (Demyttenaere et al., 2004; Wang et al., 2007). Given the critical shortage of clinicians who can deliver treatment for mental disorders in LMICs (Kakuma et al., 2011), the scientific literature has focused on strategies that leverage scarce specialized human resources through collaborative care and task-sharing. Task-sharing refers to the reassignment of specific healthcare related tasks from a health professional with a higher level of training or specialization to another health professional or layperson with less biomedical expertise (Eaton et al., 2011; Patel et al., 2013; WHO et al., 2007). In addition to augmenting local capacities for treatment delivery, task-sharing can promote treatment utilization through community-based outreach, health surveillance, education, and other practical support.

The substantial global mental health treatment gap disproportionately affects youth (Kieling et al., 2011; Patel et al., 2008). Moreover, several barriers to accessing care, such as cost, ease of communication with healthcare providers, and anticipated care effectiveness that particularly impact youth may be exacerbated for those living in LMICs (Ambresin et al., 2013; Blum et al., 2012; Patel et al., 2013; Patton et al,. 2016). Early detection and treatment of mental disorders are critical since adolescent mental disorders are strongly associated with adult mental health (Kessler et al., 2005; Patton et al., 2014), risk for other non-communicable diseases (Ngo et al., 2013), and negative future social and economic outcomes (Naicker et al., 2013). Among promising strategies to facilitate youth care access in LMICs is development of school-based platforms to provide guidance and support that facilitate help-seeking (Patton et al., 2016) and service delivery (Mnookin, 2016). School-based health promotion has had demonstrated success for health education, screening, and other interventions for a variety of health conditions (Langford et al., 2014), including mental disorders. Indeed, school-based mental health promotion, prevention, and surveillance programs have been shown effective across diverse contexts; however, the majority of studies come from high-income settings (Barry et al., 2013; Fazel et al., 2014a, 2014b; Patel et al. 2013). Moreover, despite evidence of effectiveness of task-sharing with community health workers (CHWs) for mental health promotion in LMICs (Baingana et al., 2015), fewer data address a broad scope of application for mental-health task-sharing with teachers. Additionally, relatively few data are available evaluating the feasibility and acceptability of mental health task-sharing in LMICs (Padmanathan & De Silva, 2013). This lacune is particularly salient to the sustainability of teacher-led interventions, given concerns that teachers are already overburdened in low-resource settings (Fazel et al, 2014b; Rajaraman et al, 2012).

In this paper, we examine a novel school-based approach to task sharing with teachers to promote youth mental health in Haiti; this accompaniment approach draws from a successful model deploying CHWs as health *accompagnateurs* to promote treatment adherence for AIDS and TB in rural Haiti (Walton et al., 2004). Accompaniment expands the scope of support beyond a narrow focus on treatment—for example, by providing psychosocial support and facilitating linkage to clinical resources—in order to mitigate social structural impediments to adherence. This approach has been adapted for patients who had experienced treatment failure for drug resistant HIV in Boston (Behforouz, Farmer & Mukherjee, 2004), for multi-drug resistant tuberculosis in urban Peru (Shin et al., 2004), and to improve adherence to tuberculosis therapy following treatment default in Tomsk (Gelmanova et al., 2011). In addition to evidence of the transferability of the accompaniment dimension of community-based patient care across diverse social contexts, it has also been adapted for task-sharing with different levels of healthcare providers. Although the accompaniment role was extended to nurses in the latter program, it has not been adapted for teachers.

After a major earthquake in Haiti in 2010 resulted in mass casualties and infrastructural damage, new efforts to improve mental health were undertaken by Haiti's Ministry of Health and a number of NGOs (Raviola et al., 2013). The NGO *Zanmi Lasante*— which has been providing healthcare in Haiti's Central Plateau for over 25 years— was especially well-positioned to launch a comprehensive plan to improve access to mental health care in the communities it serves (Raviola et al., 2012, 2013). This plan included training and deploying CHWs as *accompagnateurs* to facilitate community-based access to newly expanded mental health services. This accompaniment approach—already culturally familiar given that it had first been developed to serve a rural Haitian community—also had strategic appeal to help Haitian youth navigate mental health support and services by investing teachers with relevant knowledge, skills, informational resources, and a liaison with clinical services to make them "adolescent friendly" (WHO, 2012). As respected and accessible members of the community, teachers are situated to understand social and academic challenges their students face and offer informed guidance.

In this paper, we describe formative research examining the initial iteration of a school-based teacher-*accompagnateur* program in Haiti's Central Plateau. Specifically, the Teacher-*Accompagnateur* Pilot Study (TAPS; Eustache et al., 2014) intervention comprised three sequential phases: (1) mental health training for teacher participants (Eustache et al, 2017a), (2) school-based mental health screening of study participants (Eustache et al, 2017b), and (3) facilitating 1:1 brief teacher-student meetings to support treatment navigation and/or strategies to promote academic success or well-being. Aims of the present study—focused on the latter phase—were to assess feasibility and acceptability of promoting youth mental health via the platform of school-based teacher accompaniment. We also examined potential utility of this teacher-*accompagnateur* model of task-sharing to address the considerable mental health needs of student participants (see Eustache et al, 2017b) by facilitating user access to information and practical support concerning mental health care.

Method

We used a prospective design to examine the feasibility, acceptability, and utility of a school-based mental health intervention delivered in 2013. We focus here on the teacher accompaniment phase. Written informed consent was obtained for each study participant. The study was approved by both the Institutional Review Board of the Harvard Faculty of Medicine and the *Zanmi Lasante* Ethics Committee.

Study sample

Four secondary schools were invited—and agreed—to participate in this pilot study. Selection was both purposive (based on their proximal location to two ZL clinics in Haiti's Central Plateau and to allow maximal variety of school populations by encompassing both public and private schools) and by convenience. The study population included two groups of participants recruited from the four schools—teachers and students—each with a complementary role. Selection of teacher participants was purposive and based on nomination by principals of the participating schools where they were teaching (*n*=22). We identified eligible student study participants using school enrollment records and randomly selected young adult students (ages 18–22 years) within each of four participating schools, yielding a sample of 120 (Figure 1).

Study procedures

We focus here on procedures most relevant to the accompaniment (intervention) phase of TAPS. Figure 1 summarizes the phases and procedures of the overarching study which included training for teacher study participants focused on recognizing, responding to, and referring students at risk for mental illness, as well as supporting resilience (Eustache et al, 2017a). This training, held just prior to the start of the academic year, also oriented teacher participants to study procedures and materials for structuring brief teacher-student meetings during the ensuing 3–4 week TAPS intervention phase. Baseline psychosocial assessment of student participants also preceded the accompaniment phase (see Eustache et al, 2017b).

School-based baseline psychosocial assessment of student participants—At the start of the 2013 academic year, student participants responded to a battery of self-report psychosocial assessments as well as sociodemographic and healthcare utilization questions. Next, we conducted a structured research interview based on content from the major depressive episode (MDE) and posttraumatic stress disorder (PTSD) modules of the Structured Clinical Interview for DSM-IV-TR Axis I Disorders (SCID; First et al., 2010). We focused on MDE and PTSD given evidence of their elevated risk following disasters (Goldmann & Galea, 2014) and that they may be prevalent in Haiti (Wagenaar et al., 2012; Cerda et al., 2013); hence they were particularly relevant to the school-based setting. Study diagnostic assignments of MDE, PTSD, and subthreshold variants showed good convergent validity with self-report measures of symptomatology associated with related constructs (Eustache et al, 2017b).

ZL clinical mental health assessment—Following the research assessments, participants were encouraged to undergo an onsite clinical mental health assessment

intended to facilitate access to a local clinician independently of TAPS. Mental health clinicians (each with formal training in psychology, social work, or psychiatry and experience in diagnostic assessment and treatment of mental illness in the local Haitian context) performed these assessments using the standard ZL clinical mental health assessment form, where they noted their recommendations and referrals to a local ZL clinic, when appropriate. Although this clinical evaluation was not formally part of the study, participants were invited to release information from the ZL clinical mental health assessment to the study.

Teacher-student accompaniment—We assigned each student participant to a teacher participant counterpart within his or her respective school. Teachers also received a list of assigned students. We instructed participants to arrange to meet with their assigned counterparts at school at least once over the 3–4 weeks post screening to discuss mental health treatment, academic skills, and/or well-being. Teachers were provided with structured encounter forms to guide their discussion and document each meeting. Members of the research team were available to teacher participants to answer questions and facilitate clinical referrals; the study coordinator also made ad hoc phone calls and visits to teachers to offer additional support during this timeframe.

Study participant debriefing and additional feedback—After the accompaniment phase, teacher and student participants responded to self-report questionnaires with Likert-style questions regarding their experience of participation in and feedback about TAPS.

Study assessments

Self-report assessments were translated from English into Haitian Creole by a bilingual speaker, independently back translated, and adjusted in consultation with one or more members of the Haiti-based research team. Baseline psychosocial assessments developed or adapted for the study, including a diagnostic interview, are described in detail elsewhere (Eustache et al, 2017b).

ZL clinical assessment forms—We invited participants to authorize release of health information recorded on the standard ZL mental health assessment form (ZL, 2012) used for clinical care during their onsite clinical interview. We reviewed available forms (n=112) for clinician recommendations for follow-up, if any.

Teacher-student meeting encounter forms—For each meeting, teachers completed a one-page encounter form comprising a checklist of topics discussed with students. Suggested topics encompassed three general categories of skills and practices supporting 1) mental health treatment (e.g., understanding recommendations, making an appointment, adhering to recommendations or medication, finding transportation to an appointment); 2) effective schoolwork practices (e.g., time management skills, finding a good environment for homework); and 3) emotional well-being and resilience building (e.g., coping skills, sleep, nutrition, problem solving).

Student and teacher participant post-TAPS feedback—We developed self-report assessments using 5-point Likert-style questions about participation in TAPS. Among these, 11 items for students and 11 corresponding items for teachers assessed dimensions of feasibility, user acceptability, and perceived utility of TAPS based on experience with teacher-student meetings (see Figure 2). Three additional items addressed user satisfaction among student participants pertaining to the *overall* TAPS program (e.g., "I would participate in the TAPS program again"). Numeric values for these latter three items were averaged and combined into a single indicator of student user satisfaction with their overall experience of TAPS. Internal consistency reliability was measured by Cronbach's α (α=. 51).

Data management

Self-report response data were entered into Excel and verified. Written narrative data from the "General Impression" and "Plan/Disposition" sections of the ZL clinical assessment forms were translated into English and entered into an Excel spreadsheet; additional checked or encircled responses relating to recommendations for follow-up or support were entered into Excel and verified. Clinician recommendations were coded by consensus among three study investigators into three mutually exclusive categories where the ZL clinical assessment: 1) indicated mental health need and specified a recommended clinical intervention (e.g. medication, interpersonal psychotherapy, re-evaluation); 2) noted some mental health need and recommendation for psychosocial support (e.g. psychoeducation, relaxation, coping strategies); 3) did not indicate any need for mental health intervention. Finally, we examined and described additional clinician recommendations in non-mutually exclusive domains concerning other health and academic needs.

Statistical Analysis

Identification of student participants with mental health need—We operationalized "mental health need" in two ways as reflected either by a *research interview based* study diagnosis of a mental disorder or a *clinical interview based* identification of a broader psychosocial need. The former was recognized by a student's meeting study criteria for a diagnosis of MDE, PTSD, or subthreshold MDE or PTSD during the SCID-based research interview assessment (n=44; Eustache et al, 2017b). The latter was recognized by a written ZL clinical assessment recommending either a specific clinical intervention or some kind of psychosocial support for an identified mental health need (i.e., comprising respondents in either the first or second categories described above). Although available evidence supports the validity of the MDE and PTSD diagnostic constructs measured by the SCID in Haiti (Bolton et al., 2012; Rahill et al., 2015; Rasmussen et al., 2015), the operationalization of mental health need identified by a clinical interview may have greater local contextual salience.

Quantitative assessment of feasibility, acceptability, and utility—We operationalized feasibility as evidence that TAPS procedures could be carried out by participants and acceptability of TAPS procedures as user satisfaction (cf. Padmanathan & De Silva, 2013). Our proxy measure for feasibility was the percentage of student participants who attended a teacher-student meeting as documented by a returned encounter form; for

acceptability, our proxy was the mean score on a composite measure of student satisfaction with the TAPS program overall. Perceived feasibility and acceptability were also assessed through examination of the distribution and mean values of responses to 7 relevant items posed to both teacher and student participants following the teacher accompaniment phase of the study, regarding their experience of the teacher-student meetings (Figure 2).

We operationalized utility as evidence that the TAPS intervention—and teacher-*accompagnateur* meetings, in particular—provided information or help of potential value in promoting student mental health or well-being and assessed utility as follows. First, we examined perceived utility of the program by calculating mean values and distributions of responses to 4 relevant items posed to both teacher and student participants (Figure 2). Next, we calculated the percentage of student participants with mental health need—as operationalized in the two aforementioned ways—who met with a teacher-*accompagnateur*. Further, we examined the number of those students who also discussed treatment during a meeting to determine the number of participants with mental health need who accessed treatment-relevant support through teacher meetings.

In a post-hoc exploratory analysis, we also examined whether teacher-*accompagnateur* meetings may have provided potentially unique benefit to students beyond relocating or replicating services offered within the health sector. First, we used a multivariable regression to examine whether meeting with a teacher significantly predicted student satisfaction with TAPS *independently* of ZL clinical assessment identified mental health need. Second, we examined the percentage of students who had discussed treatment with a teacher-*accompagnateur* among the student participants with a mental health need who had *not* accessed any health or mental health services in the past year.

Results

Table 1 displays selected sample characteristics. Notably, student participants were two-thirds male. Teacher participants were also predominantly male. A majority of study participants met our study definition of having mental health need. Following their ZL clinical assessment, 53 and 32 students, respectively, warranted a recommendation that follow-up mental health care or psychosocial support could be helpful; thus, 70.8% of students (*n*=85) had an identified mental health need. In addition, we have previously reported that 36.7% of student participants were assigned a diagnosis of MDE, PTSD, or a subthreshold variant by research interview (Eustache et al, 2017b).

Quantitative assessment of feasibility, acceptability, and utility

Feasibility of teachers meeting with students during the accompaniment phase was only moderate: 54.2% of students and 63.6% of teachers held documented meetings. However, student ratings demonstrated acceptability of the overall TAPS program, as reflected by high mean scores on our composite measure of user satisfaction (M=4.09, SD=1.01). In addition, student and teacher perceptions of both feasibility and acceptability of meetings were generally favorable (Figure 2). For example, the majority of teachers and students (77.3% and 68.9%, respectively) somewhat or strongly agreed that they enjoyed meeting and only a minority within each group somewhat or strongly agreed that they found meeting stressful

(teachers: 9.1%, students: 21.9%) or awkward (teachers: 4.5%, students: 31.9%). That being said, nearly half of students indicated not having shared much personal information in a meeting, whereas teachers perceived them to be more forthcoming. Finally, students and teachers each reported moderate to strong agreement with statements concerning several dimensions of program utility (Figure 2).

Over half of student participants with identified mental health need met with a teacher-*accompagnateur*, supporting that a school-based meeting with a teacher may be an effective strategy to reach youth who would benefit from mental health care or psychosocial support. In particular, 59.1% of students with a diagnosis of MDE, PTSD, or subthreshold variant met with a teacher and 43.2% discussed treatment adherence in their meeting. Moreover, 52.9% of students whose ZL clinical assessment-identified mental health need met with a teacher and 40.0% discussed treatment-related issues during a meeting (Figure 3).

Student participation in teacher-student meetings was significantly associated with higher student user satisfaction ratings with TAPS (B=.70, 95% CI=.34,1.07, p<.001) in a multivariable linear regression, when controlling for a ZL clinical assessment-identified mental health need, general healthcare utilization in the past year, mental healthcare utilization in the past year, school type, school attendance, age, and gender.

Among the student participants with a diagnosis of MDE, PTSD, or a subthreshold variant who had not accessed any mental or general health services in the past year (n=19), a majority (52.6%; n=10) met with a teacher-*accompagnateur* and discussed a dimension of understanding, navigating, or adhering to treatment. Likewise, student participants with ZL clinical assessment-identified mental health need who had not utilized any health services (n=38), 34.2% (n=13) discussed treatment during a meeting. In other words, meetings with teacher-*accompagnateurs* provided an entrée to a conversation about mental health treatment for approximately one-third of student participants with mental health need who had not accessed care.

Discussion

Study findings support that a teacher-*accompagnateur* program has conceptual appeal and potential utility in Haiti's Central Plateau to both teachers and students as a school-based platform for providing information and support to students that can help them navigate local mental health services. First, a majority of students were able to meet with a teacher-*accompagnateur* during the intervention period. Second, student and teacher responses both reflect favorable ratings of the feasibility, acceptability, and utility of the program. Notwithstanding the absence of a culture of mental health treatment seeking in Haiti prior to availability of services (WHO, 2010), findings support that students were generally willing to discuss mental health treatment with teachers. We considered the possibility that students' perception of the program's utility might have resulted from access to an onsite clinician at their school rather than the opportunity to meet with a teacher-*accompagnateur*. However, our finding that meeting with a teacher-*accompagnateur* predicted student satisfaction with TAPS supports that teacher accompaniment was valuable to students independent of input from an onsite mental health clinician.

We have previously reported that the burden of mental illness was considerable in this study population of school-going transitional age youth. We have also previously reported that an unacceptably high percentage of study participants with full-syndrome or subthreshold diagnosis of MDE or PTSD had not accessed mental health care and, indeed, many had not accessed any care in the health sector over the previous year (Eustache et al, 2017b). This study's findings indicate that the TAPS program may have provided a channel for discussion of treatment for a substantial proportion (43.2%) of students who received a study diagnosis. Further, among those with a diagnosis who had not previously accessed care, over half availed themselves of an opportunity to discuss mental health treatment with a teacher-*accompagnateur*.

Likewise, we found the TAPS program provided a resource for the discussion of treatment with a teacher-*accompagnateur* for a similar proportion (40.0%) of participants with ZL clinical assessment-identified mental health need. Additionally, among the latter participants who had not utilized care over the past year, approximately a third (34.2%) discussed mental health treatment with a teacher-*accompagnateur*.

It is noteworthy both that a large proportion of student participants were identified as having mental health need by the ZL clinical assessment, and also that the recommended follow-up for them comprised a broad spectrum of possibilities that included interventions that could conceivably be offered in a school-based setting (e.g., psychoeducation, relaxation training, social support) rather than necessarily in a mental health clinic. Haiti's youth face extraordinary psychosocial stressors relating to widespread poverty, a series of natural disasters, a cholera epidemic, as well as experiencing or witnessing violence. Thus, study findings suggest that teacher accompaniment could potentially provide monitoring and early intervention to help resolve social stressors and mitigate psychosocial distress, beyond facilitating access to clinical services by providing relevant information and practical assistance.

Limitations

There are several limitations of this study. First, access to ZL health services may have contributed to greater willingness to engage in discussions about mental health with teachers. Moreover, generalizability to younger adolescents is limited as the student sample consisted exclusively of youth 18–22 years old. Additionally, teacher participants, selected by nomination by their principal, may not be representative of other secondary school teachers in Haiti. Next, because we did not directly observe the teacher-student meetings, we could not assess the quality and extent of discussion about treatment. Additionally, potential social desirability bias may have overestimated the degree of student satisfaction with the TAPS program and our proxy for user satisfaction may have been limited by its poor internal consistency reliability. Nevertheless, findings provide evidence that at least some respondents with mental health need gained access to information and guidance—possibly for the first time—via a trained teacher-*accompagnateur* in their school-setting. Finally, although a majority of student participants managed to meet with a teacher, a substantial portion of the sample did not have a meeting. Given evidence of the value of teacher-student

meetings to students, developing mechanisms to increase student and teacher participation in the meetings could enhance the program's utility.

Conclusion

The teacher accompaniment model has potential utility to respond, in part, to the urgent mental health needs of youth in LMICs and aligns with the global priority of improving their access to quality care, as articulated by the Grand Challenges in Global Mental Health initiative (Collins et al., 2011). In contrast to much of the existing literature on mental health task-sharing with teachers in LMICs focused on whether teachers can lead interventions as well as specialists (Fazel et al., 2014b), this formative research develops the role of teachers as *accompagnateurs* who can understand their students' complex psychosocial needs and also provide a bridge from the school setting to clinical care. Specifically, findings suggest that task-sharing with teachers as *accompagnateurs* may open or enhance the channels of communication and navigation for youth in accessing mental health services. Strategies that tap teachers' experience and expertise to faciliate youth access to mental healthcare hold promise and are relatively underutilized. Teachers' professional orientation towards youth well-being, and longitudinal perspective on changes in pupils' behavior uniquely situate them to promote youth mental health. Further research will be beneficial to understanding how this role could also concomitantly address psychosocial needs to pre-empt the necessity of clinical intervention, improve student academics, and make a positive shift in school climate (Durlak et al., 2011), and decrease stigma (Behforouz et al., 2004).

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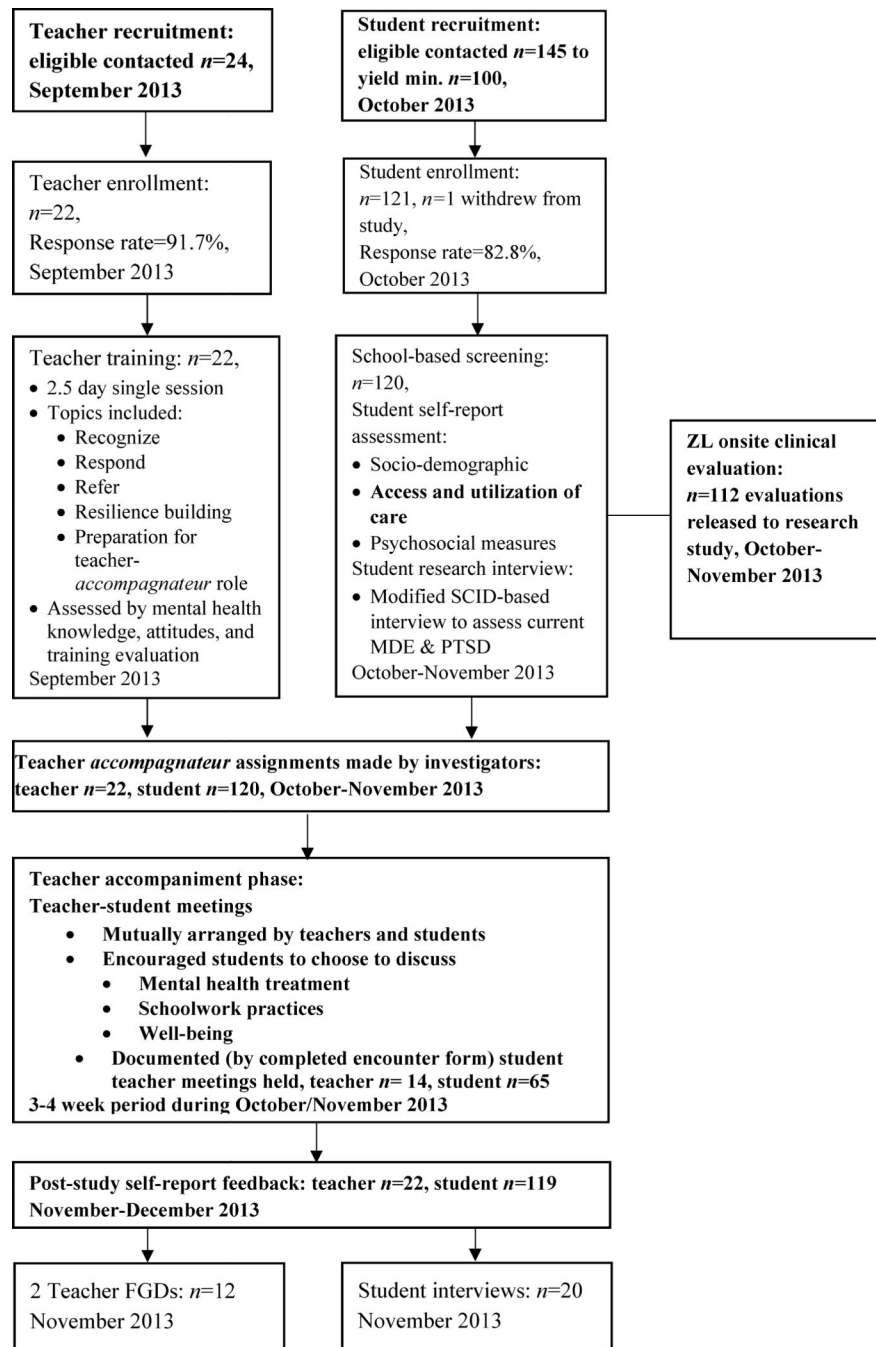
Teacher recruitment: eligible contacted *n*=24, September 2013

Student recruitment: eligible contacted *n*=145 to yield min. *n*=100, October 2013

Teacher enrollment: *n*=22, Response rate=91.7%, September 2013

Student enrollment: *n*=121, *n*=1 withdrew from study, Response rate=82.8%, October 2013

Teacher training: *n*=22,
- 2.5 day single session
- Topics included:
  - Recognize
  - Respond
  - Refer
  - Resilience building
  - Preparation for teacher-*accompagnateur* role
- Assessed by mental health knowledge, attitudes, and training evaluation
September 2013

School-based screening: *n*=120, Student self-report assessment:
- Socio-demographic
- **Access and utilization of care**
- Psychosocial measures
Student research interview:
- Modified SCID-based interview to assess current MDE & PTSD
October-November 2013

ZL onsite clinical evaluation: *n*=112 evaluations released to research study, October-November 2013

Teacher *accompagnateur* assignments made by investigators: teacher *n*=22, student *n*=120, October-November 2013

Teacher accompaniment phase: Teacher-student meetings
- **Mutually arranged by teachers and students**
- **Encouraged students to choose to discuss**
  - **Mental health treatment**
  - **Schoolwork practices**
  - **Well-being**
- **Documented (by completed encounter form) student teacher meetings held, teacher *n*= 14, student *n*=65**
3-4 week period during October/November 2013

Post-study self-report feedback: teacher *n*=22, student *n*=119 November-December 2013

2 Teacher FGDs: *n*=12 November 2013

Student interviews: *n*=20 November 2013

Figure 1.
Flow sheet summary of Teacher-*Accompagnateur* Pilot Study (TAPS) phases and procedures
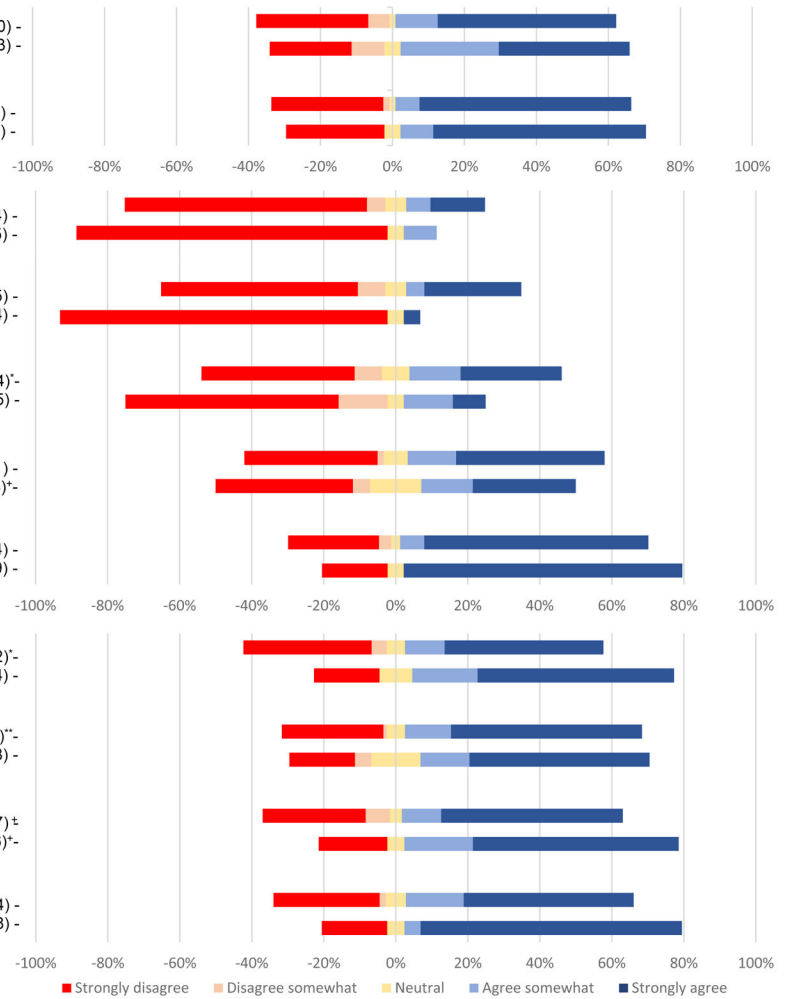Bold text indicates key procedure or data source for current investigation

Figure 2. Feasibility, acceptability, and utility of teacher-*accompagnateur* meetings perceived by student and teacher study participants

*Indicates *n*=118, ** indicates *n*=117, + indicates *n*=21. For all other student responses *n*=119, and for all other teacher responses *n*=22.

MDE, PTSD, or Subthreshold MDE or PTSD Diagnosis, *n*=44
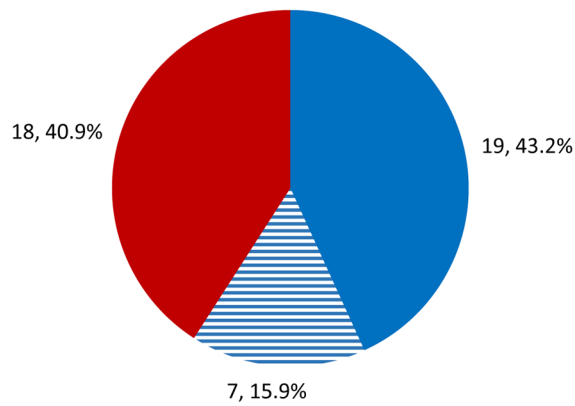
ZL Clinical Assessment Recommending either Specific Clinical Services or Support for a Mental Health Need, *n*=85

■ Met with teacher, discussed mental health treatment
= Met with teacher, did not discuss mental health treatment
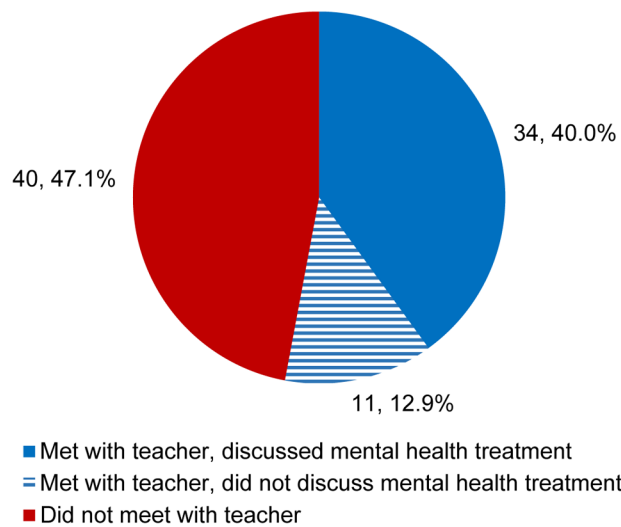■ Did not meet with teacher

Figure 3.
Percentage of students with identified mental health need (as operationalized in two ways) who met with a teacher-*accompagnateur* and who discussed treatment during a meeting

Table 1

Sample Characteristics

Student participants, *n*=120 unless otherwise indicated	
Measure	**Mean (SD) or % (*n*)**
Socio-demographic	
Age (in years)	19.5 (1.37)
Gender (% female)	33.3% (40)
Days of school attended per week, on average (*n*=118)	4.7 (1.34)
Attends Public School	50.0% (60)
Participation in TAPS	
Held documented meeting with teacher	54.2 %(65)
Discussed mental health treatment issues with teacher	40.8% (49)
Discussed effective schoolwork practices with teacher	53.3% (64)
Discussed emotional well-being and resilience-building skills with teacher	53.3% (64)
Identified mental health need	
SCID-based study diagnosis [*]	
MDE	7.5% (9)
MDE subthreshold variant	18.3% (22)
PTSD	10.8% (13)
PTSD subthreshold variant	10.0% (12)
MDE, PTSD, and/or subthreshold variant [*]	36.7% (44)
No past year utilization of mental health or any health services	15.8% (19)
No SCID-based study diagnosis [*]	63.3% (76)
ZL clinical assessment-based mental health recommendations	
Clinical follow-up or support	70.3% (85)
No utilization of mental health or any health services in past year	31.7% (38)
No support or follow-up	22.5% (27)
ZL clinical assessment unavailable	6.7% (8)
Additional recommendations based on ZL clinical assessment	
Other kind of health follow-up	15.8% (19)
Academic support	5.0% (6)
Teacher involvement in mental health support	8.3% (10)
Teacher participants (n=22)	
Measure	Mean (SD) or % (*n*)
Socio-demographic	
Age (in years)	40.1 (7.16)
Gender (% female)	18.2 (4)
Participation in TAPS	
Held documented meeting with student	63.6 (14)

[*] SCID-based diagnoses and mental health and health services utilization reported previously in Eustache et al, 2017b.