Beliefs on effectiveness of YMHFA training and whole setting implementation in London with impacts, if any, of COVID-19 pandemic lockdown

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Youth Mental Health First Aid (YMHFA) Evaluation Report PRJ-798

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EXECUTIVE SUMMARY

London-wide Practitioner Beliefs in Effectiveness of YMHFA Training

The evaluation of YMHFA training implemented by London-wide practitioners within their respective settings showed this training to be significantly effective in delivering mental health provision within settings. This was evidenced by significant increases in practitioners' rating on beliefs on six evaluation belief constructs: (A) confidence in knowledge and awareness of mental health conditions, (B) administering MHFA ALGEE dialogic action plan to converse with young people about maintaining good mental health by asking, listening non-judgementally, giving reassurance and information, enabling seeking professional help and encouraging use of self-help strategies, (C) engaging in evidence-based practice, (D) developing young people's mental health literacy, (E) influencing whole setting collective efficacy of staff, parents and young people self-efficacy to recognise their own mental health issues and knowing what self-help strategies and professional support to draw upon.

There were significant YMHFA training effects on London-wide practitioners' beliefs on all six constructs as measured post-training (one term or more after training) compared with pre-training (before training) on knowledge of mental health (45%), use of MHFA ALGEE dialogic action plan (43%), engaging in evidenced-based practice (29%), developing young people's mental health literacy (28%), collective efficacy within settings (30%) and young people's self- efficacy (25%).

Comparing the effects between London-wide practitioners' within academic settings (such as academies, mainstream schools and, faith and parent schools), and specialist settings (such as special education needs schools, youth organisations, charity organisations and hospital schools), findings showed there were similar ratings on beliefs for all constructs as no significant differences were found between settings. This indicated that YMHFA implementation was effective across diverse communities and for diverse learners within London.

London-wide practitioners' rating of beliefs on developing young people's mental health literacy was found to increase after COVID-19 national lockdown (6%), compared with before lockdown and (11%) compared with during lockdown but this increases was not significant. Practitioners' beliefs on the remaining five effectiveness constructs remained similar after lockdown compared to before lockdown. This indicated London-wide practitioners maintained their implementation of YMHFA provision in their settings helping young people with their mental health before, during and after lockdown.

Whole Setting Staff Beliefs in Effectiveness of Setting YMHFA Provision

The evaluation of whole setting YMHFA provision, implemented by the YMHFA trained designated mental health leads within academic and specialist settings on case study staff beliefs at baseline and at least one year after implementation was also determined.

Findings indicated increases in case study staff rating of beliefs at least 12 months after YMHFA implementation by the designated mental health lead compared with baseline in whole settings for three of the six effectiveness constructs but these increases were not significant: knowledge of mental health (6%) and young people's mental health literacy (8%). The findings suggest YMHFA implementation within whole settings by YMHFA trained designated mental health leads increased case study staff beliefs in their knowledge of mental health and YMHFA provision for young people's mental health literacy.

There were significant differences in case study staff beliefs with higher rating on beliefs from staff in academic settings compared to specialist settings for: developing young people's mental health literacy (17%) and influencing young people's self-efficacy (17%). In addition, there was a small significant increase in beliefs about their ability to influence collective efficacy within settings following YMHFA. There were no

significant differences in case study staff ratings of beliefs between academic and specialist settings for knowledge of mental health, administering MHFA ALGEE and engaging in evidence-based practice.

No case study settings were recruited before COVID-19 pandemic and there was insufficient case study staff responses both during and after lockdown from academic and specialist settings to collate the effects of lockdown across settings.

Post- COVID-19 Lockdown YMHFA Provision

YMHFA provision post-COVID-19 lockdown, after lockdown restrictions were lifted, by the two participant groups involved in the evaluation, London-wide practitioners and Case study staff, was considered.

Participant groups were characterised as London-wide practitioners trained in YMHFA who had implemented their training within their respective setting for one or more terms and, case study staff, who had provisioned YMHFA for at least one year after the YMHFA trained mental health lead implemented their training within whole setting. A comparison of participant group beliefs as well as any differences in participant group beliefs from academic and specialist settings were considered.

Findings indicated there was a significant difference between London-wide and case study participant group beliefs with London-wide practitioners showing higher rating in beliefs, compared with case study staff in: knowledge of mental health (9%), administering MHFA ALGEE dialogic action plan (16%) and their ability to engage in evidence-based practice (20%). There were no significant differences between London-wide practitioners and case study staff regarding their belief in their ability to develop young people's mental health literacy, collective efficacy and, young people's self-efficacy within their respective settings.

Finally, comparing participant group beliefs from academic versus specialist settings, findings showed there was a significant difference for only one of the six constructs with participants from academic settings showing higher rating in beliefs compared with specialist settings in: influencing young people's self-efficacy (7%). There were similar rating in beliefs with no significant difference between settings for all other constructs.

1 – Introduction

The 'Transforming Children and Young People's Mental Health Provision' Green Paper (Department of Health & Department of Education, 2017) acknowledges the need to ensure all children and young people have access to high-quality mental health and wellbeing support within schools and colleges as well through NHS mental health services if and when needed. To achieve this, the green paper also establishes a collaborative approach to mental health provision between schools and colleges and NHS. This included establishing designated lead roles between Mental Health Support teams supervised by NHS with groups of schools and colleges. Together the teams are able to offer specialist mental health support through school and NHS based prevention and intervention when needed by children and young people (Arango et al., 2018).

Thrive LDN with Mental Health First Aid England aimed to deliver the Youth Mental Health First Aid Course (YMHFA) to education, while youth organisation, charity and hospital setting practitioners engaged in supporting young people's mental health within their setting. The training was London-wide (<u>https://www.thriveldn.co.uk</u>). The evaluation spanned from 2019 to 2023 to determine the effectiveness of: (i) YMHFA training and implementation of training by London-wide practitioners within their respective settings and, (ii) six case studies involving all case study staff provisioning YMHFA implemented by the YMHFA trained designated mental health lead within the whole setting. Since the evaluation was undertaken before, during and after COVID-19 national lockdown, the impact, if any, of lockdown was also examined.

2 – Report Aims

The evaluation reported here addressed the research questions posed below to determine the effectiveness of YMHFA training and whole setting implementation within organisational and charitable settings supporting young people's mental health and wellbeing. The evaluation used questionnaires to obtain practitioner views in London-wide settings such as schools and colleges, youth organisations and other organisations who had received YMHFA training. In addition, whole setting staff who formed the six case studies and consented to take part in the evaluation also completed questionnaires.

The questionnaires assessed practitioner beliefs in: (A) confidence in knowledge and awareness of mental health conditions, (B) administering MHFA ALGEE dialogic action plan to converse with young people about maintaining good mental health by asking, listening non-judgementally, giving reassurance and information, enabling seeking professional help and encouraging use of self-help strategies, (C) engaging in evidence-based practice, (D) developing young people's mental health literacy, (E) influencing whole setting collective efficacy of staff, parents and young people to help young people's mental health and seek help themselves if needed, and (F) influencing young people's self-efficacy to recognise their own mental health issues and knowing what self-help strategies and professional support to draw upon.

The aim of this report is to share findings about the effectiveness of YMHFA training perceived by practitioners from London-wide settings before and after taking the training and whole setting implementation of YMHFA mental health provision perceived by whole setting staff from six case study settings. The evaluation was impacted by the onset of the COVID-19 pandemic and therefore any effects of the national lockdown in England on practitioner and staff perceptions of the YMFHA training is therefore also considered. Ethical and data protection approval was gained from UCL IOE Ethics Review Committee and UCL Data Protection Office. All participant responses are reported anonymously.

EVALUATION RESEARCH QUESTIONS

To evaluate the effectiveness of YMHFA training and implementation within London-wide settings serving diverse communities, we proposed to address the research questions listed below to understand beliefs with regard to its effectiveness held by: (a) London-wide practitioners who trained in YMHFA and were implementing this training within settings, and (b) Whole setting staff from six case study settings (case study staff) implementing YMHFA provision to support children and young people's mental health within their settings.

- 1. Did YMHFA improve knowledge and awareness of mental health conditions?
- 2. Did YMHFA increase the skills and confidence to spot the signs of poor mental health in young people?
- 3. Did YMHFA increase signposting of young people to professional mental health support and services?
- 4. What impact did YMHFA have on young Londoners' knowledge of mental health and what they need to do if they encounter mental health issues?
- 5. What impact, if any, did YMHFA have on whole setting-based mental health provision?

In addition, given COVID-19 pandemic, the following research question was posed in order to ascertain any influence of the pandemic on the effectiveness of YMHFA training implementation.

6. What impact, if any, has national COVID-19 pandemic lockdown phases in England had upon effectiveness of YMHFA training implementation within London in supporting young people's mental health and, what was the impact after COVID-19 lockdown restrictions were lifted?

3 – Sampling

Practitioners in settings in diverse communities in London were purposively recruited over the three-year duration of the evaluation. Two purposive sampling strategies were used:

- London-wide practitioners were recruited at the time of registering for YMHFA training from 2019 to 2022 with participation in the evaluation until 2013. This meant participation spanned before, during and after COVID-19 national lockdown.
- Whole setting staff were recruited from six case study settings (case study staff) in which the YMHFA trained designated mental health leads, were implementing YMHFA provision for whole setting mental health and wellbeing policy. Case study staff were invited to participate in the evaluation at the cusp of first COVID-19 national lockdown until 2023.

In the first sample, 1093 participant responses were received from London-wide participants where 10% of responses were from settings in North London, 18% East London, 48% South London, 15% West London, 5% in Central London. 5% did not answer. Participants were practitioners from a wide-range of setting.

Participant settings were categorised according to the setting education specialism: academic (72%) or specialist (28%). Within academic settings, participants were in state funded mainstream schools, academies, faith or free schools, sixth form and further education colleges and higher education institutions. Within specialist settings, participants were in special education needs schools, pupil referral units and Social, Emotional Mental Health schools, youth organisations as well as hospital schools. Since this report considers YMHFA implementation within school settings, participants not in school settings (8%), such as local authority, police, church, CAMHS were not included in this report. Of the participants from academic and specialist settings, 80% of responses were before and 20% after YMHFA training across London settings. In addition, 13% of responses were before lockdown, 25% during and 62% after lockdown.

Participant responses from six case study settings were received from 267 staff who consented to take part in the evaluation. Participants were from a sixth form college in south London (40%), secondary school in East London (1%), primary school in Central London (21%), special education needs school in North London (28%), pupil referral unit in North London (4%), and a youth organisation in South London (6%). Findings from these settings were also categorised as academic (59%) which included sixth from college, primary school and secondary school or, specialist (41%) which included special education school, pupil referral unit and youth organisation. Participant responses were sought at two time points: baseline (68%), established as the

first time point when the evaluation questionnaire was administered and, impact (32%), when the questionnaire was administered at least one year later. There were no case study participant responses before lockdown because settings were recruited at the time of first lockdown. Due to lockdown there were ensuing delays in setting engagement. Specialist settings participated in the evaluation study during (66%) and after (44%) the lockdown. Academic settings began participating in the evaluation only after lockdown. This means that for case study settings the effects of the COVID-19 pandemic lockdown was ascertained from specialist settings only.

4 – Evaluation Research Methods

4.1 YMHFA QUESTIONNAIRE

The questionnaire used in this evaluation included questions corresponding to six belief effectiveness constructs using groups of 5-7 items (see Table 1). Participant rated their beliefs on each construct on 5-point Likert scales: (A) knowledge and awareness of children and young people's mental health conditions: *not very confident* ... *very confident*, (B) their use of MHFA ALGEE dialogic action plan process to support young people's mental health needs: *not very confident* ... *very confident*, (C) their level of engagement in evidence-based practice to further develop their own and others' expertise in supporting young people's mental health needs: never ... very often, (D) developing young people's mental health literacy in self-awareness of good mental health, self-help strategies and seeking professional help as and when needed: (*young people*) *not self-aware* ... *very self-aware*, (E) influencing collective efficacy from staff, young people and their peers and, parents in recognising and helping young people's self-efficacy in maintaining good mental health through proactive self-help and willingness to overcome reluctance in seeking professional help if needed: (*young people*) *not very confident* ... *very self-aware*. ... *very self-aware*.

4.2 RELIABILITY OF EVALUATION EFFECTIVENESS BELIEF MEASURES

Questionnaire item reliability of the six effectiveness belief constructs was determined from responses by: (i) London-wide practitioners undertaking the YMHFA training and (ii) case study staff provisioning YMHFA within the whole setting. The internal consistency of each effectiveness belief calculated using Cronbach's alpha is shown in Table 1 below. Where Cronbach's alpha is 0.90 or above for a construct this indicates very good reliability of participant responses across questions, an alpha of between 0.80 and 0.60 is considered acceptable.

Table 1. Item Reliability of Evaluation Effectiveness Beliefs

		London-wide Practitioners	Case setting Staff
Effectiveness Belief in	Defining Effectiveness Belief Construct	Cronbach's Al	oha Reliability
Knowledge of mental health	Confidence in knowledge and awareness of mental health conditions and to spot the signs of poor mental health in young people: 5 items	0.94	0.92
MHFA ALGEE action plan	Administering the MHFA ALGEE dialogic action plan process for young people to assess, listen non- judgementally, give guidance, empower self-help and refer to external professional help if needed: 6 items	0.95	0.92
Evidence-based practice	Engagement in evidence-based practice as a continued professional development for themselves and staff to develop and keep updates with evidence of what works for setting based mental health provision: 7 items	0.90	0.90
Young people's mental health literacy	Developing young people's self-awareness about their own mental health, knowing what self-help strategies to draw upon and to seek professional help when needed: 5 items	0.93	0.93
Collective setting efficacy	Influencing whole setting capacity in recognising and helping young people with mental health issues and overcome reluctance to speak about their own mental health with others within the setting: 7 items	0.70	0.65
Young people's self-efficacy	Influencing young people's ability to be be aware of their own mental heath issues, what self-help strategies to use and overcome reluctance to speak about their mental health with others within the setting: 5 items	0.76	0.76

4.3 QUESTIONNAIRE ADMINISTRATION

The questionnaire was administered online, using Opinio web-based survey tool, to both sample groups: (i) London-wide practitioners trained in YMHFA and (ii) Whole setting practitioners who were staff in case settings where YMHFA was being implemented by the designated mental health lead trained in YMHFA. London-wide practitioner questionnaire responses were collated at three time points: Before training, less than one term after training and one or more terms after training. There was no significant difference in participant responses collated less than one term and one or more terms after training (see Sections 5 and 6), therefore these time points were collapsed to two time points: pre- and post-training. Whole setting staff questionnaire responses were collated at two time point levels where the first time point was considered a baseline and the second, at least one year later, was indicative of potential impact.

4.4 COVID-19 PANDEMIC LOCKDOWN

Participant responses to the YMHFA questionnaire were canvassed before, over the duration of three COVID-19 pandemic national lockdowns in England and after lockdown restrictions were lifted. Responses were categorised into three lockdown time points: (i) 'before lockdown' to represent responses from the evaluation start data in 2019 and before the first lockdown on 26 March 2020, (ii) 'During lockdown' represents responses at start of first lockdown on 26 March 2020 to end of third lockdown on 7 March 2021 and (iii) 'After Lockdown' represents responses at start of lifting of third lockdown restrictions on 8 March 2021 to the end of data collection in April 2023.

London-wide practitioner responses were thereby categorised according to three lockdown time points: before, during and after lockdown. Categorisation for case-setting staff responses was complex since participants were recruited on the cusp before the start of the first national lockdown. This meant there were no responses before lockdown. In addition, ethical considerations in relation to COVID-19 pandemic and national lockdown were discussed with the case setting designated mental health leads to make decisions on when setting staff would be able engage in the evaluation. By the end of the evaluation, specialist setting participant responses were received during and after lockdown and academic setting participant responses

were received only after lockdown. These variations had implications for the evaluation as it was not feasible to evaluate the influence of COVID-19 national lockdown upon case settings during and after lockdown.

Given, there were consistent responses from London-wide and case settings after lockdown, i.e. postlockdown, the interrelationships between participant groups (London-wide practitioners and case study staff) and setting specialism (academic and specialist) post- lockdown (after lockdown) was feasible. Therefore, a comparison between participant group responses was ascertained where: (i) London-wide practitioners were implementing YMHFA provision within their setting after YMHFA training (i.e. post-YMHFA training) and (ii) case study staff were implementing YMHFA provision at least 12 months after (i.e. impact measure) the YMHFA trained designated mental health lead engaged staff in the evaluation, see Section 5.

5 – Analytic Procedures

The effects of YMHFA implementation within settings in London was considered from the perspective of the individual level from London-wide practitioners and the social level from case study staff questionnaire responses to ascertain beliefs in their effectiveness in provisioning YMHFA to support young people with their mental health needs within their settings.

Whilst purposive sampling was used for participant recruitment, participation was voluntary and dependent upon individual preferences on whether and when to respond. In addition, London-wide practitioner responses were collated anonymously and case study staff, in consultation with the designated mental health lead, were given the opportunity to 'opt out' of sharing personal identifiers at any time without explanation.

Analysis was undertaken using both sample group data which means responses from different people in different settings were analysed with the assumption that independent group differences would be analysed. This assumption was verified using the Levene's test for equality of variances.

The effectiveness of YMHFA provision, setting specialism and influence of COVID-19 pandemic lockdown on London-wide practitioner and case study staff beliefs for the six evaluation belief constructs (see Section 4) was determined using unrelated analysis of variance and effect size using partial eta squared. Where findings suggested significant main effects, follow up pairwise comparison of between group mean differences with Bonferroni adjustment. Where interactions are found, these are reported. In addition, the proportion of mean differences as the percentage increase in mean participant beliefs between groups were also determined. Analysis was undertaken using SPSS Quantitative Analysis software.

At the individual level, with responses from London-wide practitioners, the effects of: (i) YMHFA training (preand post-training), (ii) setting specialism (academic and specialist) and (iii) COVID-19 national lockdown (before, during and after lockdown) on London-wide practitioners' beliefs in the effectiveness of implementing their YMHFA training within their setting for six effectiveness belief constructs (See Section 4) was determined.

At the social level, with responses from case study staff, the effects of: (i) whole setting YMHFA being implemented by the YMHFA trained designated mental health lead (baseline and impact at least one year later) and (ii) setting specialism (academic and specialist) on case study staff beliefs in the effectiveness of their YMHFA provision for six effectiveness belief constructs (See Section 4) was determined. No case settings were recruited before COVID-19 pandemic and there was insufficient case study staff responses both during and after lockdown from academic and specialist settings to collate the effects of lockdown across settings.

In addition, the individual and social levels of effectiveness of YMHFA provision was determined post-COVID-19 national lockdown, after lockdown restrictions were lifted, by comparing London-wide practitioner and case study staff beliefs in the effectiveness of their YMHFA provision for six effectiveness belief constructs within academic and specialist settings.

5.1 LONDON-WIDE YMHFA TRAINING

To determine the effects of YMHFA training upon London-wide practitioner beliefs for the six effectiveness belief constructs defined in Section 4, and collected at three time point levels: before training, less than one term after training and, one or more terms after training, see Table 2A. Findings show there were increases in mean participant responses over the three time points for all six effectiveness belief constructs.

One-way unrelated analysis of variance was used to determine differences in mean participant beliefs between the three YMHFA training time points on each of six effectiveness belief constructs. This showed there were significant differences between YMHFA training groups on all six effectiveness beliefs ($p \le .05$).

Follow up pairwise comparison of mean differences between the three time points with Bonferroni adjustment was therefore conducted to determine whether the significant differences were between all three time points. Findings showed there were significant differences in mean practitioner beliefs 'before training' and 'less than one term after training' for all six evaluation constructs with higher rating on beliefs 'less than one term' after training than 'before training' ($p \le .001$). Also, there were significant differences in practitioner mean responses 'before training' compared with 'one or more term after training' for all effectiveness belief constructs ($p \le .001$) with higher rating for the latter time-point. However, there were no significant differences between mean participant responses 'less than one term' and 'one or more terms' after training for all evaluation belief constructs (see Table 2B for *p* values).

The three time points were thereby collapsed to two time points: pre-training (before training) and, posttraining (less than one term and one or more term after training). Analysis of YMHFA training was therefore evaluated pre- and post-training.

Overall, the main effects between YMHFA training (pre- and post-training), Setting specialism (academic and specialist) and COVID-19 national lockdown (before, during and after lockdown) upon London-wide practitioners' mean responses for the evaluation effectiveness belief constructs (see Section 4) were analysed using three-way unrelated analysis of variance followed by pairwise comparison for mean differences with Bonferroni adjustment. (See Section 6.1)

Effectiveness Belief Construct	YMHFA Training Time Point	М	SD	n
Knowledge of mental health	Before Training	12.17	4.31	622
	Less than One Term After Training	17.20	4.76	61
	One or More Terms After Training	18.02	4.16	108
MHFA ALGEE action plan	Before Training	15.77	5.57	622
	Less than One Term After Training	21.92	5.79	61
	One or More Terms After Training	22.92	5.42	108
Evidence-based practice	Before Training	15.70	5.79	622
	Less than One Term After Training	19.03	5.73	61
	One or More Terms After Training	20.44	6.29	108
Young people's mental health literacy	Before Training	11.89	4.24	622
	Less than One Term After Training	14.61	4.35	61
	One or More Terms After Training	14.48	5.06	108
Collective setting efficacy	Before Training	20.33	4.37	622
	Less than One Term After Training	22.02	4.10	61
	One or More Terms After Training	22.73	4.84	108
Young people's self-efficacy	Before Training	12.70	3.48	622
	Less than One Term After Training	14.72	3.45	61
	One or More Terms After Training	15.16	4.02	108

Table 2A. London-wide practitioner mean responses for effectiveness belief constructs before, less
than one term and, one or more terms after YMHFA training

M = *Mean*; *SD* = *Standard deviation*; *n* = *Number in subsample*

		Mean Difference					
Effectiveness Belief Construct	YMHFA training time point (I)	YMHFA training time point (J)	(J-I)	Std. Error	Probability		
Knowledge of mental health	Before Training	Less than One Term After Training	5.038	0.58	≤.001**		
		One or More Terms After Training	5.851	0.45	≤.001**		
	Less than One Term After Training	One or More Terms After Training	0.814	0.69	.721		
MHFA ALGEE action plan	Before Training	Less than One Term After Training	6.150	0.75	≤.001**		
		One or More Terms After Training	7.148	0.58	≤.001**		
	Less than One Term After Training	One or More Terms After Training	0.999	0.89	.789		
Evidence-based practice	Before Training	Less than One Term After Training	3.337	0.79	≤.001**		
		One or More Terms After Training	4.748	0.61	≤.001**		
	Less than One Term After Training	One or More Terms After Training	1.412	0.94	.398		
Young people's mental health literacy	Before Training	Less than One Term After Training	2.714	0.59	≤.001**		
		One or More Terms After Training	2.589	0.46	≤.001**		
	Less than One Term After Training	One or More Terms After Training	-0.125	0.70	>.05		
Collective setting efficacy	Before Training	Less than One Term After Training	1.687	0.59	.014*		
		One or More Terms After Training	2.402	0.46	≤.001**		
	Less than One Term After Training	One or More Terms After Training	0.715	0.71	.938		
Young people's self-efficacy	Before Training	Less than One Term After Training	2.019	0.48	≤.001**		
		One or More Terms After Training	2.455	0.37	≤.001**		
	Less than One Term After Training	One or More Terms After Training	0.436	0.57	>.05		

Table 2B. Difference in London-wide practitioner mean responses for evaluation belief constructs across YMHFA training time points.

The mean difference is significant at $p \le .001$ (**) or $p \le .05$ (*) given Bonferroni adjustment for multiple comparisons

5.2 WHOLE SETTING YMHFA PROVISION

The effects of YMHFA provision by staff within case study settings (case study staff) where the YMHFA trained designated mental health lead implemented their training was ascertained.

The main effects between the duration of YMHFA provision (baseline and impact, 12 months later) and setting specialism (academic and specialist) on case study staff mean responses for the six evaluation effectiveness belief constructs (see Section 4) were analysed using two-way unrelated analysis of variance followed by pairwise comparison for mean differences with Bonferroni adjustment (See Section 6.2).

Assessing the influence of COVID-19 national lockdown was not possible as no case settings were recruited before COVID-19 pandemic and there was insufficient case study staff responses both during and after lockdown from academic and specialist settings to assess the effects of lockdown across settings. Therefore interrelationships between whole setting duration of YMHFA provision, setting specialism and COVID-19 lockdown are not shown.

5.3 POST COVID-19 LOCKDOWN YMHFA PROVISION

YMHFA provision by London-wide practitioners and case study staff post COVID-19 national lockdown was also ascertained. Here differences in mean responses between the two participant groups: (i) London-wide YMHFA trained practitioners leading implementation of their YMHFA training within their setting and (ii) whole setting staff where the YMHFA trained designated mental health lead was implementing their training.

Here, the main effects between participant groups (London-wide practitioners and case study staff) and setting specialism (academic and specialist) on mean responses for the six effectiveness belief constructs (see Section 4) was analysed using two-way unrelated analysis of variance followed by pairwise comparison for mean differences with Bonferroni adjustment. (See Section 6.3)

6 – Findings

6.1 LONDON-WIDE YMHFA TRAINING

Three-way unrelated analysis of variance of the main effects of: (i) YMHFA training (pre- and post-training), (ii) setting specialism (academic and specialist) and (iii) influence of COVID-19 national lockdown (before, during and after lockdown), on participant responses to all six effectiveness belief constructs listed in Section 4, is shown in Table 3 below. There were no interactions between these factors, data not shown.

Table 3. London-wide practitioner YMHFA training, setting specialism and COVID-19 national lockdown effects on participant beliefs in the effectiveness of their
implementation of YMHFA training within their setting.

		Sum of Squares	Degrees of freedom	Mean Square	F-ratio	Probability	Partial Eta Squared
	Effectiveness Belief Construct	oquales	needoni	oquare			oqualeu
YMHFA Training (Pre- Post-Training)	Knowledge of mental health	1597.25	1	1597.25	89.873	≤ .001**	0.11
	MHFA ALGEE action plan	2366.14	1	2366.14	80.464	≤ .001**	0.10
	Evidence-based practice	1149.98	1	1149.98	34.030	≤ .001**	0.05
	Young people's mental health literacy	470.02	1	470.02	25.043	≤ .001**	0.03
	Collective setting efficacy	257.21	1	257.21	13.700	≤ .001**	0.02
	Young people's self-efficacy	370.87	1	370.87	30.293	≤ .001**	0.04
Setting (Academic, Specialist)	Knowledge of mental health	20.78	1	20.78	1.169	.280	0.00
	MHFA ALGEE action plan	1.76	1	1.76	0.060	.807	0.00
	Evidence-based practice	49.82	1	49.82	1.474	.225	0.00
	Young people's mental health literacy	4.69	1	4.69	0.250	.617	0.00
	Collective setting efficacy	20.91	1	20.91	1.114	.292	0.00
	Young people's self-efficacy	5.61	1	5.61	0.458	.499	0.00
Lockdown (Before, During, after Lockdown)	Knowledge of mental health	26.96	2	13.48	0.758	.469	0.00
	MHFA ALGEE action plan	131.79	2	65.89	2.241	.107	0.01
	Evidence-based practice	6.90	2	3.45	0.102	.903	0.00
	Young people's mental health literacy	113.04	2	56.52	3.011	.050*	0.01
	Collective setting efficacy	90.19	2	45.10	2.402	.091	0.01
	Young people's self-efficacy	68.26	2	34.13	2.788	.062	0.01

Significant main effects indicated at p ≤ .001 (**) and p ≤ .05 (*); Partial eta squared indicates effect size: large (> 0.14), medium (> 0.06 to < 0.14), small (< 0.06)

YMHFA Training Effects

The main effects of YMHFA training with effect sizes indicated by partial eta squared are shown in Table 3. Findings showed significant differences in participants' mean effectiveness beliefs with medium and small effect sizes for all effectiveness belief constructs.

Findings showing highly significant differences in participants' mean effectiveness belief with medium effect size were for effectiveness belief construct (A) knowledge of mental health F(1, 709) = 89.87, $p \le .001$, $\eta_p^2 = 0.11$ and (B) administration of the MHFA ALGEE dialogic action plan F(1, 709) = 80.46, $p \le .01$, $\eta_p^2 = 0.10$. Pairwise comparisons with Bonferroni adjustment for multiple comparisons showed a significant difference in participants' mean responses pre- and post-post-training on (A) knowledge of mental health, *Mdiff* = 5.74, *Std Error* = 0.61 $p \le .001$, representing a 45% increase in belief post-training and, (B) administration of the MHFA ALGEE dialogic action plan, *Mdiff* = 6.99, *Std Error* = 0.78 $p \le 0.001$, representing a 43% increase in mean belief post-training. See Figures 1A and 1B)

In addition, significant differences in participant mean beliefs with small effect sizes for the impact of YMHFA training were found for engaging in (C) evidence-based practice to inform their implementation of training, F(1, 709) = 34.03, $p \le .001$, $\eta_p^2 = 0.05$, (D) developing young people's mental health literacy, F(1, 709) = 25.04, $p \le .001$, $\eta_p^2 = 0.03$, (E) influencing collective efficacy in whole setting capacity to maintain good mental health, F(1, 709) = 13.70, $p \le .001$, $\eta_p^2 = 0.02$ and (F) influencing young people's self-efficacy in their own capacity to maintain good mental health F(1, 707) = 30.29, $p \le .001$, $\eta_p^2 = 0.04$.

Pairwise comparisons with Bonferroni adjustment also showed significant difference in participants' mean responses pre- and post-training for (C) engaging in evidence-based practice to inform their implementation of training, *Mdiff* = 4.87, *Std Error* = 0.84, $p \le .001$, representing a 29% increase in belief post-training; (D) developing young people's mental health literacy, *Mdiff* = 3.11, *Std Error* = 0.62, $p \le .001$, representing a 28% increase in belief post-training; (E) influencing collective efficacy in whole setting capacity to maintain good mental health, *Mdiff* = 2.30, *Std Error* = 6.22, $p \le .001$, representing 30% increase post-training and, (F) influencing young people's self-efficacy in their own capacity to maintain good mental health *Mdiff* = 2.77, *Std Error* = 0.50, $p \le .001$, representing a 25% increase in belief post-training. (See Figure 1)

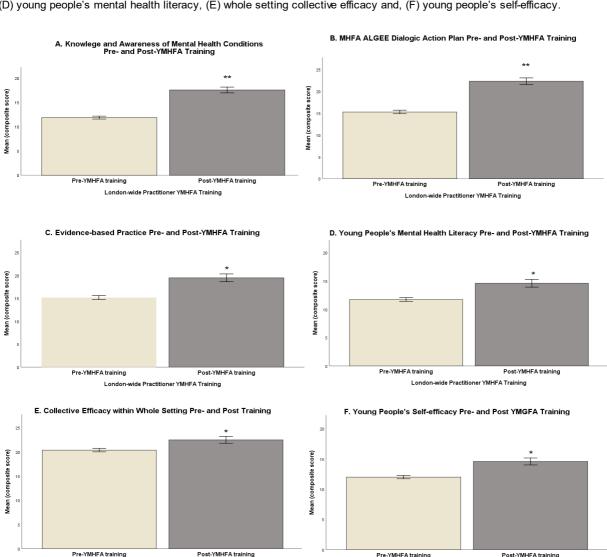


Figure 1. London-wide practitioner rating, pre- and post-YMHFA training on beliefs in six evaluation belief constructs: (A) knowledge and awareness of mental health conditions, (B) MHFA ALGEE dialogic action plan, (C) evidence-based practice, (D) young people's mental health literacy, (E) whole setting collective efficacy and, (F) young people's self-efficacy.



Pre-YMHFA training Post-YMHFA training

London-wide Practitioner YMHFA Training

London-wide Practitioner Setting Effects

There were no significant main effects and negligible effect sizes for participants' between setting specialism (academic and specialist) on participant mean responses for all six belief constructs, see Table 3.

These findings showed that the mean beliefs for all six constructs were similar between academic and specialist settings: construct (A) knowledge of mental health within academic settings, M = 14.83, *Std. Error* = 0.25, *CI* [14.37, 15.31], and in specialist settings, M = 15.48, *Std. Error* = 0.55, *CI* [14.40, 20.49],(B) MHFA ALGEE dialogic action plan in academic settings, M = 19.80, *Std. Error* = 0.32, *CI* [18.27, 19.51], and in specialist settings, M = 19.08, *Std. Error* = 0.32, *CI* [18.27, 19.51], and in specialist settings, M = 19.08, *Std. Error* = 0.71, *CI* [17.68, 20.48]; (C) evidence-based practice in academic settings, M = 17.55, *Std. Error* = 0.34, *CI* [16.88, 18.31], and in specialist settings, M = 18.56, *Std. Error* = 0.76, *CI* [17.06, 20.06]; (D) young people's mental health literacy practice in academic settings, M = 12.79, *Std. Error* = 0.25, *CI* [12.30, 13.29], and in specialist settings, M = 13.10, *Std. Error* = 0.57, *CI* [11.99, 14.22]; (E) collective setting efficacy in academic settings, M = 20.83, *Std. Error* = 0.25, *CI* [20.33, 21.33], and in specialist settings, M = 21.49, *Std. Error* = 0.57, *CI* [20.37, 22.61] and (F) young people's self-efficacy efficacy in academic settings, M = 13.46, *Std. Error* = 0.20, *CI* [13.06, 13.86], and in specialist settings, M = 13.80, *Std. Error* = 0.46, *CI* [12.90, 14.70].

This indicates there were no significant differences or change in London-wide practitioners' beliefs on effectiveness constructs serving academic and specialist settings within diverse communities for young people with diverse learning needs. (See Figures 2)

COVID-19 Lockdown Effects

There were significant main effects with small effect sizes for participants' mean responses before, during and after COVID-19 lockdown for one effectiveness belief construct, (D) developing young people's mental health literacy F(2, 709) = 3.01, $p \le .05$, $\eta_p^2 = 0.01$.

However, follow up pairwise comparisons with Bonferroni adjustment showed no significant differences in participants' mean responses between the three lockdown time points: (i) during lockdown to before lockdown *Mdiff* = -0.11, *Std Error* = 0.89, p = .0, representing a 1% decrease, (ii) after lockdown to before lockdown, *Mdiff* = 1.33, *Std Error* = 0.72, p = .264, representing a 6% increase and, (iii) after lockdown to during lockdown, *Mdiff* = 1.32, *Std Error* = 0.66, p = .135, representing an 11% increase. (See Figure 3)

In addition, there were no main effects and negligible effect sizes before, during and after COVID-19 lockdown for the other five beliefs on knowledge of mental health, administering MHFA dialogic action plan, evidence-based practice, collective setting efficacy and young people's self-efficacy, (data not shown).

Figure 2. London-wide practitioner ratings on beliefs in six evaluation belief constructs within academic and specialist settings: (A) knowledge and awareness of mental health conditions, (B) MHFA ALGEE dialogic action plan, (C) evidence-based practice, (D) young people's mental health literacy, (E) whole setting collective efficacy and, (F) young people's self-efficacy.

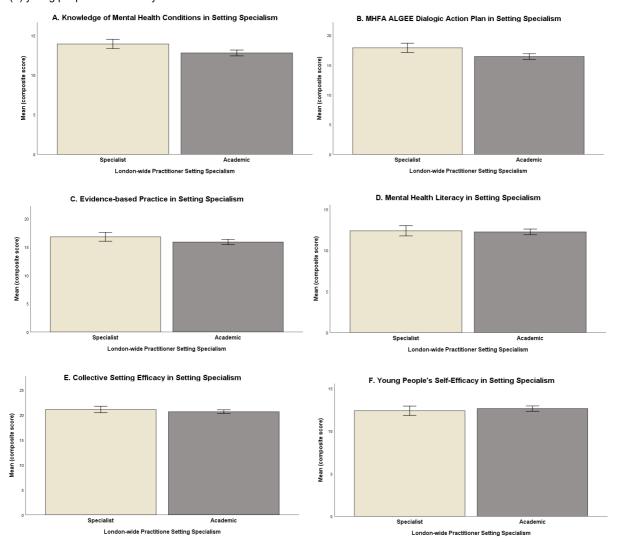


Figure 3. London-wide practitioner ratings on beliefs in developing young people's mental health literacy before, during and after COVID-19 national lockdown



Young People's Mental Health Literacy before, during and after COVID-19 Lockdown

6.2 WHOLE SETTING STAFF YMHFA PROVISION

Two-way unrelated analysis of variance of the main effects and effect size between: (i) duration of whole setting YMHFA provision implemented by the YMHFA trained setting designated Mental Health lead at start of participation in the evaluation (baseline measure) and 12 months later (impact measure) and, (ii) setting specialism (academic and specialist) on case study staff mean responses to all six effectiveness belief constructs listed in Section 4 are reported in Table 4. No case study settings were recruited before COVID-19 pandemic and there was insufficient case study staff responses both during and after lockdown from academic and specialist settings to collate the effects of lockdown across settings (see Section 4).

Table 4. Whole setting duration of YMHFA implementation and setting specialism effects on participant beliefs in the effectiveness of their YMHFA provision within
their setting.

	Effectiveness Belief Construct	Sum of Squares	Degrees of freedom	Mean Square	<i>F</i> -ratio	Probability	Partial Eta Squared
Whole Setting Duration YMHFA implementation	Knowledge of mental health	36.87	1	36.87	1.723	.191	0.01
(Baseline, Impact)	MHFA ALGEE action plan	16.46	1	16.46	0.528	.468	0.00
	Evidence-based practice	12.82	1	12.82	0.355	.552	0.00
	Young people's mental health literacy	35.69	1	35.69	1.624	.204	0.01
	Collective setting efficacy	1.70	1	1.70	0.1	.752	0.00
	Young people's self-efficacy	31.34	1	31.34	2.29	.132	0.01
Setting Specialism	Knowledge of mental health	0.01	1	0.01	0	.987	0.00
(Academic, Specialist)	MHFA ALGEE action plan	39.52	1	39.52	1.268	.262	0.01
	Evidence-based practice	71.15	1	71.15	1.968	.163	0.01
	Young people's mental health literacy	141.39	1	141.39	6.436	.012*	0.04
	Collective setting efficacy	124.52	1	124.52	7.344	.007*	0.04
	Young people's self-efficacy	185.31	1	185.31	13.545	≤.001**	0.08

Significant main effects indicated at $p \le .001$ (**) and $p \le .05$ (*); Partial eta squared indicates effect size: large (> 0.14), medium (> 0.06 to < 0.14), small (< 0.06) Note: The effects of COVID-19 national lockdown is not included - see Section 4.

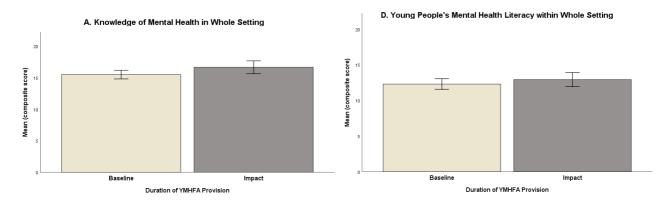
Duration of YMHFA Implementation Effects

There were no significant main effects and small or negligible effect sizes over the duration of YMHFA implementation by case study staff between baseline and impact, at least 12 months later, within whole setting (see Table 4).

Findings showing small effect sizes for the duration of YMHFA implementation were for three out of five effectiveness constructs. Pairwise comparison with Bonferroni adjustment showed participants' mean responses at impact (at least one year after baseline) compared with responses at baseline were not significantly different.

It was however noted higher rating of beliefs were found at impact compared with baseline. Belief on (A) knowledge of mental health at impact time point, M = 16.74, *Std. Error* = 0.64, *CI* [15.49, 18.00], represented a 6% increase compared to baseline, M = 15.73, *Std. Error* = 0.44, *CI* [14.86, 16.60] and (D) young people's mental health literacy at impact, M = 13.42, *Std. Error* = 0.64, *CI* [12.15, 14.70]) represented 8% increase compared to baseline M = 12.43, *Std. Error* = 0.45, *CI* [11.55, 13.31]. (See Figure 4) Of the remaining effectiveness constructs there were negligible change in case study staff beliefs (data not shown).

Figure 4. Whole case study staff rating on beliefs in three evaluation belief constructs: (A) knowledge and awareness of mental health conditions and (D) young people's mental health literacy at baseline and impact, at least 12 months after the YMHFA trained designated mental health lead implementing TMHFA provision within whole setting.



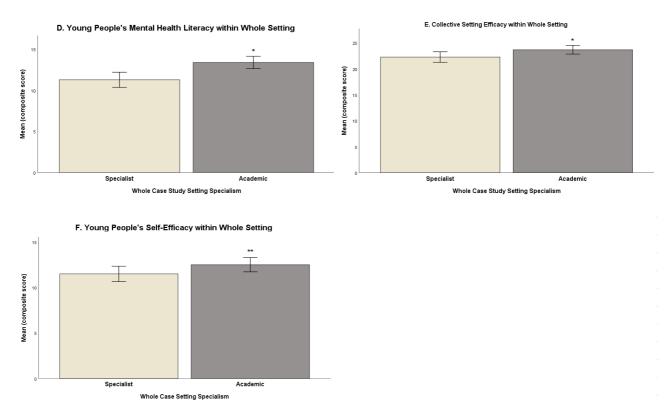
Case Study Staff Setting Effects

There were significant effects of case setting specialism (academic, specialist) on case study staff mean beliefs for three of the six constructs with medium and small effect sizes (see Table 4) with greater increase in beliefs of (D) developing young people's mental health literacy and (F) influencing young people's self-efficacy and, smaller (E) collective efficacy in whole setting smaller composite efficacy.

Pairwise comparison for mean differences with Bonferroni adjustments indicated that participants from academic settings showed significantly increased mean responses than participants from specialist settings for: (D) developing young people's mental health literacy, *Mdiff* = 1.99, *Std Error* = 0.78, p = .012, representing a 17% increase; (F) influencing young people's self-efficacy in their own capacity to maintain good mental health *Mdiff* = 1.86, *Std Error* = 0.69, $p \le .007$, representing a 18% increase and, (E) influencing collective efficacy in whole setting capacity to maintain good mental health, *Mdiff* = 2.27, *Std Error* = 6.18, $p \le .001$, representing 8% increase in mean effectiveness. (See Figure 5)

Interestingly, in this latter respect, there was a significant interaction in beliefs of (E) collective efficacy between case setting specialism and duration of YMHFA implementation within whole settings: F(1, 161) = 81.05, p = .03, $\eta_p^2 = 0.03$. This interaction showed a small effect size and given that there were no significant effects and negligible effect sizes for beliefs in collective efficacy over duration of YMHFA implementation, the effect here may explained by the academic setting specialism. Findings showed at least one year after YMHFA implementation within whole settings (impact time point) case study staff from academic settings conveyed greater beliefs in influence of collective efficacy in whole setting capacity to maintain good mental health (M = 24.89, Std. Error = 0.81, CI [23.29, 26.48]) than staff from specialist settings (M = 21.52, Std. Error = 0.79, CI [19.95, 23.08]), representing a16% increase.

Figure 5. Whole case study staff rating on beliefs on (D) young people's mental health literacy, (E) whole setting collective efficacy and, (F) young people's self-efficacy between academic and specialist settings.



6.3 Post-Covid-19 Lockdown YMHFA Provision

Two-way unrelated analysis of variance of the main effects of participant groups (London-wide practitioners and case study staff) and the setting specialism (academic and specialist) within which participants were implementing post-COVID-19 lockdown YMHFA provision was determined. Here London-wide practitioners were all YMHFA trained participants (post- training) implementing YMHFA training within their setting and, case study staff were all providing whole setting YMHFA provision at least one year (impact) after YMHFA was implemented within their setting by a YMHFA trained mental health lead. The main effects of YMHFA training with effect sizes indicated by partial eta squared are shown in Table 5 below.

Table 5. London-wide practitioner and case study staff group and setting specialism effects on participant's beliefs in the effectiveness of their YMHFA provision within their setting post-COVID-19 national lockdown.

	Effectiveness Belief Construct	Sum of Squares	Degrees of freedom	Mean Square	F-ratio	Probability	Partial Eta Squared
Participant Group	Knowledge of mental health	99.53	1	99.53	4.905	.028*	0.02
(London-wide Practitioner, Case Setting Staff)	MHFA ALGEE action plan	465.46	1	465.46	15.682	≤.001**	0.06
	Evidence-based practice	512.88	1	512.88	13.056	≤.001**	0.05
	Young people's mental health literacy	68.04	1	68.04	3.039	.083	0.01
	Collective setting efficacy	0.77	1	0.77	0.045	.833	0.00
	Young people's self-efficacy	31.71	1	31.71	2.433	.120	0.01
Setting Specialism	Knowledge of mental health	30.52	1	30.52	1.504	.221	0.01
(Academic, Specialist)	MHFA ALGEE action plan	0.66	1	0.66	0.022	.881	0.00
	Evidence-based practice	18.24	1	18.24	0.464	.496	0.00
	Young people's mental health literacy	17.22	1	17.22	0.769	.381	0.00
	Collective setting efficacy	47.84	1	47.84	2.764	.098	0.01
	Young people's self-efficacy	50.69	1	50.69	3.889	.050*	0.02

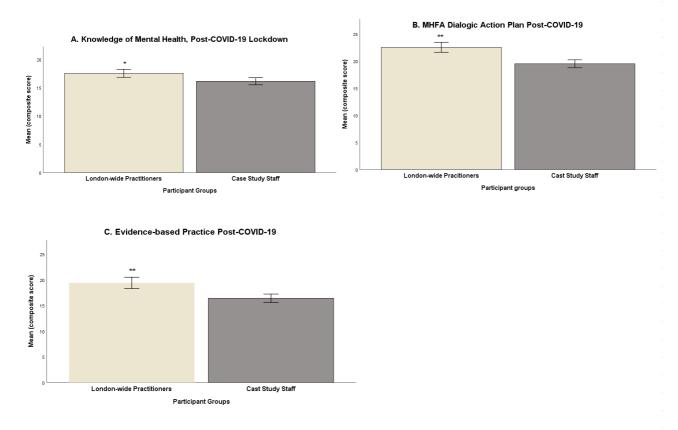
Significant main effects indicated at p ≤ .001 (**) and p ≤ .05 (*); Partial eta squared indicates effect size: large (> 0.14), medium (> 0.06 to < 0.14), small (< 0.06)

London-wide Practitioner and Case Study Staff Group Differences

Findings showed significant main effects of participant group (London-wide participants and Case study staff) on participants' effectiveness belief with small effect size for three of the six effectiveness belief constructs: (A) knowledge of mental health F(1, 228) = 4.91, p = .003, $\eta_p^2 = 0.02$ and (B) administration of the MHFA ALGEE dialogic action plan F(1, 228) = 15.68, $p \le .001$, $\eta_p^2 = 0.06$ and, evidence-based practice F(1, 228) = 13.06, $p \le .001$, $\eta_p^2 = 0.05$. There were no significant effects for the remaining belief constructs. There were no interactions.

Pairwise comparison for mean differences with Bonferroni adjustment for multiple comparisons, showed significant increases in participants' mean responses from the London-wide participant group compared with the case study staff group for (A) knowledge of mental health, *Mdiff* = 1.45, *Std Error* = 0.66, p = .023, representing a 9% increase in mean belief effectiveness, (B) administration of the MHFA ALGEE dialogic action plan, *Mdiff* = 3.14, *Std Error* = 0.79, $p \le .001$, representing a 16% increase in mean effectiveness and (C) evidence-based practice, *Mdiff* = 3.29, *Std Error* = 0.91, $p \le .001$, representing a 20% increase in mean effectiveness (See Figure 6).

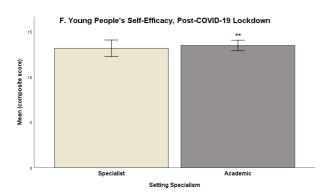
Figure 6. London-wide practitioner and case study staff rating for beliefs in: (A) knowledge and awareness of mental health conditions, (B) MHFA ALGEE dialogic action plan, (C) evidence-based practice, Post-COVID_19 lockdown



London-wide and Case study Staff Setting Specialism Differences

There was a significant main effect of setting specialism with a small effect size for participants' mean responses for belief in (F) influencing young people's self-efficacy, F(1, 228) = 50.69, $p \le .05$, $\eta_p^2 = 0.02$ but no other belief constructs (see Table 3). Follow up pairwise comparison for mean differences with Bonferroni adjustment showed there was a significant differences in participants' mean responses between setting specialism. Beliefs in influencing young people's self-efficacy, *Mdiff* = 1.035, *Std Error* = 0.53, p = .05, represented by a 7% increase in participant responses from academic settings compared with specialist settings. (See Figure 7)

Figure 7. London-wide practitioner and case study staff rating for beliefs in (F) young people's self-efficacy, Post-COVID_19 lockdown



7.0 – Conclusions

London-wide Practitioner Beliefs in Effectiveness of YMHFA Training

There were significant YMHFA training effects on London-wide practitioners' beliefs on all six constructs with higher rating in belief as measured post-training (one term or more after training) compared with pre-training (before training) on knowledge of mental health and use of MHFA ALGEE dialogic action plan, engaging in evidenced-based practice, developing young people's mental health liter, collective efficacy within settings and young people's self-efficacy.

London-wide practitioners' provisioning YMHFA within academic and specialist settings indicated they held similar beliefs on all effectiveness constructs suggesting there were no significant differences between practitioners serving diverse communities and for diverse learners within London.

The effects of COVID-19 lockdown on London-practitioners' beliefs on developing young people's mental health literacy was found to increase after lockdown compared to before lockdown but this increase was not significant. There was no change in beliefs on the knowledge of mental health, MHFA ALGEE dialogic action plan, evidence-based practice, collective setting efficacy and young people's self-efficacy. Taken together these findings suggest that London-wide practitioners maintained their implementation of YMHFA provision in their settings helping young people with their mental health before, during and after lockdown.

Whole Setting Staff Beliefs in Effectiveness of Setting YMHFA Provision

Whole setting case study staff provisioning YMHFA for at least 12 months after YMHFA implementation by the designated mental health lead showed increased beliefs in their knowledge of mental health and provision for young people's mental health literacy.

Findings also showed case study staff provisioning YMHFA within academic settings compared with staff from specialist settings had significant increased beliefs in: developing young people's mental health literacy, influencing young people's self-efficacy and influencing collective efficacy.

No case study settings were recruited before COVID-19 pandemic and there was insufficient case study staff responses both during and after lockdown from academic and specialist settings to collate the effects of lockdown across settings.

Post- COVID-19 Lockdown YMHFA Provision

Comparison between London-wide participant and case study setting participant groups showed significant differences in participants' beliefs on the effectiveness of their YMHFA provision post-COVID-19 lockdown. Findings showed London-wide practitioners had increased beliefs than whole case study staff in: three of the

six belief constructs: knowledge of mental health, administering MHFA ALGEE dialogic action plan and evidence based practice.

London-wide and case study participant setting specialism also had a significant effect on influencing young people's self-efficacy post-COVID-19 lockdown. Here participants from academic settings had a significantly greater increase in beliefs (7%) compared to participants from specialist settings.

8.0 – Research Team

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