

# Evaluation of Mental Health First Aid in New York City

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## About This Report

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An estimated 9 percent of adults in New York City (NYC) had major depression in 2016, and about 20 percent are likely have a mental health challenge in any given year. Furthermore, more than 40 percent of adults with serious mental illness either experience delays accessing needed mental health treatment or never receive it at all. To address these documented unmet mental health needs, the Mayor’s Office of Community Mental Health (OCMH) brought together city agencies, nonprofits, and community-based organizations in 2015 to support the mental health of all New Yorkers through 54 priority initiatives. One of these initiatives involved the provision of in-person Mental Health First Aid (MHFA) trainings, first to staff at city agencies and community-based organizations and eventually to all New Yorkers citywide—free of charge.

Citywide MHFA trainings under OCMH were launched in 2016 and continued until early March 2020 when most of the city experienced shutdowns due to coronavirus pandemic safety precautions. At the time of the shutdowns, planning for a full-scale evaluation of the impact of the MHFA trainings was underway but had not yet been launched. Once the evaluation could be adjusted to current circumstances by April 2021, it resumed in the form of a mixed-methods study that included a web-based survey of past trainees and a series of focus groups to assess the impact of the MHFA trainings and needs for continued training in the future. This report describes the evaluation activities that took place; the methods behind them; and the results at the individual, agency, and community levels. It also offers recommendations for ways to improve future mental health education efforts.

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## Summary

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Mental health challenges, including major depressive disorder and serious mental illness, are prevalent among the population of New York City (NYC), yet nearly half of adults who experience such challenges encounter barriers that can significantly delay access to needed mental health services or never receive them at all. In 2015, the de Blasio administration launched the Mayor’s Office of Community Mental Health (OCMH),<sup>1</sup> a landmark effort made up of more than 50 initiatives that was designed to provide comprehensive, inclusive, and holistic mental health programming through innovative partnerships between city government agencies and community-based organizations (CBOs) in the city. One of these initiatives centered on a citywide rollout of training in Mental Health First Aid (MHFA), an eight-hour course intended to equip nonclinical individuals to identify, understand, and respond to the signs and risk factors for mental illness and substance use disorders.

The Department of Health and Mental Hygiene (DOHMH) had been offering MHFA trainings, but this effort grew exponentially under OCMH, which launched the citywide rollout in 2016 with a goal of training 250,000 New Yorkers by the end of 2020. Citywide trainings were facilitated through city agencies and CBOs with the intention of transforming the culture around mental health within agencies and communities in NYC. More than 25 city agency partners were involved in the dissemination of MHFA. During the height of the program, trainings were offered citywide seven days a week to various populations of focus in multiple languages. By early March 2020, more than 155,000 had been trained in MHFA. Trainings continued until the start of the coronavirus disease 2019 (COVID-19) pandemic in March 2020, at which time all trainings were suspended.

During the March 2020 COVID-19 shutdown, planning for an independent evaluation of the MHFA program was underway but had not yet been launched. In November 2019, the Mayor’s Office for Economic Opportunity (NYC Opportunity), in collaboration with DOHMH and OCMH, commissioned the RAND Corporation to conduct an evaluation designed to assess the impact of MHFA at the *individual trainee*, *agency*, and *community* levels. To assess the impact of MHFA at the *individual trainee* level, a quasi-experimental longitudinal survey of individuals who registered for MHFA training was planned. To gauge *agency* impact, a survey of employees at a set of city agencies to compare high and low doses of MHFA training was also planned. Finally, to assess *community*-level impact, the evaluation planned to conduct focus groups with a set of CBOs to compare high and low doses of MHFA training. The evaluation plan had to be adapted given the pause of MHFA trainings. When this report was written (early 2022), in-

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<sup>1</sup> ThriveNYC served as the foundation for what has now become OCMH, which was established as a permanent part of city government through a New York City Charter amendment enacted on December 22, 2021.

person MHFA training had not resumed, and DOHMH was determining future mental health education programming.

This report describes the results of the adapted evaluation, a mixed-methods study that included a web-based survey of individuals who had received MHFA training since the inception of the program and a series of five focus groups with leaders of CBOs that provide services to underserved community groups in NYC and staff from a single city agency. These two activities collected data from individuals involved with MHFA to assess the program's impact at the individual, city agency, and community levels and to examine the needs and desire for future mental health training offerings.

## Web Survey

The survey of trainees was fielded to all individuals who had received MHFA training through the city at any time in the more than four years of offerings. The survey ran from July 27 to August 27, 2021; it took about 15 minutes to complete. Email invitations were sent to a total of 130,020 individuals, of which 17,890 reported being currently employed by one of the 26 city agency partners (referred to as *city agency employees*), and 112,130 were not employed by a city agency partner (referred to as *community-based trainees*). Community-based trainees were members from the community who are affiliated with CBOs (26 percent), faith-based organizations (6 percent), other nonspecified organizations (41 percent), and other city agencies (4 percent) and who had no work affiliation (23 percent). Community-based trainees also represented a variety of occupational fields, such as mental health and social services (19 percent), education (17 percent), health care (16 percent), law enforcement/public safety (2 percent), other (26 percent), or no occupation (15 percent). Because city agency employees were prioritized for MHFA training and were a primary group of interest (because of OCMH's focus on changing the culture of government agencies, providers, and CBOs), the survey targeted approximately equal numbers of city agency employees and community-based trainees. We aimed for a total of 1,500 city agency employee respondents and 1,500 community-based trainee respondents to ensure adequate sample sizes to conduct comparisons between city agency employees and community-based trainees and to assess factors associated with MHFA-related outcomes within these two subsamples. The overall survey response rate was approximately 2.1 percent (6.2 percent for city agency employees; 1.4 percent for community-based trainees). Response rates should be interpreted with caution because of limitations of the study design (e.g., the community-based trainees survey was closed after reaching the target number of respondents). Based on available DOHMH administrative data on trainee demographic characteristics, the survey sample was generally representative of the broader population of MHFA trainees, although survey respondents tended to be slightly older and reported higher educational attainment. The final analytic sample included 2,639 trainees (1,084 city agency employees; 1,555 community-based trainees). It assessed training-related outcomes specific to

MHFA, including respondents' mental health knowledge, stigmatizing attitudes, their helping behaviors, the reach of MHFA within their social network, and the impact on mental health service use among individuals with whom respondents applied MHFA. It also asked about respondents' well-being, their perceptions of their workplace mental health climate, and their perceptions of MHFA training and future training needs.

This adapted evaluation used the web survey data to assess the impact of MHFA at the individual level (by analyzing the full sample of trainees), at the agency level (by analyzing the subset of city agency employee trainees), and at the community level (by analyzing subgroups of trainees by sociodemographic characteristics such as race/ethnicity and gender identity). Item-level descriptive statistics, logistic regressions, and analyses of variance were conducted to characterize responses and explore differences in outcomes by factors such as training experiences, occupation, agency affiliation, and sociodemographic characteristics.

## Focus Groups

The RAND evaluation team, together with NYC Opportunity, OCMH, and DOHMH stakeholders, recruited focus group participants who were either

- leaders of CBOs that support four underserved communities (Latinx, African American, Chinese, and sexual and gender minorities [SGMs, representing the LGBTQ+ community])
- city agency employee frontline staff (participation was only possible from the Human Resources Administration/Department of Social Services, a city agency with high survey response rates).

A total of five focus groups (four CBO groups and one city agency) were held virtually between June and November 2021 and were composed of three to four individuals each. The research team used the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework to develop a semistructured interview protocol specific to the MHFA evaluation questions. All discussions were audio recorded and professionally transcribed. The transcript for the focus group conducted in Spanish was also professionally translated.

Analyses of the deidentified transcripts involved data coding to uncover emergent themes from the discussions. Thematic analysis focused on participants' experiences of MHFA implementation or participation, their motivation and outcomes sought for participating in MHFA, trainees' use of MHFA, and their wishes for future trainings or mental health resources.

## Key Findings

Findings from this evaluation indicate that the use of city-sponsored MHFA training may be a valuable tool for building support skills in the community. By diffusing MHFA through city agency workplaces and CBOs, tens of thousands of New Yorkers were given tools to come to the aid of individuals in their personal and professional lives who are experiencing mental health

challenges. Here we summarize key findings synthesized from survey and focus group data that are organized according to MHFA-related outcomes at the individual, city agency, and community/sociodemographic levels. Individual-level findings are based on the survey data among the full sample of respondents, city agency findings are derived from survey data on the subset of city agency employees and the focus group with a single city agency, and community-level findings are drawn from the survey data among community/sociodemographic subgroups and the four focus groups with leaders of CBOs.

### *Individual*

- Most survey respondents (90 percent) indicated using MHFA skills (active listening, providing reassurance and information, and encouraging professional help-seeking) in the last six months. About 77 percent of respondents felt fairly or very confident in their ability to help someone with a mental health problem.
- Respondents with more training (e.g., attaining MHFA trainer certification, completing multiple MHFA courses) were more likely to report being “very confident” in helping someone with a mental health problem, indicate “frequently or occasionally” engaging in helping behaviors as a result of MHFA, and endorse “agreeing or strongly agreeing” with knowing where to refer individuals for help, suggesting that the training “dose” strengthens an individual’s likelihood to apply MHFA skills.
- Most survey respondents (90 percent) were correctly able to identify depression symptoms from a vignette, but performance on a general knowledge test of MHFA content was low (50 percent on average), indicating room for improvement in some areas. Consistent with this, 75 percent of respondents agreed that they could benefit from additional trainings.
- On average, a given respondent had helped approximately four individuals with a mental health problem in the past six months. Based on respondents’ self-reports, altogether they helped more than 6,000 individuals who, to the best of their knowledge, ultimately sought mental health treatment.
- More than 80 percent of respondents reported using MHFA skills to support their own well-being.

### *City Agency*

- More than half of city agency employee survey respondents indicated that they would feel comfortable discussing mental health with coworkers (65 percent) and supervisors (58 percent), which may suggest potential room for improvement with respect to workplace culture surrounding mental health. Only 11 percent would fear retaliation from their employer for seeking mental health care.
- City agency employees were significantly more likely to have recently used MHFA skills with a client than community-based trainee respondents.
- Survey respondents affiliated with education service agencies were more likely to perceive a need for more training in how to apply MHFA skills in a workplace environment than respondents from other agencies.

- Focus group participants from HRA/DSS felt that MHFA skills were critical to their work and should be part of required on-the-job training, particularly for agency staff who work directly with clients or vulnerable populations.
- To reduce burden and improve alignment with agency workflows, focus group participants from HRA/DSS felt that it would be ideal to spread out training over more than one eight-hour session; they also preferred in-person training to virtual sessions.

## *Community*

- Most survey respondents (84 percent) reported frequently or occasionally correcting misperceptions about mental health and mental illness when they encountered them, suggesting that trainees may help to diffuse knowledge and combat stigma in their communities.
- Survey respondents identifying as Latinx/Hispanic or Black reported more frequent use of helping behaviors than their non-Hispanic White peers. They also were more likely to view MHFA training as able to address important community mental health issues and agree that they could use more MHFA training to apply skills within their community.
- In the four focus groups (three to four persons each), participants cited positive impacts of MHFA, including decreased stigma, increased mental health knowledge, and organic diffusion of skills and knowledge within their communities.
- Leaders of CBOs viewed MHFA as well-aligned with their organizational and programming priorities, and some alluded to cultural shifts within their organizations.
- Mental health stigma was identified by focus group participants as a potential barrier to community participation, though these leaders of CBOs described creative ways to sidestep this, such as building the training into other activities, offering meals during training, and having community members offer endorsements to their peers.
- Leaders from the Latinx and Chinese groups cited access to training in their primary language as a major facilitator of success for their communities. In contrast, leaders of the SGM group cited lack of cultural relevance in their MHFA training, as well as a lack of dually cultural competent trainers (LGBTQ+-informed and Spanish-speaking) as barriers to success for their community.
- When asked whether MHFA training had any potential negative impacts on their communities, community leaders did not identify any concerns.
- The length of training and the single-day format was cited by two groups (SGM and Latinx) as a possible barrier for some in their community.
- Some community organizations took steps to sustain ongoing access to MHFA training by developing their own trainings or embedded trainers within their organizations. Leaders from community-related focus groups also expressed desire to continue MHFA trainings in their communities, especially if tailored to their community (SGM leaders).

## **Recommendations**

OCMH, DOHMH, affiliated city agencies, and NYC Opportunity should take several considerations into account as they look ahead to the future of MHFA or other mental health trainings to offer throughout New York City. Recommendations are outlined below and are

accompanied with a synthesis of the survey and focus group findings that serve as the basis for these considerations.

### *Future Mental Health Trainings Could Be Leveraged to Address Identified Needs and to Fortify Helping Behaviors*

- Mental health literacy is a potential area in need of targeting, as suggested by respondent scores on the MHFA knowledge test, which averaged 50 percent correct. Future trainings and evaluations may also benefit from efforts to refine the ways in which knowledge is measured and use of multiple measures of knowledge to clarify potential gaps and/or training targets.
- Although over three-quarters of respondents reported being very confident (30 percent) or fairly confident (47 percent) in their ability to help someone with a mental health problem, more than one in five respondents were slightly or not at all confident after participating in MHFA training. This suggests a need for additional training, and it may be beneficial for future programming to target the sources that undermine confidence in providing aid to persons in distress.
- Compared with those who had completed MHFA training more recently (within the past two years), respondents who had completed training three or more years ago were less likely to engage in certain helping behaviors (e.g., active listening, assistance with seeking professional help) but not others (e.g., providing first aid information). Moreover, participation in additional trainings was associated with more positive outcomes. Refresher trainings could be tailored to target areas that need reinforcement.
- Both survey and CBO leader focus group respondents expressed interest in future trainings that cover additional content related to behavioral health and/or that serve as boosters for MHFA training. Future implementations of MHFA or similar trainings should consider assessing trainees' specific training interests or need areas, as well as their preexisting knowledge and exposure to MHFA training or its concepts. This would promote data-driven decisions about future programming, especially among trainees who by nature of their MHFA participation are agents of diffusion with potential for wide reach within their communities.

### *Assess Whether MHFA Training or Similar Trainings Could Serve as a Promising Tool to Address Trainee Well-Being*

- Approximately 80 percent of survey respondents reported using information from MHFA trainings to frequently or occasionally support their own well-being. Moreover, 40 percent of respondents indicated having obtained counseling *as a result of* MHFA training. CBO leaders and agency staff described how their own mental health needs were a motivation for taking the MHFA training and discussed how they were using information from MHFA trainings to support their well-being in daily life.
- Survey respondents presented with documented mental health needs, with more than 50 percent reporting needing help for emotional or mental health problems in the past year and 8 percent meeting criteria for serious psychological distress in the past 30 days (approximately double the rate of that found in the U.S. general population).

### *City Agency Employees Are More Likely to Use MHFA to Support Their Coworkers and Clients, But Workplace Mental Health Climate Can Still Be Improved*

- Compared with community-based trainee respondents, city agency employee respondents were more likely to have applied MHFA to support their coworkers and clients in the past six months.
- More than 1 in 3 city agency employee respondents expressed that they would not be comfortable using mental health services through their employer or discussing mental health with coworkers or supervisors. Approximately one in ten feared retaliation or being fired for seeking mental health care.
- Agency trainees in the focus group suggested that MHFA be implemented as a mandatory training for at least some positions in their agency. The notion of mandatory training could be explored further with a range of stakeholders with distinct vantage points (e.g., city leadership, MHFA implementors, city agency leadership, city agency staff, and agency clients). The three city agency employee focus group participants felt strongly that MHFA training should be a job requirement for staff with client contact, at a minimum. Survey respondents who were required by their job to participate in MHFA training did not differ in knowledge or helping behaviors compared with their counterparts for whom MHFA training was not mandated by their employer.

### *MHFA Could Potentially Strengthen Social Support Networks and Community Members at Large to Serve as First-Line Supports to Individuals Experiencing Mental Health Challenges*

- Respondents applied MHFA skills extensively and broadly across their social networks; 84 percent of respondents indicated using their MHFA skills to help a friend or family member, and nearly half reported applying skills with someone to whom they provide services as part of their job, a coworker, or a neighbor or acquaintance.
- Findings from the focus groups suggest that many underserved communities likely do not have sufficient resources and training to address these needs outside of clinical settings, and clinical settings have additional barriers to access (e.g., cost, cultural acceptability and accessibility, clinician workforce shortages). MHFA-trained community members may be an important first line of support, especially for peers with relatively low-level mental health needs that do not require immediate, formal clinical services.

### *Future Implementations of MHFA or Similar Trainings Should Consider the Impact of Community Stigma*

- Approximately half of survey respondents indicated the presence of community stigma, agreeing that their community thinks less of someone with a history of mental health problems and that seeking treatment is seen as a sign of personal weakness.
- CBO leaders in the focus groups relayed that stigma was a primary motivator for facilitating MHFA training but that stigma is also a barrier to participating in MHFA training and to accessing treatment in underserved communities. Future trainings may want to explicitly consider the role of stigma as a barrier to organizational participation. For example, this might include ensuring adequate outreach and engagement with leaders

in communities or neighborhoods that are known to experience higher levels of mental health-related stigma.

- Racial/ethnic minority survey respondents were more likely to report needing additional training to apply MHFA skills in their communities compared with non-Hispanic White respondents. Future trainings could assess and address the additional training needs that racial/ethnic minorities have identified as necessary to better apply MHFA within their communities.

#### *Overall Acceptability of MHFA Training Was High, But Areas for Further Cultural Adaptation Were Identified*

- Survey respondents indicated overwhelmingly favorable attitudes toward MHFA training with respect to its utility, convenience, and content (i.e., addressing issues important to the community). Furthermore, focus group participants did not identify any negative impacts of MHFA.
- Future MHFA training programs should recruit trainers who have lived experience that is shared with populations of focus. Leaders of CBOs underscored the value of offering culturally competent trainings in terms of language and lived experience. Leaders in the SGM focus group desired more culturally tailored MHFA training and culturally informed trainers.
- The use of a formal adaptation framework can provide a structured approach for adaptation that may help to preserve fidelity and effectiveness of the original intervention. The use of a formal process can provide greater scientific transparency. Formal adaptation frameworks provide a systematic, step-by-step process to identify potential adaptations to an evidence-based intervention, implement the adaptations, test the revised intervention, and implement and evaluate it on a larger scale.

#### *Trade-Offs Between the Selection of Mental Health Programming and Desired Outcomes Should Be Weighed Carefully*

- The preferred mode of delivery for MHFA training was mixed, and the city should weigh trade-offs associated with reach carefully. More data on potential trainees' preferences could be collected before future design and implementation of training initiatives, with attention to potential differences by key sociodemographic characteristics. Focus group participants had near consensus that in-person trainings were more effective and preferred, although they could identify scenarios or populations for which a virtual or hybrid training could be advantageous. At the same time, survey participants were more equivocal in terms of in-person versus online opportunities to gain additional information. One important note is that focus group participants were discussing MHFA and similar trainings specifically, while the survey assessed "additional information on mental health topics" in general. The greater acceptability of online delivery in the survey group may reflect that participants who completed the web survey might have greater comfort with and access to technology.
- Survey respondents described a range of ways they are using MHFA-associated knowledge and skills to combat stigma within their communities (e.g., 84 percent corrected misperceptions about mental health when they encountered them). CBO leaders also attested to the diffusion of MHFA knowledge and skills within their communities, which they perceived as leading to shifts in cultural norms around mental illness.

Although those who had completed training three or years ago were less likely to engage in certain helping behaviors compared with those who had completed training within the past two years of the survey, the continued application of many MHFA skills among the entire sample long after the completion of training suggests that MHFA may have the potential to create longer-term sustainable approaches to altering community norms. However, more-rigorous studies are needed to establish the effectiveness of MHFA in shifting community norms around mental health. Social marketing campaigns have gained traction as a tool to counter public stigma, but reductions in stigma tend to be strongest among people who report awareness of the campaign rather than among the general population (Gaebel, Rössler, and Sartorius, 2017; Kemper and Kennedy, 2021). Nonetheless, there is some evidence that social marketing campaigns can increase perceived need for and actual mental health treatment use among individuals with psychological distress (Collins et al., 2015). When weighing the selection of mental health programming, the city should consider the strength of the evidence base for desired or prioritized outcomes (e.g., trainee knowledge, stigma, helping behaviors; city agency and community norms; perceived need and mental health service use among individuals experiencing mental health challenges).

## Conclusions

Altogether, these findings suggest that MHFA may be a promising approach to building supportive social networks, organizations, and communities that are primed to recognize and come to the aid of those who need assistance with mental health challenges. The positive findings must be tempered by the fact that this evaluation is limited in its ability to causally link the self-reported outcomes to MHFA training and to establish its generalizability to the broader population of trainees. Rigorous, contemporaneous evaluation of future initiatives is critical to understanding and validating the potential effectiveness of mental health education programs like MHFA to engender impact at the individual, interpersonal, organizational, and community levels.

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# Chapter 1. Introduction

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In New York City (NYC), over 40 percent of adults with a serious mental illness experience delays in accessing needed mental health treatment or do not receive it at all (Ayer et al., 2018). This is disconcerting given that at least one in five NYC adults are likely to experience a mental health challenge in any given year. In 2016, approximately 9 percent of NYC adults had major depressive disorder, the greatest source of disability in the city (Tuskeviciute, Hoenig, and Norman, 2019). The city's most vulnerable residents disproportionately bear the burden of mental illness. Hispanic and Black adults have higher prevalence of depression in comparison with their White counterparts. Moreover, Black, Hispanic, and Asian and Pacific Islander New Yorkers experiencing depression are less likely to have received mental health treatment compared with their White counterparts (NYC Mayor's Office of ThriveNYC, 2021). In addition, New Yorkers who have less than a high school education have more than double the rate of depression of those with a college degree.

In 2015, the de Blasio administration launched the Mayor's Office of Community Mental Health (OCMH), a landmark effort made up of 54 priority initiatives that was designed to transform the city's mental health system into a comprehensive, inclusive, and holistic system of care. One of the initiatives centered on the provision of citywide trainings in Mental Health First Aid (MHFA).

MHFA is one of the most extensively researched mental health literacy programs (Hadlaczky et al., 2014; Morgan, Ross, and Reavley, 2018). Originating in Australia, MHFA has been implemented in more than 25 countries, including the United States, through the National Council for Behavioral Health (Crisanti et al., 2016; Jorm, Kitchener, and Reavley, 2019). In the United States, MHFA is implemented as an eight-hour course and uses didactic instruction, role-playing, and simulations to prepare individuals without clinical training to identify, understand, and respond to individuals experiencing mental illness (Jorm, 2012; Kitchener and Jorm, 2002). MHFA aims to cultivate an understanding of the impact of mental illness and substance use disorders and to build common supports and skills for connecting individuals to appropriate professional, peer, social, and self-help care. A core component of MHFA is a five-step action plan represented by the acronym ALGEE that has the following steps: assess for risk of suicide or harm, listen nonjudgmentally, give reassurance and information, encourage appropriate professional help, and encourage self-help and other support strategies (Forthal et al., 2022).

MHFA has a standard adult course that focuses on how to intervene with the general adult population but also has tailored courses that address how to respond to youth, teens, individuals in higher education (i.e., college students), older adults, veterans, and rural communities (Mental Health First Aid, 2022). Courses have also been developed to equip individuals in public safety

(i.e., law enforcement staff), fire/emergency medical services (EMS), workplace settings, and faith and spiritual communities.

The MHFA program has been shown to improve mental health knowledge, reduce stigmatizing attitudes, and enhance confidence and actual engagement in helping behaviors among trainees in adult and youth courses (Hadlaczky et al., 2014; Morgan, Ross, and Reavley, 2018; Ng et al., 2021; Sánchez et al., 2021). However, these improvements have been mostly demonstrated during the period immediately after training and up to six months afterward (Morgan, Ross, and Reavley, 2018). The longer-term effects of MHFA are not as well established given that only a few randomized controlled trials (RCTs) have assessed outcomes more than six months after training (Morgan et al., 2019; Morgan et al., 2020; Svensson and Hansson, 2014). Furthermore, when studies are restricted to RCTs, a systematic review yielded mixed evidence for improvements in the use of MHFA skills (i.e., helping behaviors) (Forthal et al., 2022).

Also subject to limited empirical study is the resultant impact on individuals who are in distress and receive MHFA (i.e., recipients of MHFA) (Forthal et al., 2022; Wong, Collins, and Cerully, 2015). A systematic review of RCTs of MHFA (Forthal et al., 2022) identified only a single study that was sufficiently powered to examine outcomes reported by recipients. In this study, teachers received MHFA training and the high school students who were the recipients reported receiving increased mental health information but not increased help; in addition, no significant improvements in recipients' mental health were observed (Jorm et al., 2010). Notably, even though a key aspect of MHFA is to connect individuals to professional help, no study has examined whether recipients of MHFA are more likely to obtain mental health services. Lipson et al., 2014, however, conducted a RCT in which resident advisors within college campus residence halls were randomly assigned to receive MHFA training and found no significant increases in rates of campus mental health service use among residents in intervention residence halls.

In addition, there is a dearth of studies examining the impact of MHFA at the organizational or community level, which has been noted as a limitation in the research literature (Hadlaczky et al., 2014; Narayanasamy et al., 2018). A systematic review of mental illness stigma interventions in the workplace (which included MHFA) noted the lack of high-quality evidence (e.g., lack of RCTs) (Hanisch et al., 2016), but a recent RCT indicated that a blended MHFA course (a six-hour online course with a four-hour face-to-face review session) improved use of MHFA skills at two-year follow-up (Reavley et al., 2021). Finally, only a handful evaluations of MHFA in the United States have been conducted, and only one was an RCT (Lipson et al., 2014), despite MHFA being widely disseminated in the country (Banh et al., 2019; Childs, Gryglewicz, and Elligson, 2020; Gryglewicz, Childs, and Soderstrom, 2018; Troxel et al., 2022). In NYC, part of the intention of implementing a citywide rollout of MHFA training was to help change the culture of government agencies and communities. The NYC Department of Health and Mental Hygiene (DOHMH) oversaw and offered MHFA trainings free of charge to all New Yorkers

seven days a week, across various sites, and in all five boroughs. It was offered in different languages (English, Mandarin, and Spanish) and to a variety of populations and settings of focus (e.g., adults, veterans, older adults, youth, law enforcement and public safety officials, the faith-based community, and those in higher education settings) across different neighborhoods and communities in NYC. More than 25 city agency partners were involved in the dissemination of MHFA, and city agency staff were prioritized for MHFA training (referred to as *city agency employee trainees*). Community-based organizations (CBOs) facilitated MHFA trainings for those affiliated with CBOs or faith-based organizations (FBOs) and members of the community at large with no work affiliation (referred to as *community-based trainees*).

Upon completion of the MHFA course, participants received certification and designation as a First Aider; some subsequently joined the DOHMH cadre of volunteer and paid trainers. When MHFA was launched under the OCMH initiative in 2016, a goal was set to train 250,000 New Yorkers by the end of 2020. Within its first year, the program trained more than 8,400 First Aiders, 221 of whom became first aid instructors (i.e., certified MHFA trainers). As of August 2019, MHFA had trained more than 100,000 First Aiders, and by fall 2019 more than 60 trainings were taking place across the five boroughs with approximately 1,500 individuals per week. By early March 2020, more than 155,000 had been trained in MHFA, but trainings were suspended March 2020 because of the coronavirus disease 2019 (COVID-19) pandemic. At the time this report was written (spring 2022), city-sponsored MHFA trainings had not resumed.

## Evaluation of NYC MHFA Trainings

The Mayor's Office for Economic Opportunity (NYC Opportunity), in collaboration with DOHMH and OCMH, commissioned the RAND Corporation to conduct an independent evaluation of the MHFA program. At the time of the COVID-19 shutdowns, planning for a full-scale evaluation of NYC's MHFA trainings was underway but had not yet been launched. Given that MHFA trainings were rolled out and facilitated via city agencies and CBOs with the goal of effecting change not only at the individual trainee level but also with the intention of changing the culture around mental health issues within agencies and communities in NYC, the evaluation had been designed to assess the impact of MHFA at the *individual trainee*, *agency*, and *community* levels. To assess the impact of MHFA at the *individual trainee* level, a quasi-experimental longitudinal survey of individuals who registered for MHFA training was planned. To gauge *agency* impact, a survey of employees at a set of city agencies that had received high versus low doses of MHFA training was also planned. Finally, to assess *community*-level impact, the evaluation had planned to conduct focus groups with a set of CBOs that had high versus low doses of MHFA training. However, due to the suspension of the MHFA program, the evaluation plan had to be revised because access to a pool of active trainees was no longer available.

In April 2021, the RAND evaluation team, OCMH, DOHMH, and NYC Opportunity agreed on an adapted evaluation plan that involved reaching out to assess ongoing application of MHFA

skills and other MHFA-related targets. This assessment would necessarily involve some participants who had been trained in MHFA many years earlier. When trainees were invited to participate in this evaluation, the time since they had completed MHFA training ranged from nearly a year and a half to more than five years.

The adapted evaluation assessed current use of MHFA, related targets, and future training needs at the individual, city agency, and community levels. Briefly, the evaluation primarily consisted of a web survey that all trainees were invited to participate in and focus groups with CBOs and a city agency. The adapted evaluation used the web survey data to assess the impact of MHFA at the individual level (by analyzing the full sample of trainees), at the agency level (by analyzing the subset of city agency employee trainees), and at the community level (by analyzing subgroups of trainees by sociodemographic characteristics such as race/ethnicity and gender identity). The focus groups provided a more in-depth examination of the implementation of MHFA training within CBOs and one city agency.

## Report Structure

The methods employed in this evaluation are detailed in Chapter 2. Chapters 3, 4, and 5 report on the individual-, city agency-, and community-level findings, respectively, based on data from the web survey. Chapter 6 describes implementation process findings from focus groups conducted with CBOs and a city agency involved in facilitating MHFA training.

In Chapter 3, the individual-level impact of MHFA and training needs are examined by addressing the following questions:

- How are trainees currently faring on MHFA training-related outcomes, such as mental health knowledge, stigma, and helping behaviors?
- What was the degree of reach of MHFA within trainees' social network?
- What was the impact on mental health service use among recipients of MHFA?
- What was the impact of MHFA on trainees' well-being?
- How are training factors (i.e., time since completed training, MHFA trainer status, number of MHFA courses completed, receipt of additional non-MHFA mental health training, having a mental health-related occupation) related to MHFA outcomes?
- What are trainee perceptions of MHFA training and future training needs?

Chapter 4 focuses on the impact of MHFA and training needs at the city agency level by examining the following questions:

- How do city agency employee trainees differ from community-based trainees with respect to use of MHFA skills?
- Among city agency employee trainees, what agency characteristics are associated with use of MHFA skills?
- How do city agency employee trainees perceive the workplace mental health climate?
- What are perceived needs for mental health training among city agency employees?

Chapter 5 explores the impact of MHFA and training needs at the community level by examining variations among trainees by sociodemographic and community groupings that were created from the following trainee characteristics:

- age
- gender identity
- sexual orientation
- race/ethnicity
- non–English language fluency
- educational attainment
- borough of residence.

Chapter 6 reports on findings from focus groups conducted with leaders of community organizations that serve the African American, Latinx, Chinese, and LGBTQ+ communities in NYC and frontline staff from one city agency. Focus groups addressed the following questions:

- How did implementation of MHFA vary across groups (community groups, agency)?
- How are trainees using MHFA skills in their community/agency?
- How are MHFA skills diffusing within the community/agency context?
- What changes to MHFA implementation may improve reach or effectiveness?

Chapter 7 synthesizes the study’s findings and provides recommendations for future mental health programming efforts. We also include three appendixes (available for download at [www.rand.org/t/RR1818-1](http://www.rand.org/t/RR1818-1)). Appendix A includes the items from the web survey, Appendix B includes tables showing supplementary data on MHFA helping behaviors across respondent subgroups, and Appendix C shows the focus group protocols.

## Chapter 2. Methods

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The adapted evaluation of MHFA trainings provided through OCMH and its partners used two data collection activities: a web-based survey of those who had received training since the program’s launch in 2015 and a series of focus groups composed of community leaders and select staff from a city agency. This chapter describes the methodological decisions and processes underpinning these two activities.

### Web Survey

In collaboration with DOHMH, NYC Opportunity, and OCMH, RAND researchers fielded a confidential web survey from July 27 to August 27, 2021. Survey participants had previously completed MHFA training in NYC between the time that the training had launched in November 2015 and the time that it had ended by March 2020.

Where possible, validated measures from prior studies of MHFA were used to enhance interpretability and comparison with existing benchmarks. To the extent possible, items were selected to align with those included in an internal DOHMH evaluation of MHFA to facilitate comparisons between studies. In other cases, items were adapted or generated by the research team, in consultation with DOHMH and NYC Opportunity, to address specific constructs of interest. The survey took approximately 15 minutes to complete.

The full survey instrument and a table of the outcome measures are included in Appendix A (available for download at [www.rand.org/t/RRA1818-1](http://www.rand.org/t/RRA1818-1)).

### *Recruitment*

Survey materials were developed in English only; as such, respondents were limited to individuals who could complete the survey in English.<sup>2</sup> Otherwise, all NYC MHFA trainees who provided a valid email address and had completed a city-sponsored MHFA training were eligible to complete the survey.

During the survey field period, DOHMH distributed survey invitations by email. An initial invitation and two reminder invitations were sent. The second reminder invitation was only distributed to the subset of trainees who were city agency employees. “Champions” within city agencies sent two email messages to raise awareness about the survey and to encourage city agency trainees to participate in the survey. Due to city regulations, city agency trainees did not receive a monetary incentive for participating in the survey. Community-based trainees (i.e.,

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<sup>2</sup> Based on available DOHMH administrative data, approximately 97 percent of MHFA completed English language MHFA training as of January 2020. Approximately 1.5 percent of trainees completed Mandarin language MHFA training and 1.6 percent of trainees completed Spanish language MHFA training.

individuals who were not currently employed by a NYC government agency and received MHFA training in a community setting) received a \$20 electronic gift card as an incentive for completing the survey. Community-based trainees were members of the community who were affiliated with CBOs (26 percent), faith-based organizations (6 percent), other non-specified organizations (41 percent), or other city agencies (4 percent) and those who had no work affiliation (23 percent). Community-based trainees also represented a variety of occupational fields, including mental health and social services (19 percent), education (17 percent), health care (16 percent), and law enforcement/public safety (2 percent). The remainder indicated other occupation types or no current occupation. To ensure adequate sample sizes for facilitating comparisons between city agency employee and community-based trainees and to assess correlates of training-related outcomes within these respective subsamples, we aimed for a total of 1,500 city agency employee trainees and 1,500 community-based trainees. Due to project resource constraints, recruitment of community-based trainees (i.e., individuals eligible to receive a monetary incentive) was discontinued shortly after achieving the target subsample size (1,500 complete community-based trainee survey responses), such that the web survey was automatically closed to additional respondents who had not yet consented to participate in the survey on August 5, 2021. (Individuals who had consented to participate in the survey but had not yet completed the survey at the time the quota was reached could still complete the survey.) Even though the target of 1,500 city agency trainees had not been reached, the survey was closed at the end of the four-week field period after minimal additional responses were achieved after multiple follow-up reminders.

Email invitations were sent to a total of 130,020 individuals, of which 17,890 were city agency trainees and 112,130 were community-based trainees. A total of 2,684 trainees completed the survey ( $n = 1,109$  city agency employees and  $n = 1,575$  community-based trainees). Based on the number of invitations sent and the number of responses at the field period end date, the overall survey response rate was approximately 2.1 percent (6.2 percent for city agency employee trainees and 1.4 percent for community-based trainees); however, due to limitations of the design (e.g., duration of the field period for city agency employees versus community-based trainees, closure of the survey for community-based trainee respondents after reaching the target number), response rates should be interpreted with caution.

Approximately 2 percent of respondents were omitted from the sample due to incomplete and/or invalid responses to survey items, resulting in a final pooled analytic sample of 2,639 trainees ( $n = 1,084$  city agency employees and 1,555 community-based trainees). The sample was generally representative of the broader population of trainees with respect to most sociodemographic characteristics, although survey respondents skewed slightly older and were more likely to endorse having graduate-level education. As such, findings should be considered in light of potential limitations to generalizability.

## Measures

The survey assessed MHFA training-related outcomes that have been widely documented in the literature (Hadlaczky et al., 2014; Morgan, Ross, and Reavley, 2018). Specifically, the primary MHFA training-related outcomes include trainees' mental health *knowledge*, *stigma*, *helping behaviors*, *reach within their social network*, and impact on *recipients' use of mental health services*. Because MHFA training has been shown to have a positive effect on trainees' own mental wellness (Lipson et al., 2014), the survey also assessed whether MHFA training contributed to *trainee well-being*. In addition, trainees' perceptions of their *workplace mental health climate* were assessed given OCMH's focus on changing the culture of government agencies and CBOs. Finally, *perceptions of MHFA training* and *future training needs* were evaluated to inform potential future mental health training programming efforts.

### Knowledge

Three indicators of knowledge were administered. The *MHFA Knowledge Test* contains nine items that assess content covered in the MHFA curricula; a total score is calculated based on the percentage of correct responses (Reavley et al., 2018). *Recognition of mental disorders* was evaluated with a vignette-based measure that describes a male person experiencing a major depressive disorder and asks respondents to provide open-ended responses to the following question: "What, if anything, do you think is wrong with Jay?" (Reavley et al., 2018). *Knowledge of referral resources* was measured by asking respondents to rate their level of agreement (1 = strongly disagree; 5 = strongly agree) with the following statement: "I know where I can refer individuals for help with their emotional or mental health challenges, including alcohol or substance use."

### Stigma

*Personal stigma* (i.e., personally held negative attitudes toward people with mental illness) was assessed by using the vignette-based depressive disorder measure offered through the *Knowledge* measure and asking respondents to rate their level of agreement (1 = strongly disagree; 5 = strongly agree) with four statements about the fictional male character (e.g., "Jay's problem is a sign of personal weakness"; "It is best to avoid Jay") (Griffiths et al., 2004; Reavley et al., 2018). *Perceived public stigma* (i.e., perceptions of negative societal treatment of people with mental illness) was assessed at the community level by asking respondents to rate their level of agreement (1 = strongly disagree; 5 = strongly agree) with the following two items: "Most people in my community feel that seeking treatment for mental health challenges is a sign of personal failure" and "Most people in my community think less of someone with a history of mental health challenges" (Link, 1982).

## Helping Behaviors

Three aspects of helping behaviors were assessed. *Confidence in helping* individuals with a mental health problem was measured with a single item that has been found to be longitudinally predictive of subsequent application of MHFA skills (Morgan, Ross, and Reavley, 2018).

*Self-perceived impact of MHFA* on helping behaviors measures the frequency with which trainees provided direct support to individuals with a mental health problem as a result of their training in MHFA. Six items were adapted from a prior study (Crisanti et al., 2016) and were based on the MHFA Action Plan (i.e., approach and assess for risk of suicide or harm; listen nonjudgmentally; give reassurance and information; encourage appropriate professional help; encourage self-help and other support strategies). Two additional items asked about indirect support and assessed how often MHFA training resulted in respondents becoming aware of their own views about mental health problems and in recognizing and correcting others' misconceptions about mental health. Given that trainees may have received other types of mental health training besides MHFA, this set of questions attempts to assess which helping behaviors were specifically attributable to MHFA training (i.e., "as a result of Mental Health First Aid training . . .").

To assess trainees' *recent use of MHFA skills*, respondents were first asked about *recent contact* with individuals with a mental health problem with the following item: "In the past 6 months how many people with a mental health problem have you had contact with?" (Response options ranged from zero people to ten or more people.) Respondents were then asked whether they applied their MHFA Action Plan skills to any of those people (and, if so, how many) (Crawford and Burns, 2020; Svensson and Hansson, 2014). We also created derived dichotomous variables from these items to indicate whether individuals reported *any contact* with someone with a mental health problem (yes = one or more people; no = zero people) and used this variable as a proxy for whether trainees had at least one opportunity to utilize MHFA Action Plan skills in the past six months. For each of the MHFA Action Plan skills, we created similar dichotomous indicators, which were used to estimate the percentage of respondents who endorsed any use of specific MHFA Action Plan skills to help someone with a mental health problem in the past six months. In addition, to estimate the total number of individuals with whom trainees utilized each MHFA Action Plan skill in the past six months among individuals reporting at least one contact, we summed the number of individuals with whom respondents indicated using each skill. (For this derived sum variable, a response of "ten or more people" was recoded to ten; as such, the sum score may reflect a conservative estimate of the total number of individuals with whom trainees applied each MHFA Action Plan skill.)

## Reach Within Trainees' Social Networks

To assess the reach of MHFA within trainees' social networks, respondents were asked to indicate in the past six months the number of people they applied MHFA skills to for six types of members within their social network (e.g., friend/family member, neighbor) (Ashoorian et al.,

2019; Jorm et al., 2010). For each network member category, we created separate dichotomous indicators for whether respondents had reported helping at least one person in that category in the past six months (yes = one or more people; no = zero people). These indicators were used to generate the percentage of respondents who endorse any use of MHFA skills to help specific types of individuals within their social networks.

#### Recipients' Use of Mental Health Services

To measure the potential impact among recipients of MHFA, respondents were asked how many of the individuals to whom they provided help subsequently sought professional help for their mental health problem (Carpini et al., 2021).

#### Trainee Well-Being

To examine whether MHFA training contributed to respondents' own well-being, we included two items that asked about the self-perceived impact of MHFA training on their wellness. Respondents were asked to indicate how often, as a result of MHFA training, they had "used the information to support my own wellbeing" and had "obtained counseling or therapy from a professional."

Relatedly, to gauge levels of unmet mental health needs, respondents were asked about perceived need for help with mental health problems and use of mental health counseling/therapy or prescription medication in the past 12 months. An indicator of unmet mental health need was derived by calculating the percentage of respondents who perceived a need for mental health treatment but had not received mental health counseling or prescription medication.

To evaluate current respondent well-being, rates of serious psychological distress in the past 30 days were measured using the Kessler Psychological Distress Scale (K6) scale (Kessler et al., 2003), a validated and widely used six-item measure of nonspecific psychological distress. Scores on the K6 range from 0 to 24, with scores of 13 or higher indicating clinically significant symptoms consistent with a probable psychiatric condition. Individuals were categorized as having current serious psychological distress (K6 score of 13 or above) or not (K6 score of less than 13) for group comparison analyses. We created an additional indicator of unmet mental health treatment need among those with probable treatment need (i.e., current serious psychological distress), defined as the percentage of individuals with a K6 score of 13 or above who had not received mental health counseling or prescription medication in the past year.

#### Workplace Mental Health Climate

Perceptions of workplace mental health climate were evaluated using four items from a nationally representative survey of U.S. adults that was sponsored by the American Psychiatric Association (American Psychiatric Association, 2020). Items measured levels of comfort with discussing mental health with coworkers and supervisors and seeking mental health services with current employers, as well as fear of retaliation if mental health services were sought.

## Perceptions of MHFA Training and Future Training Needs

*Perceptions of MHFA training* were assessed with four items that asked respondents to rate the training on the following dimensions: usefulness, length, convenience, and importance to community. *Perceptions of future training needs* were assessed with respect to perceived need for additional training to apply MHFA skills within trainees' communities, topics of interest for future training, and preferred modes for receiving additional information on topics of interest. Respondents were also given the opportunity to provide an open-ended response to a question asking to identify the most important mental health challenge faced by community members.

## *Factors Associated with Differences in MHFA Training-Related Outcomes*

### Training Characteristics

Individuals reported on the following aspects of their MHFA training experiences:

- time since taking MHFA training (coded for analysis as three or more years ago or within the past two years [reference category])
- whether MHFA training was required by their employer (coded for analysis as Yes, No, or I don't know/not sure [reference category])
- type(s) of MHFA curricula completed (e.g., adult, youth; public safety) (coded for analysis as multiple curricula or single curriculum [reference category])
- MHFA trainer status (coded for analysis as certified trainer, currently working on trainer coursework or plan to become a trainer in the future, or not a trainer and no plans [reference category])
- other (non-MHFA) training in mental health or service provision (coded for analysis as formal education, not formal education but as part of job/workplace training, not formal education and not job/workplace training but something else [COVID conversations or stand-alone], or no other training endorsed [reference category])
- occupation type (coded for analysis as mental health and social services [reference category], faith based, education, health care, law enforcement/public safety, other, not applicable).

### City Agency Characteristics

Respondents were presented with a list of 27 city agencies and asked the following: "Are you currently employed by any of the following New York agencies? Please select all that apply."

*City agency affiliation* was assessed as a binary indicator (yes/no for city agency employee trainee versus community-based trainee). Specified agencies and their characteristics are listed in Table 2.1.

For the purpose of analyses comparing outcomes across city agencies, agency affiliation was treated as a single categorical variable (i.e., affiliations were treated as mutually exclusive). Individuals who indicated being affiliated with multiple agencies were re-coded as "multiple agencies." Data for agencies with cell sizes of ten or fewer respondents are not shown to reduce identifiability.

To assess differences in outcomes for city agency employee respondents in relation to other agency/workplace factors, we also constructed indicators using city administrative data and feedback from DOHMH and OCMH for the following agency characteristics:

- *City agency size.* Agencies were grouped as small (less than 1,000 employees [reference category]), medium (between 1,000 and 4,000 employees), or large (more than 4,000 employees) based on estimated total number of employees.
- *City agency MHFA training dose.* Training dose was calculated as the percentage of total staff within an agency trained in MHFA. Categories were defined as *low* (10 percent or less), *medium* (11 to 49 percent), and *high* (50 percent or greater).
- *City agency primary service type.* Based on the primary type of services provided, city agencies were categorized according to the following: health, community, social, or human services (reference category); public safety/criminal justice; housing/transportation/infrastructure; education; and other.

**Table 2.1. City Agency Group Characteristics by Agency Affiliation**

<b>Agency</b>	<b>Size Category<sup>a</sup></b>	<b>MHFA Training Dose<sup>a,b</sup></b>	<b>Primary Service Type<sup>a,b</sup></b>
Administration for Children's Services (ACS)	Large	Medium	Health, community, social, or human services
City University of New York (CUNY)	Large	High	Education
Department for the Aging (DFTA)	Small	Medium	Health, community, social, or human services
Department of Corrections (DOC)	Large	High	Public safety/criminal justice
Department of Education (DOE)	Large	Low	Education
Department of Health and Mental Hygiene (DOHMH)	Large	High	Health, community, social, or human services
Department of Homeless Services (DHS)	Large	High	Health, community, social, or human services
Department of Housing Preservation and Development	Medium	Low	Housing/transportation/infrastructure
Department of Parks & Recreation (DPR)	Large	Medium	Housing/transportation/infrastructure
Department of Veterans' Services (DVS)	Small	High	Health, community, social, or human services
Department of Youth and Community Development (DYCD)	Small	High	Health, community, social, or human services
Housing Authority (NYCHA)	Large	Medium	Housing/transportation/infrastructure
Human Resources Administration (HRA)	Large	Medium	Health, community, social, or human services
Office of Labor Relations	Large	Medium	Other

<b>Agency</b>	<b>Size Category<sup>a</sup></b>	<b>MHFA Training Dose<sup>a,b</sup></b>	<b>Primary Service Type<sup>a,b</sup></b>
Police Department (NYPD)	Large	Medium	Public safety/criminal justice
Department of Information Technology & Telecommunications (DoITT)	Medium	Low	Housing/transportation/infrastructure
Department of Probation (DOP)	Medium	Medium	Public safety/criminal justice
Department of Transportation (DOT)	Large	Low	Housing/transportation/infrastructure
Fire Department of New York (FDNY)	Large	Low	Public safety/criminal justice
Mayor's Office (MO)	Medium	Medium	Other
NYC Health and Hospitals (H+H)	Large	Low	Health, community, social, or human services
Office to End Domestic and Gender-Based Violence (ENDGBV)	Small	High	Health, community, social, or human services
Office of the Chief Medical Examiner	Small	Low	Health, community, social, or human services
Office of Emergency Management (OEM)	Small	Medium	Public safety/criminal justice
Small Business Services (SBS)	Small	Medium	Other
Taxi and Limousine Commission (TLC)	Small	High	Housing/transportation/infrastructure
Multiple agencies	N/A	N/A	N/A

SOURCES: DOHMH administrative data and agency screening data.

<sup>a</sup> Estimate based on DOHMH administrative data.

<sup>b</sup> Estimate based on 2020 agency screening data provided by City agency administrators to DOHMH.

### *Sociodemographic and Community Group Characteristics*

Respondents provided information on a range of demographic and related characteristics that were used to create sociodemographic and community groupings, which served as proxies for examining the community-level impact of MHFA training. Where possible, items and response categories were selected to align with information collected by DOHMH on MHFA trainee registrants to facilitate comparison between survey respondents and the broader population of NYC MHFA trainees. The following variables were examined for comparison across sociodemographic subgroups:

- age (coded for analysis as 25 or under, 26–35, 36–49 [reference category], 50–64, and 65+)
- current gender identity (coded for analysis as woman [reference category], man, another gender identity [i.e., transgender, nonbinary person, not listed])
- sexual orientation (coded for analysis as straight or heterosexual [reference category], another sexual orientation [i.e., lesbian, gay, bisexual, not sure/questioning, or another orientation])

- race/ethnicity (coded for analysis as Hispanic or Latino/x, American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or other Pacific Islander, White [reference category], other race or ethnicity)
- language (coded for analysis as fluent in English only [reference category], fluent in a language other than English)
- educational attainment (coded for analysis as high school diploma/General Educational Development [GED] or no degree, some college, college degree, postgraduate degree [reference category])
- borough of residence based on home zip code (coded for analysis as Bronx, Brooklyn, Manhattan [reference category], Queens, Staten Island, or other).

## *Analyses*

We first examined item-level univariate descriptive statistics (means; frequencies) to characterize participant responses in the pooled sample and separately within the sample of city agency employee respondents.

To assess difference in outcomes of interest by training and occupation-related characteristics, we conducted separate logistic regression models for categorical outcomes and analysis of variance (ANOVA) for continuous outcomes. Among the subset of city agency employee respondents, we then used bivariate logistic regression and ANOVA to assess differences in outcomes by agency affiliation and agency characteristics. Finally, to assess potential differences in respondent outcomes by sociodemographic or community group characteristics, we conducted exploratory bivariate logistic regression and ANOVA tests by sociodemographic group variables. Given the exploratory nature of these analyses, we also conducted sensitivity analyses examining sociodemographic group differences controlling for employment and training-related factors (i.e., agency employee status, occupation type, time since MHFA training, MHFA trainer status, number of MHFA courses complete, history of other mental health training).

To account for alpha inflation due to multiple tests, we calculated corrected significance levels using the Benjamini-Hochberg False Discovery Rate (FDR) (Benjamini and Hochberg, 1995) method to sets of analyses in which each significance test is evaluated against an adjusted critical value. All results reported were significant after adjustment, except where noted.

To improve generalizability of the sample to the broader population of MHFA trainees, we explored options for balancing the sample against demographic characteristics of all respondents based on DOHMH MHFA trainee administrative data using raking weights. However, due to high rates of missing data and concerns about systematic missingness on demographic factors (i.e., we could not assume that demographic information was missing at random), raking weights were not used. Potential differences in sample characteristics relative to the population of trainees (based on available DOHMH administrative data) and implications for generalizability of findings to the broader population of NYC MHFA trainees are described in detail in Chapter 3. Briefly, based on non-missing trainee administrative data, survey respondents were broadly

representative of the broader population of trainees with respect to most sociodemographic variables of interest, with some exceptions. For example, distributions for MHFA survey respondents versus DOHMH administrative data were as follows for borough of residence (16 versus 18 percent Bronx, 29 versus 30 percent Brooklyn, 17 versus 15 percent Manhattan, 20 versus 21 percent Queens, 4 versus 4 percent Staten Island, 14 versus 12 percent other), gender (78 versus 73 percent female), and ethnicity (24 versus 27 percent Hispanic).

However, differences were observed with respect to age distribution and educational attainment, such that MHFA survey respondents tended to be slightly older (e.g., 44 percent were ages 50 or older compared with 26 percent of trainees in DOHMH administrative data) and were more likely to report having a college degree or higher (77 percent of the sample versus 63 percent of trainees in administrative data). This suggests that the survey sample was generally representative of the broader population of trainees in terms of some—but not all—sociodemographic characteristics.

## Focus Groups

Focus groups were used to address research questions about reasons for participating in MHFA, experiences with MHFA training, impacts of MHFA, reach of training and outreach efforts, and future directions. The focus group domains were based on RE-AIM, a well-established framework for program planning and evaluation (Glasgow et al., 2019). RE-AIM domains include reach, effectiveness, adoption, implementation, and maintenance. Table 2.2 crosswalks RE-AIM domains to the MHFA evaluation and shows exemplar discussion questions. The RAND team developed a structured focus group moderator's guide, organized by RE-AIM domains and designed to answer the research questions. As described in the next section, focus group participants were selected from two types of MHFA stakeholders; separate interview guides were used for community leaders and agency staff trainees (see the "Study Sample" section, next), given their distinct roles and vantage points. The focus groups were conducted virtually via Zoom videoconferencing software, due to variable pandemic-related restrictions over the course of the evaluation period.

**Table 2.2. RE-AIM Domains as Applied to the MHFA Evaluation**

<b>Domain</b>	<b>Relevance to MHFA Evaluation</b>	<b>Exemplar Interview Questions</b>
Reach	<ul style="list-style-type: none"> <li>• Motivations and desired outcomes for offering/participating</li> <li>• Barriers and facilitators to participation</li> </ul>	<ul style="list-style-type: none"> <li>• What made you interested in offering the MHFA training in your community? / What made you interested in the MHFA training?</li> <li>• Are there reasons that some community members did not participate?</li> </ul>
Effectiveness	<ul style="list-style-type: none"> <li>• Use of MHFA skills and knowledge</li> <li>• Helpful and unhelpful aspects of training</li> </ul>	<ul style="list-style-type: none"> <li>• What aspects of MHFA have been most helpful in your community? / What aspects of MHFA have been most helpful to you?</li> <li>• In general, do you know whether and how your community members have used their MHFA knowledge and skills? / How have you used MHFA?</li> </ul>
Adoption	<ul style="list-style-type: none"> <li>• Diffusion of knowledge and skills</li> <li>• Impacts at the community/agency level</li> </ul>	<ul style="list-style-type: none"> <li>• Did you have any concerns or reservations about offering the MHFA training to your community?</li> <li>• How, if at all, have community members who have been trained in MHFA shared their MHFA knowledge or skills with other community members who did not receive MHFA training?</li> <li>• How has MHFA changed mental health knowledge/attitudes/stigma within your community? / within your agency?</li> </ul>
Implementation	<ul style="list-style-type: none"> <li>• Suggested improvements and enhancements for future MHFA training</li> </ul>	<ul style="list-style-type: none"> <li>• Do you have any other suggestions for when, where, or how programs like MHFA should be delivered?</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>• Maintenance activities after MHFA training</li> <li>• Priority areas for future trainings and resources</li> </ul>	<ul style="list-style-type: none"> <li>• After having offered MHFA training in your community, have you done anything to provide community information or training about mental health or how to address mental health situations? / have you done anything to learn more about mental health or how to address mental health situations?</li> </ul>

### *Study Sample*

The focus group study sample consisted of two types of MHFA stakeholders: key community leaders who participated in and/or implemented trainings in their communities and city agency employee trainees.

#### **Community Leaders**

Four key constituent groups were selected with input from DOHMH, NYC Opportunity, and OCMH. These included CBOs that were involved in the dissemination of MHFA trainings and that serve Latinx, African American, Chinese, and LGBTQ+ New Yorkers. The African American leaders' group was specifically focused on faith-based organizations and initiatives. The group with Chinese community leaders included both faith-based organizations and non-faith-based organizations. Leaders in the sexual and gender minority (SGM; representing LGBTQ+ populations) and Latinx leaders' groups were from non-faith-based organizations. One organization in the SGM group had programming for Spanish-speaking participants.

During MHFA implementation, outreach coordinators from DOHMH worked to engage CBOs and community leaders to bring MHFA trainings to their constituents. These outreach coordinators typically had existing networks and specialization in communities of focus. For the evaluation, DOHMH and other city partners identified a roster of eligible leaders from these communities who were involved in bringing MHFA trainings to their organization or community.

Recruitment was initiated by DOHMH staff using an email template developed by the RAND team. The invitation email provided information about the purpose of the study and what participation in the focus group would entail, and it included text stating that participation was voluntary and confidential. Invited community leaders were instructed to contact RAND study staff directly if they were interested in participating. Most participants received two to three emails reminding them of the study opportunity and/or were contacted by phone by DOHMH staff who had previously engaged them in MHFA implementation. Recruitment emails to Latinx community leaders included both English and Spanish translations, and emails to Chinese community leaders included both English and Simplified Chinese translations. Following these initial emails, RAND staff also attempted to engage nonresponders by email and/or phone.

To promote privacy and protect against reidentification of participants, the RAND team managed all communications with interested participants. RAND staff did not report back to DOHMH or city partners which community leaders did or did not opt into the focus groups. The RAND team aggregated the scheduling availability of interested leaders and selected the date and time that the most participants could attend.

#### Non-Leadership Staff from HRA/DSS

The original evaluation plan included focus groups with line staff (non-leadership) from the Department of Corrections (DOC) and the New York Police Department (NYPD). We were unable to conduct these groups due to low staff availability, human subjects–related logistical concerns, and external circumstances in NYC at the time of the evaluation. An alternate agency, the Human Resources Administration/Department of Social Services (HRA/DSS), was selected based on input from city partners and a high response rate from these staff in the survey that included city agency employees (see Chapter 4).

Recruitment was initiated by New York City agency partners, via an email template provided by RAND. The email advertised the study opportunity and was sent to line staff who had participated in MHFA training. Trainees who were interested in participating in the focus group were asked to directly contact the RAND team. RAND personnel did not have access to the list of invited staff and did not engage staff unless they communicated interest directly to RAND. To promote privacy and protections against reidentification of participants, RAND managed all communications with interested participants.

The RAND team aggregated the scheduling availability of interested staff and selected the date/time that most participants could attend. A total of 14 staff expressed interest, five of these

14 registered for the scheduled focus group, and three of the 14 participated on the day of the focus group. The focus group was held in November 2021 and conducted in English.

Table 2.3 presents detailed information on invitation, response, and participation numbers for the community and agency focus groups. We sought to include six to eight persons in each focus group. Based on relatively low absolute numbers for responses, we ultimately scheduled groups once a minimum of three persons were available to participate.

**Table 2.3. Interest and Participation of Community Leaders**

<b>Focus Groups (Date of Focus Group)</b>	<b>Invited<sup>a</sup></b>	<b>Responded<sup>b</sup></b>	<b>Registered</b>	<b>Attended</b>
Chinese community leaders (June 2021)	8	6	3	3
African American faith-based leaders (July 2021)	11	4	4	4
Latinx community leaders (August 2021)	10	4	3	3
LGBTQ+ community leaders (September 2021)	7	5	3	3
HRA/DSS agency staff (November 2021)	4,995	14	5	3

<sup>a</sup> Invitations were sent by email from NYC governmental/agency partners.

<sup>b</sup> Respondents notified RAND of their interest in participating after receiving the invitation distributed by NYC governmental/agency partners.

## *Study Procedures*

Study procedures were reviewed and approved by the RAND Human Subjects Protection Committee. Verbal informed consent was obtained separately for participation and for recording of the focus group.

Registered participants received five-day, three-day, one-day, and morning-of reminder emails leading up to the scheduled focus group. These reminder emails included relevant information for participating, such as a copy of the verbal consent form to review in advance, information on downloading and testing the Zoom desktop/mobile client, log-in information for the discussion session, and reminders that participants should join the group from a private location to ensure that nonparticipants in the background were not privy to the confidential discussion.

Focus groups were held on the Zoom.gov platform, with phone-in information provided for audio fallback if needed. The groups were moderated by Ph.D.-level RAND staff with experience in qualitative methods and focus group moderation. Another RAND staff member attended to take anonymized written notes, and a RAND audio-visual technical support staff person was available to troubleshoot connection problems or participants' Zoom configurations. The group with Latinx community leaders was held in Spanish and moderated by bilingual RAND staff using a professionally translated moderator's guide. The group with Chinese community leaders was also prepared for discussion and moderation in Mandarin using translated materials; however, all three participants were willing to participate in English. Focus

groups lasted approximately one hour. Community leaders received a \$25 Amazon e-gift card as remuneration for their time. HRA/DSS agency staff were ineligible to receive an incentive for participating due to city regulations.

Audio recordings of the focus group discussions were used for professional, verbatim transcription. The transcript from the Spanish-language group was produced in Spanish and then professionally translated into a side-by-side transcript with both languages. The focus group protocols are available in Appendix C (available at [www.rand.org/t/RR1818-1](http://www.rand.org/t/RR1818-1)).

### *Data Management and Analysis*

After professional transcription, transcripts were deidentified for analysis. Codebook development was informed by multiple sources and activities. These included a review of the original interview protocol, an informal thematic analysis of written notes from the discussions, staff debriefs held after each focus group, and review of the final transcripts (Guest, MacQueen, and Namey, 2012; McMahon and Winch, 2018; Nowell et al., 2017; Braun and Clarke, 2006). Together, this process generated theory-based codes (i.e., codes that were informed by the moderator's guide and guiding research questions) and data-derived codes (i.e., codes that emerged from written notes and team debriefs). Data-driven coding can identify key concepts that were not anticipated or specified in advance (emergent themes). This enables a richer analysis and better positions the team to address the key research questions (Coffey and Atkinson, 1996). The codebook was pilot tested with two transcripts, allowing for minor revisions to the codes for clarity and precision.

Coding was undertaken by two Ph.D.-level RAND staff with training and experience in qualitative methods and who had moderated one or more of the focus groups. Given the relatively small number of transcripts, all transcripts were double-coded, meaning that both staff coded all five transcripts. Coding staff met at the beginning, midpoint, and endpoint of coding to discuss and resolve minor discrepancies. The final code tree is shown in the text box (right). Analysis was conducted using the Dedoose platform (Dedoose, 2017).

#### **Coding Tree for Focus Group Analysis**

Focus group transcripts were analyzed using the hierarchical coding tree shown here:

- Experiences of MHFA implementation and/or participation
  - Promotion and reach
  - Impacts on agency/community
  - Maintenance behaviors/programming
- Motivation for MHFA and desired outcomes
- Suggested improvements to MHFA
  - Content
  - Trainers
  - Other
- Use of MHFA
  - Use of skills, knowledge, etc.
  - Diffusion of skills, knowledge, etc.
  - Helpful/positive aspects/components
  - Unhelpful/negative aspects/components
- Wishlist for future trainings, resources, etc.

## Chapter 3. Survey Results—All Respondents

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As described in Chapter Two, all trainees from the inception of the city-wide rollout were invited to participate in a web survey to evaluate the impact of MHFA. The survey asked about their use of MHFA skills, other MHFA-related targets (e.g., mental health knowledge, attitudes), perceptions of the training, and future training needs.

This chapter first describes the characteristics of trainees who responded to the survey (i.e., MHFA survey respondents), alongside the characteristics of the entire trainee population, as recorded in DOHMH administrative data. The remainder of the chapter uses the survey results to address the following questions:

- How are trainees currently faring on MHFA training-related outcomes such as mental health knowledge, stigma, and helping behaviors?
- What was the degree of reach of MHFA within trainees' social networks?
- What was the impact on mental health service use among recipients of MHFA?
- What was the impact of MHFA on trainees' well-being?
- How are training experiences (i.e., time since completed training; MHFA trainer status, number of MHFA courses completed; receipt of additional non-MHFA mental health training; mental health-related occupation) related to MHFA training-related outcomes?
- What are trainee perceptions of MHFA training and future training needs?

### Survey Sample Characteristics

The survey respondent sample was heterogenous on a variety of characteristics. Based on the number of invitations sent and the number of responses at the field period end date, the overall survey response rate was approximately 2.1 percent (6.2 percent for city agency employee trainees; 1.4 percent for community-based trainees); however, due to limitations of the design (e.g., duration of the field period for agency versus community-based trainees, closure of the survey for community-based trainee respondents after reaching the target number), response rates should be interpreted with caution. The sample was broadly representative of the broader population of city MHFA trainees, although survey respondents skewed slightly older, tended to report higher educational attainment, and included a higher proportion of city agency employees (see below).

Characteristics of the survey respondent sample are detailed in Table 3.1. Briefly, 41 percent of respondents were city agency employees, 66 percent had completed a MHFA training within the previous two years, and most (82 percent) had completed the adult course. Approximately 31 percent of individuals reported that MHFA training was required by their job.

With respect to sociodemographic characteristics, most respondents identified as women (78 percent), 84 percent identified as straight (heterosexual), and about two-thirds of respondents (68

percent) were between the ages of 36 and 64. Approximately 24 percent of individuals identified as Hispanic, 23 percent non-Hispanic White, 35 percent non-Hispanic Black, 8 percent non-Hispanic Asian, and approximately 8 percent identified as another race or multiple races. Nearly 78 percent of respondents had a college degree or higher, and individuals varied with respect to current occupation/field. Most respondents (86 percent) currently resided in one of the five NYC boroughs (19 percent Bronx, 33 percent Brooklyn, 20 percent Manhattan, 23 percent Queens, 4 percent Staten Island).

**Table 3.1. Respondent Web Survey Sample Characteristics (N = 2,639)**

<b>Characteristic</b>	<b>N</b>	<b>%</b>
City agency employee status (yes)	1,084	41.08
Year training occurred <sup>a</sup>		
Less than three years ago	1,752	66.39
Three or more years ago	887	33.61
Type of MHFA course completed <sup>b</sup>		
Adults	2,174	82.38
Youth	885	33.54
Veterans	106	4.02
Older adults	275	10.42
Higher education	156	5.91
Public safety	326	12.35
MHFA required for job		
Yes	814	30.85
No	1,722	65.25
I don't know/not sure	103	3.90
Occupation		
Mental health and social services	586	22.21
Faith based	86	3.26
Education	558	21.14
Health care	371	14.06
Law enforcement/public safety	121	4.59
Other or not applicable	917	34.74
Military affiliation (self)	108	4.09
Gender identity		
Woman	2,049	77.79
Man	526	19.97
Nonbinary person	38	1.44
Transgender person	<10	<0.25
Not listed	15	0.57

Characteristic	N	%
Sexual orientation		
Straight (heterosexual)	2,216	84.23
Lesbian	46	1.75
Gay	80	3.04
Bisexual	133	5.06
Asexual	25	0.95
None of these describe me	90	3.42
Not sure/questioning	41	1.56
Race/ethnicity		
Hispanic	645	24.49
Non-Hispanic Asian only	219	8.31
Non-Hispanic Black only	932	35.38
Non-Hispanic White only	615	23.35
Non-Hispanic, another race	129	4.90
Non-Hispanic, multiple races	94	3.57
Education		
Did not attend high school	<10	<0.20
Some high school	19	0.72
High school diploma or GED	149	5.65
Some college	420	15.93
College degree	1,024	38.85
Postgraduate degree	1,020	38.69
Age group		
25 or younger	128	4.95
26–35	450	17.40
36–49	845	32.68
50–64	910	35.19
65 or older	253	9.78
Borough of residence <sup>c</sup>		
Bronx	430	18.91
Brooklyn	754	33.16
Manhattan	457	20.10
Queens	531	23.35
Staten Island	102	4.49

SOURCE: RAND NYC MHFA web survey, 2021.

<sup>a</sup> Note that trainings were suspended in March 2020, coinciding with the onset of the COVID-19 pandemic.

<sup>b</sup> Note that trainees could complete more than one type of MHFA course; as such, percentages do not add to 100.

<sup>c</sup> Among individuals with a NYC residence.

### *Comparison of Survey Sample to Trainee Administrative Data*

As described in Chapter 2, DOHMH administrative data of trainees had very high rates of missingness on sociodemographic variables of interest; as such, survey weights were not used to balance the characteristics of the survey sample to approximate those of the entire population of trainees (i.e., because the actual sociodemographic composition of the population was unknown). The percentages of missing data in the DOHMH administrative data for key demographic variables are as follows: 24 percent age group, 24 percent gender identity, 31 percent Hispanic, 33 percent race/ethnicity, 87 percent sexual orientation, 25 percent educational attainment, and 30 percent home borough.

Nonetheless, Table 3.2 shows a side-by-side comparison of the sociodemographic characteristics of the survey sample relative to the non-missing DOHMH administrative data of the broader population of individuals who completed MHFA training between 2015 and 2020. This has implications for gauging the extent to which non-weighted survey data may be generalizable to the broader population of all MHFA trainees. Distributions were comparable for the survey sample and administrative data across most sociodemographic variables of interest. For example, survey respondents were well matched to trainees represented in administrative data in terms of borough of home residents, gender (e.g., survey: 78 percent female; DOHMH administrative data: 73 percent) and race/ethnicity (e.g., survey: 24 percent Hispanic; DOHMH administrative data: 27 percent). However, the sample differed from available DOHMH administrative data with respect to age distribution and educational attainment, such that survey respondents tended to be slightly older (e.g., 44 percent of the sample was age 50 or older compared with 26 percent of trainees in DOHMH administrative data) and were more likely to report a college degree or higher (77 percent of the sample versus 63 percent of trainees in administrative data). This suggests that the survey sample was generally representative of the broader population of trainees in terms of some—but not all—sociodemographic characteristics. As such, findings from the survey sample may not be generalizable to all MHFA trainees.

**Table 3.2. Trainee Characteristics in the Survey Sample and DOHMH Administrative Data**

	Percentage of MHFA Survey Sample Pooled (N = 2,639)	Percentage of All MHFA Trainees (from DOHMH Administrative Data) <sup>a</sup> (N = 156,418)
NYC city government employee	41.08	32.40
Age group		
25 or under	4.85	19.59
26–35	17.05	27.93
36–49	32.02	26.83
50–64	34.48	21.34
65+	9.59	4.31
Missing/did not answer	2.01	--

	Percentage of MHFA Survey Sample Pooled (N = 2,639)	Percentage of All MHFA Trainees (from DOHMH Administrative Data) <sup>a</sup> (N = 156,418)
Gender identity		
Woman	77.64	72.81
Man	19.93	26.52
Nonbinary person	1.44	0.40
Transgender person	<0.50 <sup>b</sup>	0.11
Another gender identity/not listed	0.57	0.16
Missing/did not answer	<0.50 <sup>b</sup>	--
Hispanic or Latino/x		
No	75.37	73.37
Yes	24.44	26.63
Missing/did not answer	<0.50 <sup>b</sup>	--
Race/ethnicity		
American Indian/ Alaskan Native only	0.76	0.72
Asian only	8.45	11.28
Black only	40.92	47.23
Native Hawaiian/Pacific Islander only	<0.50 <sup>b</sup>	0.37
White only	29.82	22.27
Other race	13.11	14.94
Multiple races	6.63	3.19
Missing/did not answer	0.00	--
Sexual orientation		
Straight (heterosexual)	83.97	88.25
Lesbian	1.74	1.62
Gay	3.03	2.37
Bisexual	5.04	3.34
Asexual	0.95	0.34
None of these describe me	3.41	2.17
Not sure/questioning	1.55	1.91
Missing/did not answer	<0.50 <sup>b</sup>	--
Educational attainment		
Did not attend high school	<0.50 <sup>b</sup>	--
Some high school	0.72	3.71
High school diploma or GED	5.65	12.98
Some college	15.92	19.85
College degree	38.80	40.43
Postgraduate degree	38.65	22.88
Missing/did not answer	<0.50 <sup>b</sup>	--

	Percentage of MHFA Survey Sample Pooled (N = 2,639)	Percentage of All MHFA Trainees (from DOHMH Administrative Data) <sup>a</sup> (N = 156,418)
Borough (home residence)		
Bronx	16.29	17.68
Brooklyn	28.57	29.58
Manhattan	17.32	15.11
Other	13.83	12.29
Queens	20.12	20.91
Staten Island	3.87	4.42
Missing	0.00	--

SOURCES: RAND MHFA web survey, summer 2021, and DOHMH administrative data.

<sup>a</sup> Excluding missing data.

<sup>b</sup> Estimates for cells with less than ten respondents have been replaced with <0.50 to avoid exact percentages to protect confidentiality.

## How Are Trainees Currently Faring on MHFA Training-Related Outcomes Such as Mental Health Knowledge, Stigma, and Helping Behaviors?

MHFA training aims to equip trainees with accurate information about mental health and mental health treatment. Although stigma reduction is not a primary objective of MHFA, the training may help dispel misconceptions about mental health treatment and affect perceptions about individuals with mental illness and/or those who seek mental health treatment. Survey respondents completed a number of items assessing their knowledge and beliefs about mental health and common mental health conditions (i.e., depression), as well as items assessing stigmatizing views personally held by respondents and perceived to be held by the public within their community.

### *Knowledge*

On a nine-item test of *MHFA knowledge*, adapted from MHFA training manual content and knowledge tests used in previous studies (Reavley et al., 2018), participants answered on average 50 percent of items correctly (mean score = 50 percent, standard deviation [SD] = 19 percent). In response to a vignette detailing a fictional person with hallmark symptoms of depression, 86 percent of respondents correctly recognized the symptoms as indicative of possible depression or a related condition. With respect to *knowledge of referral resources*, over three-quarters of respondents (77 percent) agreed or strongly agreed with the statement “I know where I can refer individuals for help with their emotional or mental health challenges, including alcohol or substance use.”

### *Stigma*

Participants reported on perceptions of *personal stigma* related to mental health and treatment seeking using vignette-based items adapted from prior studies of MHFA (Griffiths et

al., 2004; Reavley et al., 2018) (range 1 = low stigma to 5 = high stigma). Scores averaged 1.47 (SD = 0.60), which falls below the scale midpoint, indicating that respondents on average did not view individuals exhibiting symptoms of depression as a sign of personal weakness or someone to avoid (i.e., low stigma).

Respondents also completed items assessing perceived public stigma with respect to perceptions of how others in their communities view mental health problems and mental health service use. Approximately 46 percent of respondents agreed or strongly agreed that most individuals in their community felt that seeking mental health treatment is a sign of personal failure, and half (50 percent) agreed or strongly agreed that most people in their community think less of someone with a history of mental health problems.

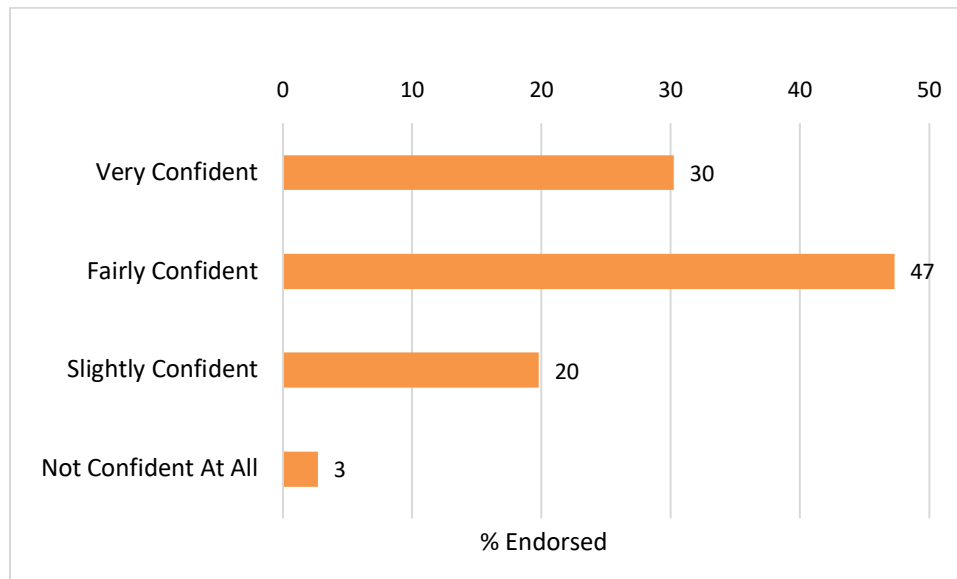
### *Helping Behaviors*

Respondents reported on their confidence in helping others with a mental health problem, which has been shown to predict future application of MHFA skills (Morgan, Ross, and Reavley, 2018), as well as the self-perceived frequency with which they provided direct support to individuals with a mental health problem as a result of MHFA training. Furthermore, to assess recent application of MHFA skills (i.e., in the six months preceding the survey), respondents provided information about their recent contacts with someone who they perceived to have a mental health problem, as well as their recent application of MHFA skills with others in their social networks.

#### **Confidence in Helping**

Most respondents (77 percent) endorsed feeling fairly or very confident in helping someone with a mental health problem (Figure 3.1). Nearly one-third of respondents (30 percent) endorsed being “very confident” in helping someone with a mental health problem, and almost half of respondents (47 percent) indicated being “fairly confident.” By comparison, only 20 percent reported being “slightly confident,” and only 3 percent endorsed being “not confident at all.”

**Figure 3.1. Degree of Confidence in Helping Someone with a Mental Health Problem**



SOURCE: RAND MHFA web survey, summer 2021.

### Self-Perceived Impact of MHFA on Helping Behaviors

As described in Chapter 1, a key aspect of MHFA training involves preparing trainees to engage in specific behaviors (e.g., consistent with the MHFA Action Plan ALGEE<sup>3</sup>) to help individuals who may be experiencing a mental health problem or crisis. Participants were asked about how often they engaged in a variety of actions to support others experiencing a mental health problem as a result of the MHFA training they received.

As summarized in Figure 3.2, a majority of respondents indicated that, as a result of MHFA training, they occasionally or frequently listened to someone in distress (87 percent), reached out to someone who may be dealing with a mental health problem (68 percent), offered basic first aid–level information and reassurance about mental health problems (68 percent), and assisted a person who was dealing with a mental health problem or crisis to seek professional help (65 percent). Descriptive statistics showing the breakdown of results by all response options (never, rarely, occasionally, frequently) are shown in Appendix Table B.1 (available at [www.rand.org/t/RRA1818-1](http://www.rand.org/t/RRA1818-1)).

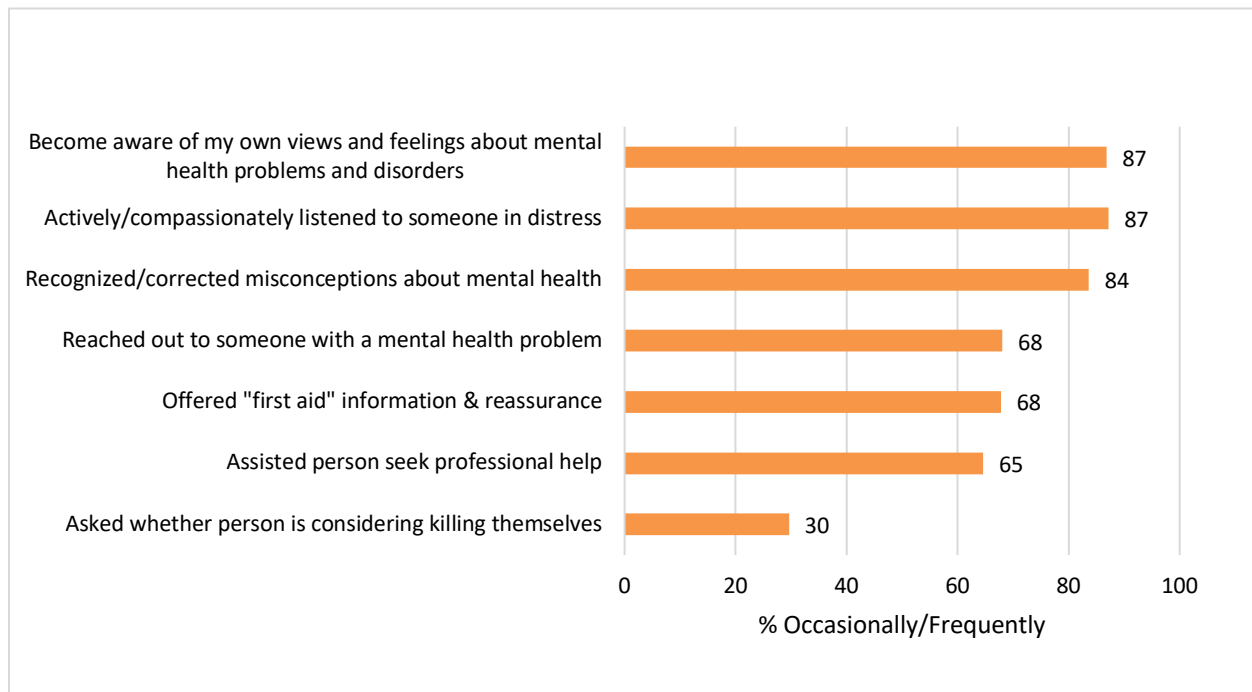
Approximately 84 percent of respondents indicated that they occasionally or frequently recognized and corrected misconceptions about mental health and mental illness as they encountered them. Furthermore, 87 percent of respondents indicated that they occasionally or

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<sup>3</sup> Approach and assess for risk of suicide or harm; listen nonjudgmentally; give reassurance and information; encourage appropriate professional help; encourage self-help and other support strategies. For more information on the MHFA Action Plan, see Mental Health First Aid, 2021.

frequently became aware of their own views and feelings about mental health as a result of MHFA training.

**Figure 3.2. Percentage of Respondents Reporting Engaging in Helping Behaviors Occasionally or Frequently as a Result of MHFA Training**

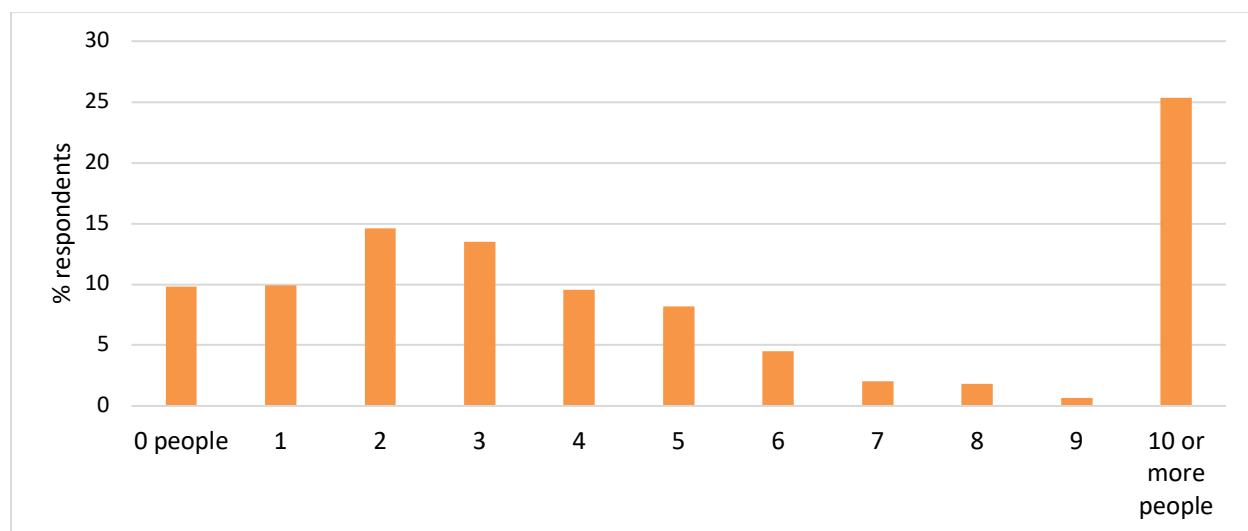


SOURCE: RAND MHFA web survey, summer 2021.

### Recent Contact and Application of MHFA Skills

Recent contact with someone experiencing a mental health problem was common: 90 percent of respondents indicated encountering at least one individual with a mental health problem in the past six months. Indeed, 25 percent reported contact with ten or more individuals (Figure 3.3). Overall, participants endorsed having contact with a median of four individuals with a mental health problem in the past six months.

**Figure 3.3. Number of People with a Mental Health Problem Respondents Had Contact with in the Past Six Months**

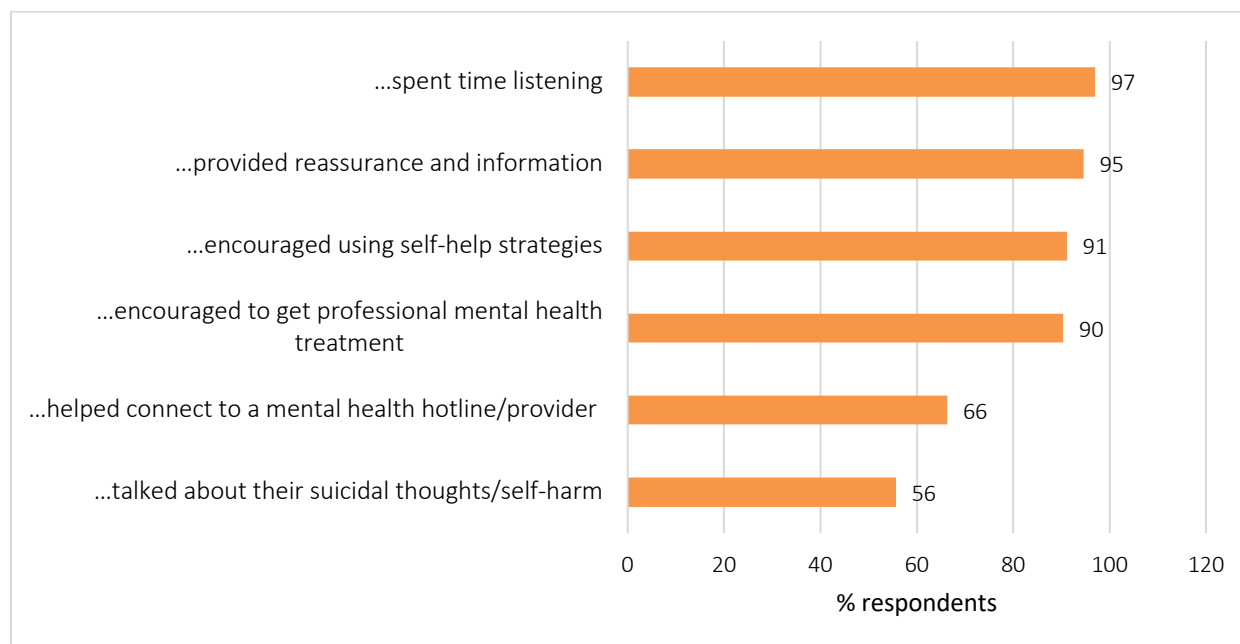


SOURCE: RAND MHFA web survey, summer 2021.

Respondents also indicated whether they used the following MHFA skills, corresponding to key steps of the MHFA Action Plan (ALGEE), to help someone with a mental health problem in the past six months (see Figure 3.4).

Of the MHFA participants who had recent contact with individuals experiencing a mental health problem, nearly all indicated listening (97 percent), giving reassurance and information (95 percent), encouraging self-help strategies (91 percent), and encouraging professional help (90 percent) (Figure 3.4). Approximately two-thirds of respondents (66 percent) helped connect an individual to a mental health hotline or provider, and 56 percent had talked with an individual about their suicidal thoughts or self-harm.

**Figure 3.4. Percentage of Respondents with Recent Contact with Someone Experiencing a Mental Health Problem Who Had Applied Their MHFA Skills in the Past Six Months**



SOURCE: RAND MHFA web survey, summer 2021.

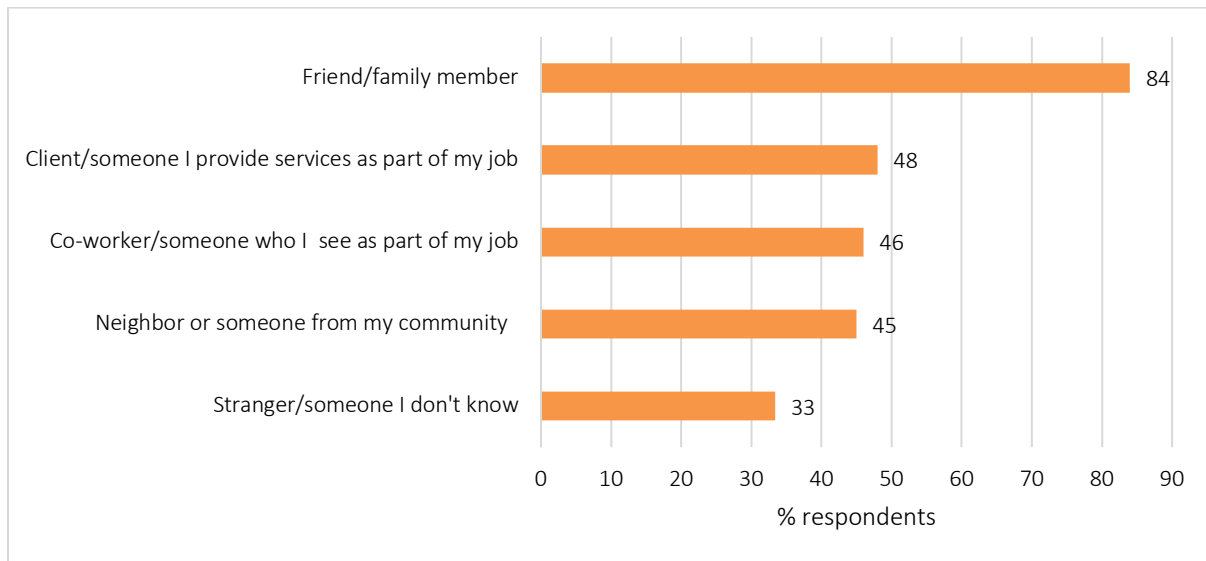
## What Was the Degree of Reach of MHFA Within Trainees' Social Networks?

To understand how and with whom trainees use MHFA to help others in the community, respondents reported on their recent interactions with individuals who had a possible mental health problem, as well as their application of various MHFA skills with different types of individuals in their social networks.

### *Types of Individuals*

Among respondents who had recent contact with individuals experiencing a mental health problem, individuals reported using MHFA skills to help different types of individuals within their social network or community in the past six months (Figure 3.5). Most respondents (84 percent) indicated using MHFA skills to help a friend or family member; nearly half applied skills with a client or someone to whom they provide services as part of their job (48 percent), a coworker (46 percent), or a neighbor or acquaintance (45 percent). One-third of respondents endorsed using MHFA skills to help a stranger or someone they did not know (33 percent).

**Figure 3.5. Types of Individuals with Whom Respondents Used MHFA Skills in the Past Six Months**



SOURCE: RAND MHFA web survey, summer 2021.

To estimate the overall reach of MHFA in the community among this group of respondents, we summed the number of individuals with whom respondents endorsed using MHFA skills, among those who endorsed having encountered at least one individual with a probable mental health problem in the past six months (i.e., those individuals who plausibly had an opportunity to utilize MHFA skills). Table 3.3 shows the median number of individuals with whom respondents endorsed using MHFA skills in the past six months. We also estimated the total number of individuals with whom trainees reported using skills (i.e., the sum of the number of individuals across respondents for each MHFA skill). Note that the estimated totals may represent a conservative estimate of the number of people helped because the scale maximum, ten or more individuals, was fixed at  $n = 10$ . True totals may exceed these estimates.

As shown in the table, for respondents who reported recent contact with one or more individuals with a mental health problem ( $n = 2,378$ ), each engaged in active listening with a median of four other people; provided reassurance and information, encouraged self-help, and encouraged seeking professional help with three other people; helped to directly connect two other people to mental health resources (e.g., a crisis hotline or a mental health provider); and talked about suicide or self-harm with one person.

**Table 3.3. Estimated Number of Individuals with Whom Respondents Used MHFA Skills in the Past Six Months, Among Those Who Had at Least One Contact with Someone with a Mental Health Problem**

<b>MHFA Skill</b>	<b>Median Number of Individuals Reached per Respondent<sup>a</sup></b>	<b>Estimated Total Number of Individuals Helped<sup>a</sup></b>
Spent time listening to their mental health problem	4	10,945
Provided reassurance and information about effective ways to help address a mental health problem	3	10,425
Encouraged using self-help strategies to help cope with a mental health problem	3	9,938
Helped to connect to a mental health hotline (e.g., NYC Well) or directly helped them engage with a mental health provider (e.g., walked them to a psychiatric emergency room)	2	6,800
Talked with about their suicidal thoughts or self-harm	1	4,567
Encouraged to get professional mental health treatment	3	9,231

SOURCE: RAND MHFA web survey, summer 2021.

<sup>a</sup> Among respondents endorsing recent contact with one or more individuals with a mental health problem (n = 2,378).

## What Was the Impact on Mental Health Service Use Among Recipients of MHFA?

Respondents also reported on the number of individuals they had helped who ultimately sought mental health treatment (to the best of their knowledge) based on the following: “In the past 6 months, how many of the individuals you provided help to sought professional help for their mental health problem?” Approximately 73 percent of respondents indicated that at least one person who they had helped in the past six months had sought mental health treatment (median number per respondent = one person). Expressed as the total number of individuals helped across all respondents, we estimate that 6,373 individuals ultimately sought professional mental health treatment.

## What Was the Impact of MHFA on Trainees’ Well-Being?

Although MHFA was not necessarily developed as an intervention to support trainees’ own mental well-being, the knowledge and skills acquired through MHFA training may have ancillary benefits for trainees (Kitchener and Jorm, 2004). As part of the survey, respondents provided information on self-perceived impact of MHFA training on supporting their own well-being, perceived need for help with mental health problems, mental health service use, and levels of psychological distress.

### *Self-Perceived Impact of MHFA on Supporting Own Well-Being*

Most respondents also used the information from MHFA training to help support their own well-being (Figure 3.6). Over 80 percent of respondents indicated that they frequently (49 percent) or occasionally (33 percent) used MHFA to support their own well-being, with comparably few respondents indicating rarely (12 percent) or never (6 percent) using skills to help themselves. Many respondents (39 percent) also endorsed having frequently (20 percent) or occasionally (19 percent) used MHFA skills or knowledge to get counseling or therapy for their mental or emotional health; 17 percent endorsed rarely using MHFA, and 44 percent never used MHFA skills to obtain counseling for themselves.

**Figure 3.6. Percentage of Respondents Who Reported Occasionally or Frequently Using MHFA to Support Their Own Well-Being**



SOURCE: RAND MHFA web survey, summer 2021.

### *Mental Health Service Use and Perceived Need for Help with Mental Health Problems*

Of all survey respondents, approximately 35 percent reported using some type of mental health treatment in the past 12 months; approximately 15 percent of respondents reported using a prescription medication to help with mental or emotional health, and nearly one-third (32 percent) reported receiving counseling or therapy from a health professional in the past year.

Approximately 7.5 percent of all respondents met criteria for current serious psychological distress (based on past-month K6 score greater than or equal to 13). Among these individuals, approximately 62 percent reported that they had utilized either prescription medication treatment or counseling for mental health in the past 12 months (35 percent endorsed prescription medication use, and 57 percent endorsed use of counseling or talk therapy). Among those with current distress, 85 percent endorsed occasionally or frequently using MHFA information or skills to support their own well-being.

Slightly more than half of respondents (51 percent) endorsed thinking that they needed help for emotional or mental health problems in the past 12 months. Rates of perceived treatment need in the past year were higher among those individuals with current serious distress (93 percent endorsed perceived need) compared with those without current distress (48 percent). Approximately 81 percent of respondents who perceived a need for help reported utilizing some type of mental health services. We also assessed the level of unmet need among respondents, defined as (1) individuals who endorsed perceived treatment need but did not endorse past-year mental health treatment and (2) individuals with current distress who did not endorse past-year mental health treatment. Approximately 3 percent of respondents met criteria for current serious psychological distress with unmet need, and about 21 percent endorsed perceived treatment need but did not endorse past year mental health treatment.

## How Are Training Experiences Related to MHFA Training-Related Outcomes?

As described above, trainees were diverse with respect to the types of mental health training received, which could be associated with variations in MHFA training-related outcomes. For example, individuals in occupations that are often characterized by the receipt of professional education in a mental health–related field, or those who have completed additional training to become certified as a MHFA trainer, may differ from individuals without these training experiences with respect to knowledge or aptitude to intervene and support persons in distress.

In this section, we focus on the self-perceived impact of MHFA on the frequency of engaging in specific helping behaviors, focusing on the following:

- actively and compassionately listened to someone in distress
- offered a distressed person basic first aid information and reassurance about mental health problems
- assisted a person who was dealing with a mental health problem or crisis to seek professional help.

Full results showing differences in helping behaviors assessed in the survey by training-related factors are shown in Appendix Table B.2.

In addition, we explored whether training-related factors were associated with differences in confidence in helping someone with a mental health problem and knowledge of referral/treatment resources (see Appendix Table B.3).

### *Differences by Training-Related Factors*

We first used bivariate logistic regression analyses to test for differences in confidence, knowledge of resources, and helping behaviors by the following training-related factors:

- time since MHFA training
- MHFA trainer status

- number of MHFA courses completed
- other (non-MHFA) mental health training
- occupation type (employment sector)
- MHFA training job requirement.

### Time Since MHFA Training

Time since completing MHFA was significantly associated with confidence in helping someone with a mental health problem and with use of helping behaviors. Respondents who had completed training three or more years ago reported lower confidence (odds ratio [OR] = 0.81, 95% confidence interval [CI] 0.67 – 0.97,  $p = 0.02$ ) and less frequent engagement in specific helping behaviors (listening to someone in distress, assisting someone to seek professional help) compared with those who had completed training within the past two years. Time since completing training was not associated with knowledge of referral resources ( $p = 0.41$ ) or with helping others by offering first aid information and reassurance ( $p = 0.18$ ).

### MHFA Trainer Status, Number of MHFA Courses, and Other Mental Health Training

Respondents who were or who planned to become a MHFA trainer showed higher ratings of confidence, knowledge of resources, and frequency of engaging in helping behaviors. For example, compared with individuals who were not and had no plans to become a MHFA trainer, respondents who were certified MHFA trainers were significantly more likely to report being very confident in helping someone with a mental health problem (OR = 3.67, 95% CI 2.56–5.25,  $p < 0.001$ ), to endorse knowledge of referral resources (OR = 1.70, 95% CI 1.06–2.72,  $p < 0.05$ ), and to endorse occasionally or frequently engaging in active listening (OR = 3.92, 95% CI 1.81–8.49,  $p < 0.001$ ), offering first aid information and reassurance (OR = 2.48, 95% CI 1.62–3.78,  $p < 0.001$ ), and assisting others in seeking help (OR = 2.19, 95% CI 1.47–3.26,  $p < 0.001$ ). Patterns were similar for those who endorsed working toward becoming a MHFA trainer compared with those who were not a trainer and had no plans to become certified in the future (see Appendix Tables B.2 and B.3).

Similarly, relative to completing a single type of MHFA curriculum (e.g., adult training course), the completion of multiple different types of MHFA curricula (e.g., both adult and youth courses) was consistently associated with higher ratings on all outcomes. Specifically, those who completed more than one type of course were more likely to endorse high confidence in helping others (OR = 1.73, 95% CI 1.45–2.06,  $p < 0.001$ ), knowledge of referral resources (OR = 1.38, 95% CI 1.12–1.70,  $p < 0.001$ ), occasionally or frequently engaging in active listening (OR = 1.51, 95% CI 1.16–1.97,  $p < 0.001$ ), offering first aid information and reassurance (OR = 1.44, 95% CI 1.19–1.72,  $p < 0.001$ ), and assisting others to seek professional help (OR = 1.42, 95% CI 1.19–1.70,  $p < 0.001$ ) (see Appendix Tables B.2 and B.3). Finally, compared with individuals with no history of other mental health training (i.e., beyond MHFA; reference group), those who endorsed additional history of mental health education/training showed consistently higher

ratings with respect to confidence, knowledge of resources, and engagement in helping behaviors. For example, compared with individuals with no other mental health–related training, respondents who endorsed formal education in a mental health–related field had higher ratings of confidence in helping others (OR = 2.54, 95% CI 2.04–3.16,  $p < 0.001$ ) and knowledge of referral resources (OR = 1.84, 95% CI 1.48–2.28,  $p < 0.001$ ) and were more likely to endorse occasionally or frequently engaging in active listening (OR = 2.78, 95% CI 2.13–3.62,  $p < 0.001$ ), offering first aid information and reassurance (OR = 2.40, 95% CI 1.98–2.92,  $p < 0.001$ ), and assisting others in seeking help from a mental health professional (OR = 2.66, 95% CI 2.19–3.22,  $p < 0.001$ ). Patterns were similar for respondents who reported having participated in other standalone mental health trainings and those who reported receiving additional workplace training in mental health topics compared with those with no additional mental health training (see Appendix Tables B.2 and B.3).

### Occupation Type (Employment Sector)

Occupation type (employment sector) was significantly associated with confidence, knowledge of resources, and helping behaviors. Although the magnitude of differences varied slightly across specific outcomes, individuals in nearly all job types/fields showed consistently lower confidence in helping others with a mental health problem, lower knowledge of referral resources, and engaged in helping behaviors less often than those in the mental health and social services sector (Table 3.6). However, there were exceptions to this pattern. In comparison with respondents who worked in mental health or social services, those in the health care sector did not differ with respect to knowledge of referral resources (contrast  $p = 0.66$ ) or frequency of engaging in active listening to someone in distress ( $p = 0.25$ ); those in faith-based occupations did not differ with respect engagement in active listening ( $p = 0.21$ ), offering information and reassurance ( $p = 0.55$ ), or knowledge of resources ( $p < 0.05$ ; contrast not significant after correction for multiple tests); those in education did not differ with respect to active listening ( $p < 0.05$ ; contrast not significant after correction for multiple tests); and those in law enforcement showed a nonsignificant trend with respect to lower frequency of offering information and reassurance to a distressed person (OR = 0.66, 95% CI 0.43–1.02,  $p = 0.06$ ).

### MHFA Training Job Requirement

As shown in Table 3.4, employer-required MHFA training was significantly associated with self-reported confidence in helping someone with a mental health problem. Respondents whose employers required MHFA training were more likely to endorse being very confident (OR = 1.48, 95% CI 1.24–1.77,  $p < 0.0001$ ) compared with respondents who reported that MHFA training was not required or those who were unsure. However, employer MHFA training requirement was not associated with knowledge of resources or frequency of helping behaviors (Table 3.6). To better understand this pattern of findings in relation to occupation type, we examined the association between employer MHFA training requirements and occupation type

(employment sector). As anticipated, self-reported MHFA training as a job requirement differed across occupation types (employment sectors) ( $\chi^2_{df=6} = 135.38, p < 0.0001$ ), such that respondents in social service and law enforcement/public safety sectors were more likely to report that MHFA training was required as part of their jobs compared with those working in other sectors.

**Table 3.4. Differences in Confidence, Knowledge of Referral Resources, and Helping Behaviors by Employment-Related Factors**

	Engaging in Helping Behaviors as a Result of MHFA Training <sup>a</sup>			Confidence in Helping <sup>b</sup>	Knowledge of Referral Resources <sup>c</sup>
	Actively listened	Offered “first aid” information	Assisted with seeking professional help		
	Main effect p-value Group contrasts (OR, 95% CI)				
Occupation type (employment sector)	<b>p = 0.001</b>	<b>p &lt; 0.0001</b>	<b>p &lt; 0.0001</b>	<b>p &lt; 0.0001</b>	<b>p = 0.003</b>
Mental health and social services	(ref)	(ref)	(ref)	(ref)	(ref)
Faith based	0.64 (0.32, 1.28)	0.85 (0.50, 1.45)	<b>0.39 (0.24, 0.64)***</b>	<b>0.33 (0.20, 0.56)***</b>	0.59 (0.35, 1.00)*
Education	0.67 (0.46, 0.99)*	<b>0.48 (0.37, 0.62)***</b>	<b>0.34 (0.26, 0.45)***</b>	<b>0.23 (0.18, 0.31)***</b>	<b>0.64 (0.48, 0.86)**</b>
Health care	0.77 (0.50, 1.20)	<b>0.64 (0.48, 0.87)**</b>	<b>0.46 (0.34, 0.62)***</b>	<b>0.50 (0.38, 0.66)***</b>	0.93 (0.66, 1.30)
Law enforcement/public safety	<b>0.53 (0.30, 0.95)*</b>	0.66 (0.43, 1.02)	<b>0.29 (0.19, 0.44)***</b>	<b>0.42 (0.28, 0.64)***</b>	<b>0.60 (0.38, 0.95)*</b>
Other	<b>0.50 (0.35, 0.72)***</b>	<b>0.53 (0.41, 0.68)***</b>	<b>0.33 (0.25, 0.42)***</b>	<b>0.34 (0.27, 0.44)***</b>	<b>0.70 (0.53, 0.93)*</b>
Not applicable	<b>0.43 (0.28, 0.65)***</b>	<b>0.35 (0.25, 0.47)***</b>	<b>0.25 (0.18, 0.34)***</b>	<b>0.35 (0.25, 0.48)***</b>	<b>0.55 (0.39, 0.77)***</b>
MHFA training required by employer	p = 0.13	p = 0.19	p = 0.50	<b>p &lt; 0.0001</b>	p = 0.62
No/do not know/not sure	--	--	--	(ref)	--
Yes	--	--	--	<b>1.48 (1.24, 1.77)***</b>	--

SOURCE: RAND MHFA web survey, summer 2021.

NOTE: This table shows estimates of associations between occupation-related variables and respondents' self-perceived frequency of engaging in helping behaviors “as a result of Mental Health First Aid training,” confidence in helping others with a mental health problem, and knowledge of mental health treatment or referral resources. Estimates are from separate bivariate logistic regression models.

<sup>a</sup> “As a result of the Mental Health First Aid training, I have . . .” (response range: never to frequently). Dichotomized for analysis as 1 = occasionally or frequently, 0 = never or rarely.

<sup>b</sup> “How confident do you feel in helping someone with a mental health problem?” (response range: not confident at all to very confident). Dichotomized for analysis as 1 = very confident, 0 = fairly confident, slightly confident, or not confident at all.

<sup>c</sup> “I know where I can refer individuals for help with their emotional or mental health challenges, including alcohol or substance use.” (response range: strongly disagree to strongly agree). Dichotomized for analysis as 1 = agree or strongly agree, 0 = strongly disagree, disagree, or neither agree nor disagree.

(--) denotes no follow-up contrast test to nonsignificant overall main effect.

Bolded values indicate statistically significant effects at p < 0.05 after multiple test FDR correction.

\* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.

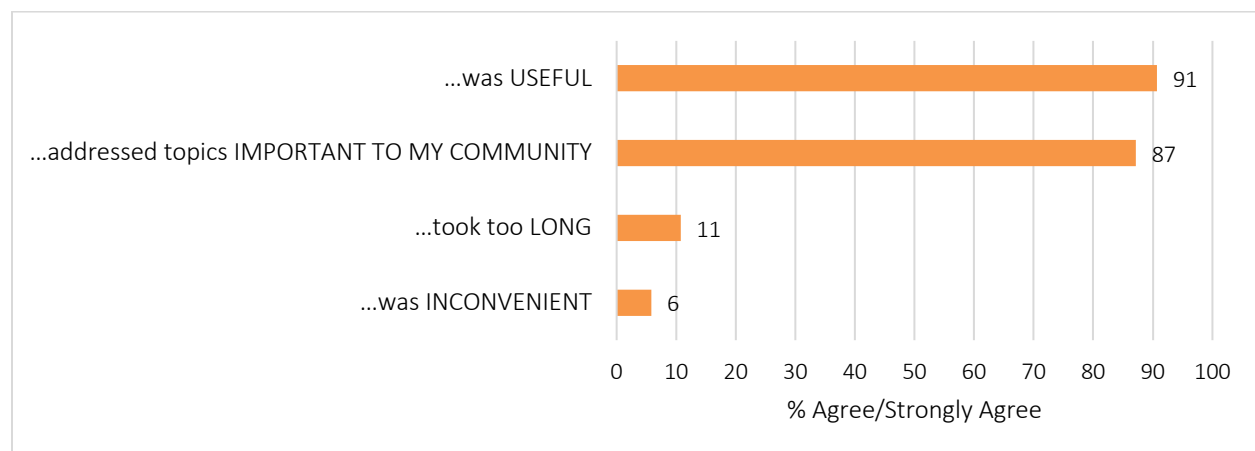
## What Are Trainee Perceptions of MHFA Training and Future Training Needs?

Although city-sponsored MHFA trainings were discontinued in 2020 due to the onset of the COVID-19 pandemic, respondents' experiences with MHFA training may offer important insights into ways in which future citywide training efforts and other initiatives related to mental health literacy could be augmented to best meet the needs of New Yorkers. This section provides information regarding respondents' perceptions of MHFA training and future training needs.

### *Perceptions of MHFA Training*

Respondents held largely favorable views of MHFA training. For example, 91 percent agreed or strongly agreed that MHFA training was useful, and 87 percent agreed or strongly agreed that MHFA addressed topics that are important to their community. In contrast, 11 percent agreed or strongly agreed that training was too long, and only 6 percent agreed or strongly agreed that MHFA training was inconvenient (Figure 3.7).

**Figure 3.7. Respondents' Perceptions of MHFA Training That They Had Completed**

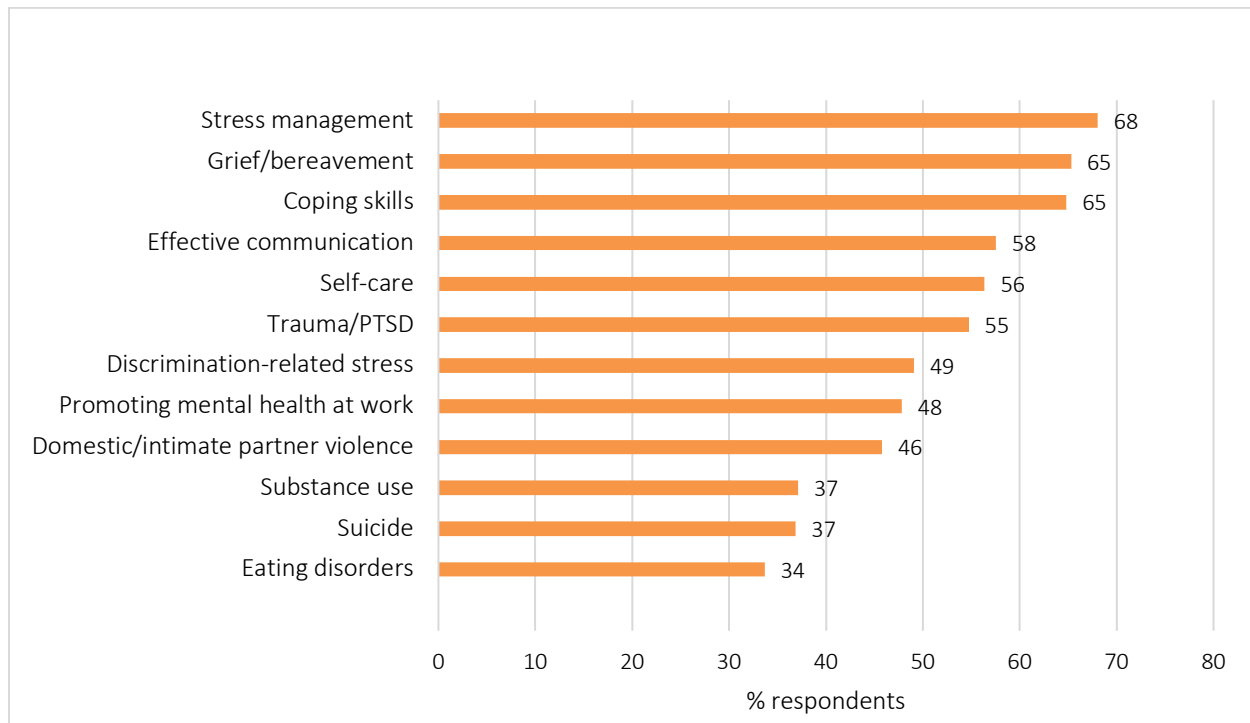


SOURCE: RAND MHFA web survey, summer 2021.

### *Perceptions of Future Training Needs*

Most respondents (75 percent) agreed or strongly agreed that they could use additional training to apply MHFA skills in their communities. Similarly, 79 percent of respondents agreed or strongly agreed with the statement “I could use additional training in other mental health skills/topics (different than what was covered in Mental Health First Aid).” Trainees were asked to indicate the mental health–related topics that they would be interested in learning more about in future trainings. As shown in Figure 3.8, stress management (68 percent), grief/bereavement (65 percent), and coping skills (65 percent) were the most highly endorsed topics of interest.

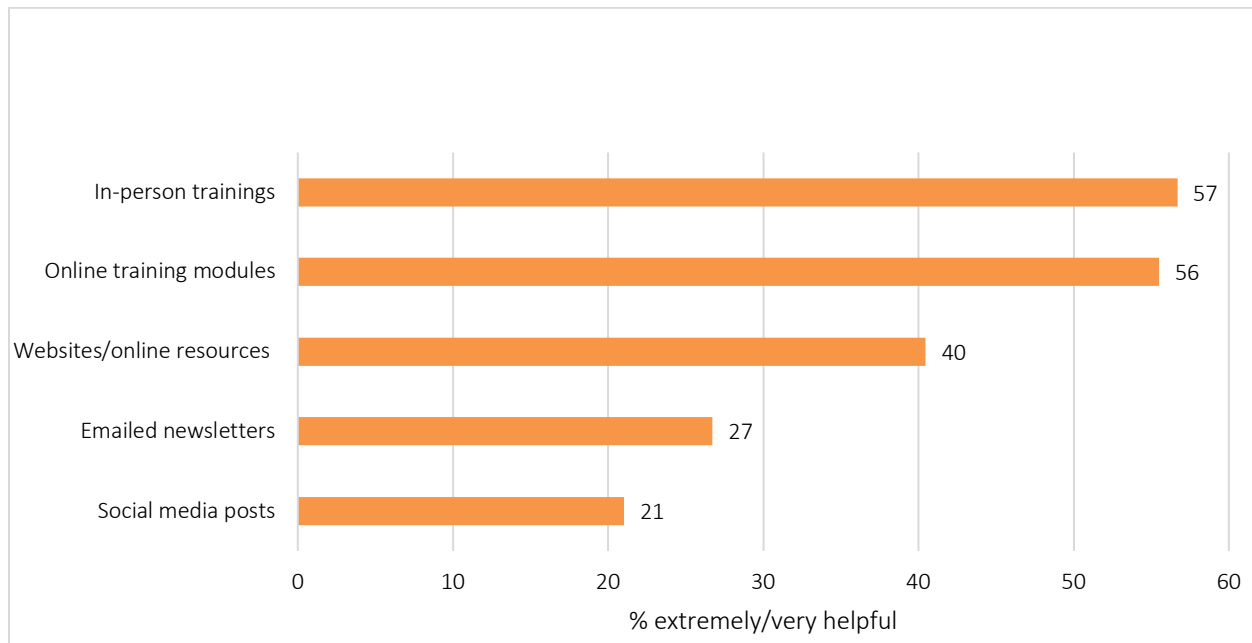
**Figure 3.8. Topics of Interest for Future Training**



SOURCE: RAND MHFA web survey, summer 2021.

Respondents were also asked about their preferred modes for receiving additional information about mental health topics. Overall, respondents endorsed online (56 percent) and in-person (57 percent) trainings as very or extremely helpful modes for receiving additional information about mental health–related topics (Figure 3.9).

**Figure 3.9. Preferred Modes for Receiving Information on Mental Health–Related Topics**



SOURCE: RAND MHFA web survey, summer 2021.

## Key Findings

### *Respondents Reported Routinely Using MHFA Skills to Help Others Well After Completing Training*

Most survey respondents endorsed occasionally or frequently applying knowledge and skills acquired through MHFA training to help others. For example, nearly 90 percent of respondents (87 percent) indicated that they occasionally or frequently engaged in active listening with someone in distress, and more than two-thirds (68 percent) occasionally or frequently offered first aid information and reassurance. Despite the fact that virtually all trainees had completed city-sponsored MHFA training more than one year prior to completing the survey (i.e., due to discontinuation of MHFA trainings coinciding with the COVID-19 pandemic), respondents continued to utilize these skills to help others when they encountered someone who was experiencing a mental health problem. For example, among individuals who had at least one recent encounter with someone with a mental health problem, more than 90 percent endorsed having used MHFA skills, such as active listening, providing reassurance and information, and encouraging professional help-seeking to assist someone with a mental health problem in the past six months.

Although direct comparisons to previous studies are challenging due to differences in study design and sample composition, MHFA trainees in prior studies have reported increases in self-reported application of helping behaviors following training. For example, Hadlaczky et al.,

2014, assessed the impact of MHFA on help-providing behaviors across nine studies included in their meta-analysis, which showed a consistent increase in helping behaviors in association with MHFA training. Other studies have similarly observed an increase in helping behaviors among MHFA trainees that increases in relation to the time elapsed since training (Carpini et al., 2021; Morgan, Ross, and Reavley, 2018). However, self-reported engagement in helping behaviors in this sample was notably higher compared with rates reported in other studies. For example, in a study of Australian government employees five months after MHFA training, approximately 39 percent of MHFA trainees reported providing “some” or “a lot” of help to others, and 29 percent endorsed having advised others to seek professional help for a mental health problem (Kitchener and Jorm, 2004). As discussed in more detail in Chapter 7, this pattern may be attributable to a number of factors that may have increased opportunities to provide help and/or frequency of helping, including differences in sample composition (e.g., the present sample includes a high proportion of trainees employed in the social service sector) and the time and context in which data were collected (i.e., during the COVID-19 pandemic), among other factors.

### *Respondents Applied MHFA Extensively and Broadly Across Their Social Networks*

Most respondents endorsed having recent opportunities to employ MHFA helping behaviors in their communities: More than 90 percent of survey respondents had contact with at least one person with a mental health problem in the past six months. This is slightly higher than rates of such contacts reported in other studies of MHFA trainees. For example, among government employees in Australia, Kitchener and Jorm, 2004, reported that approximately 72 percent of MHFA trainees endorsed having contact with someone with a mental health problem in the six months prior to completing training (and at a follow-up, approximately 73 percent endorsed a recent contact in the past five months).

Nearly all respondents in this study who had recent contact with individuals experiencing mental challenges applied key steps of the MHFA Action Plan. We estimated that a given respondent had applied MHFA to approximately four individuals in the past six months. To the best of respondents’ knowledge, more than 6,000 recipients of MHFA ultimately sought treatment within this six-month period of time.

MHFA’s reach within respondents’ social networks was broad. Of those with recent contact, 84 percent of respondents in this study reported using MHFA to help a friend or family member; nearly half used MHFA with a client or someone they provide services to as part of their job (48 percent), a coworker (46 percent), or a neighbor or acquaintance (45 percent); and one-third provided MHFA to a stranger or someone they did not know (33 percent). These findings are consistent with other studies showing that friends, family, peers (including fellow students in educational settings), or individuals supported through one’s occupation are commonly the recipients of MHFA (Ashoorian et al., 2019; Robertson et al., 2021; Zilnyk, 2010). Individuals experiencing suicidal ideation, one important target for MHFA interventions, have previously been shown to primarily disclose to family members and friends, along with mental health

providers for those engaged in mental health treatment (Encrenaz et al., 2012; Fulginiti et al., 2016). Although asking others about suicide was not endorsed as commonly as other helping behaviors, nearly one-third of respondents (30 percent) endorsed occasionally or frequently asking someone about suicide as a result of MHFA training. Moreover, among individuals who had a recent contact with someone experiencing a mental health challenge, over half of respondents (56 percent) endorsed talking to someone about suicide or self-harm. Findings from this current evaluation and the existing literature suggest that, regardless of whether MHFA training is implemented within the workplace or in community settings, trainees are likely to apply MHFA across social settings, wherever distressed individuals are encountered, including those at greatest risk for harm. In this respect, MHFA training may bolster suicide prevention efforts by better equipping trainees to assess and support individuals in their social networks.

### *Respondents Also Used MHFA Skills to Support Their Own Well-Being*

Over 80 percent of survey respondents endorsed occasionally or frequently using information from MHFA training to support their own well-being. Of significant note, approximately 40 percent indicated obtaining counseling or therapy for their mental or emotional health from a health professional as a result of MHFA training. This is particularly striking given the proportion of respondents who endorsed experiencing significant distress and/or perceived need for help in the year preceding the survey. Nearly 8 percent of respondents met criteria for serious psychological distress (based on self-reported symptom severity on the K6 screening tool, a widely used measure of nonspecific psychological distress; Kessler et al., 2003). Furthermore, approximately half of respondents (52 percent) endorsed thinking that they needed help for emotional or mental health problems in the past year. The rate of serious psychological distress is notably higher than previously observed rates in the general population. For example, based on data from a nationally representative panel survey of U.S. adults, 2014–2015, approximately 4 percent of individuals met criteria for serious psychological distress (Olfson et al., 2019). The higher rate of serious psychological distress is consistent with multiple studies that have described increased rates of mental health problems in relation to direct and indirect effects of the COVID-19 pandemic (Czeisler et al., 2021).

Encouragingly, of individuals who perceived a need for help, nearly 80 percent reported utilizing some type of mental health treatment. Among individuals with serious psychological distress (i.e., those individuals who may benefit from mental health treatment), more than 60 percent endorsed using mental health services in the past year. While the rate of accessing mental health services among respondents who endorsed serious psychological distress is consistent with published rates in this population, the high rate of treatment utilization among all respondents who perceived a need for help is greater than would be expected based on available literature on rates of mental health utilization across multiple mental health conditions. For example, Wang et al., 2005, evaluated treatment contact within one year of onset for individuals with a wide range of mental health conditions and found that only up to approximately 40

percent of individuals had received treatment within the year of condition onset. Though not originally developed with this purpose in mind, the positive impact of MHFA on trainees' own well-being has been documented in previous studies (Hung, Lam, and Chow, 2019; Kitchener and Jorm, 2004). Findings underscore the potential for the dual benefits that can be accrued for both those trained in MHFA and the recipients of MHFA.

*Increased Exposure to Mental Health–Related Training and Recency of MHFA Training Were Associated with a Greater Likelihood of Applying MHFA Skills, But Employer-Required MHFA Training Was Unrelated to Skill Application*

Attaining certification as a MHFA trainer, completing more than one MHFA course, and participating in other mental health–related training in addition to MHFA were all associated with greater confidence, knowledge of resources, and more frequent engagement in MHFA helping behaviors. Findings suggest that greater doses of either MHFA or non-MHFA training strengthen the propensity to intervene and support individuals experiencing mental health challenges. Respondents who worked in a mental health or social service occupation showed consistently higher ratings on confidence, knowledge of resources, and helping behaviors, compared with those in other job sectors. These findings indicate that individuals employed in service sectors outside of mental health and social services may have the greatest need and may be candidates for prioritization for MHFA training if resource constraints prohibit continued widespread dissemination.

Completing training three or more years ago was associated with both lower confidence in helping someone with a mental health problem and lower frequency of certain helping behaviors (i.e., listening to someone in distress, assisting someone to seek professional help), compared with training that had occurred within the past two years. Recency of training, however, was not associated with knowledge of resources or providing first aid information and reassurance to persons in distress. Thus, certain MHFA skills may be better maintained than others with the passage of time. Although data are currently lacking on the impact of follow-up or refresher trainings on MHFA skill retention or application (Morgan et al., 2020), refresher trainings may help address such gaps and could further be tailored to target areas in need of reinforcement.

Whether MHFA training was mandated as a job requirement did not appear to make a difference with respect to respondents' knowledge of resources or engagement in helping behaviors. This is consistent with prior research that found positive outcomes for MHFA training in a variety of occupational settings, both in situations where training was required or optional (Carpini et al., 2021; Narayanasamy et al., 2018). An extensive literature on organizational training shows that predictors of successful training initiatives include organizational preparation prior to training, organizational follow-up and reinforcement after training, trainee motivation, supportive work climate, and leader reinforcement (Salas et al., 2012). To the extent that such factors are present during workplace initiatives to disseminate MHFA training, the effects of mandating MHFA training as part of a job requirement may not impact outcomes.

### *Respondents Endorsed Community Mental Health Stigma as a Problem*

Although most respondents did not endorse beliefs that mental health problems reflect personal weakness (i.e., suggesting low personal stigma), perceptions of community attitudes toward mental health were less favorable (i.e., suggesting higher perceived public stigma). Approximately half of respondents agreed that most individuals in their community felt that seeking mental health treatment is a sign of personal failure and “that most people in their community think less of someone with a history of mental health problems,” suggesting that mental health stigma in respondents’ communities remains high. However, an overwhelming majority (84 percent) of respondents endorsed frequently or occasionally correcting misperceptions about mental health and mental illness when they encountered them as a result of MHFA training. This suggests that, in addition to using MHFA skills to help others and support their own well-being, respondents may be taking actions to combat stigma and related misconceptions about mental health in their communities. While MHFA has been associated with reduced personal stigma across multiple studies (Hadlaczky et al., 2014; Morgan, Ross, and Reavley, 2018; Ng et al., 2021), its impact on public stigma and perceived public stigma is less clear. However, given MHFA’s positive effect on mental health literacy and the correlation between mental health literacy and personal and perceived public stigma (Grant, Bruce, and Batterham, 2016), MHFA may be an effective means of further mitigating community mental health stigma.

### *Respondents May Benefit from Future Mental Health Trainings to Address Potential Gaps in Knowledge and Support Continued Application of Skills*

Most trainees who completed the survey endorsed strong knowledge of mental health treatment resources and confidence in helping others with a mental health problem. For example, approximately 77 percent of respondents endorsed feeling fairly or very confident in their ability to help someone with a mental health problem. This is comparable to ratings of post-training confidence or self-efficacy to help others observed in other studies of MHFA training. For example, in a study of MHFA training with Australian government employees (Kitchener and Jorm, 2004), approximately 75 percent of MHFA trainees endorsed feeling moderately to extremely confident in their ability to help someone with a mental health problem at a six-month follow-up (versus 57 percent in a control group of non-trainees).

Most survey respondents in this study (approximately 90 percent) correctly identified hallmark symptoms of depression in response to a standard vignette, which is consistent with performance observed in other MHFA studies. For example, in the Reavley et al., 2018, study of online and blended MHFA training, 93 percent of trainees correctly identified symptoms of depression after completing online MHFA training.

However, performance in this study on other training-related targets indicated potential room for improvement. For example, on a test of MHFA knowledge corresponding to general mental

health information emphasized in the MHFA training manual (Kitchener, Jorm, and Kelly, 2017) and adapted from knowledge tests used in prior studies of MHFA training (e.g., Reavley et al., 2018), the sample averaged 50 percent correct. By comparison, in a recent study of online (e-learning) and combined in-person and online (blended) MHFA training, Reavley et al., 2018, observed post-training MHFA knowledge scores between 72 percent (e-learning only) and 73 percent (blended). MHFA knowledge scores in the current study align more closely with baseline (pre-training) scores observed in Reavley et al., 2018 (between 45 and 47 percent). These differences may be attributable to multiple factors, including differences in training modality (in-person versus blended), differences in sample composition, differences in item wording and response scales, and the time lag between completing training and completing the MHFA knowledge test. For example, the knowledge test in this study used a Likert-type response scale, which was dichotomized for scoring, as opposed to a binary “true or false” response. In the Reavley et al., 2018, study, median length between baseline and post-training follow-up was 85 days, whereas time since completing MHFA training exceeded one year for nearly all participants in the study. It is possible that, over time, recall of specific mental health facts discussed in MHFA training may diminish, whereas trainees’ ability to identify individuals in distress and their confidence to provide first aid–level support may remain high.

Our findings broadly suggest that many MHFA trainees could benefit from follow-up or refresher trainings and/or access to informational resources to sustain knowledge acquired in MHFA training. Such opportunities to continue to develop skills may help to ensure that trainees remain well-equipped to provide assistance to others. This may be particularly important given the routine, ongoing use of MHFA skills reported by survey respondents.

Consistent with this, respondents indicated positive attitudes toward MHFA training and desire for future trainings. Respondents indicated favorable views of MHFA training with respect to length, usefulness, and convenience, suggesting that MHFA training was highly acceptable to respondents. Most respondents also indicated that they would benefit from additional training in mental health topics such as stress management and grief/bereavement through in-person or virtual (online) channels. Continued efforts to support the availability of such resources could benefit MHFA participants—and future trainees—in the ongoing application of MHFA and related skills to help others in their communities.

## Chapter 4. Survey Results Among Subset of City Agency Employee Respondents

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Because of OCMH's focus on changing the culture of government agencies, providers, and CBOs in their delivery of services, city agency staff were prioritized for MHFA training. This chapter is dedicated to understanding the impact of MHFA training among the city workforce by focusing analyses on the subset of survey respondents who reported being employed by a city government agency (i.e., city agency employee respondents;  $n = 1,084$ ). This chapter addresses the following research questions:

- How do city agency trainees differ from community-based trainees with respect to use of MHFA skills?
- Among city agency trainees, what agency characteristics are associated with use of MHFA skills?
- How do city agency trainees perceive workplace mental health climate and compare with community-based trainees?
- What are perceived needs for mental health training among city agency employees?

Before addressing the research questions, we first provide a description of city agencies represented by survey respondents, along with dimensions of city agencies that were used to understand differences in the use of MHFA and other related targets.

### Description of Agencies Represented by City Employee Sample

As described in Chapter 3, approximately 41 percent ( $N = 1,084$ ) of survey respondents were affiliated with a city agency. The effective survey response rate based on invitations sent to city agency-affiliated trainees ( $n = 17,890$ ) was approximately 6.2 percent. Findings may not be generalizable to all city agency-affiliated trainees. The distribution of city agency affiliations reported by survey respondents is shown in Table 4.1. The most commonly endorsed affiliations were as follows: Department of Education (20 percent), DOHMH (16 percent), Human Resources Administration (14 percent), Department of Homeless Services (11 percent), City University of New York (8 percent), and NYC Health and Hospitals (8 percent). All other agency affiliations were endorsed by less than 5 percent of the sample. Approximately 3 percent of the sample endorsed affiliations with multiple city agencies.

**Table 4.1. City Agency Affiliations Represented by Employee Sample (N = 1,084)**

<b>Agency</b>	<b>Percentage</b>
Department of Education	21.86
Department of Health and Mental Hygiene	17.07
Human Resources Administration	14.48
Department of Homeless Services	11.62
City University of New York	8.30
NYC Health and Hospitals	8.21
Police Department	4.24
Administration for Children's Services	2.95
Department of Youth and Community Development	2.03
Department of Parks & Recreation	1.66
Housing Authority	1.57
Mayor's Office	1.75
Department for the Aging	1.29
Taxi and Limousine Commission	1.29
Department of Veterans' Services	<1.0 <sup>a</sup>
Department of Corrections	<1.0 <sup>a</sup>
Department of Housing Preservation and Development	<1.0 <sup>a</sup>
Department of Information Technology & Telecommunications	<1.0 <sup>a</sup>
Department of Probation	<1.0 <sup>a</sup>
Department of Transportation	<1.0 <sup>a</sup>
Fire Department of New York	<1.0 <sup>a</sup>
Office of Labor Relations	<1.0 <sup>a</sup>
Office of the Chief Medical Examiner	<1.0 <sup>a</sup>
Office to End Domestic and Gender-Based Violence	<1.0 <sup>a</sup>
Multiple agencies	3.2

SOURCE: RAND MHFA Trainee survey, summer 2021.

<sup>a</sup> Exact percentage not reported due to cell size of  $n \leq 10$ .

## City Agency Dimensions

To better understand how the impact of MHFA may vary depending on certain organizational characteristics such as *agency size*, *training dose* (i.e., degree of staff reached), and *service type*, we analyzed whether use of MHFA skills and related targets varied along these dimensions. We categorized each agency according to size, training dose, and service type (Table 4.2). Categorizations were based on available administrative data and consultation with DOHMH (see Chapter 2). Briefly, of the 26 agencies represented by survey respondents, 14 were

categorized as large (more than 4,000 employees), four as medium (between 1,000 and 4,000 employees), and eight as small (less than 1,000 employees; reference category). With respect to MHFA training dose, eight agencies were categorized as high, 11 as medium, and seven as low. In consultation with DOHMH, agencies were also categorized by primary service type(s) according to the following groups: health, community, social, or human services (n = 10); housing/transportation/infrastructure (n = 6); education (n = 2); public safety/criminal justice (n = 5); and other (n = 3).

**Table 4.2. Dimensions of City Agencies**

<b>Agency</b>	<b>Size</b>	<b>MHFA Training Dose</b>	<b>Service Type</b>
Administration for Children's Services (ACS)	Large	Medium	Health, community, social, or human services
City University of New York (CUNY)	Large	High	Education
Department for the Aging (DFTA)	Small	Medium	Health, community, social, or human services
Department of Corrections (DOC)	Large	High	Public safety/criminal justice
Department of Education (DOE)	Large	Low	Education
Department of Health and Mental Hygiene (DOHMH)	Large	High	Health, community, social, or human services
Department of Homeless Services (DHS)	Large	High	Health, community, social, or human services
Department of Housing Preservation and Development	Medium	Low	Housing/transportation/infrastructure
Department of Parks & Recreation (DPR)	Large	Medium	Housing/transportation/infrastructure
Department of Veterans' Services (DVS)	Small	High	Health, community, social, or human services
Department of Youth and Community Development (DYCD)	Small	High	Health, community, social, or human services
Housing Authority (NYCHA)	Large	Medium	Housing/transportation/infrastructure
Human Resources Administration (HRA)	Large	Medium	Health, community, social, or human services
Office of Labor Relations	Large	Medium	Other
Police Department (NYPD)	Large	Medium	Public safety/criminal justice
Department of Information Technology & Telecommunications (DoITT)	Medium	Low	Housing/transportation/infrastructure
Department of Probation (DOP)	Medium	Medium	Public safety/criminal justice
Department of Transportation (DOT)	Large	Low	Housing/transportation/infrastructure
Fire Department of New York (FDNY)	Large	Low	Public safety/criminal justice
Mayor's Office (MO)	Medium	Medium	Other

<b>Agency</b>	<b>Size</b>	<b>MHFA Training Dose</b>	<b>Service Type</b>
NYC Health and Hospitals (HHC)	Large	Low	Health, community, social, or human services
Office to End Domestic and Gender-Based Violence (ENDGBV)	Small	High	Health, community, social, or human services
Office of the Chief Medical Examiner	Small	Low	Health, community, social, or human services
Office of Emergency Management (OEM)	Small	Medium	Public safety/criminal justice
Small Business Services (SBS)	Small	Medium	Other
Taxi and Limousine Commission (TLC)	Small	High	Housing/transportation/infrastructure
Multiple agency affiliations	Other	Other	Other

SOURCES: Agency size and training dose categories are based on DOHMH administrative data and screening data obtained by DOHMH and NYC Opportunity from agency leadership. Service type categories were based on screening data from agency leadership and consultation provided by DOHMH and NYC Opportunity.

NOTES: Agency size was categorized as small (less than 1,000 employees), medium (1,000 to 4,000 employees), and large (more than 4,000 employees). Training dose was defined as the percentage of agency staff trained in MHFA with the categories being low (10 percent or less), medium (11 to 49 percent), and high (50 percent or greater).

## Differences in Use of MHFA Among City Agency Employee Respondents and Comparisons with Community-Based Trainees

In this section, we first compare city agency employee respondents' use of MHFA skills relative to community-based trainee respondents. As in Chapter 3, we focus on frequency of engaging in specific helping behaviors (i.e., actively and compassionately listened to someone in distress; offered a distressed person basic “first aid”—level information and reassurance; assisted a person who was dealing with a mental health problem or crisis to seek professional help), as well as confidence in helping others with mental health problems and knowledge of referral/treatment resources. In addition, because a guiding principle of OCMH was to change delivery of city services to clients, we report on city agency employee respondents' recent application of MHFA helping behaviors with clients and other individuals in their social networks.

Finally, we assess differences in use of MHFA skills among city agency employee respondents by agency affiliations and agency characteristics. To address questions related to differences in MHFA training-related outcomes across city agencies among the city employee subsample, we used logistic regression analyses to test for differences in outcomes by city agency affiliation and the following agency characteristics: agency size, service type, and MHFA training dosage. Similar to Chapter 3, we only report on specific group-level contrasts (e.g., comparisons between specific agencies, comparisons between large versus small agencies) for instances in which a group variable main effect (agency affiliation, size, service type, MHFA training dosage) is statistically significant at  $p < 0.05$  and after correction for multiple statistical tests.

## Use of MHFA Skills

Self-reported frequency of engaging in specific MHFA helping behaviors among city agency employee respondents is shown in Table 4.3. Patterns of helping behaviors among city agency employee respondents were generally similar to those observed in the full sample (described in Chapter 3). Most respondents endorsed frequently or occasionally engaging in a range of helping behaviors as a result of MHFA training. For example, a majority of city agency employee respondents (85 percent) endorsed frequently or occasionally engaging in active listening to someone in distress (compared with 87 percent in the full sample). Similar to the full sample, city agency employee respondents' least frequently endorsed helping behavior was asking about suicidal ideation: 30 percent of city employee respondents reported frequently or occasionally asking someone about suicide (identical to the rate observed in the full sample).

Logistic regression analyses indicated few significant differences for city agency employee respondents and community-based trainee respondents with respect to confidence in helping others and utilization of MHFA skills. However, compared with community-based trainee respondents, city agency employee respondents were significantly less likely to agree that they know where to refer individuals with a mental health problem (OR = 0.73, 95% CI 0.61–0.88,  $p = 0.0007$ ) and were less likely to report occasionally or frequently engaging in active listening with someone in distress (OR = 0.73, 95% CI 0.58–0.92,  $p = 0.0074$ ).

**Table 4.3. Frequency of Using MHFA Helping Behaviors Among City Agency Employee Respondents**

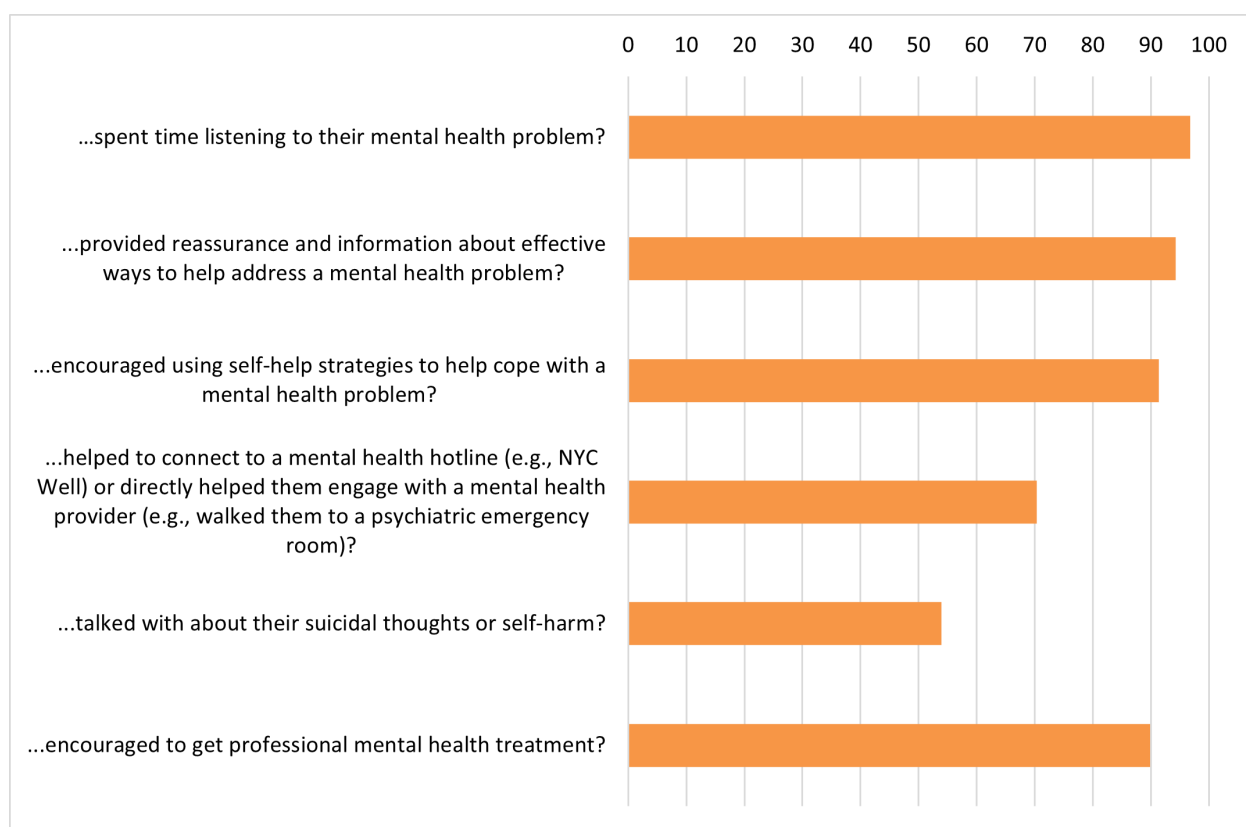
<i>As a result of MHFA training, I have...</i>	Percentage			
	Frequently	Occasionally	Rarely	Never
Reached out to someone who may be dealing with a mental health problem or crisis	19.98	46.25	15.91	17.85
Asked a person whether they are considering killing themselves	7.77	22.02	28.95	41.26
Actively and compassionately listened to someone in distress	51.71	33.43	9.51	5.36
Offered a distressed person basic “first aid” level information and reassurance about mental health problems	22.37	44.55	18.58	14.51
Assisted a person who was dealing with a mental health problem or crisis to seek professional help	24.54	38.80	20.28	16.39
Assisted a person who was dealing with a mental health problem or crisis to connect with community, peer, and personal supports	21.28	41.63	21.28	15.82

SOURCE: RAND MHFA web survey, summer 2021.

## Recent Application of MHFA Skills

Approximately 87 percent of city agency employee respondents endorsed having had contact with at least one individual with a mental health problem in the past six months, which was similar to the rate observed in the full sample (90 percent). Among those individuals who had at least one such contact, city agency employee respondents reported applying multiple MHFA skills with others in the past six months (Figure 4.1). Patterns of recent skill use were similar for city agency employee respondents compared with community-based trainee respondents, with one exception: City agency employee respondents were significantly more likely than community-based trainee respondents to endorse having helped directly connect someone to a mental health hotline, such as NYC Well, or to a mental health provider (OR = 1.35, 95% CI 1.14–1.61).

**Figure 4.1. Percentage of City Agency Employee Respondents Who Applied MHFA in the Past Six Months**

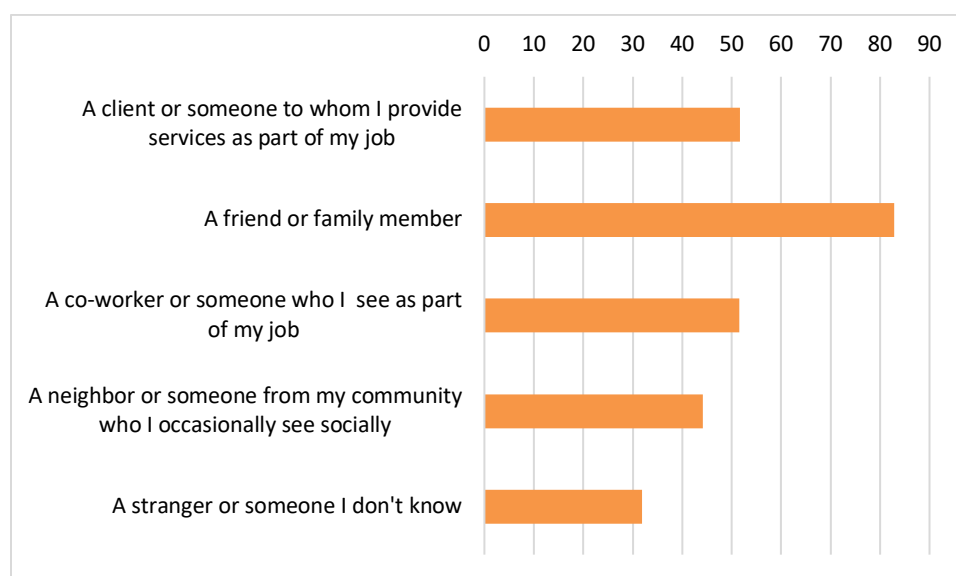


SOURCE: RAND MHFA web survey, summer 2021.

City agency employee respondents differed from community-based trainee respondents with respect to the individuals they helped by applying MHFA skills. Figure 4.2 shows the extent to

which city agency employee respondents endorsed use of MHFA skills with clients and other individuals in their social networks.

**Figure 4.2. Percentage of City Agency Employee Respondents Who Applied MHFA to the Following Types of Individuals in Their Social Network in the Past Six Months**



SOURCE: RAND MHFA web survey, summer 2021.

Compared with respondents who were not affiliated with a city agency, city agency employee respondents were significantly more likely to endorse using MHFA skills to help a client (46 percent versus 52 percent; OR = 1.27, 95% CI 1.08–1.49,  $p = 0.004$ ); they were also more likely to endorse using MHFA skills to help a coworker (43 percent versus 52 percent; OR = 1.39, 95% CI 1.18–1.64,  $p = 0.0001$ ). City agency employee respondents and nonaffiliated respondents did not differ in recent use of MHFA skills to support friends and family ( $p = 0.23$ ), to help neighbors or other members of their communities ( $p = 0.65$ ), or to help someone they did not know ( $p = 0.45$ ).

Because city agency employees and community-based trainees may differ in their opportunities to use MHFA skills as a consequence of occupation type (e.g., application of skills with clients in social services or health care settings), we also explored whether groups differed by self-reported occupation type to help contextualize findings related to use of MHFA skills with different types of individuals. City agency employees and community-based trainees were generally similar with respect to the breadth of occupation types endorsed by respondents, although groups differed on the percentages of trainees affiliated with specific fields ( $X^2_{df=6} = 241.23$ ,  $p < 0.0001$ ). Compared with community-based trainees, a larger percentage of city agency employees endorsed working in mental health and social services (27 percent of city

employees versus 19 percent of community-based trainees), education (27 percent versus 17 percent), and law enforcement/public safety services (9 percent versus 2 percent), and a smaller percentage of city agency employees endorsed working in faith-based settings (< 1 percent versus 5 percent), health care services (11 percent versus 16 percent), and other occupation types (21 percent versus 26 percent) and having no current applicable affiliation at the time of the survey (4 percent versus 15 percent). Additionally, approximately 12 percent of city agency employees endorsed an employment affiliation with a CBO compared with 26 percent of community-based trainees.

### *Use of MHFA by Agency Affiliation and Agency Characteristics*

Differences in MHFA training-related outcomes by agency affiliation and agency characteristics are shown in Appendix Table B.4 (available at [www.rand.org/t/RR1818-1](http://www.rand.org/t/RR1818-1)).

#### **Agency Affiliation**

After accounting for multiple comparisons, statistically significant differences by agency affiliation were observed with respect to respondents' reported confidence in helping others with a mental health problem ( $p = 0.01$ ), such that respondents affiliated with City University of New York ( $OR = 0.3$ , 95% CI 0.14–0.62,  $p = 0.001$ ) were significantly less likely to report feeling “very confident” compared with respondents affiliated with DOHMH (reference group).

#### **Agency Size, Training Dose, and Service Type**

After adjustment for multiple comparisons, agency size (based on estimated total number of employees) and agency MHFA training dose (based on estimated percentage of employees who received MHFA training) were not significantly associated with helping behaviors or other training-related outcomes of interest.

Agency service type was significantly associated with confidence ( $p = 0.001$ ) and engagement in helping behaviors (active listening:  $p = 0.02$ ; assisting others in seeking professional help:  $p = 0.02$ ). Compared with individuals affiliated with agencies that provide health, community, and social/human services (reference category), respondents were significantly less likely to endorse being very confident in helping others with a mental health problem if they were affiliated with education services ( $OR = 0.59$ , 95% CI 0.43–0.81,  $p = 0.001$ ) or housing, transportation, or infrastructure service agencies ( $OR = 0.46$ , 95% CI 0.24–0.88,  $p = 0.02$ ). With respect to engagement in helping behaviors, individuals affiliated with organizations that provide “other” services were significantly less likely than those in the reference category to occasionally or frequently engage in actively listening to someone with a mental health problem ( $OR = 0.27$ , 95% CI 0.11–0.64,  $p = 0.003$ ) or to assist others in seeking professional help ( $OR = 0.35$ , 95% CI 0.15–0.82,  $p = 0.02$ ). Service type was not associated with knowledge of referral resources ( $p = 0.97$ ) or with providing MHFA information and reassurance to individuals in distress ( $p = 0.20$ ).

### *Recent Opportunities to Use of MHFA Skills by Agency Characteristics*

To help understand differences in helping behaviors by affiliated agency characteristics, we explored whether respondents' opportunities to apply MHFA skills (i.e., likelihood of encountering at least one person with a mental health problem in the past six months) varied in relation to agency characteristics. Agency affiliation was not associated with likelihood of recent exposure to someone with a mental health problem ( $p = 0.53$ ), nor was agency size ( $p = 0.36$ ), MHFA training dose ( $p = 0.16$ ), or service type ( $p = 0.82$ ).

### *Recent Use of MHFA Skills to Help a Client by Agency Characteristics*

We also explored whether city agency employee respondents' recent use of MHFA skills to help a client varied in relation to agency characteristics. Use of MHFA skills to help a client was significantly associated with agency affiliation ( $p < 0.0001$ ), MHFA training dose ( $p = 0.0003$ ), and service type ( $p = 0.0001$ ). Agency size was not associated with likelihood of utilizing MHFA skills with a client ( $p = 0.07$ ).

Compared with respondents affiliated with DOHMH, individuals employed by the Department of Homeless Services were significantly more likely to endorse recently applying MHFA skills to help a client ( $OR = 4.21$ , 95% CI 2.34–7.59,  $p < 0.0001$ ), whereas those in Human Resources Administration were significantly less likely ( $OR = 0.60$ , 95% CI 0.37–0.97,  $p = 0.04$ ). With respect to MHFA training dose, respondents who were affiliated with high-dose agencies were significantly more likely to endorse using MHFA skills to help a client compared with those in low-dose agencies ( $OR = 1.49$ , 95% CI 1.09–2.03,  $p = 0.01$ ). Agency service type was associated with recent use of MHFA skills to help a client: Compared with respondents in health and social services agencies, those who worked in agencies focused on education ( $OR = 0.65$ , 95% CI 0.49–0.88,  $p = 0.005$ ), housing, transportation, and infrastructure ( $OR = 0.33$ , 95% CI 0.18–0.61,  $p = 0.0003$ ), public safety/criminal justice ( $OR = 0.54$ , 95% CI 0.30–0.97,  $p = 0.04$ ), or another service type ( $OR = 0.23$ , 95% CI 0.07–0.71,  $p = 0.01$ ) were less likely to use MHFA skills with a client.

### *Recent Use of MHFA Skills to Directly Connect Someone to Mental Health Services by Agency Characteristics*

We explored city agency employee respondents' recent use of MHFA skills to directly connect someone to mental health services in relation to agency characteristics. Recent use of MHFA skills to directly connect someone to mental health services was not associated with agency affiliation ( $p = 0.12$ ) or service type ( $p = 0.11$ ). Agency size was marginally associated with directly connecting someone to a mental health service ( $p = 0.05$ ; although group contrasts for large [ $p = 0.18$ ] and medium-sized [ $p = 0.15$ ] agencies [versus small] were not significant). MHFA training dose showed a main effect for likelihood of directly connecting someone to

services ( $p = 0.01$ ), although contrasts with the reference group (low dose) were not significant (high versus low:  $p = 0.12$ ; medium versus low:  $p = 0.15$ ).

## Perceptions of Workplace Mental Health Climate

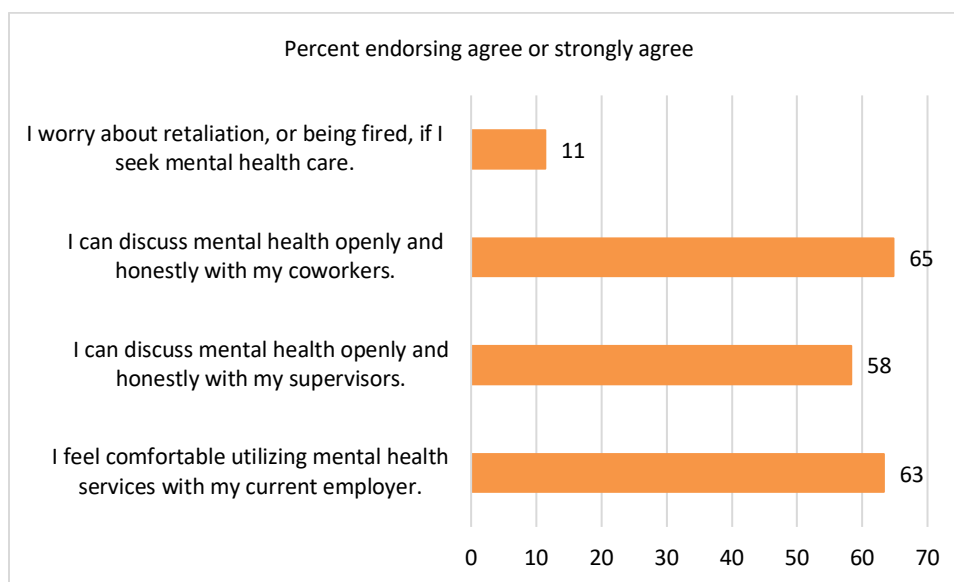
Organizational factors such as workplace culture surrounding mental health and service utilization are recognized as important, modifiable determinants of employees' well-being and mental health (LaMontagne, D'Souza, and Shann, 2012; LaMontagne et al., 2014). Assessing MHFA respondents' perceptions of workplace climate toward mental health can yield insights into potential areas for improvement and city agency employee needs across city agencies. We first used logistic regression to explore differences in respondents' ratings of workplace mental health climate across city agency employee respondents compared to community-based trainee respondents. Next, among city agency employee respondents, we examined differences across city agencies and agency groups.

Workplace mental health climate was assessed using the following indicators:

- perceived ability to discuss mental health openly and honestly with coworkers
- perceived ability to discuss mental health openly and honestly with supervisors
- comfort using mental health services through one's employer
- fear of employer retaliation or being fired for seeking mental health care.

Figure 4.3 shows city agency employee respondents' responses on indicators of workplace mental health climate. A majority of respondents agreed that they could discuss mental health openly and honestly with coworkers (65 percent) and supervisors (58 percent). Nearly two-thirds of city agency employee respondents (63 percent) agreed that they would feel comfortable using mental health services through their employer. In contrast, fewer city agency employee respondents—but notably more than one in ten (11 percent)—indicated concerns about employer retaliation or fear of being fired if they were to seek mental health care.

**Figure 4.3. City Agency Employee Respondent Indicators of Workplace Mental Health Climate**



SOURCE: RAND MHFA web survey, summer 2021.

In the pooled survey sample, city agency employee respondents differed from community-based trainee respondents on some indicators of perceived workplace mental health climate. Compared with community-based trainee respondents, city agency employee respondents were more likely to agree that they could discuss mental health openly and honestly with coworkers (OR = 1.35, 95% CI 1.15–1.59,  $p = 0.0002$ ) and with supervisors (OR = 1.35, 95% CI 1.16–1.59,  $p = 0.0001$ ). City agency employee respondents were also significantly more likely to agree that they felt comfortable utilizing mental health services with their current employer compared with respondents who were not affiliated with a city agency (OR = 1.51, 95% CI 1.28–1.75,  $p < 0.0001$ ). City agency employee respondents and community-based trainee respondents were similar with respect to endorsing worries about employer retaliation for seeking mental health care ( $p = 0.06$ ).

#### *Differences by Agency Affiliation and Agency Characteristics*

Among the subsample of city agency employee respondents, we assessed differences in perceptions of workplace climate in relation to agency affiliation and agency groupings. Few differences emerged with respect to workplace mental health climate across city agencies. There were no main effects of city agency affiliation on any workplace climate outcomes examined (all  $p$ 's  $> 0.40$ ). Similarly, no significant main effects were observed with respect to agency size (all  $p$ 's  $> 0.22$ ) or service type (all  $p$ 's  $> 0.13$ ).

Some differences in workplace climate emerged with respect to agency MHFA training dose, in terms of perceived ability to discuss mental health openly and honestly with supervisors ( $p =$

0.04) and coworkers ( $p = 0.0006$ ). Individuals affiliated with medium-dose agencies were significantly less likely to agree or strongly agree with the statement “I can discuss mental health openly and honestly with my supervisors” ( $OR = 0.67$ , 95% CI 0.49–0.91,  $p = 0.01$ ) compared with respondents affiliated with low-dose agencies (reference category). Similarly, compared with low-dose agencies, respondents affiliated with medium-dose agencies were less likely to agree or strongly agree that they could discuss mental health openly and honestly with coworkers ( $OR = 0.59$ , 95% CI 0.42–0.82,  $p = 0.002$ ).

## Perceived Need for Additional Training

To assess the extent to which city agency employee respondents may vary with respect to need for additional mental health-related training, we also examined perceptions of need for (1) additional MHFA training to apply skills in the workplace and (2) additional training that differs from what was covered in MHFA.

As in the full sample, a majority of respondents endorsed perceived need for additional training. Across all city agency employee respondents, approximately 73 percent of respondents agreed or strongly agreed that they could use additional training to apply MHFA skills in the workplace. Similarly, 77 percent agreed or strongly agreed with the statement “I could use additional training in other mental health skills/topics (different than what was covered in Mental Health First Aid).”

### *Differences by Agency Affiliation and Agency Characteristics*

After accounting for multiple comparisons, agency affiliation was not statistically significantly associated with perceptions of need for additional training to apply MHFA skills at work or in other mental health skills or topics different from what was covered in MHFA training.

After accounting for multiple comparisons, agency size and MHFA training dose were not associated with differences in perceived need for additional training in applying MHFA in the workplace or other mental health topics.

Perceptions of additional training needs did significantly differ by agency service type (training to apply MHFA in the workplace,  $p = 0.0004$ ; other non-MHFA topics,  $p = 0.0216$ ). Compared with individuals in health, community, social, or human services, respondents in education-focused agencies were significantly more likely to endorse perceived need for additional training in how to apply MHFA in the workplace ( $OR = 2.17$ , 95% CI 1.54–3.05,  $p < 0.001$ ) and in other mental health topics not covered in MHFA ( $OR = 1.63$ , 95% CI 1.14–2.32,  $p = 0.007$ ). Table 4.4 summarizes differences in ratings of perceived need for additional trainings by agency affiliation and characteristics.

**Table 4.4. Differences in Perceived Future Training Needs by Agency Affiliation and Characteristics**

	Need Additional Training to Apply MHFA Skills at Work <sup>a</sup>	Need Additional Training in Other Mental Health Skills/Topics <sup>b</sup>
	Main effect p-value Group contrasts (OR, 95% CI)	
Agency affiliation	p = 0.02 <sup>†</sup>	p < 0.05 <sup>†</sup>
Department of Health and Mental Hygiene (DOHMH)	--	--
Administration for Children's Services (ACS)	--	--
City University of New York (CUNY)	--	--
Department for the Aging (DFTA)	--	--
Department of Corrections (DOC)	--	--
Department of Education (DOE)	--	--
Department of Homeless Services (DHS)	--	--
Department of Housing Preservation and Development	--	--
Department of Information Technology & Telecommunication	--	--
Department of Parks & Recreation (DPR)	--	--
Department of Probation (DOP)	--	--
Department of Transportation (DOT)	--	--
Department of Veterans' Services (DVS)	--	--
Department of Youth and Community Development (DYCD)	--	--
Fire Department of New York (FDNY)	--	--
Housing Authority (NYCHA)	--	--
Human Resources Administration (HRA)	--	--
Mayor's Office (MO)	--	--
NYC Health and Hospitals (HHC)	--	--
Office of Labor Relations	--	--
Office of the Chief Medical Examiner	--	--
Office to End Domestic and Gender-Based Violence (ENDGBV)	--	--
Police Department (NYPD)	--	--
Small Business Services (SBS)	--	--
Taxi and Limousine Commission (TLC)	--	--
Multiple agencies	--	--
Agency size	p = 0.40	p = 0.13
Small	--	--
Medium	--	--
Large	--	--
MHFA training dose	p = 0.01	p = 0.05
Low	(ref)	(ref)
High	0.62 (0.44, 0.87)**	0.65 (0.46, 0.92)*
Medium	0.65 (0.46, 0.94)*	0.81 (0.55, 1.19)

Agency service type	p = 0.0004	p = 0.02
Education	<b>2.17 (1.54, 3.05)***</b>	<b>1.63 (1.14, 2.32)**</b>
Health, community, social, or human services	(ref)	(ref)
Housing or transportation/infrastructure	1.11 (0.63, 1.95)	1.17 (0.63, 2.18)
Other	0.88 (0.37, 2.10)	0.51 (0.22, 1.20)
Public safety/criminal justice	1.34 (0.74, 2.44)	0.87 (0.48, 1.56)

SOURCE: RAND MHFA web survey, summer 2021.

NOTE: This table shows estimates of associations between agency affiliation and agency group characteristic variables and respondents' self-perceived future training needs.

<sup>a</sup> "I could use additional training to apply Mental Health First Aid skills in my workplace" (response range strongly disagree to strongly agree). Dichotomized for analysis as 1 = agree or strongly agree, 0 = strongly disagree, disagree, or neither agree nor disagree.

<sup>b</sup> "I could use additional training in other mental health skills/topics (different from what was covered in mental health first aid training)" (response range strongly disagree to strongly agree). Dichotomized for analysis as 1 = agree or strongly agree, 0 = strongly disagree, disagree, or neither agree nor disagree.

(not estimated) = contrast could not be estimated due to small cell size or complete/quasicomplete separation.

(--) denotes no follow-up contrast test to nonsignificant overall main effect.

Bolded values indicate statistically significant effects at  $p < 0.05$  and after correction for multiple tests.

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

<sup>†</sup> Effects not statistically significant after adjusting for multiple tests using Benjamini-Hochberg FDR correction.

## Key Findings

### *City Agency Employee Respondents Showed More Favorable Ratings with Respect to Workplace Mental Health Climate, Compared with Community-Based Trainee Respondents*

Among those affiliated with a city agency, more than half of respondents indicated that they felt comfortable discussing mental health with coworkers (65 percent) and supervisors (58 percent). Similarly, most indicated that they would feel comfortable using mental health services through their employer (63 percent). These ratings are comparable to those observed in a 2020 American Psychiatric Association (APA) public opinion poll of U.S. adults (American Psychiatric Association, 2020), in which approximately two-thirds of respondents agreed that they could discuss mental health in the workplace and would feel comfortable using mental health services through their employer. Approximately one in ten (11 percent) city agency employee respondents in this study endorsed worries about retaliation or being fired for seeking mental health care. Although this indicates room for improvement, the proportion of survey respondents endorsing such concerns is considerably lower than that observed in the 2020 APA public opinion poll (43 percent of those respondents agreed that they worry about retaliation or being fired for seeking mental health care).

Respondents affiliated with city agencies differed significantly from community-based trainee respondents with respect to ratings of workplace mental health climate. Consistent with this, city agency employee respondents were also significantly more likely than community-based trainee respondents to endorse using MHFA skills to help their coworkers in the past six

months. Although few studies report on the types of individuals with whom trainees utilize MHFA skills, some studies have shown that educators trained in (youth) MHFA endorse utilizing MHFA skills to help students as well as their colleagues (Jorm et al., 2010).

*In Addition to Workplace-Specific Initiatives Undertaken as Part of OCMH, a Plethora of Initiatives Were Implemented Across and Within City Populations*

It is highly plausible that city agency workers who were exposed directly or indirectly to MHFA training were also exposed to other OCMH programs with the potential to directly or indirectly change workplace climate and worker well-being. Agency MHFA training dose was largely unrelated to MHFA training-related targets.

Agency-level MHFA training dose was not consistently associated with respondents' application of helping behaviors. However, the training dose was significantly associated with respondents' perceived need for additional training. Individuals who were affiliated with higher-dose agencies percent tended to be less likely to endorse need for additional training on how to apply MHFA skills in the workplace, in comparison with individuals affiliated with low-dose agencies. This may be attributable in part to the way in which MHFA practices are integrated within agency culture. For example, those who operate in higher-dose agencies may be less inclined to want more training because training principles are infused throughout the organization. It is also possible that individuals in higher-dose agencies have greater access or exposure to refresher trainings or related resources and therefore may not perceive a need for more additional training. Given that the majority of high-dose agencies are primarily social service or safety net-oriented agencies, this finding may also reflect a greater baseline orientation and capacity toward mental health, in terms of programming and services offered by these agencies, and/or the staff who are likely to be employed by these agencies (e.g., staff with training in social sciences, social services, etc.).

*City Agency Employee Respondents Were More Likely to Endorse Recent Use of MHFA Skills to Help Clients and Directly Connect Others to Services Than Community-Based Trainee Respondents*

Overall, city agency employee and community-based trainee respondents showed similar patterns of responses with respect to application of MHFA skills. However, city agency employee respondents showed some key differences with respect to recent (i.e., in the past six months) application of MHFA skills. For example, city agency employee respondents were significantly more likely to endorse recent use of MHFA skills to help clients.

City agency employee respondents were also more likely to endorse having helped directly connect someone to mental health services, including crisis hotlines or a mental health provider. This may be attributable to broad promotion of city-sponsored services such as NYC Well within city agencies and/or established linkages between city agencies and mental health service providers. It may also reflect expectations of some respondents' job duties, particularly if they

work for a health or human services–oriented agency. It is also notable that, as in the full sample, city agency employee respondents most commonly reported applying MHFA skills with friends and families. As such, MHFA training provided to staff at city agencies may have benefits for trainees both in and outside of the workplace.

### *City Agency Employee Respondents in Education-Focused Agencies Endorsed a Need for Additional Trainings*

Among the subsample of city agency employee respondents, we identified few differences in training-related targets in relation to agency affiliation or agency-related factors such as size and service type. However, respondents who were affiliated with education-oriented service agencies tended to endorse greater perceived need for additional training in how to apply MHFA skills in the workplace. This is consistent with national research that has shown educators frequently encounter mental health issues in their work, and a vast majority perceive a need for further training in mental health (Jorm et al., 2010). In a survey of educators in both rural and urban settings, Moon, Williford, and Mendenhall, 2017, found that 96 percent of respondents reported that they were likely or very likely to encounter students with mental health issues in their work, and 97 percent indicated that it is important for school staff to understand mental health issues that their students may experience. Multiple studies of MHFA in academic settings have demonstrated benefit to trainees, who have included teachers, staff, and students, in the area of mental health knowledge, recognition, confidence, and helping behaviors (Carpini et al., 2021; Jorm et al., 2010; Ng et al., 2021; Davies, Beever, and Glazebrook, 2018; Moon, Williford, and Mendenhall, 2017). Collectively, these findings may indicate a need for targeted trainings to further help city agency employee trainees employed in the education sector.

## Chapter 5. Impact of Mental Health First Aid Among Sociodemographic and Community Groups

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Efforts to disseminate MHFA training to diverse communities across NYC were made and often facilitated through CBOs that serve the needs of specific populations. Communities may differ with respect to levels of mental health knowledge, stigma, and ability to access resources (Lam, Jorm, and Wong, 2010; Morawska et al., 2013). Such differences may signal a need for additional resources or different types of training for specific communities, which may help guide future community mental health initiatives.

Using information on a range of demographic and related characteristics from MHFA survey respondents, we created sociodemographic and community groupings that served as proxies for examining community level outcomes of MHFA training. These groupings were delineated according to the following dimensions:

- age
- gender identity
- sexual orientation
- race/ethnicity
- non-English language fluency
- educational attainment
- borough of residence.

In this chapter, we investigate whether the impact of MHFA training varied across these sociodemographic and community groups. For brevity, and because patterns were largely similar across indicators of *self-perceived impact of MHFA on helping behaviors*, we focus on the following:

- actively and compassionately listened to someone in distress
- offered a distressed person basic “first aid”-level information and reassurance about mental health problems
- assisted a person who was dealing with a mental health problem or crisis to seek professional help
- confidence in helping individuals with a mental health problem
- knowledge of referral resources.

We used bivariate logistic regression analyses to test for group differences. For groups with more than two subgroups, we only report on subgroup differences (contrasts) for instances in which the group variable main effect is significant at  $p < 0.05$  and after correction for multiple tests. Additionally, we conducted sensitivity analyses to examine whether group differences persisted after accounting for training and occupation-related factors (see Chapter 3). As detailed in Chapter 3 of this report, the effective survey response rate was approximately 2.1 percent. The

survey sample was generally representative of the broader population of MHFA trainees with respect to sociodemographic characteristics (based on available trainee administrative data), although survey respondents tended to be slightly older and reported higher educational attainment. As such, findings may not generalize to all trainees and should be considered in light of these limitations.

## Summary of Sociodemographic and Community Group Differences

Table 5.1 summarizes tests of differences across groups observed in the survey data in respondents' confidence, knowledge of resources, and helping behaviors. Descriptive statistics and results from tests of group differences for the full set of self-perceived impact of MHFA on helping behaviors by sociodemographic and community group characteristics are shown in Appendix Tables B.5 and B.6 (available at [www.rand.org/t/RR1818-1](http://www.rand.org/t/RR1818-1)).

### *Age*

Age group was significantly associated with confidence in helping someone with a mental health problem. Compared with individuals ages 36 to 49 years (reference group), individuals ages 26 to 35 (OR = 0.72, 95% CI 0.55–0.92,  $p = 0.0104$ ) were significantly less likely to endorse being very confident in helping someone with a mental health problem. No significant age group differences were observed with respect to knowledge of referral resources or self-perceived impact of MHFA on the frequency of engaging helping behaviors.

### *Gender Identity, Sexual Orientation, and Non-English Language Fluency*

Gender identity was associated with active listening to someone with psychological distress. Men were significantly less likely than women to report occasionally or frequently using this skill (OR = 0.69, 95% CI 0.52–0.90,  $p = 0.006$ ). Gender identity was not associated with confidence, knowledge of resources, or other helping behaviors.

Sexual orientation and fluency in a language other than English were not significantly associated with confidence, knowledge of resources, or engagement in specific helping behaviors.

### *Race/Ethnicity*

Race/ethnicity was significantly associated with confidence, knowledge of resources, and helping behaviors, although the pattern of group differences varied slightly across outcomes of interest. With respect to confidence in helping others with a mental health problem, respondents who identified as Hispanic (OR = 2.27, 95% CI 1.76–2.93,  $p < 0.0001$ ), Black (OR = 2.24, 95% CI 1.76–2.85,  $p < 0.0001$ ), multiracial (OR = 2.45, 95% CI 1.54–3.89,  $p = 0.0002$ ), and other race (OR = 1.84, 95% CI 1.20–2.84,  $p = 0.005$ ) were significantly more likely to report being very confident compared with those who identified as non-Hispanic White. With respect to

knowledge of resources (agree or strongly agree with the statement “I know where I can refer individuals for help with their emotional or mental health challenges, including alcohol or substance use”), individuals who identified as Asian (OR = 0.54, 95% CI 0.38–0.76,  $p = 0.0004$ ) were less likely to endorse knowledge of resources compared with those who identified as non-Hispanic White. For helping behaviors, compared with those who identified as non-Hispanic White, respondents who identified as Hispanic were significantly more likely to endorse occasionally or frequently engaging in active listening (OR = 1.67, 95% CI 1.19–2.33,  $p = 0.003$ ), providing information and reassurance (OR = 1.72, 95% CI 1.35–2.18,  $p < 0.0001$ ), and assisting others in seeking professional help (OR = 1.61, 95% CI 1.28–2.03,  $p < 0.0001$ ). Those who identified as Black and multiracial were significantly more likely than non-Hispanic White respondents to occasionally or frequently engage in providing information and reassurance (Black: OR = 1.58, 95% CI 1.27–1.96,  $p < 0.0001$ ; multiracial: OR = 2.08, 95% CI 1.26–3.44,  $p = 0.004$ ) and assisting others in seeking professional help (Black: OR = 1.57, 95% CI 1.27–1.94,  $p < 0.0001$ ; multiracial: OR = 2.03, 95% CI 1.25–3.30,  $p = 0.004$ ).

### *Educational Attainment*

Educational attainment was associated with confidence in helping others, knowledge of resources, and frequency of helping others seek professional help for a mental health problem. Individuals with a high school degree/GED or less were significantly less likely to endorse occasionally or frequently assisting others with a mental health problem in obtaining professional help (OR = 0.63, 95% CI 0.45–0.87,  $p = 0.006$ ).

With respect to confidence, there was a significant overall effect of educational attainment. However, compared with individuals with a postgraduate degree (e.g., masters or doctoral degree), there were no significant group differences (contrasts) after correcting for multiple tests.

Knowledge of resources also varied by education gradient such that, compared with those with a postgraduate degree, all those with a college degree (OR = 0.68, 95% CI 0.55–0.85,  $p < 0.001$ ) or some college (OR = 0.60, 95% CI 0.46–0.78,  $p < 0.001$ ) were significantly less likely to report high knowledge of resources.

### *Borough of Residence*

Borough of residence was associated with confidence in provide help, such that respondents residing in the Bronx (OR = 1.58, 95% CI 1.20–2.10,  $p = 0.001$ ) were significantly more likely to endorse being very confident compared with those residing in Manhattan. Borough of residence was not associated with knowledge of resources or frequency of engaging in specific helping behaviors.

### *Sensitivity Analyses for Sociodemographic Group Differences Adjusting for Training and Occupation-Related Covariates*

To assess whether sociodemographic group differences from bivariate models persisted after accounting for training and occupation-related factors found to correlate with MHFA outcomes (see Chapter 3), we conducted sensitivity analyses examining effects of sociodemographic group variables in separate multivariable logistic regression models that controlled for agency employee status, occupation type, time since MHFA training, MHFA trainer status, number of MHFA courses completed, and history of other mental health training. Results from adjusted models are shown in Appendix Table B.7.

Overall, patterns of findings for sociodemographic group differences were substantively similar in the unadjusted bivariate models and adjusted models. However, some findings for effects of race/ethnicity and borough changed slightly after adjusting for covariates. With respect to race/ethnicity, differences in self-reported engagement in active listening by racial/ethnic group were no longer statistically significant after adjusting for covariates. Additionally, in adjusted models, those endorsing multiple races no longer differed from non-Hispanic White respondents with respect to offering “first aid” reassurance and information or assisting others in seeking treatment. For tests of group differences by borough of home residence, previously nonsignificant effects for group differences on offering “first aid” reassurance and information and assisting others in seeking treatment were statistically significant in adjusted models. Compared with those in Manhattan, respondents who lived in Brooklyn and Queens were less likely to endorse occasionally or frequently engaging in these behaviors. Additionally, those living in the Bronx were also less likely to endorse occasionally or frequently assisting others in seeking treatment. Finally, after adjusting for training and occupation factors, no significant differences were observed for educational attainment on assisting others in seeking treatment.

**Table 5.1. Differences in Confidence, Knowledge of Resources, and Self-Perceived Impact of MHFA on Helping Behaviors Across Sociodemographic and Community Groups**

	Engaging in Helping Behaviors as a Result of MHFA Training <sup>a</sup>			Confidence in Helping <sup>b</sup>	Knowledge of Referral Resources <sup>c</sup>
	Actively and compassionately listened	Offered “first aid” information and reassurance	Assisted with seeking professional help		
	Main effect p-value Group contrasts (OR, 95% CI)				
Age group	p = 0.20	p = 0.38	p = 0.21	<b>p = 0.006</b>	p = 0.29
36–49	--	--	--	(ref)	--
25 or under	--	--	--	0.72 (0.47, 1.10)	--
26–35	--	--	--	<b>0.72 (0.55, 0.92)*</b>	--
50–64	--	--	--	1.02 (0.84, 1.25)	--
65+	--	--	--	0.69 (0.50, 0.95)*	--
Sexual orientation	p = 0.20	p = 0.85	p = 0.62	p = 0.63	p = 0.87
Heterosexual/straight	--	--	--	--	--
Other sexual orientation	--	--	--	--	--
Gender identity	<b>p = 0.02</b>	p = 0.36	p = 0.06	p = 0.21	p = 0.96
Woman	(ref)	--	--	--	--
Another identity	0.74 (0.36, 1.53)	--	--	--	--
Man	<b>0.69 (0.52, 0.90)**</b>	--	--	--	--
Race/ethnicity	<b>p = 0.04</b>	<b>p &lt; 0.0001</b>	<b>p &lt; 0.0001</b>	<b>p &lt; 0.0001</b>	<b>p = 0.01</b>
Non-Hispanic White only	(ref)	(ref)	(ref)	(ref)	(ref)
Hispanic	<b>1.67 (1.19, 2.33) **</b>	<b>1.72 (1.35, 2.18)***</b>	<b>1.61 (1.28, 2.03)***</b>	<b>2.27 (1.76, 2.93)***</b>	0.91 (0.70, 1.20)
Non-Hispanic American	(not estimated)	(not estimated)	(not estimated)	(not estimated)	(not estimated)

	Engaging in Helping Behaviors as a Result of MHFA Training <sup>a</sup>				
	Actively and compassionately listened	Offered "first aid" information and reassurance	Assisted with seeking professional help	Confidence in Helping <sup>b</sup>	Knowledge of Referral Resources <sup>c</sup>
	Main effect p-value Group contrasts (OR, 95% CI)				
Indian or Alaskan Native only					
Non-Hispanic Asian only	0.92 (0.61, 1.39)	0.81 (0.60, 1.11)	0.94 (0.69, 1.29)	1.10 (0.75, 1.61)	<b>0.54 (0.38, 0.76)***</b>
Non-Hispanic Black only	1.32 (0.98, 1.76)	<b>1.58 (1.27, 1.96)***</b>	<b>1.57 (1.27, 1.94)***</b>	<b>2.24 (1.76, 2.85)***</b>	0.96 (0.74, 1.23)
Non-Hispanic Native Hawaiian or other Pacific Islander only	(not estimated)	(not estimated)	(not estimated)	(not estimated)	(not estimated)
Non-Hispanic other race	1.73 (0.92, 3.26)	1.06 (0.71, 1.59)	1.35 (0.90, 2.03)	<b>1.84 (1.20, 2.84)**</b>	0.84 (0.53, 1.32)
Non-Hispanic, multiple races	1.77 (0.86, 3.63)	<b>2.08 (1.26, 3.44)**</b>	<b>2.03 (1.25, 3.30)**</b>	<b>2.45 (1.54, 3.89)***</b>	0.71 (0.43, 1.17)
Borough	p = 0.37	p = 0.18	p = 0.16	<b>p = 0.007</b>	p = 0.52
Manhattan	--	--	--	(ref)	--
Bronx	--	--	--	<b>1.58 (1.20, 2.10)**</b>	--
Brooklyn	--	--	--	1.04 (0.80, 1.34)	--
Other/unknown	--	--	--	1.11 (0.82, 1.50)	--
Queens	--	--	--	0.98 (0.74, 1.30)	--
Staten Island	--	--	--	1.17 (0.74, 1.87)	--
Education	p = 0.07	p = 0.09	<b>p = 0.01</b>	<b>p = 0.003</b>	<b>p = 0.0003</b>
Graduate degree	--	--	Ref	(ref)	(ref)
College degree	--	--	0.85 (0.71, 1.02)	0.91 (0.75, 1.10)	<b>0.68 (0.55, 0.85)***</b>
Some college	--	--	1.05 (0.82, 1.33)	1.33 (1.04, 1.69)*	<b>0.60 (0.46, 0.78)***</b>

	Engaging in Helping Behaviors as a Result of MHFA Training <sup>a</sup>			Confidence in Helping <sup>b</sup>	Knowledge of Referral Resources <sup>c</sup>
	Actively and compassionately listened	Offered “first aid” information and reassurance	Assisted with seeking professional help		
	Main effect p-value Group contrasts (OR, 95% CI)				
High school diploma or GED or less	--	--	<b>0.63 (0.45, 0.87)**</b>	1.45 (1.04, 2.03)*	0.65 (0.44, 0.95)*
Non–English language fluency	p = 0.13	p = 0.47	p = 0.50	p = 0.23	p = 0.09
English only	--	--	--	--	--
Fluent in a language other than English	--	--	--	--	--

SOURCE: RAND MHFA web survey, summer 2021.

NOTE: This table shows estimates of associations between sociodemographic group variables and respondents' self-perceived frequency of engaging in helping behaviors “as a result of Mental Health First Aid training,” confidence in helping others with a mental health problem, and knowledge of mental health treatment or referral resources. Estimates are from separate bivariate logistic regression models.

<sup>a</sup> “As a result of the Mental Health First Aid training, I have . . .” (response range never to frequently). Dichotomized for analysis as 1= occasionally or frequently, 0 = never or rarely.

<sup>b</sup> “How confident do you feel in helping someone with a mental health problem?” (response range not confident at all to very confident). Dichotomized for analysis as 1 = very confident, 0 = fairly confident, slightly confident, or not confident at all.

<sup>c</sup> “I know where I can refer individuals for help with their emotional or mental health challenges, including alcohol or substance use.” (response range strongly disagree to strongly agree). Dichotomized for analysis as 1 = agree or strongly agree, 0 = strongly disagree, disagree, or neither agree nor disagree.

(--) denotes no follow-up contrast test to nonsignificant overall main effect.

Bolded values indicate significant effect, p < 0.05 after FDR correction for multiple tests.

\* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.

## Key Findings

### *Respondents from Different Racial/Ethnic Backgrounds Varied with Respect to MHFA Skill Application, Attitudes Toward Training, and Future Training Needs*

The survey did not focus on trainees from specific communities, and thus the results cannot directly address the impact of MHFA training or specific needs in different communities. However, our examination of differences across sociodemographic subgroups may yield some insights into the way in which respondents from different backgrounds applied MHFA in their respective communities and their perceptions about future training needs.

Although respondents from different sociodemographic subgroups (e.g., gender identity, sexual orientation, language fluency) showed largely similar response profiles in most domains, some patterns of subgroup differences emerged. In particular, racial/ethnic identity was consistently associated with differences on multiple outcomes—including confidence in helping others, knowledge of resources, application of helping behaviors, perceived alignment of MHFA training with topics important to one's community, and perceived need or desire for additional training to apply MHFA skills in one's community. For example, compared with non-Hispanic White peers, respondents who identified as Hispanic or Black reported higher confidence in their ability to help others with a mental health problem, as well as more frequent engagement in helping behaviors (i.e., offering first aid–level information and reassurance, assisting someone with seeking professional help). Hispanic and Black respondents were also more likely than their non-Hispanic White counterparts to agree that MHFA training addresses topics important to their community. Moreover, compared with respondents who identified as non-Hispanic White, those identifying as Hispanic, Asian, or Black were significantly more likely to agree or strongly agree that they could use additional training to apply MHFA skills in their communities. Moreover, results were similar for most outcomes of interest even after adjusting for multiple training and occupation-related factors. Findings are consistent with an evaluation that assessed three- and six-month follow-up outcomes among trainees who completed MHFA in the United States in 2016 (Troxel et al., 2022). Racial/ethnic minority trainees reported greater quality of training (e.g., gained a lot of new knowledge) and greater perceived impact of training (e.g., more aware of the signs and symptoms of other people's mental health; more likely to ask someone if he/she is “ok” if I see him/her showing signs or symptoms of distress).

These patterns of findings may be related to multiple factors, including but not limited to differences in unmet treatment need and access to resources across communities, as well as the manner in which MHFA trainings were implemented and adapted to meet the needs of diverse community groups. Although sensitivity analyses adjusting for multiple training and occupation factors showed largely similar patterns of findings with respect to racial/ethnic differences, it is possible that other unobserved factors may account for these group differences. Multiple studies have shown that immigrant and ethnic minority groups access mental health services at

significantly lower rates and with greater delays from symptom onset, compared with non-Hispanic White individuals (Derr, 2016; Wang et al., 2005). These groups also demonstrate greater utilization of family, friends, and religious leaders for mental health support (Derr, 2016). Although Hispanic and Black trainees who completed the survey were *not* more likely than their non-Hispanic White peers to endorse recent likelihood of encountering someone with a mental health problem, these individuals may have more opportunities to apply helping behaviors with others in their communities.

Qualitative data from focus groups of community leaders (Chapter 6) indicated that MHFA content was adapted in some instances to align more closely with the language, culture, and/or needs of trainees in the community. This, in conjunction with recognition of high unmet mental health need in some communities, may have contributed to greater perceptions that MHFA trainings addressed topics that are important to trainees' communities. At the same time, some respondents may also recognize a need for additional efforts to better equip them to address the specific needs of their communities in a culturally appropriate manner. These findings should be considered in the context of some limitations. For example, respondents differed from the broader population of trainees on some characteristics (e.g., age, educational attainment), the survey response rate was low (approximately 2 percent), and we cannot rule out the possibility of response bias (e.g., respondents may have differed systematically from nonrespondents on some characteristics). As such, findings may not generalize to all trainees. Collectively, these findings reinforce the value of MHFA training within cultural subgroups and underscore the potential role that MHFA and similar programs may play in helping New Yorkers from diverse backgrounds build and sustain capacity to address mental health problems and promote wellness within their communities.

## Chapter 6. Focus Groups with Community Leaders and City Agency Staff

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In addition to the survey of trainees from city agency staff and across the NYC community, we conducted a series of five focus groups to gather additional contextual information for the insights captured in the surveys. We conducted two types of focus groups: groups for leaders of CBOs that serve African American, Latinx, Chinese, and SGM clients and a group for staff from a city agency. The research questions guiding the focus group protocols were as follows:

- How did implementation of MHFA vary across community groups?
- How are trainees using MHFA skills in their community/agency?
- How are MHFA skills diffusing within the community/agency context?
- What changes to MHFA implementation may improve reach or effectiveness?

Methods are described in detail in Chapter 2. Briefly, for the agency focus group, NYC governmental partners sent a study email invitation on behalf of RAND, and interested participants were asked to directly contact RAND. For the four focus groups with CBO leaders, city partners identified CBOs and leaders within the organizations who were involved in the dissemination of MHFA trainings in their communities. For the city agency focus group, the invitation was sent to HRA/DSS agency staff who had participated in MHFA training.

Absolute numbers for the focus groups with CBO leaders were relatively small (i.e., three to four participants per group), but this was an acceptable participation rate (30 to 43 percent) given the absolute number of invited persons (see Table 2.4). The participation rate for the city agency focus group was much lower (0.06 percent), and therefore we caution that focus group findings for the city agency staff should be generalized to other agency staff with extreme caution. Nevertheless, the qualitative data provide valuable insight into the attitudes and experiences of the trainees who participated in this evaluation.

Trained staff moderated five semi-structured focus groups, one for each population, guided by the RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) domains. These domains are described in more detail in Table 2.3 (Chapter 2) and were used to organize the focus group findings below. Focus groups were held on the Zoom.gov platform and lasted approximately one hour. The focus group with Latinx community leaders was conducted in Spanish; all other groups were conducted in English.

In this chapter, we present findings for the CBO leaders focus groups together, given the preponderance of common cross-cutting themes, and we note contrasts or distinctions as applicable. These findings also provide important insights into the impact of MHFA training on Spanish- and Chinese-speaking populations in New York City (the survey was only conducted in

English). Perspectives of CBO leaders also have an advantageous “bird’s-eye view” of MHFA trainings in their communities, which complements the individual-level perspectives aggregated by the survey. To complement the subgroup analysis of the city agency employee survey respondents, we also present findings from the city agency staff focus group. Throughout the findings, we also provide illustrative quotes from focus group participants to provide additional nuance.

## Community Leader Focus Groups

### *Reach*

CBO leaders articulated their motivations for offering MHFA training in their communities and their desired or anticipated outcomes. They also described factors that impeded or facilitated community members’ participation in training.

#### Motivation and Desired Outcomes

Stakeholders from all four groups asserted that unmet mental health needs in their communities were a primary motivation for offering MHFA training. These needs included depression and suicidality, substance use, trauma, domestic violence, immigration-related stresses, and nonspecific forms of stress. For example, one of the leaders from the Chinese community explained:

[W]e have been seeing many people who have the mental health issues. Because to the Chinese new immigrants (1) they have financial issues, and (2) they have language barriers, and (3) they have cultural barriers. So, with these three barriers, they have limited resources. . . . And they don’t know where to look for the help.

These long-standing needs often became apparent during the course of these organizations’ provision of non-mental health programs and services, including health screenings. A leader from the African American faith-based group explained, “First, dealing with the churches and individuals, you’re dealing with people. And people who are depressed and going through different trauma and problems.” As another example, a leader in the Latinx community took the training themselves and connected the content to what they felt were unmet needs in their community; they subsequently contacted MHFA coordinators to implement the training in their community.

Stakeholders in the Chinese, African American, and SGM groups explicitly described how offering MHFA training was aligned with their organizations’ existing missions and priorities. For example, a leader in the African American group explained that it was critical for adults leading the young adult program to “understand behavior” and “how to talk to a person who is agitated or how to calm a person down.” Similarly, for ministry leaders and church security staff, it was necessary for them to

understand that we can't control who comes into the church, but we can control how we treat them when they're there. . . . Like, you accept everyone. So, the training was brought forth to educate us so that no one would feel that slighted or felt that they were not treated fairly because they were different or going through an emotion that they couldn't control at the moment.

Similarly, a leader in the Chinese community explained that as part of Buddhism, they are always conscious of community members' mental health, "and then support[ing] them and then to helping people to recognize the strength from their mind, and then be stronger and then [they] can overcome any challenges and the realities."

A leader in the SGM community explained that in the course of their young adult programming and services, "we're always looking for opportunities to empower them to understand more of how they can support each other. . . . I think having this kind of information is sort of empowering." Two other leaders in the SGM group explained how MHFA training for their organizations' staff would cultivate greater understanding and awareness of the ways that clients' mental health needs can manifest during services. As one of them said:

So I think the hope for me in engaging the Mental Health First Aid training was to just even start talking about "Why do maybe some of our clients seem to get really angry super quickly and then other people are very withdrawn?" And why is it that it could seem like you're having a totally fine session with somebody and then they snap at you or they start crying, and it seems out of the blue?

In line with these motivations, the anticipated and desired outcomes generally fell into two categories. First, community leaders hoped that the training would reduce stigma and increase access to informal and formal support for community members with mental health needs. For example, a leader in the Latinx group explained, "Entonces, y mirando esos talleres, ellos identifican eso no es estar loco. Entonces pueden buscar apoyo a tiempo." [*"So, by attending these workshops, they identify that it doesn't mean they are crazy, and they can seek help early."*] In the group with leaders from the Chinese community, one participant explained that their hope was that the MHFA training would allow trained community members and volunteers to serve as a "first step" and "a bridge" to formal services:

they can be able to give better suggestions, and they encourage them [persons with mental health need] with more support, the congregation, the group support so they can face seeking the professional help.

Second, leaders from the African American community and Chinese community explicitly identified the potential for wider community diffusion and impact as an important motivator. As one African American leader explained, "And the other half, the other part of it is that we're there, in turn, [will/we'll] help others."

### Participation Barriers and Facilitators

Leaders in the African American and Chinese community focus groups explained how the training was integrated into their existing programming, initiatives, and events. For example, a

leader in the Chinese community explained that MHFA training was offered in the context of a weekend-long training event at their organization. Similarly, a leader in the African American community explained how MHFA training was offered in the context of a mental health conference and during a mental health awareness month.

Participants in the African American leaders' group described several ways they successfully promoted the training and encouraged attendance. First, one leader explained that they collaborated with multiple ministries in their church community:

And that was also very helpful because that also got their . . . people who were part of those ministries also to come in and be part of the training, as well. And even in the middle of the thing at the lunch break, we did—there was [a different health topic] conversation that was done during lunch, so that kind of broke up the time a little bit and, so, it was additional information that was given out as well. So, collaboration was a big part.

Another leader described the use of pulpit announcements, along with targeted but informal outreach to “people that we know as maybe as a friend . . . So, we try to identify those people, approach them on a one-on-one and see if they have a family member that would be interested in [participating].” Flyers were also cited as an outreach tool by several leaders in this community. Other effective approaches included setting up a kiosk after church services where congregants could ask questions and receive assistance with registering and disseminating testimonial videos from previous attendees. For one faith-based organization, participation was mandated for leaders and anyone who wanted to work with children.

Leaders in the Latinx, African American, and Chinese communities identified stigma and shame as potential barriers to community members' participation in MHFA training. For example, one Chinese community leader explained:

Yeah, I think it's still—for a short time we'll have to change the thousand years of these cultural barriers is not that easy. So we try to open up the dialog to encourage people, as many as we can, to participate in the event. Of course, there are many people still, “Oh, I don't have time,” “Oh, I'm not really interested in the topic,” and stuff like this.

In a similar vein, a leader in the Latinx community cited families' anticipated stigma and “el miedo a ser señalado” [“fear of being singled out”] if they were to disclose personal experiences in the context of the training:

Incluso, cuando hacíamos talleres aquí en la comunidad era muy difícil de pedirle a las familias que asistieran porque venían con miedo. «Oh, no quiero que divulguen lo que yo voy a hablar» «No quiero que vayan a saber lo que estoy pasando». [*When we had the workshops here in the community, it was challenging to ask families to attend because they were afraid. “Oh, I don't want people to disclose what I'm going to talk about.” “I don't want people to know what I'm going through.”*]

Potential approaches to counter stigma as a barrier to participation included expanding the workshop's title to something other than “mental health” (Latinx community leader) and having

church leadership staff participate in large and visible numbers (African American community leader). (Though ultimately the church did not achieve the desired level of participation from leadership.)

The daylong duration of the MHFA training was also cited as a barrier by leaders in the Latinx and SGM focus groups. For example, one of the organizations serving SGM New Yorkers only offered the training for their staff; they had considered offering it as a community training but felt it “might actually be a little too intensive to offer in that context.” However, the length of the training was not cited as a barrier by African American community leaders. As one leader explained, “When most people heard they would be getting an eight-hour certificate and it’s eight hours and lunch would be served and breakfast, we got a big crowd. We had to turn back and sign them up for the next workshop.”

However, African American community leaders believed that it was challenging for community members to attend trainings scheduled on Saturdays. As one leader pointed out, “Saturday is the only day that they have to do all their running around because Sunday is church. . . . And that throws their life off if they can’t get it done.” Finally, one SGM community leader felt that it was possible that the advertising and promotion used for the trainings may not have resonated with SGM constituents: “So I think maybe that not all community members that we were sending this messaging out to felt like it was relevant, or that they were the target audience [for the training], maybe.”

## *Effectiveness*

Community leaders described how trainees were using MHFA-related knowledge and skills. They also identified specific aspects of MHFA training that they or their community members perceived to be helpful or unhelpful.

### **Trainees’ Use of MHFA Knowledge and Skills**

Across all four community groups, leaders described trainees’ use of newly gained mental health knowledge, skills for supporting persons experiencing mental health needs, and skills for referring someone for professional help. These new strengths were seen as beneficial to the individual trainee as well as other community members, including peers in the community, family members, and program clients. As one African American community leader summed up:

people tell each other and they share it and they say, “wow,” they recognize, “my god, I didn’t realize that my friend—and now I know what’s going on.” It made a big difference, like, the light came on. People became very much aware, that’s what it is. So, we were able to approach a person in a different way once they were trained. Or refer them to someone who might be able to talk to them in a confidential and private way, manner.

The use of knowledge and skills was often described as being relevant to previously unrecognized needs among persons in trainees’ social networks. These were mental health needs they had seen or experienced in themselves or with others that trainees previously did not

understand well or that they had been ill-equipped to address. For example, at the individual level, a Latinx community leader explained that the trainings provided trainees with a greater understanding and self-awareness of stressors and their effects on mental health:

nos sentimos bien identificadas del por qué tenemos tanta ansiedad, tanto estrés por tanto bullying, tanto miedo por tanta agresión, y persecución [*we were able to identify why we feel so much anxiety and stress from so much bullying, fear from so much aggression and persecution.*]

Another leader from the Latinx community felt that the trainings had also enhanced trainees' ability to cope with these experiences and feelings:

Antes, tal vez, yo creo que no hubiéramos podido identificar y buscar ayuda para establecer nuestro—[estado] emocional día a día que vivimos. Yo creo que esto nos ha ayudado. No digamos a—bueno, no puedo decir que estamos perfectamente, pero [nos ayudo a] poder manejar las situaciones del día a día que vivimos. [*In the past, perhaps, we wouldn't have been able to identify and seek help to establish our—emotional state in our daily life. I believe this has helped us. Let alone—well, I can't say we're perfectly well, but we can now manage the daily situations we encounter.*]

With regard to how trainees responded to others in their communities, an African American community leader described this phenomenon as “the light came on.” They continued, “We’re able to use a label and say this is what it is. It’s mental health.” Similarly, a Latinx community leader explained, “Identificamos muchas cosas que quizás antes, nosotros diríamos, «¿qué es lo que está pasando?».” [*“We were able to identify many things that maybe, in the past we would have said, ‘What’s going on?’”*]

Trainees’ ability to make referrals was also highlighted by stakeholders. For example, one Chinese community leader explained that trainees “have certain level of the knowledge, they really can spread the word out and they’re really helping the neighborhood and the community to pay more attention, or they can identify some people who might have the mental illness should look for more help.” A leader from the African American community explained that:

our leaders now are able to talk to other parents and other people without saying, “Oh, [you should see] a psychiatrist.” Everything is not about seeing a psychiatrist. And I think now that people are more open, or someone says, “. . . Why don’t you see a professional? Why don’t you see Minister Whoever or Deacon Whoever and talk to them and see what they say?”

SGM leaders described how trainees were using MHFA knowledge and skills in the context of serving clients. For example, one leader said:

I think it’s helpful for [staff who have initial contact with community members] in trying to make determinations, to some extent, around if there’s a concern, having a better framework to understand what might be going on for that person. Not that we’re diagnosing or anything like that, but more just in terms of how to approach the situation in a way that might be more constructive or helpful for someone who seems that they’re having a challenge of some kind.

Other, more-specific skills mentioned by community leaders included community members' ability to make referrals to more formal supports or resources (African American and Latinx leaders) and the ability to identify more-intense mental health needs that likely need professional support and how to de-escalate a situation (African American and SGM leaders).

### Helpful and Unhelpful Aspects of MHFA Training

When asked about the most helpful aspects of MHFA, several participants in the groups with African American and SGM leaders identified the informational and knowledge component of the training. This included a basic orientation to the taxonomy of different mental health conditions and the signs and symptoms that would be useful for identifying someone experiencing unmet mental health needs. One SGM community leader described this as “foundational knowledge” and a “framework” for understanding mental health. Similarly, a leader from the African American community said:

I think the understanding the difference between the diagnosis were the most important thing. Understanding what the difference between depression, schizophrenic, you know, bipolar and all of those things made it a little—it was helpful for them to understand when their—especially when their family members got a diagnosis, they could kind of put “Oh, that’s what that means. And that’s what that looks like.”

Other leaders (in the SGM and African American focus groups) also pointed out that the training’s coverage of supportive behaviors and de-escalation were helpful. Along these lines, the roleplay activities and interactive components were cited by leaders in the Chinese, African American, and SGM focus groups as having provided not only helpful skills, but also variety and engagement in the context of a daylong training. A leader from the Latinx focus group cited another interactive activity of the training, likely referring to the sorting activity where participants holding pieces of paper with a given mental health condition formed a continuum reflecting the least to most prevalent mental health conditions.

Chinese and Latinx community leaders expressed gratitude and appreciation for trainings delivered in their native languages. As one Chinese community leader said, “This is the first time we have all the training materials and trainers who can speak their native language.”

Finally, three participants in the Latinx and African American leaders’ groups felt that everything covered in the training was helpful, to the extent that they did not identify specific components. Community leaders did not identify any unhelpful aspects of the training. For example, one leader from the Chinese community explained, “I couldn’t think of anything in the negative side for this training program.”

### *Adoption*

Community leaders described the diffusion of MHFA-related knowledge and skills in their community. They also identified a range of impacts on their communities and organizations.

## Diffusion of Knowledge and Skills

Stakeholders described several forms of diffusion in their communities or organizations. First, leaders from the Chinese community and African American community felt that trainees had generated enthusiasm and interest for MHFA training itself in their communities. As one African American leader explained, trainees

realized that it was something very helpful and they shared it with others after we did the first workshop. . . . [T]hen the word got around, “Oh, this is a great thing. I do know someone or someone in my home is going through this.” And the word got around.

This leader also described enthusiasm among adolescent trainees, who found that the training certificate was an asset for finding summer employment. As a result, “this word went around and people, now they want more training because they realize that having had mental health training is like opening the door wider for them.” As noted earlier, the potential for diffusion was cited by one leader in the African American community as a motivator for offering MHFA training to their constituents.

Other aspects of diffusion were also identified. For example, an African American leader described conducting MHFA training on their family members during pandemic stay-at-home orders. One leader from the SGM community described how staff who had participated in the training had created topical trainings for their organization’s clients, in addition to informal diffusion that had occurred between staff:

many of our staff who were at the training actually presented pieces of what we learned at the Mental Health First Aid training to the clients in a more broken-down way. . . . We had one person who did a psychoeducational group session on what are triggers, what does it mean when someone’s triggered? We had another one about anxiety. We had another one about depression. We had a really good one about mental health stigma. . . . So if the question is “was this information dispersed after the training was over?” Yes, definitely, I think what people were able to get out of it they found really valuable and they passed on not only to other staff members, but also to our clients.

Another leader from the SGM community explained how they shared their knowledge from training with other staff, to promote greater empathy and understanding when a client is “always showing up late. . . . It’s not because they’re lazy or they’re always late, but there are other reasons why they might not be able to show up on time or why they suddenly get angry.”

## Impacts at the Community Level

Stakeholders from all four community groups described common impacts of MHFA training. These centered around reductions in stigma and improved communications around mental health. For example, a Chinese community leader explained that MHFA “really breaks the barriers in the community,” and an African American community leader perceived that the trainings had normalized mental health needs in the community:

It opened the gates to realize that . . . we all have mental health issues, we all have mental health concerns. However . . . that does not define us and we can do something about it. We can have a conversation about it. We're not alone.

Another African American leader felt that the trainings, in the context of other mental health initiatives, had normalized help-seeking and therapy, including for community members who believed that receiving therapy was contrary to biblical principles. A different leader from the African American community felt that the trainings had impacted families in the community, particularly with regard to communication between parents and children, even if this communication was “just checking in.” Similarly, a Latinx leader also described how MHFA training facilitated more informal conversations in families, and the workshops created “el canal de apertura” [“*an opening channel*”] to talk about mental health.

Leaders from the SGM community perceived that MHFA had empowered staff to better serve their organizations' clients. As one leader explained, they and their administrative staff

noticed two really major changes, one of which was many, many of our staff seem to have greater patience with clients who were probably having an external expression of a mental health crisis or an ongoing mental health condition. People definitely shifted the way that they respond to that. There was much less of “Why is this person like this?” and more discussion of, “Oh, maybe this person is really anxious. Maybe this person has some trauma. Maybe this person is trigger-y.” And definitely a lot of staff trying to practice what they had gotten out of the training and trying to recognize what we had been talking about . . . which was a really positive change.

For this leader and this organization, MHFA training had opened a space for staff “to air things that they had been wondering . . . to ask questions that had been floating around and know it's totally fine to be—to have a wrong thought and to be able to bring it up and have it corrected.”

Finally, one African American community leader believed that their community's participation in the MHFA trainings had prepared them to better cope with the stresses of the COVID-19 pandemic. They perceived that “When we would talk about posttraumatic stress disorder or this depressive feeling . . . the discussions were a little bit easier to have with some people because they already had, they were exposed to the language of it and kind of have a little bit of a background of it.” Notably, no stakeholders identified negative impacts of the MHFA training.

### *Implementation*

Community leaders provided feedback on the content and delivery of MHFA and the trainers. In some cases, they provided suggestions for future implementation.

#### **Trainers**

Feedback on the trainers was primarily positive. Praise for trainers included their knowledge and expertise, ability to convey complex information to lay audiences, engaging style, the

creation of a safe space for the training, and strong language skills when offering trainings in languages other than English. As one leader from the Latinx group explained

sí veo que han seleccionado bien el personal porque en la ciudad donde estuve hubo tres diferentes instructores y los tres conocían el tema, eso es lo más interesante e importante. Conocían el tema y tenían empatía con la gente y tenían—Eran muy flexibles . . . . Seleccionaron bien el personal. [*I can tell that they selected the staff very well because there were three different instructors in the city where I was, and all of them knew the topic; that was the most interesting and important thing. So they knew the topic and had empathy with the people, and they had—They were very flexible. . . . So they selected the staff very well.*]

In one case, a leader from the Chinese community noted that some trainers would benefit from a less “technical” style. Some trainers’ style was akin to “reading a book” or having “a projector on the screen and you keep reading” and was not as conversational and engaging as other trainers had been. Another leader from the Chinese community favored a two-trainer approach because it was more dynamic and interactive.

Two leaders in the SGM focus group expressed a desire for trainers with more expertise or experience with SGM communities. In one case, this went hand in hand with a leader’s suggestion for more culturally relevant MHFA content in general. The other leader from the SGM community explained:

the trainers we had were super nice, were really excited about engaging with us. They seemed well prepared. I think they were a little thrown off by some of our questions just because they didn’t seem particularly familiar with the community that we serve, which is sometimes I guess unavoidable or just not going to happen. But I think that they definitely did their best and were respectful of all the questions that they asked, and were very willing to do follow-up with us and answer anything else that came up.

Finally, one leader from the SGM community explained that they had programming that served Spanish-speaking SGM clients. They were unable to obtain Spanish-speaking MHFA trainers for their group, which presented challenges given the newness of the content and cultural nuances in translation.

## Promotion and Reach

Participants provided other feedback related to the implementation of the training. First, two leaders from the African American community reported that the internet-based registration form and the extent of demographic data requested were potential barriers for older adults. One leader described the resistance they encountered:

I do think that the way that they have the site set up for people to join it or to register is very difficult to maneuver, especially for our seniors. That was our biggest issue. . . . Our seniors are not comfortable giving up that much information for a training. . . . and I got yelled at. I got yelled at several times. They couldn’t do it. So, that was my only negative thing that I have about the whole program is the registration process.

As a potential solution, another leader from the African American community explained that they had staff attend an unrelated meeting of older adults to assist them with registration, either helping older adults register online or writing down registration information offline and completing the data entry on behalf of the older adults. Along these lines, a leader from the Latinx community also explained that their constituents were unlikely to be accessing web sites that advertise the trainings, and they recommended “creando alianzas con todas las organizaciones de las ciudades donde van a presentar estos talleres y las organizaciones hacer la invitación a las comunidades” [*“creating alliances with all the organizations of the cities where those workshops will be conducted, and the organizations will invite the communities”*].

Other messaging-related suggestions to improve reach and minimize barriers were provided by an SGM community leader and a Latinx community leader. An SGM community leader who had cited a perceived lack of relevance as a barrier to MHFA participation suggested ensuring that the promotion and messaging about MHFA was relevant and that it conveyed that MHFA training “could actually help them in some way or be beneficial.” With regard to stigma as a barrier, a leader from the Latinx community suggested that alternative titles and framing (e.g., “well-being” instead of “mental health”) would make the trainings more accessible.

### Scheduling

As described earlier, scheduling was cited as a barrier by African American community leaders, who suggested hosting the training on days other than Saturday and/or splitting the training into two half days. One leader from the Chinese community group also cautioned against hosting trainings on holidays, when caregivers would be unable to attend, and a Latinx community leader said that trainings during the day would conflict with work schedules.

The notion of splitting up the training was also suggested by multiple leaders in the Latinx and SGM focus groups, who cited the eight-hour duration and content as too long and too intensive for community members. A Latinx community leader said that this duration of training was also infeasible for caregivers of young children; they also noted that the amount of content covered in this span meant that trainers sometimes had to transition to the next topic prematurely. A SGM community leader suggested 1.5 hours to 1.75 hours as the maximum feasible length for a training, based on their experience with community programming.

Stakeholders in these groups suggested that shorter trainings would also provide an opportunity to take a module- or topic-based approach to the training. As one participant in the Latinx community leaders’ group suggested,

pueden llegar también con ciertos temas. Por ejemplo, salud mental en general pero esta fecha depresión, conociendo la depresión. La otra, violencia doméstica; el otro, adicciones, así. Podría ser como de unas dos horas, tres horas. La gente se le haría más fácil participar. [*They can reach out with specific topics. For example, mental health as a general topic and then address depression, knowing about depression on one date, domestic violence on another date, addictions on*

*another day, something like that. It could last two or three hours. It would make it easier for the people to participate.]*

A leader from the Chinese community said that they had initially planned to offer the standard eight-hour training but ultimately offered it in a two-session format (e.g., two morning sessions) after similar feedback from community members.

### In-Person or Virtual Training

In light of the pandemic, leaders were asked for their perspectives on in-person versus online trainings (e.g., via videoconference platforms). The general consensus from Latinx, SGM, and Chinese community leaders was that in-person training was more effective and preferable, typically based on their experiences with other program adaptations during the pandemic. One leader from the African American community indicated that they had offered online trainings but still preferred in-person delivery. Nevertheless, leaders felt that online training delivery might be more accessible than in-person trainings for specific groups of participants (e.g., persons with scheduling or travel limitations, persons with compromised immune systems). One middle ground suggested by an SGM community leader and endorsed by another participant in the group was the notion of a hybrid training (e.g., some content delivered online and other content, such as roleplays, practiced during an in-person session).

### Resources and Capacity

Three resource- and capacity-related suggestions arose. A Latinx community leader described difficulty locating a physical space to host the training, as their organization did not yet have a formal location. Another Latinx leader suggested having a permanent MHFA trainer embedded in organizations, so that the trainings could be offered on a regular basis. Leaders in the African American group expressed desires for a network that would promote more collaboration and cross-pollination between faith-based organizations that were offering MHFA trainings or similar programs in their communities. For example, leaders could share information, programming, resources, and counseling services. Two leaders from different organizations who unexpectedly reunited during the focus group cited this as an example of not knowing who else in the community had been offering the trainings and as an example of a connection that could have been established earlier had there been a formal network.

### Training Content

Community leaders also provided feedback on MHFA content. Two leaders from the SGM community expressed a desire for more culturally relevant or culturally tailored training content for their SGM constituent populations. For example, if “just the examples or the roleplay scenarios could be expanded a little bit to capture or be representative of more groups of people,” then “people who attend the training can more easily recognize like, ‘Oh, yeah, I have seen that.’” Along these lines, a leader from the Chinese community group expressed a desire for

more “case stud[ies]” during the training, which would “help people to understand the theory of the situations,” although it was not clear whether this was referring to more examples in general or examples tailored to Chinese community members.

### *Maintenance*

Community leaders described programming and activities that they had offered as follow-ups or supplements to the MHFA training. They also described priority topics for future mental health–related trainings in their communities.

### *Follow-Up Programming or Activities*

Community leaders were asked about ongoing or follow-up activities after MHFA training, and responses included both informal and formal maintenance activities. A Chinese community leader described how community demand for supportive consultations by their faith leaders had surged during the pandemic and shared that their organization was providing services to both members of their Buddhist community and nonmembers who were referred by congregants. Through these supportive consultations, they were “bridging” to official and professional supports when needed. Another leader from the Chinese community described pandemic-related programming, including Zoom-based educational programming, and efforts to promote social connectedness among older adults. An African American community leader described a bereavement group that had formed during the COVID-19 pandemic and felt that MHFA had “helped broach a lot of the conversations that we have to have.” Along these lines, a Latinx community leader described an ongoing support group that began before the MHFA trainings but was ongoing and “*lo reforzamos*” [“*we reinforced it*”], such that after MHFA training, the group began talking about uncomfortable topics, including mental health and referrals for professional support. Finally, an SGM community leader described staff trainings on trauma-informed care and de-escalation, but they were unsure whether these trainings had occurred before or after MHFA.

Two stakeholders from the African American and Latinx leaders’ groups described more-formal activities that were inspired by the MHFA training. First, an African American community leader described how “pastors and our community had their own training for their own congregations. And they were so excited about it. And they took it to another level. And that was great.” Second, a Latinx community leader created a new organization to address perceived unmet behavioral health needs in their community, particularly the lack of Spanish-language resources for behavioral health.

### *Priority Areas for Future Trainings and Resources*

Community leaders were also asked about the types of trainings they would like to see in the future and made suggestions in this vein while responding to other questions. Leaders from all four groups overwhelmingly asked for more MHFA trainings and were hopeful that MHFA

would eventually resume. As described earlier, SGM leaders expressed a desire for more culturally tailored MHFA, if it were to be offered in the future.

Leaders in the African American, Latinx, and Chinese community groups reported that mental health needs had been exacerbated by the COVID pandemic. Two stakeholders in the African American leaders' group voiced a specific desire for MHFA-like trainings that incorporated effects of the pandemic. For example, this included “coping skills, grieving, you know, loss of family members maybe and something that’s a little on a higher level of the mental health training.”

Three distinct themes arose in each of the Chinese, Latinx, and African American leaders' focus groups. First, leaders from the Chinese community identified several resource-related needs. These included counselors or counseling services that were more accessible than formal clinical (e.g., psychiatric) services for persons who have mental health “concerns” and were seeking “advice,” increased reimbursement for mental health care provided by physicians, and an increased mental health workforce (e.g., social workers, counselors, and other providers) available to serve Chinese communities.

Second, leaders in the Latinx community expressed concerns about substance use and addiction in their communities. As described earlier, one trainee founded their own organization focused on behavioral health in the Latinx community. Two of the other leaders specifically cited the legalization of marijuana, its widespread use, and subsequent addiction among young adults as a concern. As one stakeholder said, “Pusieron la bomba de legalizar todo, pero no están dando apoyo.” [“*They dropped the bomb to legalize everything, but they are not providing any kind of support.*”]

Third, leaders in the African American community elaborated on their desire for a more formal network among their faith-based organizations. This was previously noted with regard to implementing MHFA trainings. However, this also applied to other programming and events, along with knowledge- and resource-sharing. In reflecting on the focus group experience, one leader explained

It’s great to hear that there are other houses of worship that are addressing the mental health concerns of the community. . . . I mean, this [focus group] is great because you brought us together, but I think it’s important for us to know who we are. So, I don’t know how, if you can work it out, that you can connect us, because I know there are things that we have at my church than people are having at other churches where we can be able to be of a support.

## Agency Staff Focus Group

### *Reach*

Participants described their motivations for participating in MHFA training, which included their desired or anticipated outcomes, and participation barriers and facilitators. We remind

readers that findings from this group represent the perspectives of only three staff members; therefore, they should be generalized to other agency employees with extreme caution.

### Motivation and Desired Outcomes

Each of the three agency staff participants indicated that they were motivated to attend the MHFA training by their desire for a basic knowledge and understanding of mental health and that they did not have prior formal training in these concepts. Two of the participants had direct client contact and felt that the training would improve their ability to serve clients with unmet mental health needs. For example, one explained:

So, when I took the training, I was hoping to get or gain knowledge. Because I had no knowledge or very little knowledge in mental health or education. . . . Because that knowledge will help me better understand people and to better serve our clients. And be able to identify when I see those indicators so I will know how to assess.

This trainee also supervised staff who were likely to have some training and expertise in mental health, and, therefore, they felt that MHFA would better enable them in their supervisory role.

One of the participants also explained that they felt that there should be more attention to, and less stigma toward, mental health in minority communities and that this drove their motivation to participate. This trainee felt that by attending MHFA training, they could gain information, and that they could in turn share the information with others.

### Facilitators and Barriers to Participation

All three trainees voluntarily participated in MHFA training. A participant without client contact explained that they took the training because it was offered during their orientation as a new hire with the agency. Another participant argued that MHFA training should be mandatory for all staff with client contact, given the agency's work with vulnerable populations; others in the focus group were in full agreement with this idea. This participant likened the training to other mandatory trainings, like those focused on preventing workplace sexual harassment:

I think just because of the nature of the work we do, I think moving forward, because I know, you know, things go along with whatever administration, it should be a mandatory training. Right? I know one of the speakers said it was a part of the onboarding for [them], but it's not—that's not the general process. Right? So, I think, moving forward, all new hires should have that training. . . . Like the sexual harassment and all the other new [trainings].

Two participants believed that refresher trainings should also be required after an initial MHFA course. One of them suggested that it would be beneficial to offer the training to everyone in a short period of time, and then the agency as an organization could follow up by identifying and codifying best practices for working with clients. Finally, to promote participation in future MHFA-like initiatives, one of the participants pointed out the advantage to

“a big city push” for mental health which they had seen under the current administration. As they explained, “I saw, like, on trains, I saw it on the news, I heard it on the radio.”

### *Effectiveness and Implementation*

Participants described how they had used MHFA-related skills and knowledge. They also provided feedback on specific aspects of the training that were helpful or unhelpful and suggested improvements for future offerings.

#### **Trainees’ Use of MHFA Skills and Knowledge; Impacts**

Two participants with client contact described the relevance of MHFA skills and knowledge to outreach and work with clients. One reported that the skills and knowledge were used “Every day. Yes, it helps us kind of identify things and know how to be able to approach and assess things in a better way.” Three specific aspects that were mentioned were listening and observing body language, having the skills to approach clients in a supportive manner, and making referrals to professional support. One said that the training made them more aware of “unconscious” words and biases that might marginalize or trigger colleagues or people in their personal life. A third participant, who did not have direct client contact, felt that the training was beneficial in their personal life with friends, especially in light of stressors associated with the COVID-19 pandemic. While one participant joked that “Everybody thinks they’re a psychiatrist after this,” staff did not otherwise identify any negative impacts of MHFA training.

#### **Helpful and Unhelpful Aspects of MHFA Training and Suggested Improvements**

Skills for listening and observing body language, as a means to assess someone’s current well-being, were cited as the most helpful aspects of MHFA training. Two participants could not remember whether any specific aspects of the training were not helpful.

One participant felt that a video with scenario reenactments was “not really believable” and therefore was not helpful. This participant felt the training would benefit from more discussion of trainees’ real-world experiences and “less of the fake stuff.” They explained that the training should have

more time to digest what was being said because there’s a lot of—it’s a lot of good information. . . . and I noticed that a lot of people had so much to share. . . . like, everybody had a situation or some kind of situation that happened where they were either impacted personally or impacted, you know, someone they knew with some type of—some form of mental health.

Participants felt that the trainers were “thorough” and knowledgeable. Two participants were in agreement that the dual-trainer approach led to clashes in style. One of them elaborated:

the way their style comes across, like, or the way that the information comes across or is delivered to you, it’s like, it’s totally different. . . . one is believable and the other one is not, like, so believable. But it’s not their fault, though, because, you know, some people like don’t match each other’s energy

sometimes. And some people, like, when you put them together, they're like dynamite. So, I just wish they would feed off of each other's energy.

The third participant disagreed with the notion that trainers' styles had clashed, but it is unknown whether all three participants were referring to the same trainer dyad.

Each of the participants were in agreement that the training should be broken into more than one day, and the participant who expressed desire for more personal experiences in the training ("less of the fake stuff") argued that a multisession training would allow for this additional content. The trainee who participated in MHFA during their new-hire onboarding felt that it yielded too much information to absorb in a short period of time and felt that it would be advantageous to offer the training separately from the agency orientation.

All three participants felt that in-person MHFA training would be more effective than videoconferencing. One explained that they were "a visual learner" who preferred "interaction." A second explained that in-person training was more conducive to sharing personal experiences, as participants would feel "more comfortable" disclosing in person. The third felt that distractions such as work-related emails would detract from the training experience if it were offered online.

### *Maintenance*

Participants identified several areas for future trainings. These included an MHFA refresher course, a motivational interviewing training, trauma-informed self-care, and mental health trainings that were attuned to specific developmental stages (e.g., adolescents versus older adults). A staffer also requested "More diversity training. From diverse people."

## **Key Findings**

Where possible, we identified commonalities across groups, and, when applicable, we noted differences that were unique to one or more of the community populations. Perspectives of community leaders also reflect an advantageous "bird's-eye view" of MHFA trainings in their communities, which complements the individual-level perspectives aggregated by the survey. These findings are important, given that they provide insights into the impact of MHFA training on Spanish- and Chinese-speaking populations in New York City, and the survey component was only conducted in English. We remind readers that the absolute number of participants was relatively small, but participation rates for eligible community leaders were acceptable.

### *MHFA Training Was Aligned with Community Organizations' Needs*

Leaders of community organizations in all four populations were aware of long-standing mental health needs in their communities, and this was a significant motivator to offer MHFA training to their community members and/or staff. Furthermore, several leaders described how MHFA was well-aligned to supplement their existing programming and organizational priorities.

Each of these populations was selected for focus because they are underserved groups. As several leaders explained, they serve communities with relatively limited economic resources (and likely many of these organizations operate with relatively limited resources as well). A major advantage to the MHFA program is that the training was paid for by the city, DOHMH provided all training materials and trainers, and DOHMH could provide audiovisual equipment if needed. Community organizations provided the space for the training, could ask peer organizations to host the training session, or could send community members to on-site trainings at DOHMH. None of the leaders who participated in the focus groups indicated that implementing MHFA was administratively burdensome for their organizations or communities. They also did not identify significant reservations about offering the training, and they did not report any negative community impacts. The use of skills and community impacts described by leaders, and the various aspects of diffusion that were described, suggest that MHFA training may have a relatively strong impact in these underserved community groups.

Overall, community leaders identified several positive impacts of MHFA, and these impacts were clearly aligned with the content and spirit of MHFA (i.e., to decrease stigma, increase knowledge, and increase helping behaviors and skills). These community-level impacts are also well-aligned with those identified in a meta-analysis of MHFA trainee outcomes (Morgan, Ross, and Reavley, 2018). Leaders described the diffusion of skills and knowledge in their communities and alluded to cultural shifts within their organizations. These findings suggest that in addition to potential impacts on individuals in the community (e.g., if they receive support for unmet mental health needs), MHFA may also have the longer-term potential to shift community norms about mental health. Most evaluations of MHFA trainings have focused on trainee-reported outcomes, but the experiences of persons who receive support from MHFA trainees are also an important, albeit understudied, domain for outcomes (Forthal et al., 2022; Morgan, Ross, and Reavley, 2018). Along these lines, impacts at the community level are understudied.

### *Stigma Is a Barrier to Mental Health Services in Underserved Communities and May Also Be a Barrier to Participation in MHFA Training*

As documented elsewhere (Clement et al., 2015; Schnyder et al., 2017) and as articulated by community leaders, stigma and shame are barriers to accessing mental health treatment. Prior research suggests that aspects of stigma, specifically negative attitudes toward help-seeking and greater self-stigma, are the key forms of stigma associated with less help-seeking (Clement et al., 2015; Schnyder et al., 2017). Focus group participants did not explicitly differentiate types of stigma in their communities, but many of the examples provided could reasonably be interpreted as negative attitudes toward help-seeking and internalized stigma.

Mental health stigma was a primary motivator for offering MHFA training to communities, but it was also cited as a barrier to participation. Community leaders described a number of suggestions to help overcome this barrier, ranging from when and how MHFA training is offered to the language used to describe the training. This finding may also have relevance to broader

buy-in for MHFA among other community organizations. Although we only interviewed leaders of organizations who did implement MHFA, it is plausible that mental health stigma is a barrier to other CBOs' willingness to offer MHFA. For example, organizational staff and leadership may be reluctant to offer the training due to their own internalized stigma or concerns about low community interest and turnout. Across the community focus groups, participants described alignment between their organizations' programming and goals and the potential impacts of offering MHFA to their constituents. For organizations that are initially ambivalent or reluctant to offer MHFA training, it may be worthwhile to identify potential synergies with MHFA and their operational goals.

In terms of promoting reach and participation, leaders from the African American community in particular identified a number of helpful strategies that could be explored with other community groups in future MHFA implementation. For example, these strategies included announcements in the context of existing events (e.g., pulpit announcements during services), setting up an MHFA information table or kiosk in high-traffic areas, sharing testimonial videos from past trainees, and providing hands-on assistance for community members who may have difficulty or hesitance with online registration portals. Future MHFA implementations may also consider alternative ways to gather trainee demographic information, as this was cited as a potential barrier to registration. For example, trainees may be more willing to provide this information at the conclusion of training, after rapport has been cultivated.

### *Relatively Few Formal Maintenance Activities Were Undertaken, with Some Exceptions*

Community leaders identified relatively few formal maintenance activities as follow-up to MHFA training in their communities. Much of this may be attributed to COVID-19 pandemic-related disruptions to community activities and resource constraints. If MHFA or similar trainings are offered again in the future, city implementors might consider engaging communities in developing formal maintenance plans. For example, implementors could work with community partners and organizations to help them develop longer-term mental health programming plans or to identify untapped synergies between their other programming and MHFA. Increased efforts to "train the trainers" embedded in the community could also be part of a formal maintenance plan. For example, a leader in the African American focus group had described how pastors developed their own trainings for their congregations, and a Latinx community leader suggested embedding trainers within organizations so that training could be provided on an ongoing basis. In the course of MHFA implementation, implementors and/or community leaders might also systematically assess priority topics for future trainings and programs (e.g., including a question about desired topics within a post-test survey administered at the conclusion of training).

### *Community Leaders Identified Changes and Improvements for Future Programming*

Our discussions with community leaders identified several other considerations for future implementations of MHFA or similar trainings. First, the one-day, eight-hour format was cited as a barrier by leaders from the SGM and Latinx communities. Leaders suggested breaking the training into multiple sessions, which might also provide an opportunity to address other aspects of mental health or behavioral health more broadly (e.g., additional modules on topics such as intimate partner violence). A review of MHFA-like interventions (i.e., including MHFA as well as other first aid–styled mental health interventions) offered internationally between 2009 and 2019 found that the training has been offered in a variety of formats and durations, including trainings split over multiple days (Costa et al., 2021).

The length of training was not cited as a barrier by leaders in the Chinese community or leaders in the African American community. This may reflect different programming models in these communities and associated norms (e.g., extended services and activities on a given day, such as Sunday, for faith-based communities). A lack of concern about the length of the training may also reflect the belief that MHFA training addressed a critical need for the community, and thus the time spent participating was perceived as worth the anticipated benefits. Future implementations might engage leaders in planning for single- or multiple-day training approaches and might also endeavor to compare across groups to better understand what factors facilitate participation in one-day trainings, if that format is necessary. For example, African American community leaders described how they integrated other ministry activities in the course of the MHFA training day and offered breakfast and lunch as part of the training. There may be other considerations or supports (e.g., providing child care resources) that would promote participation in the future. Leaders in the Chinese and African American communities also provided important feedback for scheduling future trainings.

### *Leaders Stressed the Value of Offering Culturally Competent Trainings in Terms of Language and Lived Experience*

Leaders in the Latinx and Chinese communities highlighted the significant gains in accessibility enabled by trainings offered in their communities' primary languages, though one SGM leader described the challenges of delivering an English-language training to clients whose primary language was Spanish. Prior studies of MHFA in cultural and ethnic minority groups have also suggested additional adaptations to the MHFA content that could be beneficial, such as offering a cultural orientation prior to the traditional MHFA course, training delivery by community member, training content review and editing by a mental health subject-matter expert who is also part of the community, and use of revised MHFA manuals that have been approved by the applicable community (Crooks et al., 2018; Gurung et al., 2020; Minas, Colucci, and Jorm, 2009).

Leaders in the SGM community also expressed a desire for a more culturally tailored MHFA training and culturally informed trainers. Cultural competency was not cited as an issue by leaders from the Chinese, Latinx, and African American communities. Trainings offered for Chinese and Latinx communities were offered bilingually, and the trainers for these groups had bicultural lived experience, which likely increased the cultural relevance of the training. Relatively little research has examined MHFA training offered to SGM populations. Using a Delphi method with mental health providers, Bond et al., 2017, identified several guidelines for providing MHFA to an SGM person, which may also be relevant to adaptations of MHFA curriculum. These included an understanding of the dimensions of sexuality and gender, types of mental health problems and risk factors experienced by SGM populations, inclusive and supportive language, supportive behaviors (e.g., for someone coming out), and obstacles to treatment for SGM persons (e.g., discrimination in health care) (Bond et al., 2017). Future MHFA training programs should also consider recruiting trainers who have lived experience as a bicultural/bilingual SGM person (e.g., bilingual persons who identify as both Latinx and SGM).

### *Leaders Perceived That In-Person Training Would Be More Effective Than Virtual Trainings*

Community leaders expressed a strong preference for in-person MHFA training rather than online training on videoconference platforms. Some potential benefits were noted for videoconference trainings (e.g., for persons who could not travel, or persons with compromised immune systems). For context, we consider this finding in light of what is known from prior research examining differences in MHFA delivery and the potential inequities in access to necessary technology. MHFA has been previously offered in digital, self-administered formats (e.g., online modules or CD-ROM), but in-person delivery appears to predominate (Morgan, Ross, and Reavley, 2018). A 2017 RCT (Reavley et al., 2018) found limited differences between a hybrid (“blended”) training and eLearning (virtual, solitary) MHFA training. The blended training included the eLearning component, with an additional four hours of in-person activities, such as discussion and role plays. Participants who received blended training were more likely to accurately recognize depression symptoms and had greater improvements in quality of helping intentions for persons with depression symptoms. Those in blended training formats also were more likely to have completed the online training and showed some evidence of greater engagement (more completed modules and greater total engagement time) (Reavley et al., 2018).

With regard to access, contemporary research suggests that while gaps have narrowed over the past two decades, some populations (e.g., persons without a high school degree, those with less than \$30,000 annual household income, and older adults) may have less internet adoption and/or home broadband access than their peers (Pew Research Center, 2021). For New Yorkers specifically, a 2018 report indicated that almost one-third of New York City households did not have a broadband internet access subscription (NYC Mayor’s Office of the Chief Technology Officer, 2018). New Yorkers who are 65 and older, Black or Hispanic, who have less educational

attainment, or who are out of the workforce have lower rates of broadband subscription (NYC Mayor's Office of the Chief Technology Officer, 2018).

Leaders from the African American community reported that the internet-based MHFA registration portal was a barrier to participation for some older adults and that this population expressed concern over the extent of demographic information requested for registration. This suggests that alternative registration options, such as optional paper-based registration forms that could be distributed and collected by an organization's point of contact, may be useful to offer in the future. It may also be more acceptable to collect trainees' detailed sociodemographic information at the conclusion of training after greater rapport has been established. Delaying the collection of extended demographics (from registration to post-training) could also reduce data entry requirements associated with the alternate paper registration forms, if this approach was offered.

### *Community Leader Participants Identified Priority Areas for Future Trainings and Other Resources*

Leaders in the Chinese, Latinx, and African American communities all desired a continuation of MHFA trainings, and SGM leaders also expressed a desire for MHFA training that was tailored to their community. Other resource- and capacity-related needs arose in response to this discussion question, and these needs were relatively distinct for three communities: Leaders in the Chinese community focused on mental health services access and workforce capacity; leaders in the Latinx community were especially concerned about marijuana use by young persons and felt that there were inadequate community resources in the wake of legalization; and leaders in the African American community expressed interest in having an information- and resource-sharing network among organizations in their community through which to address mental health needs.

### *The Three City Agency Employee Focus Group Participants Felt That MHFA Was Highly Relevant to Their Work and Should Be Required for Some Staff*

These agency employees had attended the MHFA training because they desired a foundational knowledge and basic skills related to mental health. This finding suggests that there may be other HRA/DSS staff who desire or would benefit from MHFA or MHFA-like trainings and that this content may not be currently addressed in the existing training and education curricula in their agency. Along these lines, all three staff were in agreement that MHFA training should be required for at least some staff, specifically those with client contact. Similar notions were identified in a study of workplace MHFA training in the United Kingdom (Narayanasamy et al., 2018). Mandatory training would certainly overcome most barriers to participation. However, it does not necessarily translate to similar outcomes across all trainees.

As described earlier in discussion of the survey results, other organizational factors can influence training outcomes (Salas et al., 2012). Agency staff, particularly those working in

social service–related agencies, may have greater inherent buy-in for mandatory mental health related trainings. For example, focus group participants felt that MHFA skills were critical to their work in HRA/DSS. Routinizing the training could also have the effect of reducing stigma experienced by agency clients. It could also potentially impact stigma in the broader city environment, given that most employees are also New Yorkers themselves. Indeed, two of the participants in this focus group described using MHFA-related knowledge and skills in their personal lives. A prior evaluation of MHFA training outcomes among Australian government employees suggested that participation also has the potential to improve the worker’s own mental health (Kitchener and Jorm, 2004).

We note that the focus group participants did not appear to know each other prior to participation, and therefore they may have been uncomfortable or unwilling to spontaneously disclose how training impacted their own mental health. We did not explicitly ask workers about the training’s impact on their own mental health in the focus groups because the group setting was not designed to capture sensitive information.

*For Future Implementations, City Agency Employee Participants Suggested a Modular Approach with an in-Person Component and Identified Other Topics for Trainings*

Like community leaders, city agency employee staff felt that training should be spread out over more than one eight-hour session. As discussed above, workplace implementations of MHFA training have also been offered in a range of durations (Narayanasamy et al., 2018). Agency staff identified a number of shortcomings for videoconference-based trainings and favored in-person trainings. Finally, staff identified a number of potential topics for future trainings. The topics they identified (e.g., MHFA boosters, motivational interviewing, trauma-informed self-care) have clear relevance to employees working with vulnerable populations of New Yorkers, such as persons experiencing homelessness. In addition to surveys of agency employees in general, post-test surveys or trainee-completed evaluations of MHFA trainings could help to identify the most preferred and beneficial topics for future training initiatives.

## Chapter 7. Conclusions and Recommendations

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This evaluation utilized a mixed-methods approach to assess the impact of MHFA training in NYC and to identify training needs that may inform future mental health program planning efforts. In this chapter, we summarize key findings and conclude with recommendations that are accompanied with a synthesis of the survey and focus group findings that serve as the basis for the recommendations. Findings should be considered in light of certain study limitations, such as the low survey response rate and the limited participation and representation across the community and city agency focus groups.

### Key Findings

City-sponsored MHFA training represents a potentially valuable tool in widely distributing information to improve mental health awareness and support skills to community members. Between 2015 and 2020, tens of thousands of New Yorkers became MHFA trainees and received information and skills to better equip them to provide first aid–type support to others who may be experiencing a mental health challenge. Below, we integrate qualitative and quantitative data from this evaluation and summarize key findings at the individual, agency, and sociodemographic/community levels.

#### *Individual*

Survey respondents endorsed routinely applying the skills they learned in MHFA training to help others and themselves. Indeed, more than 80 percent of respondents reported using the knowledge or skills learned in MHFA to help support their own well-being. This paralleled feedback from some focus group participants, who felt that MHFA training had a positive impact on their personal well-being. These findings are particularly notable in the context of high rates of distress and perceived need for mental health support among respondents at the time the survey was conducted (summer 2021, amid the COVID-19 pandemic). This suggests that MHFA training may have secondary benefits to trainees, beyond equipping them with knowledge and action plans for assisting others with a mental health challenge. Despite a considerable lag between the time of the evaluation and the discontinuation of MHFA trainings in spring 2020, most survey respondents (nearly 90 percent) indicated using MHFA skills (active listening, providing reassurance and information, and encouraging professional help-seeking) in the past six months. Most trainees who completed the survey also felt confident in their ability to assist others. However, recall of general mental health information covered by MHFA curriculum indicated room for improvement—on average, trainees scored 50 percent correct on the MHFA knowledge test—suggesting that some trainees may benefit from booster or refresher trainings.

Consistent with this, most survey respondents indicated that they could benefit from additional training in mental health topics. Both the survey and focus group discussions with community leaders and agency staff indicated preferences for in-person training and suggested potential utility of virtual trainings as well.

### *Agency*

City agency employees, many of whom provide direct services to members of the community, were a key target for MHFA trainings. Consistent with this, city agency employee survey respondents were significantly more likely to have recently used MHFA skills with a client than were community-based trainee respondents. Feedback from agency focus group participants underscored the potential importance of MHFA training in equipping some agency employees to better navigate their work with clients, particularly for agency staff who work directly with clients or vulnerable populations. Indeed, some focus group participants felt that MHFA skills were so critical to their work that they recommended making it a requirement for on-the-job training. Employer-required MHFA training did not appear to be associated with negative outcomes insofar as survey respondents who reported that MHFA training was required by their job did not differ on outcomes compared with those for whom MHFA training was not a job requirement. Nonetheless, findings from the survey indicated that many agency employees feel that they could benefit from additional training to apply MHFA skills in the workplace. This was particularly notable for individuals employed in education-focused agencies.

### *Community*

MHFA trainings were offered in multiple CBOs and other publicly accessible venues throughout the city in order to maximize training accessibility and extend the reach of MHFA to all New Yorkers, including those from historically underserved and/or underresourced communities. Feedback from leaders of CBOs in the focus groups indicated highly favorable attitudes toward MHFA. CBO leaders acknowledged that MHFA training content aligned well with the needs and priorities of their communities. This is consistent with responses from the survey that indicated high rates of agreement that MHFA training addressed topics that were important to respondents' communities. Similarly, feedback from both the CBO leaders and survey respondents suggested that MHFA was viewed as highly useful among those who completed training.

CBO leaders in our focus groups cited a range of perceived positive impacts from MHFA training, including its potential to increase available support for individuals experiencing mental health challenges in their communities. Consistent with this, survey data showed that respondents indicated translating MHFA skills into actions to help friends, family members, coworkers, and other individuals in their social networks. On average, respondents who had recent opportunities to use MHFA skills (i.e., at least one recent contact with an individual with a mental health problem) indicated helping four individuals in their communities within the past

six months. CBO leaders also discussed the organic diffusion of MHFA knowledge and skills within their communities and potential to help decrease community mental health stigma (a problem also apparent in survey responses) and drive cultural shifts. Paired with data from the survey, which indicate that most respondents reported frequently or occasionally correcting misconceptions about mental health when they encountered them, these findings suggest that MHFA trainees may also play a sustained role in combatting stigma in their communities.

Overall, both qualitative and quantitative data indicated high perceived usefulness of MHFA training, low perceived burden, and few perceived problems or challenges associated with the way in which trainings were implemented. Consistent with this, leaders from CBO focus groups expressed a desire to continue MHFA trainings into the future. However, some focus group participants indicated that the length and structure of training (eight hours in a single day) may prevent some individuals from participating (e.g., due to competing demands, scheduling challenges, or other barriers).

Some focus group participants expressed concerns surrounding the cultural relevance of MHFA training to their communities or limited cultural competency of trainers. On the other hand, leaders from the Latinx and Chinese CBOs noted that the delivery of MHFA training in their native language was a major facilitator of MHFA's success in their communities. In this respect, focus group feedback revealed potential opportunities to improve reach and perceived benefits of MHFA training in diverse communities through efforts to ensure that trainings are accessible and culturally appropriate.

## Recommendations

### *Future Mental Health Trainings Could Be Leveraged to Address Identified Needs and Fortify Helping Behaviors*

- Mental health literacy is a potential area in need of targeting, as suggested by respondents scoring an average of 50 percent correct on the MHFA knowledge test.
- Although over three-quarters of respondents reported being very confident (30 percent) or fairly confident (47 percent) in their ability to help someone with a mental health problem, more than one in five respondents were slightly or not at all confident after participating in MHFA training. This suggests a need for additional training, and it may be beneficial for future programming to target the sources that undermine confidence in providing aid to persons in distress.
- Refresher trainings could be tailored to target areas that need reinforcement. Compared with those who had completed MHFA training more recently (within the past two years), respondents who had completed MHFA training three or more years ago were less likely to engage in certain helping behaviors (e.g., active listening, assistance with seeking professional help) but not others (e.g., providing first aid information). Furthermore, participation in additional trainings was associated with more-positive outcomes.
- Both survey respondents and CBO leaders expressed interest in future trainings that cover additional content related to behavioral health, and/or that serve as boosters for MHFA

training. Future implementations of MHFA or similar trainings should consider assessing trainees' specific training interests or need areas, as well as their preexisting knowledge and exposure to MHFA training or its concepts. This would promote data-driven decisions about future programming, especially among trainees who by nature of their MHFA participation are agents of diffusion with the potential for wide reach within their communities.

### *Assess Whether MHFA or Similar Trainings Could Serve as a Promising Tool to Address Trainees' Own Well-Being*

- Approximately four in five survey respondents reported using information from MHFA trainings to frequently or occasionally support their own well-being. Moreover, 40 percent of respondents indicated having obtained counseling as a result of MHFA training. Additionally, CBO leaders and agency staff described how their own mental health needs were a motivation for taking the MHFA training and discussed how they were using information from MHFA trainings to support their well-being in daily life.
- Survey respondents presented with documented mental health needs, with over 50 percent reporting needing help for emotional or mental health problems in the past year and 8 percent meeting criteria for serious psychological distress in the past 30 days (approximately double the rate of that found in the U.S. general population).

### *City Agency Employees Are More Likely to Use MHFA to Support Their Coworkers and Clients, But Workplace Mental Health Climate Can Still Be Improved*

- Compared with community-based trainee respondents, city agency employee respondents were more likely to apply MHFA to support their coworkers and clients in the past six months.
- More than one in three city agency employee respondents reported that they would not be comfortable using mental health services through their employer or discussing mental health with coworkers or supervisors. Approximately one in ten feared retaliation or being fired for seeking mental health care.
- Agency trainees in the focus group suggested that MHFA be implemented as a mandatory training for at least some positions in their agency. The notion of mandatory training could be explored further with a range of stakeholders with distinct vantage points (e.g., city leadership, MHFA implementors, city agency leadership, city agency staff, and agency clients). The three city agency employee focus group participants felt strongly that MHFA training should be a job requirement for staff with client contact, at a minimum. Survey respondents who were required by their job to participate in MHFA training did not differ in knowledge or helping behaviors compared with their counterparts for whom MHFA training was not mandated by their employer.

### *MHFA Could Potentially Strengthen Social Support Networks and Community Members at Large to Serve as First-Line Supports to Individuals Experiencing Mental Health Challenges*

- Respondents applied MHFA skills extensively and broadly across their social networks; 84 percent of respondents reported using their MHFA skills to help a friend or family

member, and nearly half applied skills with someone to whom they provide services as part of their job, a coworker, or a neighbor or acquaintance.

- Findings from the focus groups suggest that many underserved communities likely do not have sufficient resources and training to address these needs outside of clinical settings, and clinical settings have additional barriers to access (e.g., cost, cultural acceptability and accessibility, clinician capacity shortages). MHFA-trained community members may be an important first line of support, especially for peers with relatively low-level mental health needs that do not require immediate, formal clinical services.

### *Future Implementations of MHFA or Similar Trainings Should Consider the Impact of Community Stigma*

- Approximately half of survey respondents indicated the presence of community stigma—agreeing that their community thinks less of someone with a history of mental health problems and that seeking treatment is seen as a sign of personal weakness.
- CBO leaders in the focus groups relayed that stigma was a primary motivator for facilitating MHFA training but that stigma is also a barrier to participating in MHFA training and to accessing treatment in underserved communities. Future trainings may want to explicitly consider the role of stigma as a barrier to organizational participation. For example, this might include ensuring adequate outreach and engagement with leaders in communities or neighborhoods that are known to experience higher levels of mental health-related stigma.
- Racial/ethnic minority survey respondents reported better MHFA-related outcomes compared with non-Hispanic White respondents on several domains (i.e., confidence in helping someone with a mental health problem; engaging more frequently in certain helping behaviors, such as providing information/reassurance and assisting others with seeking professional help). Yet, racial/ethnic minority survey respondents were more likely to report needing additional training to apply MHFA skills in their communities compared with non-Hispanic White respondents. Future trainings could assess and address the additional training needs that racial/ethnic minorities have identified as necessary to better apply MHFA within their communities.

### *Overall Acceptability of MHFA Training Was High, But Areas for Further Cultural Adaptation Were Identified*

- Survey respondents indicated overwhelmingly favorable attitudes toward MHFA training with respect to its utility, convenience, and content (i.e., addressing issues important to the community). Furthermore, focus group participants did not identify any negative impacts of MHFA on their communities.
- Future MHFA training programs should consider recruiting trainers who have lived experience that is shared with populations of focus. Leaders of CBOs underscored the value of offering culturally competent trainings in terms of language and lived experience. Leaders in the SGM focus group desired more culturally tailored MHFA training and culturally informed trainers. Leaders in the Chinese, Latinx, and African American community focus groups did not raise cultural competency as a concern. Trainings offered for Chinese and Latinx communities were offered bilingually, and the

trainers for these groups had bicultural lived experience, which likely increased the cultural relevance of the training.

- The use of a formal adaptation framework can provide a structured, systematic approach for adaptation that may help to preserve fidelity and effectiveness of the original intervention. Use of a formal adaptation process can provide greater scientific transparency and reproducibility. A range of adaptation frameworks exist, and these typically share common steps (Escoffery et al., 2019). The most relevant frameworks for adaption of MHFA training in this context may be those frameworks that explicitly include community assessment, stakeholder engagement, pilot testing, and evaluation steps, in addition to other core adaptation steps shared by nearly all frameworks (e.g., selecting what specific components require adaptation). Several published studies have evaluated the acceptability and impacts of adapted MHFA trainings for specific populations; some examples include adaptations for First Nations peoples in Canada (Crooks et al., 2018), Bhutanese refugees (Gurung et al., 2020), Vietnamese community members (Minas, Colucci, and Jorm, 2009), and military populations (Mohatt et al., 2017). However, most prior studies of MHFA adaptations have provided limited information on the rigor of the adaptation processes used.

#### *Trade-Offs Between the Selection of Mental Health Programming and Desired Outcomes Should Be Weighed Carefully*

- The preferred mode of delivery for MHFA training was mixed, and the city should weigh trade-offs associated with reach carefully. More data on potential trainees' preferences could be collected before future design and implementation of training initiatives, with attention to potential differences by key sociodemographic characteristics. Focus group participants had near consensus that in-person trainings were more effective and preferred, although they could identify scenarios or populations where a virtual or hybrid training could be advantageous. At the same time, survey participants were more equivocal in terms of in-person versus online opportunities to gain additional information. One important note is that focus group participants were discussing MHFA and similar trainings specifically, while the survey was assessing "additional information on mental health topics" in general. The greater acceptability of online delivery in the survey group may reflect that participants who completed the web survey may have greater comfort and ease of access to technology.
- Survey respondents described a range of ways they are using MHFA-associated knowledge and skills to combat stigma within their communities (e.g., 84 percent corrected misperceptions about mental health when they encountered them). CBO leaders also attested to the diffusion of MHFA knowledge and skills within their communities, which they perceived as leading to shifts in cultural norms around mental illness. The continued application of MHFA skills long after the completion of training suggests that MHFA may have the potential to create longer-term sustainable approaches to altering community norms. However, more-rigorous studies are needed to establish the effectiveness of MHFA in shifting community norms around mental health. Social marketing campaigns have gained traction as a tool to counter public stigma, but reductions in stigma tend to be strongest among persons reporting awareness of the campaign rather than among the general population (Gaebel, Rössler, and Sartorius,

2017; Kemper and Kennedy, 2021). Nonetheless, there is some evidence that social marketing campaigns can increase perceived need for and actual mental health treatment use among individuals with psychological distress (Collins et al., 2015). When weighing the selection of mental health programming, the city should consider the strength of the evidence base for desired or prioritized outcomes (e.g., trainee knowledge, stigma, helping behaviors; city agency/community norms; perceived need and mental health service use among individuals experiencing mental health challenges).

## Limitations

These findings and recommendations should be considered in light of their limitations. One limitation relevant to both the survey and focus groups is the gap between MHFA participation and the evaluation. MHFA training has been paused since March 2020 due to the COVID pandemic, and thus more than two years have passed since the most recent implementation. On one hand, some details of the MHFA implementation and application of skills may have been lost to the passage of time. On the other hand, this evaluation has the advantage of a longer-term period of follow-up when assessing these outcomes of interest (e.g., use of skills; knowledge, attitudes, and beliefs; diffusion, maintenance, and the impacts of training on communities).

Limitations inherent in the survey of MHFA trainees should be weighed when interpreting this evaluation's findings. This evaluation was unable to establish the efficacy of MHFA given the cross-sectional nature of the survey, the lack of a randomized control group, reliance on only a post-test assessment, and the use of trainee self-report to estimate the number of MHFA recipients reached. Some survey items were newly created or drawn from a DOHMH internal evaluation to assess domains of interest to DOHMH, OCMH, and NYC Opportunity stakeholders. Additionally, items assessing self-perceived impact of MHFA training on frequency of helping behaviors asked respondents to consider their engagement in behaviors "as a result of MHFA training." Although this language strengthens the extent to which results can be interpreted as directly attributable to MHFA training, findings may not fully characterize the frequency with which trainees engage in specific helping behaviors. However, trainees were asked to quantify the number of individuals to whom they applied MHFA skills in the six months prior to the survey. The representativeness of survey findings was also limited by the lack of complete administrative data that could have been used to design and apply survey weights, the use of an English-language-only survey, and the closing of the survey when the target number of community-based trainee respondents was reached. Although the survey sample was broadly representative of the population of trainees (based on available administrative data), the survey sample skewed slightly older and tended to report higher educational attainment relative to the population of MHFA trainees. In addition, we cannot rule out the possibility of selection or response bias. For example, it is possible that respondents were systematically more likely to hold more favorable views of MHFA training compared with nonrespondents. As such, the survey findings may not generalize to all MHFA trainees.

Other limitations that could be addressed in future quantitative evaluations include the lack of randomization, a control group, multiple assessments over time, non-English language trainees, and validated outcome measures as opposed to brief or single-item measures. The originally planned evaluation included a quasi-experimental longitudinal design that would have included a control group of individuals who registered but did not complete MHFA training with baseline, six-month, and 12-month follow-up assessments. In addition, we included measures that were being used in an internal DOHMH evaluation (which were drawn from prior MHFA studies) given that stakeholders had an interest in possibly comparing the two data sources. Only about 3 percent of trainees took the MHFA course in Spanish or Mandarin; however, apart from English, these are the top two languages spoken at home in NYC (New York City Department of City Planning, 2017). Future research could oversample these groups and provide Spanish and Mandarin survey language options to better understand the needs and impact of mental health programs like MHFA.

Even though this study is one of the few that assessed whether recipients of MHFA obtained mental health services when trainees intervened with them and applied MHFA, this was based on trainee self-report. Relying on trainees to report on the quality of their helping behaviors and whether recipients benefited from trainee MHFA actions is a major limitation. Future studies could adopt innovative methods and research designs, such as rating simulated roleplays using a validated rubric with trainees or directly assessing recipients on MHFA outcomes by employing more-contained populations (e.g., families, schools) (Forthal et al., 2022).

In addition, this study relied on trainee self-report to assess agency and community level outcomes as a result of having to adapt the evaluation in light of the COVID-19 shutdown of MHFA trainings. To better assess agency- and community-level impact, future studies of MHFA should include representative samples of agency and community participants with varying exposure to MHFA training, as well as population-level outcomes (e.g., workplace absenteeism and climate; community rates of unmet mental health need and discrimination).

Several limitations are specific to the focus groups. First, participation was optional. Community focus groups had low absolute numbers of attendees but acceptable participation rates from the pool of eligible participants. The focus group with HRA/DSS staff was both low in absolute numbers and also very low in terms of response rate and participation rate; as noted throughout, findings from this specific group should be generalized with caution. These limitations temper the generalizability of these findings, as the views expressed by community leaders and agency staff who chose to participate may not reflect the views of all community leaders who facilitated MHFA implementation or HRA/DHS staff who participated in training. Second, while we took measures to promote open, critical discussion and confidentiality, participants may have been reluctant to offer criticisms of a city-funded training program in a group setting. Third, where possible, we identified commonalities and contrasts in findings across community groups. However, contrasts and comparisons across groups should not be inferred beyond the findings explicitly presented here. For example, the lack of a given theme in

a community group should not be interpreted as a lack of importance of that theme. Although we used the same semistructured moderator's guide for each group discussion, focus groups have inherently unique dynamics, flow, and content based on the makeup of each group. Additionally, each constituent group is unique in terms of the background context in their communities and how MHFA was implemented. Finally, the findings here represent the perspectives of community leaders and staff from one agency. Future qualitative evaluations of MHFA or similar programs could also include focus groups with consumers and clients as an additional vantage point to understand community and organizational impacts, as well as the experiences of persons who have received services from MHFA-trained employees.

## Conclusions

Even though a significant amount of time had passed since completing MHFA training (up to several years in many cases), respondents had ongoing current encounters with individuals experiencing mental health problems and relied on MHFA to provide support. The application of MHFA extended throughout respondents' social networks, workplaces, and communities and even personally reached many who relied on MHFA to support their own well-being. By respondents' count, a substantial number of individuals, including the respondents themselves, wound up seeking mental health treatment because of MHFA. Altogether, findings suggest that MHFA may be a promising approach to building supportive social networks, organizations, and communities that are primed to recognize and come to the aid of those who are in need of assistance. The positive findings must be tempered by the fact that this evaluation is limited in its ability to causally link the self-reported outcomes to MHFA training and to establish its generalizability to the broader population of trainees. It should also be noted that this is one of the largest mental health initiatives conducted in the United States, with more than 155,000 New Yorkers having been trained in the span of a few years. This is a remarkable and noteworthy achievement, but whether implementing MHFA at such a massive scale proves to be sustainable and cost-effective remains to be seen. Rigorous, contemporaneous evaluation of future initiatives is critical to understanding and validating the potential effectiveness and feasibility of mental health education programs like MHFA to engender multilevel impact at the individual, interpersonal, organizational, and community levels.

## Abbreviations

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ALGEE	MHFA Action Plan to approach and assess for risk of suicide or harm (Assess for risk of suicide or harm; listen nonjudgmentally; give reassurance and information; encourage appropriate professional help; encourage self-help and other support strategies)
ANOVA	analysis of variance
CBO	community-based organization
CI	confidence interval
COVID-19	coronavirus disease 2019
CUNY	City University of New York
DOC	Department of Corrections
DOHMH	Department of Health and Mental Hygiene
FDR	False Discovery Rate
GED	General Educational Development
HRA/DSS	Human Resources Administration/Department of Social Services
K6	Kessler Psychological Distress Scale
MHFA	Mental Health First Aid
NYC	New York City
NYC Opportunity	Mayor's Office for Economic Opportunity
NYPD	New York Police Department
OCMH	Mayor's Office of Community Mental Health
OR	odds ratio
RCT	randomized controlled trial
RE-AIM	framework to describe Reach, Effectiveness, Adoption, Implementation, and Maintenance
SD	standard deviation
SGM	sexual and gender minority (e.g., LGBTQIA+)

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