Comparison of State Online Mandated Reporter Trainings

Danielle Somerville, BS; Sarah Dore, MPA; Kathryn L. Humphreys, PhD, EdM; Nicole Verdiglione, MA; Shouhau Zhou, PhD; Robert Hamm, PhD; Rick Fiene, PhD; Karl Kapp, EdD; Benjamin H. Levi, MD PhD FAACP

Key words: Mandated reporter training; Online learning; Child abuse, Child protection; Evidence-based training

Abstract

This article presents the results of a comparative analysis of online mandated reporter trainings regarding child abuse. Programs from 47 U.S. states and the District of Columbia were reviewed and their content and features compared with iLookOut for Child Abuse's Core Training. Significant variation was identified in terms of the scope, content, didactic approach, delivery method, and outcome measures across different trainings. These findings raise concern that while all children need protection from abuse, not all mandated reporters are receiving comparable preparation to fulfill this important moral and legal responsibility.

Introduction

As individuals required by law to report suspected *child abuse* (a term used here to denote all forms of child maltreatment, including neglect), mandated reporters play an important role in protecting victimized and atrisk children (Child Welfare Information Gateway, 2019). Though most states require mandated reporters to complete state-approved training on how to recognize and report suspected child abuse, there are currently no standards for such training in terms of content or delivery (Kenny et al., 2016). The lack of national consensus for child abuse training along with the potential for major differences in training across jurisdictions raise concern that not all mandated reporters are receiving comparable

preparation and that some are being inadequately prepared (Kenny, 2015). Many states use online training for instruction in mandated reporting, but little is known about how these trainings vary in terms of content and delivery. This article reports on the findings of such a comparison and discusses some of the implications of the variability that was found.

Research has shown that online training is effective for educating adults and that it has particular advantages over in-person training (John et al., 2020). Specifically, online training is accessible (in terms of both timing and content), enables standardized evaluations of learning and satisfaction, facilitates storage and analysis of data, and can readily promote continuous learning (Kenny et al., 2016; Scott et al., 2016; Shendell et al., 2016).

Particularly when in-person training is not feasible, well-designed evidence-based online training can ensure that quality education is available to a multitude of people.

In response to the need for evidence-based online mandated reporter training (Ayling et al., 2019), a research team at the Penn State College of Medicine developed the iLookOut for Child Abuse (iLookOut) Core Training—a free online, interactive learning program designed to help mandated reporters better recognize, report, and respond to suspected child abuse (www.ilookoutproject.org). iLookOut also delivers an Advanced Training module. Although the iLookOut training was initially developed for early childhood professionals, it includes general information to meet the needs of all mandated reporters (e.g., in Pennsylvania) and can be adapted for use in any state. iLookOut's Core Training uses an experiential learning framework, a video-based storyline, and gamification to engage users (Levi et al., 2019). In addition to a standard registration page, the iLookOut Core Training includes validated pre/post measures that evaluate (1) knowledge and attitudes about child abuse and its reporting, (2) individuals' sense of preparedness (to identify and report suspected abuse), and (3) learners' satisfaction with the iLookOut Core Training. In-depth descriptions have been published on iLookOut's content and structure, practical and conceptual considerations in creating iLookOut, and its strategy for ensuring that its educational material is fully integrated (Kapp et al., 2020; Levi et al., 2019; Levi et al., in press). Also published are data from a randomized controlled trial (n=741) and a real-world study (n=11,065) demonstrating that the iLookOut Core Training significantly improves knowledge and changes attitudes regarding child abuse and its reporting compared with a standard mandated reporter training (Humphreys et al., n.d.; Mathews et al., 2017; Yang et al., 2020). While the iLookOut learning program's effects are well documented, there is little research on the effectiveness of other online mandated report trainings. In light of these findings, we sought to compare iLookOut's Core Training with

other existing online mandated reporting trainings in all 50 U.S. states.

Methods

A primary reviewer from the iLookOut research team performed a comparative analysis of 48 online mandated reporter trainings, including the iLookOut Core Training, and the findings were then reviewed and confirmed. Specifically, the primary reviewer registered for and completed (in full) each and every online training examined, and the reviewer then binary coded (present or absent) each of the 40 characteristics for every training. The process for generating the list of characteristics is described in the next section. Each training was further assessed for overall Level of Engagement, based on the presence or absence of several interactive features (see Table 4) as well as the scope of information present in each training. The initial coding process was completed by the primary reviewer, crosschecked for accuracy by two additional reviewers (no disagreements were identified), and discussed and confirmed according to the findings by a larger multi-disciplinary team.

Identification of Training

The initial step to identify online mandated reporter (MR) training for each state involved querying the Child Welfare Information Gateway (2019), a service of the U.S. Department of Health and Human Services that provides online resources to professionals in child welfare and related fields. Their webpage, State Training Resources for Mandatory Reporters of Child Abuse and Neglect, provides a state-by-state list of online MR trainings and other resources (e.g., toolkits, guidelines, protocols) for mandated reporters of child abuse. For the 35 states for which this listing identified a specific state-sponsored, publicly available MR online training, that training was used for the present comparison.

For states where no such program was identified, a subsequent search was performed for trainings sponsored by non-profit agencies whose primary focus was child protection/child abuse prevention, such as CARE House, Michigan (CARE House of Oakland County, 2020). If this search did not identify an online MR training, a new search was conducted for MR trainings offered by more broadbased organizations, such as SafeSchools Training, Ohio (SafeSchools, 2020), for whom child protection was not the primary focus. For states in which there were multiple state-approved MR trainings, but no state-sponsored MR trainings, the state-approved training that was both most accessible (e.g., free, user-friendly) and most extensive (in terms of content and delivery/presentation) was selected for inclusion and comparison. The various state trainings and their classifications are shown in Tables 1 and 2.

Inclusion/Exclusion Criteria

Only MR trainings that were publicly available online (either open access or with registration) were examined. With the exception of Kansas, Nebraska, and Oklahoma (which charged \$5, \$15, and \$15, respectively), none of the trainings required a fee for access or to obtain a certificate of completion. All sites were accessed between January 3, 2020, and October 26, 2020. To enable maximal comparability, only English-version trainings were evaluated; however, Table 2 identifies states that also provided MR training in multiple languages.

Subject Matter for Comparison

According to expert recommendations (Damashek et al., 2011; Chen et al., 2013), effective MR training should (1) imbue *knowledge* about the various types of child abuse, risk factors, and the long-term epidemiology and impact of child abuse and also (2) cultivate *skills* for recognizing both physical signs of abuse and behavioral indicators of child abuse (for both children and perpetrators). Based on published

recommendations, and using iLookOut as the reference training, an iteratively constructed list of 40 characteristics was created to account for the kinds of content and functionality present in each training. The list was developed by the primary reviewer in collaboration with a multi-disciplinary team whose research focuses on child protection. Content, which accounted for 21 of those 40 characteristics, included both fact-based information (e.g., types of abuse, risk factors for abuse, legal responsibilities of mandated reporters, steps for making a report) as well as education about processing (e.g., how to ask better questions, respond to disclosures by children, interpret "reasonable suspicion"). Matters involving Delivery/Functionality accounted for the remaining 19 characteristics and included the presence of a preand/or post-test, handouts, videos, voice narration, links to resources, as well as elements that promoted engagement (e.g., user-friendly format, interactive games, stories). A full list and description of these 40 characteristics can be found in Table 3.

MR trainings were then categorized as Limited, Basic, Moderate, or Advanced based on their level of engagement, as per the inclusion criteria shown in Table 4. Because there are no published consensus criteria for grading MR trainings, these three categories were intended to broadly categorize the different tiers of training as they currently stand. It is our hope that the present examination encourages others in the field to develop evidence-based, outcomes-driven criteria for a quality rating system of MR trainings.

Results

Format

In addition to the iLookOut Core Training, MR trainings were identified and examined for all U.S. states plus Washington, D.C., with the exception of Mississippi, Rhode Island, and Wyoming, for which no online MR trainings were identified. A list of all 49 trainings examined and the agencies and organizations that sponsored each training are

included in Table 2. The amount of time it took to complete each MR training ranged from 30 minutes to 3 hours. While some of the trainings allowed users to click through modules at their own pace, others required users to remain in a given module

for a fixed amount of time. Most provided some form of overview to orient the user (n=32), and most included video-based content (n=32). However, over one third of MR trainings (n=17) presented information using only slides or text.

Table 1. Providers of Online Mandated Reporter Trainings.

Type of training	Number of states	Which states
State-sponsored mandated reporter trainings (*provided by state university)	35	AL, AK, AZ, AR, CA, CO, CT, DC, DE, FL, HI, IL, IN, IA, KS, LA, ME, MD, MN, NV, NJ, NM*, NY, ND, OK, OR, PA, SC, SD, TN, TX, VT, VA, WA, WI
Non-profit, primary focus on child abuse	11	ID, KY, MA, MI, MO, MT, NC, NE, NH, UT, WV,
Non-profit, broader focus on child well-being	2	GA, OH
No online training found	3	MS, RI, WY

Table 2. State Mandated Reporting Training Sources.

State	Agency
Alabama	Alabama Dept. of Human Resources https://aldhr.remote-learner.net/ Last accessed: July 2020
Alaska	Alaska Department of Health and Human Services http://training.dhss.alaska.gov/mandatoryreporter/training/multiscreen.html Last accessed: July 2020
Arizona	Arizona Child Abuse Info Center – Children's Justice Program https://childhelpinfocenter.org/ Last accessed: July 2020
Arkansas	Arkansas Commission on Child Abuse, Rape and Domestic Violence https://ar.mandatedreporter.org/UserAuth/Login!loginPage.action Last accessed: July 2020
California	California Department of Social Services https://mandatedreporterca.com/ (also available in Spanish) Last accessed: August 2020
Colorado	Colorado Department of Human Services https://coloradocwts.com/mandated-reporter-training Last accessed: July 2020
Connecticut	Connecticut Department of Children and Families https://www.proprofs.com/training/course/?title=connecticut-mandated-reporter-training-for-community-providers-jan-2020-version-3_5e260a8c470e8 Last accessed: July 2020
Delaware	Delaware Office of the Child Advocate https://ocade.server.tracorp.com/novusii/application/login/

State	Agency
District of	District of Columbia Children and Family Services Agency https://dc.mandatedreporter.org/
Columbia	pages/Welcome.action Last accessed: July 2020
Florida	Florida Department of Children and Families https://fl-dcf.org/RCAAN/ media/RCAAN/
	index.html#SPLASH Last accessed: July 2020
Georgia	Georgia Division of Family and Children's Services https://www.prosolutionstraining.com/ store/product/?tProductVersion id=1093 (also available in Spanish) Last accessed: August 2020
Hawaii	Department of Human Services- Social Services https://humanservices.hawaii.gov/ssd/home/child-welfare-services/ Last accessed: July 2020
Idaho	IdahoStars https://idahostars.org/portals/61/Docs/Providers/ApprovedTrain/ICCP/ICCP ReportAbuse Inst 2018.pdf Last accessed: July 2020
Illinois	Illinois Department of Children and Families https://mr.dcfstraining.org/UserAuth/ Login!loginPage.action Last accessed: July 2020
Indiana	Indiana Department of Child Services https://reportchildabuse.dcs.in.gov/ Last accessed: August 2020
Iowa	Iowa State University Extension and Outreach https://training.hs.iastate.edu/course/view. php?id=731#section-2 Last accessed: July 2020
Kansas	Kansas Child Care Training Opportunities https://kccto.org/product/strengthening-families-through-positive-connections/ Last accessed: August 2020
Kentucky	Kosair Charities* https://education.ky.gov/teachers/Documents/CANtraining_FaceIt.pdf Last accessed: April 2020
Louisiana	Louisiana Department of Children and Families http://www.dcfs.louisiana.gov/index.cfm?md=newsroom&tmp=detail&articleID=575#undefined Last accessed: April 2020
Maine	Maine Office of Child and Family Services https://www.maine.gov/dhhs/ocfs/mandated-reporters.shtml Last accessed: April 2020
Maryland	Maryland's Resource for Mandated Reporters https://training.reportabusemd.com/ Last accessed: August 2020
Massachusetts	Middlesex Children's Advocacy Center https://51a.middlesexcac.org/ Last accessed: April 2020
Michigan	CARE House of Oakland County https://mandatedreportertraining.carehouse.org/ welcome/?profession=1 Last accessed: July 2020
Minnesota	Minnesota Department of Human Services https://mn.gov/dhs/people-we-serve/children-and-families/services/child-protection/programs-services/mandated-reporting-training-overview.jsp Last accessed: July 2020
Missouri	Missouri Kids First https://protectmokids.com/ Last accessed: July 2020
Montana	Child Care Resources, Inc. https://www.childcaretraining.org/mod/page/view.php?id=4007 Last accessed: July 2020
Nebraska	Project Harmony https://projectharmony.learnupon.com/ https://projectharmony.learnupon.com/ https://projectharmony.learnupon.com/ https://projectharmony.learnupon.com/ https://projectharmony.learnupon.com/ https://projectharmony.learnupon.com/ https://projectharmony.learnupon.com/ https://projectharmony.learnupon.com/ <a href="</td">

State	Agency
Nevada	The Nevada Registry http://www.nevadaregisNtry.org/ Last accessed: April 2020
New Hampshire	Know and Tell https://knowandtell.org/educate/ Last accessed: April 2020
New Jersey	New Jersey Department of Education https://www.state.nj.us/education/students/safety/socservices/abuse/training/ Last accessed: April 2020
New Mexico	New Mexico State University https://swrtc.nmsu.edu/educators/
New York	New York State Office of Children and Family Services http://www.nysmandatedreporter.org/ Last accessed: April 2020
North Carolina	Prevent Child Abuse North Carolina https://preventchildabusenc-lms.org/ (also available in Spanish) Last accessed: April 2020
North Dakota	North Dakota Department of Human Services http://www.pcand.org/NDDHS/mandatedreportertraining/index.html Last accessed: April 2020
Ohio	SafeSchools Training https://www.safeschools.com/courses/child-abuse-mandatory-reporting-ohio/ Last accessed: April 2020
Oklahoma	The University of Oklahoma Health Sciences Center https://www.ouhsc.edu/okcantraining/ Online-Training Last accessed: July 2020
Oregon	Oregon Department of Human Services https://www.oregon.gov/DHS/ABUSE/Pages/mr employees.aspx Last accessed: April 2020
Pennsylvania	Pennsylvania KeepKidsSafe https://www.reportabusepa.pitt.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=91_1 Last accessed: April 2020
South Carolina	University of South Carolina School of Law https://dss.sc.gov/child-well-being/mandated-reporters/ Last accessed: April 2020
South Dakota	South Dakota Department of Social Services https://apps.sd.gov/SS60ReporterVideoTraining/ https://apps.gov/SS60ReporterVideoTraining/ https://apps.gov/SS60ReporterVideoTraining/ https://apps.gov/SS60ReporterVideoTraining/ https://apps.gov/SS60ReporterVideoTraining/ https://apps.gov/SS60ReporterVideoTraining/ https://apps.gov/SS60ReporterVideoT
Tennessee	Tennessee State Government https://www.tn.gov/dcs/program-areas/training/tpd/cw-resources/cwr/mandated-reporter-training.html Last accessed: October 2020
Texas	Texas Dept. of Family and Protective Services http://www.dfps.state.tx.us/training/reporting/ (also available in Spanish) Last accessed: July 2020
Utah	Prevent Child Abuse Utah https://pcautah.org/ Last accessed: July 2020
Vermont	KidsSafe Collaborative, Vermont Agency of Human Services https://goto.webcasts.com/starthere.jsp?ei=1087433 Last accessed: April 2020
Virginia	Virginia Department of Social Services https://www.dss.virginia.gov/abuse/mr.cgi
Washington	Washington State Department of Children, Youth and Families https://www.dcyf.wa.gov/safety/mandated-reporter Last accessed: April 2020
West Virginia	Prevent Child Abuse West Virginia https://teamwv.org/prevent-child-abuse-wv-landing/mandated-reporter-training-information/ Last accessed: April 2020
Wisconsin	Wisconsin Child Welfare Professional Development System https://media.wcwpds.wisc.edu/mandatedreporter/ Last accessed: April 2020

Testing

Knowledge checks (i.e., fact-based questions) were present at various junctures in 30 of the MR trainings, while only nine MR trainings included skill-testing activities (e.g., recognizing abuse, identifying risk factors for abuse). Though 30 of the MR trainings included a post-test to evaluate user knowledge, only 12 of these contained a pre-test such that they could measure pre-/post-test changes in knowledge. Real-world scenarios in the form of short stories and multiple-choice questions (Errington, 2008) were present in 24 MR trainings, and 32 trainings included some element of voice narration, but only seven MR trainings provided any form of extended scenario-based storyline.

Content

MR trainings also varied considerably in terms of specific content. The vast majority (n=42) provided detailed information about the process for *making a report* of child abuse, but only 10 MR trainings provided explanations about interpreting the statutory threshold for when mandated reporting is required (colloquially referred to as *reasonable suspicion*) (Levi & Loeben, 2004). Relatively few MR trainings included information about *domestic violence* or *animal abuse* being risk factors for child abuse (n=13), how to determine when *reasonable suspicion* is present (n=8), or what kinds of questions are *better* (n=17) or *worse* (n=14) to ask when responding to a child's disclosure of abuse.



Figure 1. Number of Training Components by State.

(States colored white do not have an online MR training.)

Table 3. Training Components and Their Presence in State MR Trainings.

Component	Definition	States that have this component	States
Training features			
Pre-test	Pre-training fact-based questionnaire that tested knowledge about child abuse and its reporting	14 (29%)	AZ, AR, DC, GA, IL, IA, KS, LA, MO, MT, NH, OK, UT, iLookOut
Post-test	Post-training fact-based questionnaire that tested knowledge about child abuse and its reporting	30 (61%)	AL, AK, AZ, AR, CO, DC, GA, ID, IL, IN, KS, LA, ME, MD, MI, MO, NE, NV, NH, NC, OH, OK, OR, PA, SC, TN, TX, UT, VT, iLookOut
Training overview	Introduction that explains the purpose, content, and format of the training	32 (65%)	AK, CA, CO, DE, DC, FL, GA, ID, IL, IN, KS, LA, MA, MI, MN, MO, MT, NE, NH, NJ, NY, OH, OR, OK, PA, SC, TX, VT, VA, WV, WI, iLookOut
Individualized learning path	Individualized pathway that learners choose to guide their training content	2 (4%)	CO, ND
PDF handouts	Informational handouts that can be downloaded	10 (20%)	FL, ID, IA, MO, NJ, OK, OR, WA, WI, iLookOut
Reporting worksheet	Form that can be downloaded and used to take notes in preparation for making a report	4 (8%)	FL, OR, WI, iLookOut
Questions/knowledge checks throughout training	Short quizzes that follow each lesson	30 (61%)	AL, AR, CA, CO, CT, DC, GA, IL, IN, IA, KS, ME, MA, MI, MO, MT, NE, NV, NJ, NM, NC, ND, OR, PA, SC, TX, UT, VT, VA, iLookOut
Skill testing activities	Interactive games or activities (i.e., matching activity, crossword puzzle) that test knowledge of various topics	9 (18%)	CO, GA, MO, NM, NY, OR, SC, WI, iLookOut

Component	Definition	States that have this component	States
Feedback/explanation after questions	Explanations of correct/ incorrect answers following knowledge checks	18 (37%)	AL, CA, CO, CT, DC, ID, IN, ME, MA, MO, NE, NM, OH, OR, PA, UT, VT, iLookOut
Real-world scenarios	Real-world applications that provide context for training content	24 (49%)	AL, AK, AR, CO, DE, GA, IL, IN, LA, MI, MT, NE, NH, NM, NC, ND, OR, PA, SC, SD, UT, VA, WI, iLookOut
Scenario-based storyline	A storyline used to engages learners in the training	7 (14%)	AL, AK, MI, NM, ND, WI, iLookOut
Voice narration	A spoken commentary accompanies text throughout the training	32 (65%)	AL, AK, CA, CO, CT, DC, FL ID, KY, LA, ME, MD, MA, MI, MN, MO, NE, NV, NY, NC, ND, OK, OR, SD, TN, TX, UT, VT, VA, WA, WI, iLookOut
Videos	Informational videos included throughout the training	32 (65%)	AL, AK, AZ, CA, CO, DC, HI, ID, KY, MD, MA, MI, MN, MO, MT, NE, NV, NH, NM, NY, ND, OH, OK, OR, SC, SD, TN, TX, VT, WA, WI, iLookOut
Videos with real actors	Video scenarios that are acted out by live actors	7 (14%)	AK, KS, NH, NM, TX, VT iLookOut
Audio clips	Short voice-clips to narrate slides and/or modules	12 (24%)	CO, CT, IL, IN, IA, ME, MO, NJ, NM, NC, WI, iLookOut
Links to online resources	Links to additional resources such as state laws, definitions, or further information about the topics covered in training	21 (42%)	AK, CA, CO, CT, DC, FL, GA, ID, IL, IN, KS, MD, MI, NH, NM, OR, PA, SC, SD, TX, iLookOut
Resources for ongoing training (ie, microlearning)	Resources that promote on-going learning beyond the initial training (e.g., follow-up micro-learning activities)(18).	1 (2%)	iLookOut

Component	Definition	States that have this component	States
Evaluation of mandated reporter training	A survey given at the end of the training to gauge the user's overall experience	15 (31%)	DC, GA, ID, IL, KS, LA, NE, NH, NC, PA, SC, SD, UT, VT, iLookOut
Discussion forum	An online forum that allows for ongoing discussion between learners	1 (2%)	KS
Mandated reporter content	Content		
Types of abuse	Definition of the main types of child abuse/neglect, as state definitions	48 (98%)	AL, AK, AZ, AR, CA, CO, CT, DE, DC, FL, GA, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, iLookOut
Common signs and symptoms of abuse	Common signs and symptoms of each of the main types of child abuse/neglect	44 (90%)	AL, AK, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KS, LA, ME, MD, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OR, PA, SC, SD, TN, VT, VA, WA, WV, WI, iLookOut
Risk factors	Factors that put certain children/ families at greater risk for experiencing maltreatment	20 (41%)	AR, CA, CO, CT, DC, GA, ID,IL, KY, LA, ME, MA, MO, NE, OR, PA, UT, VT, VA, iLookOut
Red flags/indicators for abuse	Physical/behavioral indicators that should raise concern about child abuse	41 (84%)	AL, AK, CA, CO, CT, DC, FL, GA, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OR, PA, SC, SD, UT, VT, VA, WA, WV, iLookOut

Component	Definition	States that have this component	States
Things that should NOT raise concern	Physical/behavioral signs that should NOT raise concern about child abuse (i.e., Mongolian spots, normal locations where toddlers bruise)	17 (35%)	AR, CA, CO, GA, IL, KS, ME, MN, MT, NM, NC, ND, VT, VA, WA, WI, iLookOut
Parent/caregiver behavior that should raise concern	Behavior seen in child care providers that should raise concern about possible abuse	24 (49%)	AK, CA, DE, DC, FL, ID, KS, KY, LA, MI, MO, NE, NV, NH, NY, NC, ND, OR, PA, SC, UT, VT, WA, iLookOut
Prohibited child care provider behavior	Behavior seen in parents or caretakers that should raise concern about possible abuse	1 (2%)	ID
Epidemiology of child abuse	Statistics that describe the scope of child maltreatment on a national or state level	25 (51%)	AK, CA, DE, DC, GA, IN, IA, KS, LA, ME, MD, MA, MO, NE, NV, NH, NM, OH, OR, PA, TN, UT, VA, WV, iLookOut
Long-term impact of child abuse	Long-term physical, psychological or behavioral consequences of child maltreatment, as well as costs to society as a whole	23 (47%)	AL, AK, CA, DE, GA, ID, KS, LA, ME, MD, MA, MI, MN, MO, NV, NH, ND, OH, OR, PA, UT, WV, iLookOut
Domestic violence/animal abuse	Domestic violence and/or animal abuse presented as risk factors for abuse	13 (27%)	CA, CT, DC, IL, ME, MN, MT, NH, NM, NC, VT, WA, iLookOut
Explication of reasonable suspicion mean	Explanation of what "reasonable suspicion" means (with regard to making a report of suspected abuse)	10 (20%)	AZ, CT, FL, MA, MO, NM, NY, OK, PA, iLookOut
Determining whether reasonable suspicion is present	Examples are given of how to determine whether or not a situation rises to the level of reasonable suspicion	8 (16%)	FL, ID, MT, NY, OK, PA, VT, iLookOut

Component	Definition	States that have this	States
		component	
Information gathering—good questions	Examples of better questions to ask when responding to a disclosure of child maltreatment from a child	17 (35%)	AK, AZ, FL, GA, IL, KY, ME, MA, MO, NE, NH, UT, VA, WA, WV,WI, iLookOut
Information gathering—bad questions	Examples of worse questions to ask when responding to a disclosure of child maltreatment from a child	14 (29%)	AK, GA, ID, IL, MA, MO, NE, NH, TN, VA, WA, WV, WI, iLookOut
How to respond to disclosures by children	How to talk to a child who has disclosed that they have been abused	32 (65%)	AK, AZ, AR, CA, CO, DE, DC, FL, GA, ID, IL, KY, LA, MD, MA, MO, MT, NE, NV, NH, NM, NC, OH, SC, SD, TN, UT, VA, WA, WV, WI, iLookOut
Legal responsibilities of mandated reporters	State laws that designate which professionals are required to report cases of suspected child abuse/neglect	44 (90%)	AK, AZ, AR, CA, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, LA, ME, MD, MA, MI, MN, MO, MT, NE, NV, NH, NM, NY, NC, OH, OK, OR, PA, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, iLookOut
Consequences for failing to report	Penalties for mandated reporters who fail to report cases of suspected child abuse/neglect	37 (76%)	AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, LA, ME, MD, MA, MI, MN, MO, MT, NE, NV, NJ, NY, NC, OH, OK, OR, PA, SC, SD, TN, VT, VA, WA, iLookOut
Legal protection for good faith reports	Explanation that mandated reporters are protected from liability if a report is made in good faith, regardless of the outcome of the report	41 (84%)	AL, AK, AZ, AR, CA, CO, CT, FL, GA, HI, ID, IL, IN, IA, LA, ME, MD, MA, MI, MN, MO, MT, NE, NV, NJ, NM, NY, NC, ND, OH, OK, OR, PA, SC, SD, TN, TX, UT, VA, WI, iLookOut

Component	Definition	States that have this	States
		component	
Preparing to make a report	Specific information that should be gathered before making a report of suspected child abuse	43 (88%)	AL, AK, CA, CO, CT, DE, DC, FL, GA, HI, ID, IN, IA, KS, LA, ME, MD, MA, MI, MN, MO, MT, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, SC, SD, TN, TX, UT, VA, WA, WV, WI, iLookOut
Mechanics of making a report	Specific steps involved in making a report of suspected abuse to child protective services	42 (88%)	AL, AK, AR, CA, CO, CT, DE, DC, FL, GA, ID, IL, IN, IA, KS, LA, MD, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OK, OR, PA, SC, SD, TN, TX, VA, WA, WV, WI, iLookOut
Explanation of what happens after a report is made	Description of the process following the mandated reporter's conversation with a child protective services intake worker (i.e., potential outcomes of the report, timeline for next steps)	40 (82%)	AL, AK, AR, CA, CO, CT, DC, FL, GA, ID, IL, IN, IA, KS, ME, MD, MA, MI, MN, MO, MT, NV, NH, NJ, NM, NY, NC, ND, OK, OR, PA, SD, TN, TX, VT, VA, WA, WV, WI, iLookOut

Additional Resources

A smattering of MR trainings provided additional resources to promote ongoing learning, such as *PDF handouts* that reinforced important learning points (n=10), *reporting worksheets* to help guide users through the process of making a report of suspected child abuse (n=4), and *links to online resources* such as government websites and state laws (n=21). Despite strong evidence that learning requires reinforcement—ideally using spaced retrieval and spaced practice (Burns & Gurung, 2020; Karpicke & Bauernschmidt, 2011)—only iLookOut provided additional learning exercises designed to reinforce and augment its MR training. These micro-learning exercises comprise iLookOut's Advanced Trainings

1 and 2 (Kapp et al., 2020; Levi et al., 2019), which learners can access following the completion of the iLookOut Core Training. For a comprehensive inventory of characteristics of the 49 mandated reporter trainings reviewed, see Table 3 and also https://webgis.pop.psu.edu/iLookOut/.

Gamification and Engagement

In the context of education and learning, gamification (e.g., storylines with hidden information, badges, points, avatars, matching exercises) has been shown to improve learner engagement and motivation, and contribute to higher learning outcomes (Dichey & Dicheva, 2017; Jang et al., 2015; Mohammed et al., 2018). Of the

49 MR trainings in this comparative assessment, only nine made use of gamified activities. From an experiential standpoint, trainings were categorized based on their overall level of engagement. Of the

49 MR trainings reviewed, six were evaluated as Limited, 33 Basic, nine Moderate, and one Advanced. As detailed in Table 4, what distinguished more engaging MR trainings was their scope and use of audio-visual content and interactivity.

Table 4. Level of Engagement.

Level of	Definition	States at this level	States
engagement			
Advanced	Training includes multiple interactive* features, engaging multi-media formats, a wide array of resources, a scope that is considerably broader than just mandated reporting (e.g., trauma-informed care, mindfulness, critical thinking, support for families), both pre- and post-tests, and interactive feedback on knowledge test.	1 (2%)	iLookOut
Moderate	Training includes one or more interactive* features, requires participant engagement through frequent knowledge checks, may include a pre- or post-test, and includes information that goes beyond mandated reporter training.	9 (19%)	CA, GA, IN, KS, MD, MO, NM, UT, WI,
Basic	Training includes videos or audio-clips, a few minor interactive* features, and expanded information (typically as text) related to mandated reporting, such as legal requirements, signs of abuse, and prevention.	33 (67%)	AL, AK, AZ, AR, CO, CT, DC, FL, ID, IL, IA, LA, ME, MA, MI, MN, MT, NE, NH, NV, NY, NC, ND, OH, OR, PA, SC, SD, TX, VT, VA, WA, WV

Level of	Definition	States at this level	States
engagement			
Limited	Training does not include interactive* features and presents information simply as text, a slideshow, and/or a single video.		DE, HI, KY, NJ, OK, TN

Discussion

This comparative assessment identified significant variation in both content and delivery/functionality among 49 online (English language) mandated reporter (MR) trainings. Because all children deserve protection from abuse regardless of where they live, such variation raises concern over just how many mandated reporters in the U.S. have access to comprehensive preparation for recognizing and reporting suspected child abuse. This is particularly relevant if in-person MR training is not easily accessible, be it due to cost, timing, location, or other barriers.

iLookOut was designed to provide an evidence-based, standardized MR training that can be adapted to meet any given state's laws and policies. Included in this design is an emphasis on helping learners develop and apply critical thinking skills as they apply to suspected child abuse and, more generally, promoting child well-being. Whether it involves distinguishing poverty from neglect or raising awareness about cultural differences, we believe that well-designed MR trainings should include strategies for countering systemic racism and implicit bias. There was no ready metric for coding MR trainings on this goal, and so it was not evaluated in this comparative assessment.

Clearly, not all online MR trainings are created equal with regard to educating, engaging, and motivating mandated reporters. Perhaps the most glaring finding from this study is that 37 MR trainings failed to include both a pre- and post-test, and 17 MR trainings contain neither. This means that it is not possible to measure whether any one of these

37 state-approved MR trainings has any effect on mandated reporters' knowledge about child abuse and its reporting. In fact, a subsequent literature review found no published evaluation or outcomes studies for any of the 48 online MR trainings that we compared with iLookOut's Core Training. Further, for those MR trainings that had a pre- or post-test, we found no evidence that any of these other than iLookOut (Levi, et al., in press; Panlilio et al., in press) had validated their measures—as is needed to ensure that question items are truly evaluating their intended construct. So, too, no MR training other than iLookOut employed gamification or spaced retrieval/practice to promote learner engagement. To the extent that we want to both engage mandated reporters and optimize knowledge gain and retention, online trainings should take advantage of evidence-based practices shown to improve knowledge, change attitudes, and (ideally) affect people's actual behavior.

Limitations

Despite the breadth of our examination, there are several limitations to the present study. First, because only English versions of online MR training were reviewed, the content and functionality of MR trainings in other languages were not assessed. Second, because we did not continue searching MR training programs after identifying a state-sponsored training, it is possible that higher quality MR trainings exist in those states that had a state-sponsored MR training. Third, because there are no established criteria of what components should be included in MR training, the list of 40 components used to code the trainings may be neither

comprehensive nor quintessential. Finally, because there is no existing standard for evaluating a MR training's level of engagement, there may be more appropriate criteria than were used in this study.

Conclusion

The findings of this comparative assessment show major state-to-state differences in the content and delivery/functionality of state-approved mandated reporter trainings. Because, as has been noted in prior research (Mathews & Kenny, 2008), there are non-trivial differences between the states in terms of policy, legal definitions, and reporting requirements, some amount of variability is to be expected. That being said, if it is worth investing the time, energy, and resources to educate mandated reporters, it is certainly worth ensuring that key concepts and strategies for protecting children are conveyed effectively. Otherwise, there may be little reason to believe that such training will actually help mandated reporters protect children.

Recommendations

Based on the study findings, we recommend the following suggestions to practitioners and policy makers:

- Establish national standards for what should be covered in MR training.
- Establish a national standard for rating the quality of online MR training, including criteria for what counts as an evidence-based training.
- Increase funding to devleop MR training that incorporates best practices for online learning (e.g., spaced retrieval/practice) as well as innovations (e.g., gamification) that make such training genuinely engaging (and thereby more effective) for users.
- Encourage states to accept only MR training that is evidence based.
- Develop online evidence-based training that helps parents and other caregivers better understand the parameters of child abuse and its reporting.



About the Authors

Danielle Somerville, BS, is a research specialist who has over five years of experience in the area of child maltreatment. While pursuing her undergraduate degree at Penn State, she was involved in research studying the impact of child maltreatment on cognitive development. She has worked with the iLookOut project since 2019.

Sarah Dore, MPA, is Director of Learning and Curriculum for the iLookout project and has an extensive background in child welfare and program management. She has worked on the iLookOut project since 2016. She has been integral in developing its learning content and integrating gamification into learning activities.

Katherine L. Humphreys, PhD, EdM, is Assistant Professor in the Department of Psychology and Human Development, Vanderbilt University, and an infant mental health psychologist and researcher. Her lab examines the effects of early adversity (including abuse and neglect) on brain and behavior, the transition to parenthood, and developmental psychopathology. She has been affiliated with the iLookOut project since 2018.

Nicole Verdiglione, MA, is a research specialist who has extensive experience working on research projects within the Humanities and Pediatric Departments at the Penn State College of Medicine and has worked on the iLookOut project since 2014. Ms. Verdiglione has experience with multiple NIH funded research projects and has expertise assisting with study design, implementation, and data management as well as with early childhood education.

Shouhao Zhou, PhD, is Assistant Professor of the Department of Public Health Sciences at Pennsylvania State University. Dr. Zhou's research interests include clinical trial design, Bayesian hierarchical modeling, meta-analysis, and statistical model selection.

Robert Hamm, PhD, is Professor with the Department of Family and Preventive Medicine, University of Oklahoma Health Sciences Center. Dr. Hamm studies rational and erroneous decision-making, referring to the standards of decision theory and empirical accuracy and descriptions of how people use the information available to them. He has been affiliated with the iLookOut project since 2014.

Richard Fiene, PhD, a research psychologist, has spent his professional career in improving the quality of child care throughout the United States and internationally. Dr. Fiene has done extensive research and publishing on the key components in improving child care quality through an early childhood program quality indicator model of training, technical assistance, quality rating and improvement systems, professional development, mentoring, licensing, risk assessment, differential program monitoring, key indicators, and accreditation. He has been affiliated with the iLookOut project since 2014.

Karl Kapp, EdD, is Professor of Instructional Technology at Bloomsburg University in Bloomsburg, Pennsylvania, where he teaches instructional game design, gamification classes and online learning design. Dr. Kapp is the Director of Bloomsburg's Institute for Interactive Technologies and is recognized internationally as an expert in the application of games, game-thinking, and gamification to learning. He has been affiliated with the iLookOut project since 2014.

Benjamin Levi, MD, PhD, FAACP, is Professor of Pediatrics and Humanities, Penn State College of Medicine and Penn State Children's Hospital. Dr. Levi is a philosopher and practicing pediatrician whose research focuses on various aspects of decision-making. He also teaches bioethics, conducts clinical ethical consultations, and was the Founding Director of Penn State's Center for the Protection of Children. He is the Founder and Director of the iLookOut project. Contact: BHLEVI@psu.edu

References

Comparison of State Online Mandated Reporter Trainings

- Ayling, N. J., Walsh, K., & Williams, K. E. (2019). Factors influencing early childhood education and care educators' reporting of child abuse and neglect. *Australasian Journal of Early Childhood*, 45(1), 95–108. https://doi.org/10.1177/1836939119885307
- Burns, K. C., & Gurung, R. A. R. (2020). A longitudinal multisite study of the efficacy of retrieval and spaced practice in introductory psychology. *Scholarship of Teaching and Learning in Psychology*. https://psycnet.apa.org/record/2020-59641-001
- CARE House of Oakland County. (2020). *Online mandated reporter training*. Retrieved October 20, 2020, from https://www.carehouse.org/mandated-reporter-training/
- Chen, Y., Fetzer, S., Lin, C., Huang, J., & Feng, J. (2013). Healthcare professionals' priorities for child abuse educational programming: A Delphi study. *Children and Youth Services Review*, 35(1), 168–173. https://doi.org.10/1016/j.childyouth.2012.09.024
- Child Welfare Information Gateway. (2019). *Mandatory reporters of child abuse and neglect.* U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau. Retrieved April 4, 2021, at https://www.childwelfare.gov/topics/systemwide/laws-policies/statutes/manda/
- Damashek, A., Balachova, T., & Bonner, B. (2011). Training competent psychologists in the field of child maltreatment. *Journal of Clinical Psychology*, *67*(7), 752–757. https://doi.org/10.1002/jclp.20803
- Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed, and what remains uncertain: A critical review. *International Journal of Educational Technology in Higher Education*, *14*(1), 1–36. https://doi.org.10/1186/s41239-017-0042-5
- Errington, E. P. (2008). Exploring real-world scenarios as vehicles for authentic learning. *The International Journal of Interdisciplinary Social Sciences: Annual Review, 3*(5), 1–6. https://doi.org/10.18848/1833-1882/cgp/v03i05/52619
- Humphreys, K. L., Piersiak, H. A., Panlilio, C. C., Lehman, E. B., Verdiglione, N., Dore, S., & Levi, B. (n.d.). Evaluating changes in knowledge and attitudes following child abuse mandated reporter training: A randomized controlled trial of iLookOut. (under review).
- Jang, J., Park, J. J., & Yi, M. Y. (2015). Gamification of online learning. In C. Conati, N. Heffernan, A. Mitrovic, & M. Verdejo (Eds.), Artificial intelligence in education (AIED). Lecture Notes in Computer Science, 9112. https://doi.org/10.1007/978-3-319-19773-9_82
- John, R. S., Salas-Wright, C. P., Amodeo, M., Chassler, D., & Alford, D. P. (2020). Faculty education in addiction training (FEAT): Evaluating an online training program for multidisciplinary health professions educators. *Substance Abuse*, 41(3), 292–296. https://doi.org.10/1080/08897077.2020.1783739

References, cont.

- Kapp, K., Dore, S., Fiene, R., Bennett, E., Grable, B., Hamm, R., & Levi, B. (2020, April). Cognitive mapping for iLookOut for Child Abuse: An online training program for early childhood professionals. *Online Journal of Distance Education and e-Learning*, 8(2), 80–89. http://tojdel.net/?pid=showissue&issueid=236
- Karpicke, J., & Bauernschmidt, A. (2011). Spaced retrieval: Absolute spacing enhances learning regardless of relative spacing. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 37(5), 1250–1257. http://learninglab.psych.purdue.edu/downloads/2011 Karpicke Bauernschmidt JEPLMC.pdf
- Kenny, M. C. (2015). Training in reporting of child maltreatment: Where we are and where we need to go.

 Mandatory Reporting Laws and the Identification of Severe Child Abuse and Neglect Child Maltreatment,
 327–346. https://doi.org/10.1007/978-94-017-9685-9_16
- Kenny, M. C., & Abreu, R. L. (2015). Training mental health professionals in child sexual abuse: Curricular guidelines. *Journal of Child Sexual Abuse*, 24(5), 272–591. https://doi.org/10.1080/10538712.2015.10421
- Kenny, M. C., Lopez-Griman, A. M., & Donohue, B. (2016). Development and initial evaluation of a cost-effective, Internet-based program to assist professionals in reporting suspected child maltreatment. *Journal of Child & Adolescent Trauma*, 10(4), 385–393. https://doi.org/10.1007/s40653-016-0110-3
- Levi, B. H., Belser, A., Kapp, K., Verdiglione, N., Mincemoyer, C., Dore, S., Keat, J. & Fiene, R. (2019). iLookOut for Child Abuse: Conceptual and practical considerations in creating an online learning programme to engage learners and promote behaviour change. *Early Child Development and Care*, 1–10. https://doi.org/10.1080/03004430.2019.1626374
- Levi, B. H., Mundy, M., Palm, C., Verdiglione, N., Fiene, R., & Mincemoyer, C. (In press). Developing an interactive online learning program on child abuse and its reporting. *Journal of Educators Online*.
- Levi, B., & Loeben, G. (2004). Index of suspicion: Feeling not believing. *Theoretical Medicine and Bioethics*, 25(4), 277–310. https://doi.org/10.1007/s11017-004-3136-8
- Mathews, B., & Kenny, M. C. (2008). Mandatory reporting legislation in the United States, Canada, and Australia: A cross-jurisdictional review of key features, differences, and issues. *Child Maltreatment*, 13(1), 50–63. https://doi.org/10.1177/1077559507310613
- Mathews, B., Yang, C., Lehman, E. B., Mincemoyer, C., Verdiglione, N., & Levi, B. H. (2017). Educating early childhood care and education providers to improve knowledge and attitudes about reporting child maltreatment: A randomized controlled trial. *PLoS ONE, 12*(5). https://doi.org/10.1371/journal.pone.0177777
- Mohammed, G. S., Wakil, K., & Nawroly, S. S. (2018). The effectiveness of microlearning to improve students' learning ability. *International Journal of Educational Research Review*, *3*(3), 32–38. https://doi.org/10.24331/ijere.415824

38 ADVISOR

References, cont.

- Panlilio, C., Famularo, L., Masters, J., Dore, S., Verdiglione, N., Yang, C., Lehman, E., Hamm, R. M., Fiene, F., Kapp, K., & Levi, B. H. (In press). Integrating validity evidence to revise a child abuse knowledge test for early childhood education providers: A mixed methods approach. *American Journal of Evaluation*.
- SafeSchools. (2020, October 9). *Child abuse: Mandatory reporting*. Retrieved October 20, 2020, from https://www.safeschools.com
- Scott, M., Feldman, B. N., & Underwood, M. (2016). Delivering professional development in suicide prevention. *Pedagogy in Health Promotion*, *2*(4), 266–275. https://doi.org/10.1177/2373379916658667
- Shendell, D. G., Apostolico, A. A., Milich, L. J., Patti, A. A., & Kelly, S. W. (2016). Comparing efficacy of online and in-person versions of a training on U.S. federal wage and hour, child labor laws, and hazardous occupations orders for secondary school professionals. *Frontiers in Public Health*, 4. https://doi.org/10.3389/fpubh.2016.00075
- Yang, C., Panlilio, C., Verdiglione, N., Lehman, E. B., Hamm, R. M., Fiene, R., Dore, S. Bard, D., Grable, B., & Levi, B. (2020). Generalizing findings from a randomized controlled trial to a real-world study of the iLookOut, an online education program to improve early childhood care and education providers' knowledge and attitudes about reporting child maltreatment. *PLoS ONE*, *15*(1). https://doi.org/10.1371/journal.pone.0227398

