

Developing an Interactive Online Learning Program on Child Abuse and Its Reporting

Benjamin H. Levi MD, PhD,^{1,2} Mandy Mundy,³ Cathy Palm,⁴ Nicole Verdiglione,¹ Rick Fiene PhD,⁵ Claudia Mincemoyer PhD⁶

¹ Department of Humanities, Penn State College of Medicine, Hershey, PA

² Department of Pediatrics, Penn State Children's Hospital, Hershey, PA

³ Network of Victims Assistance, Perkasie, PA

⁴ Center for Children's Justice, Bernville, PA

⁵ Emeritus Professor, Departments of Psychology & Human Development, Penn State University; Middletown, Pennsylvania; President, Research Institute for Key Indicators;

⁶ Emerita Professor; Extension Education Department, Penn State University, State College, Pennsylvania

Running Head: *Online Program on Child Abuse & Its Reporting*

Corresponding Author:

Benjamin H. Levi, MD, PhD

Departments of Humanities and Pediatrics

Penn State College of Medicine, C1743

500 University Drive

Hershey, PA 17033

Fax: 717-531-3894

Email: BHLEVI@psu.edu

Running head: *Online Program on Child Abuse*

Word Count: 3,000 (not including headers)

Abstract

This manuscript describes the content and pedagogical foundations of *iLookOut for Child Abuse*, an interactive, online learning program that was designed for early childhood professionals and others who provide child care to young children.

The word count for the manuscript is 3,000 (not counting headings).

Introduction

Educational interventions to prepare early childhood professionals to protect young children from abuse are underdeveloped (Dinehart & Kenny, 2015; McKee & Dillenburger, 2012). This is significant because >675,000 cases of child abuse (physical, sexual, and emotional abuse; neglect; and imminent risk) are confirmed annually in the U.S., (U.S. Department of Health & Human Services, 2018) with evidence that the true incidence is much higher (Finkelhor, Turner, Ormrod, & Hamby, 2010).

Research demonstrates the devastating and long-lasting consequences of child abuse, including physical disabilities, cognitive impairment, neurological damage, mental health problems (depression, anxiety, post-traumatic stress, etc.), maladaptive behaviors (alcoholism, drug abuse, intimate partner violence), and of course further victimization (Norman et al., 2010). In short, abuse can have a devastating impact on a child's life and the adult s/he becomes.

Young children (0–5 years) are more vulnerable to victimization, accounting for >75% of deaths from abuse, and a greater proportion of abuse than older children for all categories of maltreatment except sexual abuse (U.S. Department of Health & Human Services, 2018). Yet despite 10-12 million American children being under the watchful eyes of early childhood professionals (**ECPs**—a term used here to describe early childhood educators, daycare providers, childcare workers, pre-school teachers, and others who work with young children), ECPs identify <1% of all substantiated cases of child abuse in the U.S. each year (McKee & Dillenburger, 2012; U.S. Department of Health & Human Services).

Early Childhood Professionals (ECPs)

The population of ECPs is diverse (in terms of age, education, work setting, and available resources), but almost all are strategically positioned to identify and respond to child abuse. ECPs may be the only people outside of the immediate family to have extended opportunities to observe children on a daily basis, and thus have the potential to both help prevent patterns of abuse from taking hold, and act as key supports for children/families (Dinehart, Katz, Manfra & Ullery, 2013). Yet ECPs face considerable obstacles in recognizing signs of abuse, differentiating normal childhood injuries from abuse, and knowing when and how to report concerns about abuse. So it is not surprising that ECPs have identified “reporting possible abuse” as one of the most troubling ethical issue they face in their workplace (Clyde & Rodd, 1989; Feeney & Sysko, 1986).

Studies of ECPs’ reporting habits for child abuse are relatively few compared with the many studies involving other mandated reporters (e.g., teachers, nurses, doctors). The small body of research examining reporting experiences of ECPs (Bishop, Lunn, & Johnson, 2002) reveals high levels of uncertainty about the decision to report, perceived “conflicts of loyalty,” (Svensson & Janson, 2008) and plethora of complexities that cause some ECPs to feel as if they are “dancing on the edge” (Feng, Chen, Wilk, Yang, & Fetzer, 2009) The challenges arise in part from ECPs’ desire to preserve relationships with families and avoid causing harm, while also meeting their legal, professional, and ethical responsibilities to protect children. One study found ECPs are less likely to have ever reported child maltreatment compared to other professionals who work with children (Zellman & Bell, 1990) –due in part to scant education regarding the

circumstances and level of concern that warrant reporting (Kenny, 2007). Even when ECPs do report, there is considerable *report latency*, with one study finding an average lag time of 14 months between ECPs having suspicion and making a report (Sundell, 1997) –a situation that if left unaddressed risks dire outcomes for many young children.

Professional training has been the chief mechanism for trying to improve ECPs' recognition and reporting of child abuse —the presumption being that increased knowledge will promote reporting. But due to the lack of rigorously evaluated interventions, little is known about the actual effect of education on ECPs' recognition of abuse, reporting behavior, or how to best prepare them to meet their responsibilities to protect children (Christian, 2008). That said, research suggests that ECPs' lack of education contributes to their reports of suspected abuse having lower yields –with substantiation rates of just 6.3%, compared to 25-33% for other mandated reporters (Pennsylvania Department of Human Services, 2017; King, Lawson, & Putnam-Hornstein, 2013).

Need for Training

Any intervention to help ECPs meet their professional, ethical, and legal responsibilities as mandated reporters must deal with well documented challenges: wide variability in entry level training of ECPs; variability in the quality of professional development opportunities; logistical barriers to professional development during working hours (be it lack of down time during the workday, or limited access to training); bureaucratic challenges to ensuring quality education across settings (from family-based daycares to corporate chains to church-based facilities); as well as short-staffing and 20-40% annual turnover rates (Whitebook, Phillips, & Howes, 2014;

Melusky, Slavinsky, Strauser, & Le, 2013). All these factors make it more difficult to establish childcare environments that are well prepared to protect young children (especially infants and toddlers) from harm (Zaslow, 2014).

That said, well designed training programs can succeed, provided they deliver standardized, high quality curricula and reinforce learning (Lunenberg, 2011). *Online* education has particular advantages for meeting the needs of ECPs, and overcoming key challenges, as it lends itself to standardization; is eminently scalable; provides ready, low-cost access to multi-media learning; can easily employ interactive exercises for experiential learning; can be accessed more flexibly than workshop based training; is as effective as in-person training at enhancing ECPs' knowledge, skills, and professional competencies; and provides ready means for tracking results (Stone-MacDonald & Douglass, 2015).

To be effective, a training program needs to help ECPs understand the different forms of child abuse and their presenting signs and symptoms (Dinehart & Kenny, 2015) –since child abuse can be challenging to discern, and perceptions of abuse can be mistaken (Christian & States, 2017; Reece & Christian, 2008). Effective training must also teach ECPs about their professional and legal responsibilities –which can be confusing (Mathews & Kenny, 2008)– and also promote appropriate attitudes and behavior about reporting suspected abuse (Ajzen & Fishbein, 2005). If done well, education can help ECPs be more aware, better prepared, and more inclined to appropriately recognize and effectively report suspected abuse (Fraser, Mathews, Walsh, Chen & Dunne, 2010; Crenshaw, Crenshaw, & Lichtenberg, 1995). Importantly, this entails not only reducing missed cases of abuse, but also minimizing over-reporting (Ho, Gross, & Bettencourt,

2017). It is either disingenuous or misinformed to suggest that ECPs should report whenever child abuse is “possible” –given that child abuse is protean in its various presentations. A child who is anxious or withdrawn or angry, or small, or tired, or slow to develop, or any number of other common things “may” be being abused. But it is neither warranted, practical, nor helpful to report every such child.

iLookOut for Child Abuse (iLookOut)

iLookOut is an online, interactive educational program that was designed to help better prepare ECPs for the challenging and important responsibility of protecting the most vulnerable members of our society from harm. A randomized controlled trial has shown that *iLookOut* improves ECPs’ knowledge, and changes ECPs’ attitudes (in the desired direction) about child abuse and its reporting, and that ECPs very much like *iLookOut*. Previously published work describes those results, as well as how the knowledge and attitudinal measures were developed and validated. In this article we describe the *iLookOut* learning program, itself, and its pedagogical underpinnings.

Learning Objectives

iLookOut was intentionally designed for ECPs and, like most standard training on reporting child abuse, its didactic learning objectives are to help ECPs: 1) Understand and recognize possible child abuse, and 2) Understand the responsibilities of being a mandated reporter (see Figure 1). An additional learning objective, however, is affective in nature: to 3) Become empowered and motivated to protect children who are at risk for abuse. This includes helping ECPs engage with colleagues about the possibility of abuse, and navigate barriers to reporting suspected abuse.

Structure of Learning Program

Learners first complete a registration section that covers a broad range of demographic items (professional and personal), including prior experience with both child abuse education and reporting suspected abuse. Learners then complete a pre-test of knowledge (23 items) and attitudes (13 items) regarding child abuse and its reporting (previously described (Mathews et al., 2017)).

The *Getting Started* section then begins with 2 separate videos of a young man and a young woman (both actors) talking about their experience of being abused as a child. While these testimonials do not contain any graphic descriptions or images of abuse, learners are alerted before-hand that “some people may find the videos upsetting, particularly if their own lives have somehow been affected by abuse.” (Of note, with >12,000 ECPs having completed *iLookOut*, we have not received any objections or negative comments about these testimonial videos.) The purpose of these videos is to impress on learners the very real human impact that our actions (or failures to act) can have for children who are abused, as well as their families. At the end of the learning program, this connection is further reinforced with a brief video of a young girl who asks: “If you don’t protect me, who will?”

In this initial version of *iLookOut*, learners are asked to imagine being an early childhood educator working with 4 and 5 year-olds. Then, using an interactive, video-based storyline filmed with point-of-view videography (i.e., the camera functioning as the learner’s eyes), key events unfold through interactions with children, parents, and co-workers (all played by actors). As more is revealed about each child’s situation (over the storyline’s 2-day timeframe), the

learner has to decide what, if any, action to take. In-depth information is provided for 5 of the children depicted, each of whom demonstrates risk factors for a particular form of abuse.

At different junctures in the story, resource files become available for learners to access (see Fig. 2). These include: i) *Types of Child Abuse* (which defines and provides examples of each type of child abuse); ii) *Red Flags for Abuse*; iii) *Facts About Abuse* (which includes state and national statistics about the incidence of abuse, physical and psychological consequences of abuse, tips for identifying abuse, legal penalties for failure to report suspected abuse, and links to useful websites); and iv) *Reporting Suspected Abuse* (which explains the threshold for reporting, how to operationalize the term “reasonable suspicion,” and that mandated reporters have legal immunity so long as a report is made in good faith).

Learners also can choose to view additional videos and text-files to learn more about the children portrayed in the storyline –including back-stories on the children and their families. Part of the lesson here is that, as in real life, the more information one has, the better informed one’s choices. That said, it is also made very clear that it is not the ECP’s role to “investigate” whether child abuse has in fact occurred.

Throughout the *iLookOut* program, learners are posed questions, and based on their response are provided information to augment (and/or correct) their existing understanding of child abuse and its reporting. At the end of the storyline, a video is shown in which narrators discuss elements within the storyline that could (or should) have raised or lowered the learner’s concern about abuse for each of the children she encountered in the story. Learners are then asked to sign a

pledge that they will fulfill their responsibilities as mandated reporters. They are also given follow-up materials (e.g., case scenarios for discussion, handouts, etc.) that they can print, download, and share with others in their work setting.

Learners then complete a knowledge and attitudes post-test (identical to the pre-test), and a survey evaluating the learning experience. If any items on the knowledge test were answered incorrectly, the learner must identify the correct answer in order to complete the *iLookOut* program. The learning program then finishes with a disclaimer about the characters (children and adults) depicted in *iLookOut*, explaining that i) *iLookOut* was written and casted to demonstrate diversity (race/ethnicity, gender, socio-economic status, awareness, temperament, etc.); ii) various of the depicted behaviors and personal characteristics may inadvertently reinforce negative stereotypes; and iii) the creators welcome suggestions for avoiding such negative characterizations, provided they do not simply shift them to another group. To date, no complaints or suggestions on this matter have been received.

Completing *iLookOut* earns ECPs 3 hours of professional development credit, and also satisfies their state requirement for mandated reporter training. ECPs' valuation of *iLookOut* is perhaps best demonstrated by the fact that >12,000 learners have completed it since open access began in January 2015 –with >95% of learners accessing all the supplemental resource files, and <2% failing to finish the learning program. Separate manuscripts are currently in preparation reporting ECPs' satisfaction with *iLookOut*, as well its efficacy (in a real-world setting) for improving knowledge and attitudes.

Pedagogical Approach

iLookOut was created by an interdisciplinary team with expertise in child abuse, instructional design, pediatrics, early childhood education, online learning, mandated reporter training, law, ethics, child advocacy, and victim services. Its interactive storyline was designed to 1) engage ECPs emotionally and intellectually, 2) increase their awareness about child abuse, and 3) help them feel both empowered and responsible to contact child protective services when there is reasonable suspicion of child abuse.

The opening testimonial videos set the stage for these goals. Prior to the first video, text appears on the screen (rhetorically) asking “Do you remember a time when YOU felt hurt and scared? ... and nobody helped you?” Prior to the second video, the same question appears in text on the screen: “Do you remember a time when YOU felt hurt and scared?” But this time, the follow-on text reads: “...and someone asked the right questions and did the right thing to protect you?” The purpose of this sequence is to encourage learners not only to identify with the vulnerability of children who are at-risk, but also to identify as being part of a system that, however imperfect, is the only system we have for protecting children. As the learning program then moves into the video-based storyline, ECPs are immersed in realistic scenarios that both teach them new information, and challenge them to put into practice what they are learning. In addition to helping learners operationalize new information, this approach encourages important affective skills to encourage ECPs to be more pro-active in protecting real children from harm.

This is one example of how *iLookOut* is grounded in an “experiential learning” conceptual model that is a key feature of adult learning theory. Drawing on the work of Knowles (Knowles, 1984),

Billington (Billington, 2000), and Kolb (Kolb & Kolb, 2009), *iLookout*'s design recognizes that adults learn best when 1) they know why they need to learn the material, 2) the learning process is experiential, 3) learning is framed as problem-solving, and 4) the material to be learned has immediate value (Knowles, 1984). In keeping with Billington's key factors for promoting adult development, *iLookOut* i) challenges ECPs just beyond their present level of ability –so they are pushed to grow, but not pushed so far that they give up; ii) uses exercises to reinforce facts and frameworks (here, regarding suspected child abuse); and iii) allows learners to proceed (and therefore digest information) at their own pace. Because *iLookOut* is accessible 24/7 and can be paused/resumed as desired (including across multiple sessions), it also leverages ECPs' preference for "flexibility" in professional development (Kyzar et al., 2014). Additionally, *iLookOut*'s online platform provides an emotionally safe environment for experiential learning, which has been shown to improve knowledge acquisition and implementation among ECPs (Kyzar et al., 2014).

By interweaving an interactive storyline with didactic information, decision-points, and critical feedback to learners' responses, *iLookOut* aims to reflect adult learning best practices (Billington, 2000), and embody the key elements of Kolb's experiential model (Kolb & Kolb, 2009). In the context of helping ECPs become responsible mandated reporters of child abuse, these key elements manifest as follows: 1) "Concrete Experience" –helping ECPs reinterpret experiences they have previously encountered; 2) "Reflective Observation" –helping ECPs consider and problem-solve any tension/conflict between the lived experience of being a ECP and their responsibilities to protect children; 3) "Abstract Conceptualization" –promoting reflection about the meaning/implications of concepts such as abuse and suspicion; and 4)

“Active Experimentation” –providing practice opportunities to apply new information/understanding. Taken together, these elements provide a nuanced, yet practical educational experience expressly designed for early childhood educators and caregivers. In particular, *iLookout*’s interactive storyline, pairing of questions with immediate critical feedback, post-test reinforcement, reflective debriefing, and follow-up engagement capitalize on Kolb’s observation that critical thinking skills develop best when learners transform their own experience into knowledge by acting on their learning.

iLookOut’s Evidence-Base

The *iLookOut* program is integrated with a learning management system that tracks pre- and post-test data, responses to questions within the learning program, as well as a post-program evaluation of the learning experience. In both randomized controlled trials (Mathews et al., 2017; ClinicalTrials.gov) and a real-world study (forthcoming), outcomes are being tracked with regard to attitudes, and actual behavior. Because the learner’s responses within the various learning modules are also recorded by the learning management system, it is also possible to study patterns of learning, however this has not been a focus of inquiry to date.

By design, all legal/policy-related content in *iLookOut* is contained within discreet learning modules (as opposed to the video-based storyline). So while *iLookOut* was originally developed for use in Pennsylvania, state-specific content can be readily revised to comport with legal and policy-related requirements of other states –as has already been done for the state of Maine. This adaptability provides opportunities to study the efficacy of *iLookOut* with diverse populations, as well as to experiment with different ways of framing the learning material.

Implications for Practice

Few if any interventions intended to improve the identification and reporting of suspected child abuse address the behavioral underpinnings of these key activities, which are needed to protect children from harm. *iLookOut*'s use of a realistic, interactive storyline provides an innovative prototype for experiential learning that also facilitates learner engagement and skill-building. In particular, *iLookOut* demonstrates how a story-based learning experience can help learners feel more empowered and motivated to act when needed –an affective goal often neglected when designing educational interventions.

Figures

1. Understand and recognize possible child abuse

- What does and does not constitute child abuse
- How and where abuse occurs
- Risk factors for abuse
- Signs and symptoms of abuse
- Consequences of abuse



Red Flags for Abuse or Neglect

ANY KIND

Subtle Signs of Abuse	Behavior Seen in Children	Behavior Seen in Abusers
Marked changes in personality that do not make sense	Discloses abuse or neglect	Does not show love toward the child
Constant sadness	Re-enactment of abuse using dolls, drawings, or friends	Talks about the child as being bad or "the cause of my problems"
Abnormal fears	Frequently criticizes or tries to hurt him/her-self	
Often complains of stomach aches, headaches, nausea for no apparent reason	Bullies others	

PHYSICAL

Subtle Signs of Abuse	Behavior Seen in Children	Behavior Seen in Abusers
Unusual bruising <ul style="list-style-type: none"> • On the ears or neck • On ankles, chest or back • In the genital area • In the shape of an object (hand, belt, utensil) 	The story of what happened does not match the injury	Has a different account than the child of how the injury occurred
Unusual injuries <ul style="list-style-type: none"> • Bite marks • Patterned burns (cigarette, iron,) • Inconsistent with normal play • Pain moving arms or legs • Pain with breathing 	Refuses or is afraid to talk about injuries	Cannot control anger or frustration
	Is away a lot, and when s/he comes back has signs of healing injuries	Expects too much from the child
	Is frequently afraid of others or being touched	Severely punishes the child

(continued on next page)

Wears clothes to cover up injuries

Fig. 2 Red Flags for Abuse Handout

References

- Ajzen, I., & Fishbein, M. (2005). The Influence of Attitudes on Behaviour. In D. Albarracin, B. Johnson, & M. Zanna (Eds.), *The Handbook of Attitudes* (pp. 173–221). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Billington, D.D. (2000). Seven Characteristics of Highly Effective Adult Learning Programs. Retrieved from: <http://education.jhu.edu/PD/newhorizons/lifelonglearning/workplace/articles/characteristics>
- Bishop, A., Lunn, P., & Johnson, K. (2002). 'I Would Just Like to Run Away and Hide, But I Won't!' Exploring Attitudes and Perceptions on Child Protection Issues with Early Years Teacher Trainees on the Threshold of Their Careers. *Westminster Studies in Education*, 25(2), 187-199. doi.org/10.1080/0140672020250208
- Christian, C.W. (2008). Professional Education in Child Abuse and Neglect. *Pediatrics*, 122, S13-S17. [doi:10.1542/peds.2008-0715f](https://doi.org/10.1542/peds.2008-0715f)
- Christian, C.W., & States, L.J. (2017). Medical Mimics of Child Abuse. *American Journal of Roentgenology*, 208(5), 982-990.
- ClinicalTrials.gov, NCT03185728. Retrieved from <https://clinicaltrials.gov/ct2/results?cond=&term=NCT03185728&cntry=&state=&city=&dist=>
- Clyde, M., & Rodd, J. (1989). Professional ethics: There's More to It Than Meets the Eye!, *Early Child Development and Care*, 53(1), 1–12. [doi:10.1080/0300443890530101](https://doi.org/10.1080/0300443890530101)
- Crenshaw, W.B., Crenshaw, L.M., & Lichtenberg, J.W. (1995). When Educators Confront Child Abuse: An Analysis of the Decision to Report. *Child Abuse & Neglect*, 19(9), 1095–1113. [doi.org/10.1016/0145-2134\(95\)00071-F](https://doi.org/10.1016/0145-2134(95)00071-F)
- Dinehart, L.H., Katz, L.F., Manfra, L., & Ullery, M.A. (2013). Providing Quality Early Care and Education to Young Children Who Experience Maltreatment. *Early Childhood Education Journal*, 41(4), 283–290.
- Dinehart, L., & Kenny, M.C. (2015). Knowledge of child abuse and reporting practices among early care and education providers. *Journal of Research in Childhood Education*, 29(4), 429-443. doi.org/10.1080/02568543.2015.1073818
- Feeney, S., & Sysko L. (1986). Professional Ethics in Early Childhood Education: Survey Results. *Young Children*, 42(1), 15–20.
- Feng, J.Y., Chen, S.J., Wilk, N.C., Yang, W.P., & Fetzer, S. (2009). Kindergarten Teachers' Experience of Reporting Child Abuse in Taiwan: Dancing on the Edge. *Children and Youth Services Review*, 31(3), 405-409. doi.org/10.1016/j.childyouth.2008.09.007

- Finkelhor, D., Turner, H., Ormrod, R., & Hamby, S.L. (2010). Trends in childhood violence and abuse exposure. *Archives of Pediatric Adolescence Medicine*, 164(3), 238-242. [doi:10.1001/archpediatrics.2009.283](https://doi.org/10.1001/archpediatrics.2009.283)
- Fraser, J.A., Mathews, B., Walsh, K., Chen, L., & Dunne, M. (2010). Factors Influencing Child Abuse and Neglect Recognition and Reporting by Nurses: A Multivariate Analysis. *International Journal of Nursing Studies*, 47(2), 146–53. doi.org/10.1016/j.ijnurstu.2009.05.015
- Ho, G.W.K., Gross, D.A., & Bettencourt, A. (2017). Universal Mandatory Reporting Policies and the Odds of Identifying child Physical Abuse. *American Journal of Public Health*, 107(5), 709-716. doi.org/10.2105/AJPH.2017.303667
- Kenny, M.C. (2007). Web-based Training in Child Maltreatment for Future Mandated Reporters. *Child Abuse & Neglect*, 31(6), 671-678. doi.org/10.1016/j.chiabu.2006.12.008
- King, B., Lawson, J., & Putnam-Hornstein, E. (2013). Examining the Evidence: Reporter Identity, Allegation Type, and Sociodemographic Characteristics as Predictors of Maltreatment Substantiation. *Child Maltreatment*, 18(4), 232-244. doi.org/10.1177/1077559513508001
- Knowles, M. (1984). *The Adult Learner: A Neglected Species (3rd ed.)*. Houston: Gulf Publishing.
- Kolb, A.Y., & Kolb, D.A. (2009). The Learning Way: Meta-cognitive Aspects of Experiential Learning. *Simulation & Gaming*, 40(3), 297-327. doi.org/10.1177/1046878108325713
- Kyzar, K.B., Chiu, C., Kemp, P., Aldersey, H.M., Turnbull, A.P., & Lindeman, D.P. (2014). Feasibility of an Online Professional Development Program for Early Intervention Practitioners. *Infants & Young Children*, 27(2), 174-191. [doi:10.1097/IYC.0000000000000007](https://doi.org/10.1097/IYC.0000000000000007)
- Lunenburg, F.C. (2011). Curriculum Models for Preschool Education: Theories and Approaches to Learning in the Early Years. *Schooling*, 2(1), 1-6.
- Mathews, B., & Kenny, M. (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. 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). doi.org/10.1371/journal.pone.0177777

- McKee, B.E., & Dillenburger, K. (2012). Effectiveness of child protection training for pre-service early childhood educators. *International Journal of Educational Research*, 53:348-359. doi.org/10.1016/j.ijer.2012.04.008
- Melusky, R., Slavinsky, E., Strauser, M., & Le, A. (2013). The 50 state child care licensing study 2011-2013. Lexington (KY): National Association for Regulatory Administration (US). on. Report No.: 043
http://www.naralicensing.org/assets/docs/ChildCareLicensingStudies/2011-2013_child%20care%20licensing%20study.pdf
- Norman, R.E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The Long-Term Health Consequences of Child Physical Abuse, Emotional Abuse, and Neglect. *PLoS Medicine*, 9(11). doi.org/10.1371/journal.pmed.1001349
- Pennsylvania Department of Human Services (2017). *Child Protective Services 2017 Annual Report*. Retrieved from
http://www.dhs.pa.gov/cs/groups/webcontent/documents/document/c_275378.pdf
- Reece, R.M., & Christian, C. (2008). *Child abuse: medical diagnosis & management (3rd ed.)*. American Academy of Pediatrics, 2008.
- Stone-MacDonald, A. & Douglass, A. (2015). Introducing Online Training in an Early Childhood Professional Development System: Lessons Learned in One State. *Early Childhood Education Journal*, 43: 241-248.
<https://doi.org/10.1007/s10643-014-0649-2>
- Sundell, K. (1997). Child-Care Personnel's Failure to Report Child Maltreatment: Some Swedish Evidence. *Child Abuse and Neglect*, 21(1), 93-105.
[doi.org/10.1016/S0145-2134\(96\)00133-0](https://doi.org/10.1016/S0145-2134(96)00133-0)
- Svensson, B., & Janson, S. (2008). Suspected Child Maltreatment: Preschool Staff in a Conflict of Loyalty. *Early Childhood Education Journal*, 36(1), 25-31.
- U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2018). *Child maltreatment 2016*. Available from
<https://www.acf.hhs.gov/ch/research-data-technology/statistics-research/child-maltreatment>
- Whitebook, M., Phillips, D., & Howes, C. (2014). *Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.

Zaslow, M. (2014). General Features of Effective Professional Development. In H.P. Ginsburg (Ed.), *Preparing Early Childhood Educators to Teach Math* (pp.97-115). Baltimore, MD: Brookes Publishing Co.

Zellman, G.L., & Bell, R.M. (1990). *The Role of Professional Background, Case Characteristics, and Protective Agency Response in Mandated Child Abuse Reporting*. RAND Corp., Santa Monica, CA.