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Understanding and Parenting Children's Noncompliant Behavior: The Efficacy of an Online Training Workshop for Resource Parents

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Abstract

The current study examined the effectiveness of an online training program on parenting children's noncompliant behavior. Eighty-two resource parents (foster, adoptive, and kinship) were recruited through Foster Parent College—an online training website—and randomly assigned to a treatment or wait-list control group. Parents in the treatment group participated in an online interactive workshop on noncompliant child behavior. Online assessments occurred before and after a 1-week intervention, and again 3 months later. Group differences at posttest were significant for parents' reports of children's positive behavior and parent knowledge related to children's noncompliant behavior. Only parents in the treatment group showed significant improvement from pre- to posttest on several other outcome measures of parenting noncompliant behavior. Satisfaction with the online workshop at posttest was very high. Results at the 3-month follow-up assessment showed significant group differences only for parents' knowledge about children's noncompliant behavior. Feedback on the workshop remained positive, with treatment group parents indicating that they felt the workshop had beneficially impacted their parenting and their children's behavior.

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Conflict of Interest

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Keywords

automated training program; defiant child behavior; externalizing behavior; interactive web-based training; noncompliant child behavior; online parent training; parental stress; placement disruption; resource parent training

1. Introduction

Children in care, whether foster, foster-adoptive, or kinship, often endure relational trauma, prenatal substance exposure, and other adverse events (Burns et al., 2004; Stambaugh et al., 2013), all of which correlate with a range of neurobehavioral problems, including behavioral noncompliance and defiance (Chasnoff, 2010; Cook et al., 2005; D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012; Ford et al., 1999; Steiner & Remsing, 2007; van der Kolk et al., 2009). Noncompliance is an externalizing behavior problem (McKee, Colletti, Rakow, Jones, & Forehand, 2008), referring to interactions in which a child either actively or passively, but willfully, fails to cooperate with an action requested by a caregiver or other adult authority figure (Kalb & Loeber, 2003). Levels of noncompliant behavior are typically stable during childhood, peak in early adolescence, and then tail off in late adolescence (Kalb & Loeber, 2003). Childhood noncompliance often predicts later aggression and other disruptive behavior problems, which are associated with risk of foster placement breakdown (Fisher, Stoolmiller, Mannering, Takahashi, & Chamberlain, 2011; Leathers, 2006). Defiance, an extreme form of noncompliance and a significant externalizing behavior problem, can include aggressive oppositionality and tantrums in response to caregiver requests (Barkley, 2013; Kalb & Loeber, 2003). Adoptive parents seeking mental health services report defiance as the second most common presenting behavior problem, behind only lying and manipulation (Smith, Howard, & Monroe, 2000). Elevated levels of foster parent stress related to caring for a child with serious behavior problems can interfere with responsive caregiving (Fisher & Stoolmiller, 2008). A range of externalizing behavior problems, including defiance and oppositional behavior, along with the rise in foster parent stress levels, can presage foster care placement disruption (Fisher & Stoolmiller, 2008; Leathers, 2006). While often seen as less disagreeable than noncompliance and/or defiance, fearful *over*compliance is also viewed as a mental health problem in children (Crittenden, 1992; Crittenden, 2008).

Noncompliance is more frequently being understood as a bidirectional, *relational*, process that involves interchanges in which parent requests and child behavior reciprocally influence and negatively reinforce each other (Kalb & Loeber, 2003). Problematic parent-child interactions play a significant role in the emergence of noncompliance. Coercion theory (Granic & Patterson, 2006; Patterson, 2002) posits that children's noncompliance often develops in response to punitive, harsh, and overcontrolling parenting strategies, but can also include child characteristics that elicit the overcontrol (Verhoeven, Junger, van Aken, Dekovic, & van Aken, 2010). In coercive relationships, parents and children are often trying to control each other at a behavioral level, mostly because they have little awareness of or interest in each other's internal states (feelings, intentions, and thoughts) (Fearon et al., 2006).

Three developmental pathways are implicated in the etiology of coercive parent-child interactions and compliance problems. First, *prenatal substance exposure* (PSE), especially to alcohol, can increase young children's negative affect (Fryer, McGee, Matt, Riley, & Mattson, 2007) and undermine their capacity to regulate behavior (Kodituwakku, 2007). Negativity and dysregulation can elicit coercive responses from parents, to which the children in turn may respond even more negatively (Beekman et al., 2015; Burke, Pardini, & Loeber, 2008; Huh, Tristan, Wade, & Stice, 2006; Schermerhorn et al., 2013). Second, *exposure to relational or intrafamilial trauma*, such as abuse, neglect, and domestic violence, correlates with overcompliance, difficulty understanding and complying with rules (Cicchetti, Rogosch, & Toth, 2006; Cook et al., 2005), and defiance/oppositionality (Ford et al., 1999). Third, *extrafamilial adverse conditions in early childhood*, such as living in poverty or a dangerous environment, are also associated with parental coercion and corresponding noncompliance from children (Pinderhughes et al., 2007). Notably, PSE, intra- and extrafamilial trauma can coexist, combine and impair development of children later placed in foster care (Fisher, Kim, Bruce, & Pears, 2012).

Children raised coercively learn dysfunctional ways of relating to caregivers, which can generalize to social interactions with peers and teachers (Smith et al., 2014), as well as with members of the foster or adoptive family (Lieberman, 2003). Chronic noncompliance challenges the patience and skills of even the most experienced foster, adoptive, and kinship parents (Nilsen, 2007), who may mistakenly view noncompliant children as spiteful (Lieberman, 2003). These parents may arrive at conclusions about noncompliance that fail to consider the factors underlying its development and maintenance. Resource caregivers who fail to reflect about their child's inner state or their own are more likely to use ineffective behavioral-level strategies that perpetuate the historic coercive pattern and leave them feeling confused and inadequate (Gonzalez & Jones, 2016; Patterson, 2002; Patterson & MacCoby, 1980). As a result of ongoing behavioral problems, especially noncompliance and oppositionality, resource parents are subjected to significant levels of stress (McCarthy & McCullough, 2003), which are associated with numerous unwanted outcomes, such as parental depression (Hastings, 2002), negative impacts on parenting style (Ross, Blanc, McNeil, Eyberg, & Hembree-Kigin, 1998; Vanschoonlandt, Vanderfaellie, Van Holen, De Maeyer, & Robberechts, 2013), the use of ineffective and coercive parenting strategies, and a corresponding rise in noncompliance and other child behavior problems (Coldwell, Pike, & Dunn, 2006; Granic & Patterson, 2006; Neece, Green, & Baker, 2012). Commonly, parental stress and children's behavior problems do not lessen with the passage of time alone (Goemans, van Geel, & Vedder, 2018). Ongoing problem behaviors can lead to an increased risk of placement breakdown, especially when foster parents are unsupported and untrained and when their motivation to continue fostering is flagging (Goemans, van Geel, & Vedder, 2018; Khoo & Skoog, 2014).

1.1. Need for resource parent training

As noted by Solomon, Niec, and Schoonover (2017, p. 4), "Because children in foster care are likely to have many behavioral needs that require effective parenting skills, adequate training for foster parents is vital." Parenting knowledge, skills, and abilities for very challenging behavior problems need to be addressed through specialized training for foster,

adoptive, and kinship parents. Both preservice and in-service (continuing education) training for these resource parents needs to include knowledge and awareness of the aftereffects of trauma, normal and atypical child development, issues related to cultural competence, skills training in parent-child communication, and the ability to work with the child's birth family (Day et al., 2018).

Targeted training can give resource parents a better understanding of the causes of, as well as an awareness of the internal states (thoughts, feelings, and intentions) related to, noncompliant and defiant behaviors, which can help them to effectively intervene with therapeutic and noncoercive strategies (Adkins, Luyten, & Fonagy, 2018; Jacobsen, Ha, & Sharp, 2015; Keil & Price, 2006; Smith, Howard, & Monroe, 2000). Foster parents who are trained feel more confident and competent and are less likely to suffer "burn out" (MacGregor, Rodger, Cummings, & Leschied, 2006); report lower levels of caregiver stress (Fisher & Stoolmiller, 2008); are more satisfied with placements (Denby, Rindfleisch, & Bean, 1999); and are more likely to remain foster parents (Whenan, Oxlad, & Lushington, 2009). States have been using several approaches, including foster parent training, in an effort to stabilize placements (Blakey et al., 2012). Effective training can help foster parents address children's behavior problems and youth's needs and thereby help avoid placement breakdowns (Piescher, 2010).

1.2. The success and promise of online training for resource parents

Most training for foster, kinship, and adoptive parents is delivered through in-person classroom sessions. However, in the past few years, the convenience and cost-effectiveness of online training have led to a variety of websites offering on-demand training courses and webinars for resource parents. Among the many such sites identified through a Google search (June 19, 2018) are [FosterClub.com](#), [FamilyWorksTogether.org](#), [Foster2Forever.com](#), [FosterParents.com](#), [FosterParentTraining.com](#), [AdoptionLeamingPartners.org](#), and [FosterParentCollege.com](#). These sites vary in cost and the number, length, and quality of courses or webinars offered, as well as the amount of training credit offered for completing their courses. Some states, including Oregon, Washington, California, and Texas, now offer their resource parents free online training from their own and other websites.

Many of the training sites advertise their courses as research based, meaning that the content was derived from relevant research articles and/or developed with input from child welfare experts. However, few of them have been evaluated for effectiveness or participant satisfaction. A search of relevant databases and indexes yielded surprisingly few results. One was an article about an evaluation of two online training modules, which found significant knowledge gains by foster parents from pre- to posttest on the content of the two modules (legal issues and managing challenging behaviors), as well as high user satisfaction (Buzhardt & Heitzman-Powell, 2006).

The only other results from the search were three articles about studies of [FosterParentCollege.com](#) courses. First was a study on the effectiveness of online courses about lying and sexualized behavior in children, which found significant pre-post gains in foster parent knowledge and very high user satisfaction for both courses (Pacifci, Delaney, White, Nelson, & Cummings, 2006). Second was a pilot study comparing the effectiveness

of online and in-person versions of a preservice training course for prospective resource parents on child abuse and neglect. This pilot study found that online training was more effective than classroom training at increasing parents' knowledge of course material. However, there were no significant group differences on a measure of empathy, and overall user satisfaction with the two training approaches was comparable (Delaney, Nelson, Pacifici, White, & Smalley, 2012). Third was a study of the effectiveness of preservice training for prospective resource parents that compared a blended online and classroom training approach with a traditional in-person, classroom-only approach. Findings showed greater gains in knowledge from pretest to posttest for the blended approach. The blended approach also produced dramatically lower dropout rates during preservice training (White et al., 2014). Together, these studies provide support for the idea that, in terms of knowledge gains, user satisfaction, and training completion, online training can offer a strong alternative to in-person resource parent training.

1.3. The online workshop on Understanding Noncompliance

In the web-based workshop on noncompliant child behavior that was evaluated in the current study, resource parents participated in eight automated online meetings covering noncompliance; the compliance-noncompliance spectrum (from fearful cooperation to defiant noncooperation); why children are noncompliant, with special emphasis on how complex trauma relates to noncompliance; and how parental sensitivity to the child's feelings, intentions, and thoughts can enhance compliance. This in-service (continuing education) workshop employs video streamed interviews and monitored group discussion board exercises where viewers post their ideas, as well as interactive multiple-choice, drag-and-drop, and sorting exercises. The general flow of the electronically presented workshop is described below.

The first automated meeting begins with an introduction and interactive exercises on gaining a basic understanding of the compliance-noncompliance spectrum. Resource parents examine and apply four reasons behind a child's noncompliance. Viewers are also introduced to how a child's feelings, intentions, and thoughts influence behavior; and how those interact with his/her parent's own feelings, intentions, and thoughts. The first meeting ends with an introduction to complex trauma and an exploration of the seven aftereffects of such trauma a child may exhibit, i.e., issues related to attachment, physical health, emotions, detachment, behavior, cognition and thoughts, and self-esteem.

The second meeting presents the first case study, that of "Lauren," a noncompliant 13-year-old girl with a long history of neglect. (It is worth noting that Lauren, like other children and resource parents in Foster Parent College courses, is a composite character, portrayed by an actor.) While hearing Lauren's story, viewers come to understand how her history and noncompliant behavior led to a disruption from her caregiving family. The story continues with her social worker assessing prospective families for Lauren and the difficulties of placing a noncompliant child. Viewers then learn about the Trauma-Sensitive Review Form (TSRF), which is a living document parents can use to identify a child's known (complex) trauma history, his or her strengths and resilience, identifiable aftereffects of trauma, and the parent's current parenting strategies, e.g., in relationship to noncompliance. The goal is for

parents to brainstorm and identify new ways to understand the child's observable problems and noncoercive strategies to support a child who has experienced trauma and, as a result, has difficulties with noncompliance. This form is used by the viewers to identify Lauren's relational trauma and her strengths.

In the third meeting, viewers learn how to use the TSRF to identify Lauren's trauma aftereffects. The meeting ends with viewers being introduced to four basic parenting styles that can be compared in various ways, including how much they emphasize structure and demands as opposed to warmth and nurturing. The four styles, covered in more detail in one of the workshop's 13 printable handouts, are Balanced/Authoritative (combining high structure and high warmth); Authoritarian (high structure and low warmth); Permissive/Indulging (low structure and high warmth); and Rejecting/Neglecting (low structure and low warmth). The Balanced/Authoritative style is presented as the ideal parenting style for the development of a child's cooperation and negotiation skills. The noncoercive parenting approaches of this style would be expected to mitigate rather than exacerbate noncompliance and the aftereffects of trauma.

In the fourth and fifth meetings, viewers identify the qualities of Lauren's new caregivers, the Marx family. Their Balanced/Authoritative parenting style and noncoercive approaches convey to Lauren that she is in a safe and secure family. Viewers use the TSRF to identify what this family is already doing to address her behavioral and self-esteem aftereffects. Before viewers brainstorm the next steps the Marx family can take to address Lauren's aftereffects, they are introduced to scaffolding, i.e., a parenting approach which temporarily provides a safe framework that supports the child in building his or her confidence, self-esteem, and skills.

In the final three meetings, viewers hear the case study of "Garrett," an 8-year-old boy who will be adopted by his maternal aunt and her partner. Garrett's history is outlined using the TSRF, and viewers are asked to identify his possible trauma aftereffects, one of which is noncompliance. This is followed by interactive exercises on parenting approaches and how parents can adapt them to address Garrett's trauma and noncompliance.

1.4. Hypotheses

The present study assessed the efficacy of the online workshop on *Understanding Noncompliance*. We hypothesized that:

1. Treatment group participants' reports of children's noncompliant/defiant/overly compliant behavior after the intervention would be significantly lower than control group participants' reports of such behavior, while their reports of children's positive and cooperative behavior would be significantly higher.
2. The level of parental stress after the intervention (i.e., at posttest) would be significantly lower among treatment group participants than among control group participants.

3. Posttest scores on the use of positive parenting approaches to children's noncompliant behavior would be significantly higher among treatment group participants than among control group participants.
4. Knowledge relevant to parenting children with noncompliant, defiant, or overly compliant behavior would be significantly greater among treatment group parents at posttest than among control group participants.
5. Attitudes and beliefs relevant to parenting children with noncompliant, defiant, or overly compliant behavior would be significantly more appropriate at posttest among treatment group parents than among control group parents.

In addition, we expected that any significant group differences exhibited at posttest would be maintained at the 3-month follow-up assessment and that any significant gains or improvements exhibited by the treatment group from pre- to posttest would be maintained at the 3-month follow-up assessment.

We also examined the level of satisfaction with the online workshop among treatment group parents, including their feedback at follow-up on the workshop and its impacts on their parenting and their children's behavior.

It is worth noting that, because delivery of the online workshop is programmed and therefore standardized, the issue of implementation fidelity, which must be addressed in the case of live training presentations, is eliminated. With the workshop's online approach, implementation fidelity is 100%.

2. Methods

2.1. Sample

Foster, adoptive, and kinship parents were recruited to participate in the online study via an emailed announcement and invitation from Foster Parent College (FPC), a parent training website owned by Northwest Media, Inc. (NWM). Potential subjects were selected from NWM's database of parents who had previously taken one or more FPC courses. Invitations were sent in waves, as needed, starting with the 1,000 most recent users of the site. Another 4,500 email invitations were sent in three additional waves, for a total of 5,500 invitations. Recruitment continued until enough parents were enrolled to likely achieve our target sample size of at least 80 (40 per group). Based on our previous studies, we expected an attrition rate of about 25% from pre- to posttest. Taking that into account, starting with a sample of at least 40 per group seemed likely to produce at least 30 posttest completers per group, the minimum number needed to have 80% power of obtaining statistically significant results ($\alpha = 0.05$) if there is a large difference between groups (Cohen's $d = 0.75$).

The final sample for the pre-post study included a total of 82 resource parents, 41 of whom were in the treatment group and 41 in the control group. The mean age of study participants was 42.5 years ($SD = 10.2$). The sample was 84% female. Racially, the sample was about 70% White, 17% Black or African American, 1% each American Indian/Alaska Native and Native Hawaiian or Other Pacific Islander, 9% more than one race, and 2% unknown. Ethnically, 7% of the participants identified themselves as Hispanic or Latino. There were no

statistically significant differences between the two groups on any of the study's demographic variables. (See Table 1 for a breakdown of sample demographics by study group.)

Sixty-three of the participants in the pre-post study later completed the 3-month follow-up assessment, of whom 27 were in the treatment group and 36 were in the control group. As with the pre-post sample, there were no statistically significant demographic differences between the two study groups in the follow-up sample.

2.2. Procedure

Those interested in study participation were directed to go to the study website, where they learned more about the study and filled out an application and a brief screening questionnaire to determine their eligibility. To qualify for the study, parents had to be at least 21 years old; currently providing foster, adoptive, or kinship care for a child age 3-12 years; and willing to commit 5-6 hours over the following week to complete the study. They also had to have a computer and high-speed internet connection in their home.

Once eligibility was established, participants used an individual link to access the study site. When participants clicked on that link for the first time, they completed a statement of informed consent. To control for extraneous sources of variability as well as threats to internal validity, participants were automatically and randomly assigned to either the treatment group or the wait-list control group. Those in the treatment group viewed the workshop on noncompliance and completed a set of questionnaires before and after viewing the workshop. Those in the control group completed the same questionnaires (except for the satisfaction questionnaire completed only by treatment group participants at posttest) within the same 1-week timeframe as the treatment group, but they did not view the workshop. About 3 months after completing the posttest assessment, participants in both study groups were sent an email inviting them to return to the study site to complete a follow-up assessment. After completing this assessment, control group participants were given the opportunity to view the online workshop on noncompliance at no charge.

Participation in the study was voluntary. Those who completed both the pre- and posttest assessments received a \$50 eGift Card from [Amazon.com](https://www.amazon.com) or \$50 from PayPal (their choice). Following the posttest, each parent in the treatment group also received a certificate of completion from FPC for 6 hours of online training; those in the control group who elected to view the workshop after completing the follow-up assessment also received a certificate of completion from FPC for 6 hours of online training. Participants in both groups who completed the 3-month follow-up study received an additional \$15 in the same form they had earlier requested for the pre-post study.

2.3. Data collection

The study's data collection process was conducted entirely online, using FPC's online data management system. Study participants had to complete each questionnaire item before moving on to the next one, so there were no missing data. Participants in the treatment group had to view every segment of the workshop in sequence. They could not skip ahead, although previously viewed segments could be viewed again. Automated email reminders

were sent to participants for completing questionnaires or viewing the program, if necessary. Automated emails were sent to participants 3 months after completing the posttest, inviting them to participate in the online follow-up study. Participants were given reminders by email and by phone, when necessary, to encourage their participation.

2.4. Measures

2.4.1. Background Information—At pretest, study participants were asked to report their age, gender, ethnic background, racial background, marital status, highest level of school completed, number of children (birth, foster, adopted, and kinship), and number of years they had been foster, adoptive, or kinship parents.

2.4.2. Parent Report—This measure, developed by Northwest Media research staff, was an adaptation of the *Parent Daily Report* (Chamberlain & Reid, 1987). Like the *Parent Daily Report* (PDR), the *Parent Report* was a parent observation self-report measure that asked whether a list of child behavior items occurred or not and if they did, whether it was stressful for the parent. The 10 child behaviors listed in the *Parent Report* were written specifically for this study. They asked parents to report (Yes or No) whether their foster, kinship, or adopted child had exhibited each behavior during the previous week. (Parents with more than one foster, kinship, or adopted child were asked to think of the one that has, or may have, problems with noncompliance or defiance.) Six of the 10 listed behaviors were noncompliant (e.g., “Showed a lack of cooperation that interfered with his/her ability to participate in structured activities, such as games, sports, and outings”); defiant (e.g., “Was openly defiant or resisted a request and included obvious anger and negative responses, like physical displays, temper tantrums, whining, or complaining”); or overly compliant (“Was overly compliant due to fear, anxiety, or desire to please everyone”). The remaining four behaviors listed in the measure were positive alternatives to noncompliance, e.g., “Cooperated wholeheartedly with parents or other adult authority figures.”

Three scales were created from these 10 items in the *Parent Report* measure: *Number of Noncompliant Child Behaviors Reported* (out of the six listed); *Number of Positive Child Behaviors Reported* (out of the four listed); and *Cooperative Child Behavior Reported* (i.e., the sum of “No” responses to the six noncompliant behaviors and “Yes” responses to the four positive alternative behaviors).

When completing the *Parent Report*, if parents responded that their child had exhibited one of the six noncompliant, defiant, or overly compliant behaviors, they were presented with a follow-up question asking them to rate how stressed it made them feel when their child did that (on a scale where 0 = *not at all*, 1 = *somewhat*, and 3 = *very*). A *Parental Stress* scale was created from the six follow-up questions, and scores were the mean rating on the six items. Higher scores indicated a greater level of stress related to the child’s noncompliant behavior.

2.4.3. Practice-Plus Parenting Questionnaire (PPPQ)—This self-report measure was adapted for the current study from a subscale of the *Nurturing Skills Competency Scale* (Bavolek & Keene, 2009) that assesses parents’ use of nurturing parenting skills. Items for the *Practice-Plus Parenting Questionnaire* were written specifically for the study. The

questionnaire listed 10 positive parenting behaviors related to caring for a child with noncompliant behavior and asked respondents to rate how often each one applied to their parenting in the previous week (on a scale where 0 = *not at all*, 1 = *once or twice*, and 2 = *often*). The list of positive parenting behaviors included, for example, behaviors around making requests of children, tracking children's cooperative behavior, and thinking about how the child's trauma history might be related to his or her noncompliant behavior. Two sample items were "Considered positive ways to bring up requests to your child" and "Reviewed your rules and consequences for disobedience." A scale was created from the 10 items, and scores were reported as the mean rating on the 10 items. Higher scores on the scale indicated more appropriate (positive) parenting practices.

2.4.4. Parent Knowledge – Noncompliant Behavior—Developed in-house by project research staff, the knowledge questionnaire consisted of 20 multiple-choice questions based on the content of the *Advanced Parenting Workshop on Understanding Noncompliance*. Topics assessed included the defining signs of noncompliance, defiance, cooperation, fearful cooperation, and overcompliance; ways to encourage cooperative behavior in children; parenting styles; and complex trauma and the aftereffects of trauma on children. Staff initially drafted a pool of 23 questions, which were then subjected to two rounds of pilot testing and revision before the final 20 items were selected for inclusion in the study version of the questionnaire. (See section 3.1 below for details on the pilot testing process and results.) A scale was created from the 20 items, and scores were reported as the percentage of correct responses out of 20. Higher scores on the scale indicated greater knowledge of issues relevant to parenting children with noncompliant, defiant, or overly compliant behavior.

2.4.5 Parent Attitudes and Beliefs about Children's Noncompliant Behavior—Also developed in-house for this study, the attitudes questionnaire asked parents to rate on a 5-point scale how much they agreed or disagreed with 19 statements (1 = *Strongly Disagree* and 5 = *Strongly Agree*). The attitudes questionnaire also underwent two rounds of pilot testing (described at section 3.1 below). The questionnaire included statements expressing attitudes and beliefs which the workshop aimed to teach, e.g., "I believe childhood trauma can lead to noncompliance and defiance," as well as statements expressing attitudes and beliefs the workshop sought to change, e.g., "I believe children should be punished for misbehaving." Before the attitudes and beliefs scale was created, responses to the latter statements were reverse coded, so that all were coded in the same direction. Scores on the scale were reported as the average rating on all 19 items, and higher scores indicated more appropriate attitudes and beliefs for parenting children with noncompliant (or overly compliant) behavior.

2.4.6 User Satisfaction—The 16-item User Satisfaction questionnaire, administered only to treatment-group participants at posttest, included 10 statements about various aspects of the workshop and the study website. Respondents were asked to indicate how much they disagreed or agreed on a 5-point scale (where 1 = *strongly disagree* and 5 = *strongly agree*). The questionnaire also included 4 closed-ended questions about participants' experience with the workshop (e.g., how long they spent viewing it) and 2 open-ended questions about

any difficulties they experienced with the website, and any other comments or suggestions they wanted to make to the producers of the project.

A scale was created based on the 10 Likert-type items, all of which were worded in a positive direction, and scores were reported as the average rating on the 10 items. (See Table 3 for the wording of these 10 statements.) Higher scores on the scale indicated greater satisfaction with the workshop and study website.

2.4.7 Follow-up Feedback Questionnaire—As part of the 3-month follow-up assessment, treatment group participants were administered a 14-item feedback questionnaire, which included both open- and closed-ended questions about the impact they felt the workshop had on their parenting and their foster, adopted, or kinship child's behavior. The questionnaire also included items about parents' use of workshop materials, how helpful they found the workshop, whether they would recommend it to other parents, and what impressed them about the workshop, as well as what could be improved.

3. Results

3.1 Preliminary analyses: Pilot testing of knowledge and attitudes questionnaires

We conducted two rounds of online pilot testing before finalizing the knowledge and attitudes questionnaires used in the study. Participants were recruited from previous users of FPC via emailed invitations. To be eligible, parents had to be at least 21 years old; currently providing foster, adoptive, or kinship care for a child between the ages of 3 and 12 years; willing to commit 20-30 minutes to complete the questionnaires within 2 days; and have a computer and high-speed internet connection in their home. Those interested and eligible were asked to complete draft versions of the knowledge and attitudes questionnaires, as well as the same background information questionnaire later used in the study. Those who completed the questionnaires received \$15 as either an Amazon eGift Card or from PayPal (their choice).

Nineteen parents completed the first pilot test, 13 of whom were female. They ranged in age from 36 to 60. Racially, 17 of the participants identified themselves as White and 2 as Black or African American. Ethnically, 2 participants identified themselves as Hispanic or Latino and the other 17 as Not Hispanic or Latino.

Following the first pilot test, project research staff reviewed the questionnaire responses. Given the large number of correct responses to many of the items in the knowledge questionnaire, staff did some extensive editing in an effort to make the questions more difficult, thus creating room for greater improvement in scores from the study's pretest assessment to the posttest assessment. Staff also edited the attitudes and beliefs questionnaire, e.g., by reversing the direction of some of the positively worded items to help prevent a potential response set of acquiescence.

The revised knowledge and attitudes questionnaires were pilot tested online with a group of ten parents, eight of whom were female. They ranged in age from 30 to 56. In terms of racial background, seven of the participants identified themselves as White, one as Black or

African American, one as more than one race, and one as unknown. Seven reported their ethnic background as Not Hispanic or Latino and three as unknown.

Based on the results of the second pilot test, project staff did some minor additional editing of both questionnaires before finalizing the versions used in the study.

3.2. Outcome analyses – pretest-posttest study

Analysis of Covariance (ANCOVA) was performed on each outcome measure to compare the treatment group to the control group at posttest after adjusting for baseline levels at pretest as a covariate. Paired *t*-tests were also performed to assess the change from pretest to posttest within each group.

3.2.1. Reliability of the study's outcome measures—Cronbach's alpha (α) and Guttman's lambda (λ_2) were used to measure reliability and internal consistency for each summary scale. Guttman (1945) proved that alpha is a lower bound to the reliability and proposed λ_2 , which is often reported as an alternative (Sijtsma 2009).

One item (the single item about overly compliant behavior) was removed from the original scale for *Noncompliant* behaviors, as it did not correlate well with the overall score for number of *Noncompliant* behaviors ($r = -0.005$). Similarly, four items were removed from the original *Knowledge* scale because they did not correlate well with the other items ($r < 0.075$). (Three of these items were about cooperation, while the fourth was about abuse and noncompliance.) In addition, three items were removed from the 19-item *Attitudes and Beliefs* scale – one because it was not clear from the workshop content whether it should be reverse coded or not (“I believe negative consequences are a good way to correct children's misbehavior”) and two because, on closer inspection, they seemed more like knowledge items than attitude or belief items (“I know that children who have been abused are likely to be assertive” and “I know that trauma always leaves aftereffects on children”). Also, these two items were not well correlated with the other items in the scale ($r = -0.033$ and $r = -0.137$, respectively). The three revised scales were used for analysis. (See Table 2 for the reliability of the scales used in the analysis and Table 4 for descriptive statistics and Paired *t*-test results at pretest, posttest, and follow-up.)

3.2.2. Parent Report – four scales

Noncompliant Behaviors: Results from the Paired *t*-tests showed that the noncompliant behaviors reported by parents in the treatment group decreased significantly from pre ($M = 3.00$, $SD = 1.41$) to post ($M = 2.49$, $SD = 1.60$) ($t(40) = 2.03$, $p = 0.049$), whereas the number of such behaviors reported by control group parents did not change significantly from pre ($M = 2.59$, $SD = 1.55$) to post ($M = 2.51$, $SD = 1.57$) ($t(40) = 0.408$, $p = 0.686$). However, the effect of group in the ANCOVA model was not significant ($F(1, 79) = 0.962$, $p = 0.330$), suggesting that we do not have evidence that the noncompliant behaviors reported by treatment group parents were significantly lower than the noncompliant behaviors reported by control group parents at posttest, adjusting for baseline behaviors at pretest.

Positive Alternatives to Noncompliant Behaviors: The positive behaviors reported by parents in the treatment group were significantly higher than the positive behaviors reported by control group parents at posttest, as evidenced by the significant effect of group in the ANCOVA ($F(1, 79) = 5.060, p = 0.027$). Paired t -tests showed that the number of positive child behaviors reported by treatment group parents increased significantly from pre ($M = 2.63, SD = 1.16$) to post ($M = 3.02, SD = 1.01$) ($t(40) = -2.20, p = 0.034$), whereas the number of positive behaviors reported by control group parents did not change significantly from pre ($M = 2.85, SD = 1.20$) to post ($M = 2.66, SD = 1.11$) ($t(40) = 1.113, p = 0.273$). Note that generalizations based on this measure are limited, given the relatively low reliability of the scale.

Cooperation: By combining the number of positive child behaviors reported by parents and the number of noncompliant behaviors parents did **not** report their child had exhibited, we analyzed overall child cooperation reported by parents in each group. Paired t -tests showed that treatment group scores on this measure increased significantly from pre ($M = 4.63, SD = 1.80$) to post ($M = 5.54, SD = 2.10$) ($t(40) = -2.68, p = 0.011$), whereas control group scores did not change significantly from pre ($M = 5.27, SD = 2.33$) to post ($M = 5.15, SD = 2.16$) ($t(40) = 0.46, p = 0.650$). However, the treatment group did not perform significantly better than the control group in the ANCOVA at the 0.05 alpha level ($F(1, 79) = 3.79, p = 0.055$).

Parental Stress: Parents in the treatment group decreased in stress, but not significantly more than those in the control group, as evidenced by the marginal group effect in the ANCOVA ($F(1, 61) = 3.77, p = 0.057$). Paired t -tests showed that the treatment group decreased in stress significantly from pre ($M = 2.17, SD = 0.52$) to post ($M = 2.00, SD = 0.50$) ($t(32) = 2.64, p = 0.013$), whereas the control group did not change significantly from pre ($M = 2.01, SD = 0.49$) to post ($M = 1.97, SD = 0.53$) ($t(30) = -0.52, p = 0.609$).

3.2.3. Practice-Plus Parenting Scale—The treatment group did not improve on the *Practice-Plus Parenting* scale significantly more than the control group, as evidenced by the nonsignificant effect of group in the ANCOVA ($F(1, 79) = 0.28, p = 0.868$). Post hoc tests showed that the treatment group did not change significantly from pre ($M = 1.35, SD = 0.40$) to post ($M = 1.35, SD = 0.40$) ($t(40) = -0.04, p = 0.968$); and the control group also did not change significantly from pre ($M = 1.40, SD = 0.37$) to post ($M = 1.37, SD = 0.39$) ($t(40) = 0.63, p = 0.532$).

3.2.4. Parent Knowledge – Noncompliant Behavior—The treatment group improved in knowledge significantly more than the control group, as evidenced by the significant effect of group in the ANCOVA ($F(1, 79) = 12.97, p = 0.001$). Paired t -tests showed that the treatment group increased in knowledge significantly from pre ($M = 0.47, SD = 0.20$) to post ($M = 0.58, SD = 0.23$) ($t(40) = -4.67, p < 0.001$), whereas the control group did not change significantly from pre ($M = 0.45, SD = 0.20$) to post ($M = 0.45, SD = 0.18$) ($t(40) = 0.001, p = 0.999$).

3.2.5. Parent Attitudes and Beliefs about Children’s Noncompliant Behavior—Paired t -tests showed that the attitudes of treatment group parents improved significantly

from pre ($M = 3.64$, $SD = 0.44$) to post ($M = 3.85$, $SD = 0.43$) ($t(79) = -3.09$, $p = 0.004$), whereas the attitudes of the control group parents did not change significantly from pre ($M = 3.75$, $SD = 0.34$) to post ($M = 3.79$, $SD = 0.39$) ($t(40) = -0.995$, $p = 0.325$). However, scores on the attitudes and beliefs scale at posttest were not significantly higher (more appropriate) in the treatment group than in the control group at the 0.05 alpha level, after adjusting for pretest values in the ANCOVA ($F(1, 81) = 3.40$, $p = 0.069$).

3.2.6 Summary of Pre-Post Study Results—Hypothesized group differences at posttest were found only on parents' reports of their children's positive alternatives to noncompliant behaviors and parent knowledge about children's noncompliant behavior, where treatment group parents scored significantly higher than control group parents after the intervention. Results from the Paired t -tests indicated that treatment group participants made significant improvements from pre- to posttest on all but one of the study's outcome measures, while control group participants showed no significant change on any of these measures. Neither group showed any significant change from pre- to posttest on the study's measure of parenting approaches to noncompliant behavior, i.e., the *Practice-Plus Parenting Scale*.

3.2.7. User Satisfaction—Parent satisfaction with the *Advanced Parenting Workshop on Understanding Noncompliance* was very high, with more than 90% of those who viewed it either agreeing or strongly agreeing that the workshop helped them understand why foster, adopted, and kinship children have problems with noncompliance and defiance; that it helped them understand how to parent foster, adopted, and kinship children who are noncompliant and defiant; and that they would recommend the course to other foster, adoptive, and kinship parents. Mean scores on the ten satisfaction items rated on a 5-point scale (where 5 indicated the greatest satisfaction) ranged from a low of 4.29 to a high of 4.76. On the scale created from the ten items, the mean was 4.55 ($SD = 0.51$). (See Table 3.)

About 46% of the parents reported spending 4-5 hours on the workshop, about 32% spent 6-7 hours on it, 17% spent more than 7 hours on it, and 5% spent only 1-3 hours. When asked what difficulties they had experienced using the website, 61% of the treatment group parents reported experiencing no difficulties. Among the other respondents, the most common difficulty reported was that the website was a little slow or froze at times while they were viewing the workshop (reported by 7 of the 41 participants).

3.3. Outcome analyses at 3-month follow-up

Effects at follow-up were analyzed for the 63 participants who completed the follow-up assessment. ANCOVA models were performed on each outcome measure at follow-up to compare the treatment group to the control group after adjusting for baseline values at pretest. Paired t -tests were also performed to assess the changes from pre- and posttest to follow-up within each group. (See Table 4 for descriptive statistics and Paired t -test results for the study's outcome measures within group at all three assessments, and see Table 5 for ANCOVA results at posttest and follow-up.) Analyses at follow-up have limited power due to the smaller sample who completed all three time points.

3.3.1. Parent Report – four scales

Noncompliant Behaviors: The number of noncompliant behaviors continued to decrease from posttest to follow-up in both groups; however, the changes were not significant. The difference between study groups at follow-up, adjusting for baseline, was also not significant ($F(1, 60) = 0.48, p = 0.827$), suggesting no evidence that the treatment group reported a significantly different number of noncompliant behaviors by their children than the control group at follow-up, adjusting for baseline behaviors reported at pretest.

Positive Alternatives to Noncompliant Behaviors: There were no significant changes in positive alternatives reported from pretest or posttest to follow-up within study group. There was also no significant difference between the two groups at follow-up ($F(1, 60) = 0.21, p = 0.648$), adjusting for baseline.

Cooperation: There were no significant changes in cooperation from pretest or posttest to follow-up within study group, and the difference between groups was not significant ($F(1, 60) = 0.24, p = 0.625$). The positive changes from pretest to posttest in the treatment group (see section 3.2.2 above) did not decrease significantly from posttest to follow-up, but they were also no longer significantly greater than pretest.

Parental Stress: There was no significant change from pretest or posttest to follow-up for either group, and there was no significant difference between groups at follow-up ($F(1, 45) = 0.02, p = 0.879$), adjusting for baseline.

Note that only 51 of the 63 follow-up study participants had data for *Parental Stress* at follow-up, and only 48 had data at both pretest and follow-up to include in this analysis.

3.3.2. Practice-Plus Parenting Scale—There were no significant changes from pretest or posttest to follow-up in either the treatment or control group. The between-group difference was also not significant ($F(1, 60) = 0.37, p = 0.543$).

3.3.3. Parent Knowledge – Noncompliant Behavior—While the gain in knowledge achieved from pre- to posttest for the treatment group decreased significantly from posttest to follow-up ($t(26) = 2.38, p = 0.025$), the mean at follow-up was still significantly greater than at pretest ($t(26) = -3.61, p = 0.001$) for the 27 participants completing all three tests. The knowledge score for control group participants did not change significantly from pretest or posttest to follow-up. There was a significant effect for group in the ANCOVA ($F(1, 60) = 13.67, p < 0.001$), indicating that the treatment group had higher scores than the control group at follow-up, adjusting for baseline values at pretest.

3.3.4. Attitudes and Beliefs about Children’s Noncompliant Behavior—There was not a significant difference between groups in attitudes and beliefs about children’s noncompliant behavior at follow-up ($F(1, 60) = 0.10, p = 0.752$). Although treatment group parents improved in attitudes and beliefs from pre to post (see section 3.2.5 above), their attitudes score dropped somewhat (nonsignificantly) from post to follow-up. The attitudes and beliefs score for the control group did not change significantly from post to follow-up.

3.3.5. Summary of results at 3-month follow-up—Most of the outcomes did not show significant differences between groups at follow-up. Likewise, for the outcomes that had shown significant improvements within the treatment group from pre to posttest, 5 out of 6 no longer showed significant improvements from pre to follow-up assessment. The nonsignificant results at follow-up may be partly due to decreased power from smaller sample sizes. The only significant group difference found at follow-up was on parent knowledge, with the treatment group achieving higher scores than the control group, adjusting for scores at pretest, and despite the drop-off in treatment group scores from posttest to follow-up. There was also a nonsignificant decline in the treatment group parents' attitudes and beliefs.

3.3.6. Follow-up Feedback Questionnaire—At the 3-month follow-up assessment, treatment group parents completed a feedback questionnaire that included items about a foster, adopted, or kinship child who was in their home when they began the workshop. Responses to two of these questions indicated a perception among parents that their children's noncompliant behavior had diminished, and their cooperative behavior had increased. (See Table 6 to compare the frequencies on these two questions.)

On five Yes/No feedback questions, 96% of parents said they would recommend the workshop to other parents of a child who has problem behavior; 81.5% said the workshop changed their parenting approach around cooperation and noncompliance; 81.5% also said they had identified aftereffects of trauma their child might have experienced; about 78% said the workshop helped them understand how their child might feel while being noncompliant, cooperative, and self-assertive; and 63% said the workshop had an impact on how they felt towards their child in general or when their child was noncompliant.

An open-ended feedback question asked what changes, if any, they'd seen in the child's cooperative behavior since taking the workshop. The following was a typical response: "Increased cooperation on the child's part. Increased patience and understanding on my part." These responses to another feedback question, about the workshop's impact on their parenting approach, also indicated that the workshop achieved at least some of its intended impacts: "It was a reminder to not take the behaviors personally. The words and actions are not toward me but as a result of all the hurt she is feeling" and "I take time to understand how he is feeling."

When asked what, if anything, impressed them about the workshop, parents most commonly reported being impressed with the information presented; the thoroughness, simplicity, depth, and breadth of the material presented; the attention to trauma-based effects on children's behavior; the practical tips offered; and the comfort and convenience of taking the workshop at home.

4. Discussion and Conclusion

The current study examined the efficacy of an online training workshop for resource parents on understanding and dealing with children's noncompliant and defiant behavior. Overall, the aim of the study was to determine whether the online training would produce significant

group differences in parent reports of children's behavior, parental stress, and relevant parenting knowledge, attitudes, and approaches, not only at posttest but also at follow-up. The study also examined within-group change from pretest to posttest and the durability of those results at a 3-month follow-up assessment.

The finding that reports of children's positive alternatives to noncompliant behavior were significantly higher among treatment group parents than control group parents at posttest is encouraging, given that increased positive behaviors often replace or decrease negative, noncompliant behavior (Dwyer, Rozewski, & Simonsen, 2012). Frequently, parent training models have achieved the goal of eliminating or decreasing problematic behavior such as oppositionality by adding to the child's repertoire of adaptive behaviors, e.g., cooperation and compliance (Ducharme, Atkinson, & Poulton, 2001). The finding that treatment group parents' knowledge about children's noncompliant behavior was significantly higher than control group parents' knowledge at posttest is also encouraging. Although skill-based, behavioral-level training for foster parents can be effective, it does not typically include knowledge that increases the parents' understanding of the thoughts, intentions, and emotional needs communicated by their children's behavior (Adkins, Luyten, & Fonagy, 2018). Among the significant changes pre- to posttest within the treatment group, the observed reduction in parental stress levels might bode well for placement stability, an outcome variable that was not part of the present study. Parental stress levels that are unaddressed and unremitting can lead to foster parent burnout and increased chances of placement breakdown (Goemans, van Geel, & Vedder, 2018).

The one expectation regarding treatment group change from pre- to posttest that was *not* supported by the data was that the use of positive parenting approaches vis-à-vis children's noncompliance, as measured by the PPPQ, would increase significantly. A combination of factors may account for this finding. For one, the scale had only three levels (0 = *not at all*, 1 = *once or twice*, and 2 = *often*), so it was not very good at discriminating. Also, many respondents reported using the desired parenting approaches "often" at pretest, so they had no room for improvement on the scale. Had we used a scale with more levels, we might have detected more improvement. However, despite the lack of significant findings on the PPPQ, there was some evidence from the follow-up feedback questionnaire that parents thought the workshop *did* impact their parenting (see section 3.3.6). For example, when asked directly whether the workshop changed their parenting approach around cooperation and noncompliance, 81.5% of responding treatment group parents said "yes."

Our expectation that any significant gains or improvements exhibited by the treatment group at posttest would be maintained at the 3-month follow-up assessment was generally not met. One possible explanation for this finding is that, with the smaller sample size at follow-up (resulting primarily from the 34% attrition rate in the treatment group between posttest and follow-up), the significance of gains from pretest to follow-up was not able to be detected. There was not sufficient evidence to conclude maintenance or not for these outcomes, and further research is needed. While this study provides no direct, significant evidence for a decrease in children's noncompliant behavior at follow-up, the parent reports of same in the feedback questionnaire suggest a changing perception of the child's behavior. This perception may account for or relate to the reduction in stress levels reported by parents.

Further, these impacts of the workshop could have positive implications for the stability of placements. For instance, it has been found in children adopted from foster care that parents who often thought about ending the placement had related perceptions about how difficult they perceived the child's problems to be (Rushton & Dance, 2004, as cited in Faulkner, Adkins, Fong, & Rolock, 2016).

Our expectation that the significant treatment group gains in knowledge and attitudes from pre to post would be maintained from post to follow-up met mixed results. On knowledge, there was a significant drop-off from post to follow-up, and on attitudes there was a nonsignificant drop-off. One possible explanation is that newly acquired knowledge and attitudes need to be reinforced over time. It may not be realistic to expect a brief intervention (in this case, just 1 week) to achieve retention of new knowledge and attitudes for as long as 3 months. Clearly, achieving longer term change in both knowledge and attitudes, as well as behavior, is more difficult than achieving immediate or short-term change, but it is also arguably more important. Our goal is for resource parents to remember and apply what they have learned from our online courses and workshops throughout the placement of children in their care. Therefore, in future studies we will explore and evaluate the effectiveness of various ways to reinforce workshop content during the wait period between post and follow-up assessments.

Among the limitations of the present study was its reliance on parents' reports of their own parenting approaches and their children's behavior. Also, because study participation was not limited to parents of children with the behavior problem of noncompliance, our findings on child behavior might have been weaker than they would have been if the sample had included only parents of a child with a noncompliant behavior problem. In addition, a general limitation of online resource parent training is that it is accessible only to parents with a computer and a high-speed internet connection. Although access to these is by now widespread, it is not universal.

In general, results of this study showed that an online workshop format can be an effective way to train and support resource parents. Although in-person training has been the traditional approach, much of the training needed by these parents could be provided in a more standardized, convenient, and cost-effective way over the web, allowing agencies to use classroom sessions for building relationships with their resource parents and for training on topics better covered in person, such as state and local regulations. Also, as indicated by participants' responses to the user satisfaction and feedback questionnaires, resource parents like online training, which may increase the odds that they will complete their required in-service training and continue in their role as much-needed resource parents (White et al., 2014).

In planning future interventions, we need to think about and design ways to achieve longer lasting change in parent knowledge and attitudes, not only at 3 months post-intervention but also at 6 months and beyond. It is also essential that these changes be accompanied by positive changes in parenting behavior and practices that are associated with positive parent-child interactions and the healthy development of children. Achieving such changes may require increased and continuing emphasis on skill-based training, both in-person and

online, focused on parenting approaches such as behavior tracking, encouragement, reinforcement, redirection, and de-escalation. Closer attention should also be paid to the appropriateness of measures used in future studies. Because interventions like the present one aim to improve not just knowledge and attitudes but also behavior, it is important that future studies incorporate parent and child behavioral outcome measures, as well as blinded parent-child observations. The goal of using such measures of parent and child behavior, instead of relying on parent self-report measures, remains elusive but worthwhile, despite its greater complexity.

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Highlights:

- Results for the online workshop showed significant group differences at posttest for parents' reports of children's positive behavior and parent knowledge about children's noncompliant behavior, with treatment group parents scoring higher than control group parents.
- Treatment group parents showed significant improvement from pre- to posttest on several other outcome measures of parenting noncompliant behavior.
- Results at the 3-month follow-up assessment showed significant group differences only for parents' knowledge about children's noncompliant behavior, with the treatment group achieving higher scores than the control group.
- Participant satisfaction with the online workshop at posttest was very high.
- Feedback on the workshop at follow-up remained positive, with treatment group parents indicating they felt it had beneficially impacted their parenting and their children's behavior.

Table 1

Sample Demographics by Study Group

		Treatment Group <i>n</i> = 41		Control Group <i>n</i> = 41	
		<i>n</i>	%	<i>n</i>	%
Gender	Female	35	85.4	34	82.9
	Male	6	14.6	7	17.1
Ethnic Background	Hispanic/Latino	3	7.3	3	7.3
	Not Hispanic or Latino	35	85.4	36	87.8
	Unknown	3	7.3	2	4.9
Racial Background	White	28	68.3	29	70.7
	Black or African American	9	22.0	5	12.2
	American Indian or Alaska Native	0	0.0	1	2.4
	Native Hawaiian or Other Pacific Islander	0	0.0	1	2.4
	More than one race	2	4.9	5	12.2
	Unknown	2	4.9	0	0.0
Marital Status	Single	6	14.6	3	7.3
	Married	29	70.7	31	75.6
	Divorced	5	12.2	5	12.2
	Unmarried Partners	1	2.4	1	2.4
	Separated	0	0.0	1	2.4
Highest Level of School Completed	High School/GED	8	19.5	4	9.8
	Some College or AA Degree	12	29.3	23	56.1
	BA/BS Degree	9	22.0	9	22.0
	MA/MS or PhD	12	29.3	5	12.2
Age		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
		42.9	11.5	42.1	8.9
Number of Children	Birth	2.1	2.2	1.4	1.3
	Foster	1.5	1.1	1.3	1.1
	Adopted	1.2	1.6	1.3	1.3
	Kinship	0.2	0.5	0.4	0.9
Number of Years a Resource Parent		4.6	4.1	5.9	5.0

Note: There were no statistically significant differences ($p > 0.05$) between the treatment and control groups on any of these demographic variables.

Table 2

Reliability Statistics for Study's Outcome Measures

Measure	Pretest		Posttest	
	alpha	lambda	alpha	lambda
Parent Report Scales:				
Number of Noncompliant Child Behaviors Reported (out of 5 listed)	0.72	0.74	0.72	0.74
Number of Positive Child Behaviors Reported (out of 4 listed)	0.55	0.59	0.41	0.47
Number of Cooperative Child Behaviors Reported (out of 10 possible)	0.68	0.71	0.67	0.71
Parental Stress ^a	na	na	na	na
<hr/>				
Practice-Plus Parenting (PPPQ) (10 items)	0.78	0.79	0.81	0.82
<hr/>				
Parent Knowledge – Noncompliant Behavior (16 items)	0.70	0.73	0.77	0.79
<hr/>				
Parent Attitudes & Beliefs (16 items)	0.76	0.79	0.80	0.83

^aReliability could not be measured for Parental Stress, because participants did not report stress on all items.

Table 3

User Satisfaction with the Online Workshop on Understanding Noncompliance

	<i>N</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
s.1 The workshop helped me understand why foster, adopted, and kinship children have problems with noncompliance and defiance.	41	3	5	4.66	0.62
s.2 The workshop helped me understand how to parent foster, adopted, and kinship children who are noncompliant and defiant.	41	2	5	4.32	0.79
s.3 I liked the narration and overall presentation of the material.	41	2	5	4.37	0.80
s.4 The stories of families were helpful.	41	3	5	4.71	0.56
s.5 I would recommend this course to other foster, adoptive, and kinship parents.	41	3	5	4.68	0.61
s.6 I would like to receive more resource parent training on the web.	41	2	5	4.59	0.77
s.7 I thought the website was easy to use.	41	3	5	4.76	0.49
s.8 I liked the way the course was organized into different segments.	41	1	5	4.68	0.76
s.9 The interactive exercises were helpful.	41	1	5	4.29	1.01
s.10 I found the supplemental handouts helpful.	41	2	5	4.41	0.84
Satisfaction Scale - Online Workshop on Noncompliance (mean of 10 items above)	41	3	5	4.55	0.51

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Table 4

Descriptive Statistics and Paired t-tests Within-Group

	Group	Pre (N=82)			Post (N=82)			Follow-up (N=63)			Pre vs. Follow-up	Post vs. Follow-up
		n	M	SD	n	M	SD	n	M	SD		
Parent Report												
# of Noncompliant Behaviors	Treatment	41	3.00	1.41	41	2.49	1.60	*	27	2.41	1.69	
	Control	41	2.59	1.55	41	2.51	1.57		36	2.33	1.66	
# of Positive Behaviors	Treatment	41	2.63	1.16	41	3.02	1.01	*	27	2.85	1.20	
	Control	41	2.85	1.20	41	2.66	1.11		36	2.81	1.28	
Cooperative Behavior	Treatment	41	4.63	1.80	41	5.54	2.10	*	27	5.44	1.99	
	Control	41	5.27	2.33	41	5.15	2.16		36	5.47	2.42	
Parental Stress	Treatment	38	2.17	0.52	33	2.00	0.50	*	21	1.99	0.48	
	Control	34	2.01	0.49	35	1.97	0.53		30	1.96	0.57	
Practice-Plus Parenting (PPPQ)	Treatment	41	1.35	0.40	41	1.35	0.40		27	1.31	0.45	
	Control	41	1.40	0.37	41	1.37	0.39		36	1.40	0.42	
Parent Knowledge – Noncompliant Behavior	Treatment	41	0.47	0.20	41	0.58	0.23	***	27	0.56	0.20	*
	Control	41	0.45	0.20	41	0.45	0.18		36	0.44	0.18	
Parent Attitudes & Beliefs	Treatment	41	3.64	0.44	41	3.85	0.43	**	27	3.73	0.54	†
	Control	41	3.75	0.34	41	3.79	0.39		36	3.83	0.48	

† $p < 0.10$,

* $p < 0.05$,

** $p < 0.01$,

*** $p < 0.001$

Table 5

Estimated Means and Standard Errors from ANCOVA Between-Groups

		Posttest (<i>N</i> = 82)			Trt vs Ctrl	Follow-up (<i>N</i> = 63)			Trt vs Ctrl
		<i>n</i>	<i>M</i>	<i>SE</i>		<i>n</i>	<i>M</i>	<i>SE</i>	
Parent Report									
# of Noncompliant Behaviors	Trt	41	2.36	0.20		27	2.32	0.29	
	Ctrl	41	2.64	0.20		36	2.40	0.25	
# of Positive Behaviors	Trt	41	3.07	0.15	*	27	2.91	0.23	
	Ctrl	41	2.61	0.15		36	2.76	0.20	
Cooperative Behavior	Trt	41	5.72	0.28	†	27	5.61	0.39	
	Ctrl	41	4.96	0.28		36	5.35	0.34	
Parental Stress	Trt	33	1.93	0.06	†	21	1.96	0.11	
	Ctrl	35	2.10	0.06		27	1.98	0.10	
Practice-Plus Parenting (PPPQ)	Trt	41	1.37	0.05		27	1.33	0.08	
	Ctrl	41	1.36	0.05		36	1.39	0.07	
Parent Knowledge – Noncompliant Behavior	Trt	41	0.57	0.02	**	27	0.55	0.02	***
	Ctrl	41	0.46	0.02		36	0.44	0.02	
Parent Attitudes & Beliefs – Noncompliant Behavior	Trt	41	3.89	0.05	†	27	3.77	0.09	
	Ctrl	41	3.75	0.05		36	3.80	0.08	

†
p < 0.10,*
p < 0.05,**
p < 0.01,***
p < 0.001

Table 6

Frequencies of responses to feedback questions about placement of child on the spectrum of cooperation and noncompliance, at start of workshop and at 3-month follow-up.

	<u>At start of workshop</u>			<u>At 3-month follow-up</u>		
	Frequency	%	Cumulative %	Frequency	%	Cumulative %
1 Fearful Cooperation	3	11.1	11.1			
2 Cooperation	1	3.7	14.8	8	29.6	29.6
3 Self-assertion	7	25.9	40.7	13	48.1	77.8
4 Noncompliance	8	29.6	70.4	5	18.5	96.3
5 Defiance	8	29.6	100.0	1	3.7	100.0
Total	27	100.0		27	100.0	

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