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Promoting Parental Engagement in Parenting Education Programs

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Promoting Parental Engagement in Parenting Education Programs

by

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Promoting Parental Engagement in Parent Education Programs

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Promoting Parental Engagement in Parenting Education Programs

Jessica L. Maksut

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Chapter I: Introduction

Optimizing the welfare of children and families is among the fundamental goals of the field of human development and family studies. Practitioners’ and researchers’ efforts to simultaneously promote well-being and prevent or lessen families’ levels of dysfunction or experienced hardship take many forms. Among these options exists parenting education, a preventive intervention method that both educates and supports parents and caretakers to raise their children responsibly, confidently, and effectively (Cowen, 2001; Schultz, Schmidt, & Stichter, 2011). According to the Connecticut Parenting Education Network (CT-PEN; 2007, para. 1), “Parenting education supports the development of awareness, knowledge and skills parents and caregivers need (a) to form healthy, loving relationships with their children and (b) to enhance children's physical and cognitive health and development.” The spirit of parenting education is such that parents, much like therapists and other professional mental health workers, have the capacity to change their and their children’s behaviors that impede healthy family functioning (Kaminski, Valle, Filene, & Boyle, 2008). One of the fundamental assumptions of parenting education is that parents and caregivers play a central role in creating meaningful, sustained change in families. Among the primary purposes of parenting education is the enabling of parents and caregivers to feel comfortable in, and deserving of, their critical role in the change process. Thus, a key concern in the parenting education realm is how best to empower parents and caregivers as agents for positive change.

According to the Virginia Statewide Parent Education Coalition (VSPEC; 2013), there are three general types of parenting education programs in which all programs may be categorized: primary, secondary, and tertiary programs. Primary parenting education programs are programs that are offered to the general public that focus on enhancing a wide range of
general parenting skills, while secondary programs are more targeted in their scope. Secondary programs are more likely to be offered to parents and caregivers at risk of child abuse or neglect and typically focus on targeting parenting knowledge and skills in specific areas known to be associated with risk. Tertiary parenting programs are offered to parents and caregivers of children who have already experienced some form of child abuse or neglect and focus on empowering individuals to use their new knowledge to make positive changes in their family lives. Individuals in tertiary parenting education programs are usually, though not always, court involved.

Family composition and circumstances, parent and child characteristics, and involvement with the court system are likely to influence the type of services that parenting education clients need (VSPEC, 2013). Common examples of program clientele include biological, adoptive, and foster parents, kinship caregivers such as aunts, uncles, and grandparents, expecting parents, military families, and social workers and other adults with a vested interest in the well-being of children (Collins & Fetsch, 2012). As a result, there is a variety of parenting education programs available to meet this diverse but pervasive need for family and child-centered assistance.

It is worth noting that parenting education programs vary not only in the individuals and families that they serve, but also in the strength of the content and delivery mechanisms, whether the curricula is theoretically well-informed (i.e., whether there is an evidence base), and the degree to which parenting education programs’ creators and facilitators are sensitive to families’ unique lived experiences (Croake & Glover, 1977). Julion, and Fogg (2001, p. 246) argue that while parenting education is a powerful mechanism for promoting positive parenting skills and reducing risk factors associated with externalizing and antisocial behaviors in children, the field of parenting education is plagued with methodological flaws. In evaluation studies of parenting
education, deficits in intervention design (e.g., no control group, unrepresentative samples), lack of empirical or theoretical bases, and failure to evaluate intervention fidelity occur often. In an effort to publicize the most effective parenting education programs currently available, Small and Mather (2009) crafted a directory of the evidenced-based parenting education programs. In total, seventeen programs with the sole purpose of providing parenting education were listed, including well-known and tested programs such as the Triple P Positive Parenting Program (Sanders, 1999). While this list is no doubt an important resource for researchers and facilitators of parenting education, it also speaks to the fact that the many parenting education programs in circulation have not been empirically validated or do not yield significant, consistent results.

In addition, it is rather common for practitioners in the field of parenting education to not sufficiently address the critical elements necessary for success beyond the strength of the program’s content. While parenting education is widely recognized as a useful, positive construct, attrition, inconsistent attendance, and low participation undermine the goals of many programs (Wolfe & Haddy, 2001). It has been suggested that external influences can hinder parents’ ability and willingness to participate in parenting education programs, acting as de facto “barriers to treatment” (Kazdin, Holland, & Crowley, 1997; Spoth & Cleve, 1995). Documented barriers to treatment include – but are not limited to – parental stress, single-parent family status, socioeconomic disadvantage, younger maternal age, higher parental depression, and greater severity of conduct problems (Werba, Eyberg, Boggs, & Algina, 2006). According to Kazdin and his colleagues (1997), barriers to treatment participation substantially increase the risk of treatment dropout. As such, addressing these barriers is a task that is central to the success of parenting education programs. Indeed, the overall quality of a program matters little if participants are unable to engage.
Treatment dropout, which is in part affected both by barriers to treatment and parent motivation for treatment, is a pervasive problem. Indeed, a meta-analysis by Wierzbicki and Pekarik (1993) reviewed 125 studies on psychotherapy dropout and found that the mean dropout rate was nearly 47 percent. Frey and Snow (2005) found similar results for parenting education programs, reporting that approximately 30 to 53 percent of participants drop out before their programs are complete. In a study of attrition in parenting skills training for mothers and their preschool aged children, Werba and her colleagues (2006) found that attrition was best predicted by maternal age, maternal ratings of parenting stress, and maternal inappropriate behavior (e.g., criticism and sarcasm during mother-child interactions). In a study by Prinz and Miller (1994), the most common reasons participants’ cited for dropout were environmental and logistical barriers caused by their current life situations. Along similar lines, Kazdin and colleagues (1997) report that characteristics that predict treatment dropout include socioeconomic disadvantage, high levels of stress and familial dysfunction, and difficult living circumstances. Together, these findings highlight the importance of identifying parents and caregivers enrolled in parenting education programs who show high parental stress and are therefore at risk of dropping out of treatment. In doing so, parent educators and other treatment personnel may be able to reduce the likelihood that these parents will drop out by offering support and attention to their personal and child-related concerns.

It is also important for parent educators and other program stakeholders are able to be sensitive to the added needs of some program clientele who may require additional assistance or flexibility in designing the timing, location, and supplemental services available to program participants. For example, parents who must undertake all of their familial responsibilities alone (because no other adult figures are present to assist) or who lack independent transportation are
less likely to attend parenting education programs (Prinz & Miller, 1994). Thus, programs that offer childcare or transportation are likely to facilitate participations from an assortment of family types.

Lessening barriers is important because parenting education offers families treatment that is, on average, far more cost-effective and less intensive than therapeutic treatments (Crane & Payne, 2011). Along those lines, according to Kazdin, “Developing a portfolio of treatment delivery models that vary in cost, that are disseminated in different ways, and that can be delivered on a large scale will help overcome barriers to access that seem to be outside the control of any one discipline” (2013, para. 12). In line with Kazdin’s mode of thinking, parenting education is a justified form of treatment in part because it tends to be less expensive and intensive than therapeutic options and thus caters to a specific demographic that therapeutic services may not reach (or be appropriate for).

Efforts to reduce the rate of treatment dropout have been made; indeed, Snow, Frey, and Kern (2002) offered financial incentives in exchange for parents’ program attendance. This idea—specifically, to offer parents cash for their attendance—can be viewed as an extrinsic motivator for treatment participation because it does not come from within the participant; instead, the participant is rewarded by an outside source (i.e., from the members of the program). Unfortunately, Snow and his colleagues’ efforts did not yield significant results. In effect, offering parents money to improve their program attendance was not a useful method. This is not entirely surprising, as the literature on extrinsic and intrinsic motivators suggest that intrinsic motivators are far more useful for sustainable behavior change (Frey & Osterloh, 2002). It is possible that efforts to cultivate parents’ intrinsic motivation for positive change is lacking. This is problematic because other, related areas of literature suggest that the cultivation of intrinsic
motivation is a key instrument in improving treatment engagement and outcomes for individuals with many kinds of concerns.

One conceptual framework of human motivation that has received a great deal of attention is the theory of intrinsic motivation and self-determination proposed by Deci and Ryan (1985). According to Deci and Ryan, there are two basic types of motivation that regulate behavior: (1) *intrinsic motivation* and (2) *extrinsic motivation*. According to these authors, intrinsically motivated behaviors are those that an individual performs purely for the satisfaction derived from their performance, while extrinsically motivated behaviors are behaviors that individuals engage in primarily for instrumental reasons (i.e., to receive a reward or to avoid punishment). Intrinsically motivated behavior is thought to stem from the need to feel competent and self-determined, while extrinsically motivated behavior has been generally regarded as non-self-determined behavior; however, Deci and Ryan (1985) have proposed four different types of extrinsic motivation, some of which may be self-determined (namely *integrated regulation*, which posits that an individual performs a behavior for extrinsic reasons - e.g., to achieve personal goals- but it is internally regulated and thus self-determined). Deci and Ryan (1985) also offer that self-determination and intrinsically motivated behaviors are greatly influenced by factors in the environment that can either induce losses of intrinsic motivation or enhance intrinsic motivation and self-determination. In this way, we can see that it is not only internal sources that impact intrinsic motivation; it is very much the case that the external context impacts an individual’s level of intrinsic motivation for change.

For an individual to present intrinsically motivated behavior, it has been argued that certain basic needs must be met. According to Pelletier, Tuson, and Haddad (1997) three key aspects of external events can affect an individual’s intrinsic motivation and feelings of self-
competence. Firstly, the controlling aspect of an external event, which concerns the degree to which an event is controlling versus autonomy supportive, can influence whether individuals experience their behavior to be caused by the controlling event (and thus adopt an external locus of control) or by an autonomy supportive event. Individuals who experience controlling events tend to have lower levels of self-determination and intrinsic motivation (Pelletier et al., 1997). The second aspect is the informational aspect, which involves the extent to which competence feedback is offered to an individual; positive feedback as an individual attempts to interact with his or her environment can positively impact an individual’s self-determination. Finally, the extent to which a significant other (e.g., treatment facilitator) encourages self-determination in an individual is likely to influence that individual’s intrinsic motivation and feelings of self-competence. In this way, we can see how external factors and internal, person-specific traits work together to create a sense of self-determination for change.

Pelletier et al. (1997) offer that more self-determined, intrinsic forms of motivation lead to enhanced learning, greater interest, increased life satisfaction, persistence, and improved health, and that in the domain of psychotherapy, fostering a sense of self-competence and autonomy in clients greatly improves treatment outcomes (e.g., decreased dropout, increased compliance, improved overall effectiveness of treatment programs). Taken along with the results from Frey and Osterloh (2002), which suggest that payments are not an effective way to ensure the long-term impact of treatment interventions, the argument could be made that methods to improve internal locus of control and self-determination in clients are needed to impact positive outcomes in psychotherapy and related treatment programs.

Motivation for Change
It is not entirely unreasonable to extrapolate the findings of motivational techniques in clinical settings to parenting education work, particularly for studies that evaluate these techniques in individual, child, and family therapy. Motivational techniques to improve engagement in clinical settings have been used for decades and have demonstrated efficacy for clients with various treatment goals, e.g., drug and alcohol cessation, dietary adherence for diabetes patients, child therapy work (Miller, 1983). Motivational interviewing is one such technique that is used to stimulate clients’ intrinsic motivation to modify problematic behaviors by resolving their ambivalence (Miller & Rollnick, 1991). Motivational interviewing taps into individuals’ intrinsic motivations for change because it harnesses participants’ inner motivation and is not imposed from outside sources. Central to this technique is the belief that direct persuasion is not an effective method for resolving ambivalence (Miller & Rollnick, 1991).

Some researchers have argued that participants’ enthusiasm – in other words, their desire to engage in treatment – is not a necessary component of parenting education programs (Arbuthnot & Gordon, 1996). However, this belief assumes that the negotiation between participants and their facilitators is not important and is in contrast to the client-centered approach that motivational interviewing employs. In the following subsections, the issue of engagement in parenting education will be more deeply explored with respect to the complex and transformative process of change that is meant to occur during these programs. The engagement of participants in parenting education is important, as with any form of treatment.

**Transformative Learning in Parenting Education**

Parenting education can be thought of as a mechanism for change in that it supports individuals’ transformations to more positive ways of thinking and behaving. According to To, Iu Kan, Tsoi, and Chan (2013), the goal of transformative educational experiences is to help each
learner find his or her own inner voice so that he or she feels empowered to affect the desired changes in family life. In the field of parenting education, a transformative approach enables parents to “look at things in fundamentally new and different ways and to examine actions that they can take to change their lives in essential ways” (First & Way, 1995, p. 107). Following this line of thinking, it is possible that parenting education programs that capitalize on transformative learning help parents to engage in self-reflective exercises, leading them to better understand their family-related concerns, improving their intrinsic motivation to change, and consider how they can make the desired changes (To et al., 2013). Enhancing parents’ intrinsic motivation through self-reflective exercises is an important process that can foster stronger, more intimate parent-child relationships and it is something that has the potential to be affected by motivational, self-reflective assessments.

Close connections between transformative learning, self-reflection, and self-narratives exist (Brendel, 2009). Self-narratives consist of stories where individuals are creating and recreating meaning during the process of personal storytelling. Specifically, self-narratives allow for discussion, comparison, and the analysis of inner motivation to guide one’s reflection about past events and create narratives that explain situations and behavior. This process may aid individuals in developing an understanding of the relationship between the self of the past and their personal narrative in the present and serve as a guidepost for future-oriented change (Brendel, 2009). Narrative sharing helps to facilitate parents’ construction of new meanings from their stories, which can serve as guideposts for future decision-making (Leung & Lam, 2009). In parenting education, by providing parents with chances to review their family lives and narrate their stories, we can facilitate parents’ reorganization of their parenting experiences and re-authoring of their past experiences. By doing this, they can then construct a coherent narrative of
their lives, develop a different perspective in understanding their children and, therefore, ascertain the direction of future parenting practices. In other words, it may be argued that the process of engaging in self-narration (e.g., through the process of an interactive motivational intervention) may help parents and caregivers to achieve more complex epistemologies and, therefore, be better engaged in and motivated for treatment.

**The transtheoretical model of behavior change.** Transformative learning in parenting education programs may be better understood with the use of the transtheoretical model of behavior change, sometimes referred to as simply the transtheoretical model or as stages of change (Figure 1). The model, which was established by Prochaska and DiClemente in 1983, offers an explanation of the variation in individuals’ levels of readiness to make changes in their lives, as well as the stage of the change process an individual is in.

Though the transtheoretical model has not been used to explain the process of change within the context of parenting education programs, its usefulness in related areas of research (e.g., psychotherapy) suggests that it has been underutilized in this line of work. Additionally, its effective applications in psychotherapy and clear connections to various facets of motivational interviewing support its use in the present case (Miller, 1983).

The transtheoretical model is comprised of six stages that include *precontemplation, contemplation, preparation, action, and maintenance,* and *relapse* (Prochaska & DiClemente, 1983). The model can be applied to a wide variety of problem behaviors, including those that are commonly addressed in parenting education programs, such as weaker parenting practices or children’s externalizing problems, e.g., tantrums, aggression, noncompliance (Barlow & Stewart-Brown, 2000). As a result, the use of this framework in parenting education research and practice is useful. Parenting education programs’ efforts to support individuals and families’ sustained
positive behavior change requires a working knowledge of individuals unique lived experiences and the different stages of readiness that they have upon arrival.

**Parental Perceptions and Engagement**

Parents’ views of parent education play an important role in their level of engagement with parent education programs, as a solid understanding of parents’ beliefs about parenting education programs and about engaging in these programs is critical to lessening the rate of attrition. In 2004, Burns and Bond evaluated 39 mothers’ epistemologies (i.e., beliefs about the nature of knowledge and the self as a knower) and their expected benefit from and engagement with parenting education and discovered that mothers’ engagement in parenting education varied by their epistemology. In general, mothers who had more complex epistemologies expected more discussion during sessions and demonstrated more active involvement in their parenting education programs. Burns and Bond’s study has important implications for parenting education work because it suggests that efforts to move participants toward more complex epistemologies – in other words, sophisticating participants’ epistemologies by engaging them in self-reflective exercises – can help parents and caregivers to take more away from parenting education programs by increasing their level of involvement. It is possible that completing a motivational questionnaire at the beginning of a parenting education program may help to set parents’ frame of mind to a more complex epistemology, such that they are more likely to be engaged in their parenting education experiences.

**The engagement paradox.** Lam and Kwong (2012) posit that parent educators are faced with a fundamental problem, referred to the engagement paradox. According to these researchers, parent educators who utilize a collaborative learning approach for their programs are imposing their ideology of empowerment upon parents, many of whom actually value and seek
expert knowledge and advice from parent educators. Lam and Kwong offer that many individuals come to parenting education classes with the expectation that the facilitator will teach rather than collaborate with them. While collaborative learning is generally agreed upon to be the superior approach (Lam & Kwong, 2012), it is nonetheless important for participants’ pedagogical expectations to be met.

To resolve the paradox of empowerment, parent educators must contend with two seemingly conflicting teaching styles by incorporating both into their programs. Parent educators should not neglect the parents’ and caregivers’ pedagogical expectations to be taught new parenting approaches. However, educators are still responsible for negotiating relationships that are “characterized by collaboration and partnership” rather than by inequality (Lam & Kwong, 2012, p. 65). In teaching parents and other caretakers through parenting education, it is important to ensure that they feel as though they are an active part of the change process.

One way to ensure that participants feel as though they are an active part of the change process is to invite them to consider the changes that they wish to make in their family lives through the use of an interactive motivational questionnaire. In theory, this survey could allow participants to reflect on what it is in their lives that they wish to change (e.g., improve parenting skills, decrease child misbehavior) and how they might like to go about making these changes. The process of completing a motivational assessment may help participants to take some responsibility for the change process that occurs over the course of their parenting education program.

**The Proposed Study**

The proposed study is concerned with creating a brief motivational intervention for parenting education programs to improve participants’ treatment engagement and related outcomes. The
primary goal of this study is to better understand the application of motivational techniques within parenting education. Both the feasibility and the effectiveness of these techniques – administered via a researcher-facilitated survey – will be evaluated. The need for a motivational survey is clear, given that parenting education programs suffer from high rates of attrition, similar to those of psychotherapy. However, the less intense nature of parenting education programs and their group structure present pragmatic limitations that necessitate a survey rather than one-on-one interviews. In the past, parenting education programs have been shown to be useful in individuals’ efforts to elicit change in their family lives; however, such changes cannot be made if participants are not adequately engaged with the program’s content or with the facilitator. Thus, addressing the engagement problem should be of utmost importance to all parenting education programs to ensure that they may be able to fulfill their intended purposes. Such a goal is deeply important for the field because even the best interventions cannot be sustained without proper engagement from participants.

This study presents a motivational survey-based intervention that is inspired by the central aspects of motivational interviewing, including: a person’s exploration of his or her own reasons for change, strengthening his or her confidence in his or her own ability to change, and the identification of social support for the change process (Miller, 1983). The questionnaire is composed of five questions concerning these central aspects of motivational interviewing, e.g., “Do you feel supported to make changes in your family life right now?” These questions are both quantitative and qualitative in nature.

The motivational questionnaire was developed by the author of this paper specifically for the purpose of testing a motivational intervention in the context of parenting education given the demonstrated efficacy of motivational interviewing-inspired motivational interventions in the
context of psychotherapy. It is worth noting, however, that parenting education is most often delivered in a group setting with fewer sessions than psychotherapy treatments, so an interactive, brief survey rather than a full interview session will be used to better suit the unique context of parenting education. As a result, a primary purpose of this thesis was to examine the psychometric properties of the motivational questionnaire as a measure of client motivation for parenting education and to assess its convergent validity with another, pre-established measure of motivation for treatment. The proposed motivation questionnaire is unique not only in that it is applied to the parenting education realm, but because unlike other measures of motivation for treatment in child and family treatments, it offers a mixed methods design and mimics the interactional nature of motivational interviewing. As a result, both the quantitative and qualitative properties of this motivation questionnaire will be explored in detail, and a discussion of the benefits of the interactional nature of the motivation questionnaire versus other motivation measures that are completed independently of study administrators or facilitators.

Another primary goal of the study was to implement the motivation questionnaire in a parenting education setting to test its effects on treatment completion and related outcomes. As motivational interventions are novel in the realm of parenting education, it was worth exploring to what extent the motivational questionnaire had the ability to effect change in this context. To test the effect of the motivational survey-based intervention on areas of parents and caregivers’ program engagement, specifically (1) program completion, (2) parent motivation for treatment, (3) perceived barriers to treatment, and (4) program satisfaction, the present study has a total of four research hypotheses, each divided into two separate but related parts. Given that this questionnaire is a novel contribution to the parenting education field, the present researcher sought answers regarding the motivation questionnaire’s efficacy, as well as at what point in the
program sequence the questionnaire should be delivered. The present researcher believed that participants who completed the questionnaire during the second session of the program would fare better than those who completed the questionnaire upon enrollment because participants who completed the questionnaire during the second session would have had the opportunity to first begin building a relationship with his or her facilitator, which could in turn further motivate them during the interactive questionnaire process. As a result, the study design was such that parents and caregivers could receive the intervention at differing points in the program. The subsequent hypotheses were divided into two parts – the first part of each hypothesis was related to when the motivation questionnaire was delivered (i.e., immediately upon enrollment versus during the second session), and the second part was about whether the motivation questionnaire was delivered (i.e., assignment to intervention (motivation questionnaire received) versus control (motivation questionnaire not received) groups).

**Hypothesis 1.1:** Parents and caregivers who complete the motivation questionnaire during the second session of the program will be least likely to drop out of the parenting program in which they are enrolled, followed by parents who complete the motivation questionnaire during the second week of the program, and individuals in the control condition will have the highest rates of the three groups of treatment non-completion.

**Hypothesis 1.2:** Parents and caregivers who complete a motivational questionnaire are less likely to drop out of the parenting education program in which they are enrolled than parents and caregivers who do not complete the motivational questionnaire.

**Hypothesis 2.1:** Parents and caregivers who complete the motivation questionnaire during the second session of the program will have the least number of perceived barriers to treatment, followed by parents who complete the motivation questionnaire during the second week of the
program, and individuals in the control condition will have the highest number of perceived barriers to treatment of the three study conditions.

**Hypothesis 2.2:** Parents and caregivers who complete the motivational questionnaire report fewer perceived barriers to treatment than those who do not complete the motivational questionnaire.

**Hypothesis 3.1:** Parents and caregivers who complete the motivation questionnaire during the second session of the program will have greatest motivation for treatment, followed by parents who complete the motivation questionnaire during the second week of the program, and individuals in the control condition will have the least motivation for treatment of the three study conditions.

**Hypothesis 3.2:** Parents and caregivers who complete the motivational questionnaire have higher levels of motivation for treatment than those who do not complete the motivational questionnaire.

**Hypothesis 4.1:** Parents and caregivers who complete the motivation questionnaire during the second session of the program will have the greatest satisfaction with their parenting program experiences, followed by parents who complete the motivation questionnaire during the second week of the program, and individuals in the control condition will have the lowest levels of satisfaction with their program experiences of the three study conditions.

**Hypothesis 4.2:** Parents and caregivers who complete the motivational questionnaire are more satisfied with their program experiences than those who do not complete the motivational questionnaire.

**Chapter II: Methodology**

**Participants**
A total of \( N = 22 \) participants enrolled in the *Common Sense Parenting* program at the Village for Families and Children during the months of April 2014 through March 2015 participated in the study. Of the total sample, \( n = 19 \) (86.4\%) were female, \( n = 2 \) were male (9.1\%), and \( n = 1 \) participant did not identify a gender. The age range of the sample was 22 years to 45 years (\( M = 31.81, \ SD = 6.282 \)). The average number of children was 2.68 (\( SD = 1.76 \)), with a range of one child to eight children. In total, \( n = 14 \) (63.8\%) reported DCF involvement, and an additional \( n = 5 \) (22.7\%) were mandated to attend by their residential treatment program.

The racial breakdown of the sample was as follows: \( n = 9 \) (40.9\%) participants were Black or African-American, \( n = 7 \) (31.8\%) of the sample identified as Hispanic or Latino, and the remaining \( n = 6 \) (27.3\%) were White or Caucasian. Furthermore, \( n = 1 \) (4.5\%) participant had not attended high school, \( n = 11 \) (50.0\%) participants finished some high school, but did not receive a diploma, \( n = 3 \) (13.6\%) participants graduated high school or received a GED, \( n = 2 \) (9.1\%) participants completed some college credit, but did not receive a degree, \( n = 4 \) (18.2\%) participants finished trade, technical, or vocational training, and \( n = 1 \) (4.5\%) participant had a bachelor’s degree. Finally, \( n = 12 \) (54.5\%) participants were single, never married, and not living with a partner, \( n = 5 \) (22.7\%) participants were single, never married, and living with a partner, \( n = 2 \) (9.1\%) participants were married or in a domestic partnership, \( n = 2 \) (9.1\%) participants were divorced, and \( n = 1 \) (4.5\%) participant was separated from his or her partner. The demographics of the participants in this sample are included in Table 1.

**Program Description**

Participants were enrolled in Common Sense Parenting (CSP), which is a group-based parenting education program designed for parents with children aged six to 16 who exhibit significant behavioral or emotional problems. According to the National Institute of Justice
“The objective of the program is to teach positive parenting techniques and behavior management strategies to help increase positive behavior, decrease negative behavior, and model appropriate alternative behavior for children” (n.d., para. 1). CSP may be categorized a secondary prevention parenting education program because it is tailored to serve parents who may be at risk of abuse or neglect and because it focuses on enhancing parenting knowledge and skills in specific areas known to be associated with said risks, e.g., building self-awareness about the parenting approaches and behaviors that may harm children’s health or well-being (VSPEC, 2013).

The NIJ gives Common Sense Parenting a score of 3 on a 1 to 5 scale, where 1 = well supported by research and 5 = concerning practice, may do more harm than good, where ‘3’ suggests that the program has ‘promising’ research evidence; in other words, Common Sense Parenting is promising in that (a) has no research evidence to suggest that it does harm, (b) it has a book or manual that can be followed, and (c) there is at least one study with a control-group to establish the program’s benefit over the control group. CSP is grounded in social learning principles and has research that highlights its positive results (Thompson, Grow, Ruma, Daly, & Burke, 1993; Thompson, Ruma, Schuchmann, & Burke, 1996).

CSP consists of six weekly two-hour group-based parenting education sessions that are led by certified parenting education facilitators. In the present study, there were two facilitators; the first was a primary facilitator and the second filled in when the first facilitator could not be there. Session topics include (1) “Parents Are Teachers,” (2) “Encouraging Good Behavior,” (3) “Preventing Problems,” (4) Correcting Problem Behavior,” (5) “Teaching Self-Control,” and (6) “Putting It All Together.” According to the NIJ, “CSP classes concentrate on experiential learning and consist of five training components—review, instruction, modeling, practice, and
feedback—and conclude with a summary. Each session is designed to teach one parenting concept and a skill related to that concept” (n.d., para. 5). In the present study, the parenting education class that used CSP had rolling enrollment throughout the course of the study so new participants enrolled in the course each week. As a result, the facilitator of the course could not teach CSP in order. One week, the course topic may have been class four, “Correcting Problem Behavior,” and the next week, it may have been class six, “Putting It All Together” – it depended entirely on the information the participants need to cover in order to graduate from the program.

According to the facilitators of this program, the majority of program participants (over 50%) are referred to CSP by the Department of Children and Families (DCF) or by InterCommunity Recovery Centers. InterCommunity Recovery Centers, also referred to as Coventry House, is a halfway house for substance abusing pregnant and post-partum women located in Hartford, Connecticut. Participants residing in Coventry House are mandated to attend CSP per the agreement that has been established between Coventry House and the Village for Children and Families, which states that the Village provides the parenting component of their treatment program. As a result, all individuals residing in Coventry House attend CSP.

Instrumentation

The purposes of the assessment were to measure baseline parental motivation for treatment (i.e., the parenting program in which they were enrolled) and to determine whether parental motivation for treatment may be improved by using a questionnaire, designed specifically for this study, as a priming mechanism. The measure (called the Motivation Questionnaire, or MQ) was used to get participants thinking about the issues that brought them to the parenting education program in which they were enrolled and to consider the strategies they might use to make changes in their family life. In addition, participants completed a post-test set
of surveys measuring the perceived barriers that parents and caregivers experienced and their satisfaction with their program experiences.

**Demographics questionnaire.** Basic demographic information about the child and parent was obtained in the Demographics Questionnaire (Appendix B) before the start of the first class of each program. This information included details about parent and child age, gender, and ethnicity, as well as family composition (i.e., marital status) and the parent’s highest level of education reached.

**Treatment completion.** Participants’ completion of their treatment program, described in detail below, was measured by whether participants finished all six sessions of the program. Participants were grouped dichotomously as “completed” or “not completed” depending on whether the participant attended all six sessions of the program. If a participant completed anywhere from one to five sessions but did not complete his or her final session, the participant was placed in the “not completed” group.

**Motivation questionnaire.** The Motivation Questionnaire (MQ; Appendix C) acted as a priming mechanism for participants to begin thinking about the issues that brought them to parenting education. Given that there was no existing measure that evaluated parent motivation using the stages of change and motivational interviewing frameworks, the MQ was developed to assess this construct. The MQ asked participants to identify their reasoning for enrolling in the parenting education course, the degree to which they wanted to see change in their family life, how they would go about making changes in their family life, how confident they felt about making these changes, and whether they had social support for their efforts to change. The MQ was administered either during the first or second class, one-on-one with the study administrator.

The MQ is composed of five questions that reflect the principal processes of motivational
interviewing (Miller & Rollnick, 1991), such as engaging (i.e., involving participants in talking about issues, concerns, and hopes), focusing (i.e., narrowing the conversation to habits or patterns the participant wants to change), evoking (i.e., eliciting participant motivation to change by increasing the participant’s sense of importance of change, their confidence about change, and their readiness to change), and planning (i.e., developing practical steps clients want to use to implement the desired changes). The survey asks participants to rate their desire for change, which is the central construct of interest, but it also asks about constructs related to, and that affect, desire for change, namely perceived ability to change and the identification of social support for the change process (Kelly, Zyzanski, & Alemagno, 1991). The following questions were included in the survey: (1) “Why did you sign up for this class?”, (2) “Is it important for you to see changes in your family life?”, (3) “If you could wave a magic wand to make these changes immediately, how would things be better for you and your family?”, (4) “Do you feel able to make changes in your family life right now?”, and (5) “Do you feel supported in your efforts to make changes in your family life?”. Items 1 and 3 are open-ended, while items 2, 4, and 5 are Likert scale questions. The Motivation Questionnaire (using the three Likert-type items) was found to be highly reliable (Cronbach’s $\alpha = .896$), which suggests that desire for change (item 2) was significantly, positively correlated with constructs related to, and supporting of, change (items 4 and 5) such as support for change and perceived ability to change.

**Parental motivation.** Parent motivation for treatment (i.e., parent education) was assessed using the Parent Motivation Inventory (PMI; Appendix D; Nock & Photos, 2006). Conceptually, these the Parent Motivation Inventory and the Motivation Questionnaire are both parent motivation for treatment and are assumed to tap into the same latent construct; as a result, the Parent Motivation Inventory acts as a validity check for the Motivation Questionnaire.
Failure to find a significant correlation between these two measures can naturally elevate concerns about the validity of the MQ. The internal consistency reliability (Cronbach’s $\alpha$) of the PMI total score was .96 as reported by the authors, and .955 in the present sample.

**Barriers to treatment participation.** The Barriers to Treatment Participation Scale (BTPS; Appendix E; Kazdin, Holland, & Crowley, 1997) was used to determine parents’ perceived level of barriers to participation in treatment (in this case, parenting education). The internal consistency of the BTPS as reported by the authors is $\alpha = .86$. The BTPS was given to participants at the end of the program to account for all barriers experienced prior to and during the program. Given the lack of variability in participants’ responses on the BTPS this small sample, however, internal consistency statistics were impossible to calculate in the present sample.

**Satisfaction with program.** Participants’ level of satisfaction with their programs was determined with the Client Satisfaction Questionnaire (CSQ; Appendix F; Larsen, Attkisson, Hargreaves, & Nguyen, 1979). Participants rated their quality of the services that they received and the extent to which they would refer the program to their friends. The internal consistency of the CSQ as reported by the authors is $\alpha = .91$, and in the present sample it is $\alpha = .919$.

**Procedures**

The Institutional Review Boards of the University of Connecticut and of the agency where this study took place, the Village for Families and Children in Hartford, Connecticut, approved of all study procedures and materials.

**Study Design**

The study population consisted of parents and caregivers enrolled in a once-weekly parenting education course at a large community-based agency in Hartford, Connecticut. The
study had a pre-test post-test design and participants were randomized to one of three study conditions: (1) Early Intervention, (2) Late Intervention, or (3) Control (i.e., no intervention). In the Early Intervention condition, participants completed the Motivation Questionnaire (MQ) during the first session of the program. In the Late Intervention condition, participants completed the MQ during the second session of the program, after one session’s worth of getting to know the facilitator and other participants. In the Control condition, participants did not complete the MQ.

In each of the three study conditions, participants were asked to complete two short sets of surveys - the pre and post-test assessments, respectively - and were told that these surveys pertained to their parenting education program experiences. The pre-test was administered at the very beginning of the program (i.e., session one, immediately upon enrollment) to participants in the Early Intervention and Control conditions, while participants in the Late Intervention condition received the first set of surveys during session two. The post-test was given to all of the participants at the very end (i.e., session number six) of the program. During the pre-test phase, intervention participants (i.e., participants in the Early Intervention and Late Intervention conditions) were given an additional brief interactive survey to complete with the study administrator. This survey asked participants to reflect on their reasons for enrolling in the parenting education program in which they were enrolled and to consider any changes that they might want to make in their family lives and how to make those changes. The motivational survey, the Motivation Questionnaire, served as the motivational intervention for the study.

**Recruitment and Enrollment**

Parents and caretakers enrolled in the parenting education program *Common Sense Parenting* were approached and asked to participate in the study. Each participant was first
introduced to the study administrator by the facilitator of the program, who was an individual with whom many participants were familiar. After, the study administrator briefly described an overview of the study and asked each individual if he or she would like to hear more about the study and whether they might be interested in participating. A total of $N = 22$ parents (87.5% of those who were approached) responded positively to an invitation to participate in the study. Participants who volunteered were taken into an adjacent room and completed the informed consent process with the study administrator one-on-one. Individuals disinterested in participating returned to the room in which the group course was being held, and individuals who wished to participate signed the consent form and were immediately assigned to a study condition and given a set of surveys to complete.

**Pre-Test Procedures**

Upon completion of the informed consent process, participants were immediately assigned a participant ID number and randomized to an experimental condition (i.e., intervention, week 1, intervention, week 2, or control) via the results of a Research Randomizer random number generator. Prior to the start of the study, the study administrator utilized [www.Randomizer.org](http://www.Randomizer.org) to generate a random list of three sets of 14 unique numbers (for a total of 42 unique numbers from 1-42). Participant ID numbers corresponding with set 1 were assigned to intervention, week 1, ID numbers in set 2 were assigned to intervention, week 2, and ID numbers in set 3 were assigned to the control group.

Study participants who were randomized to one of the two intervention conditions (intervention, week 1 or intervention, week 2) completed the MQ. Participants in the intervention, week 1 condition completed the pre-test (including the MQ, PMI, and Demographics Questionnaire) during the first week of the program, and participants in the week
2 completed the pre-test (including the MQ, PMI, and Demographics Questionnaire) during the second week of the program. Individuals who were enrolled in the control condition completed their pre-tests (the PMI and the Demographics Questionnaire) during the first week of the program, but they did not complete the MQ.

**Post-Test Procedures**

All participants, regardless of the condition they were assigned to, completed the Barriers to Treatment Participation Scale (BTPS) and the Client Satisfaction Questionnaire (CSQ) at the end of the program (i.e., week six of the program). As thanks for their time and effort, parents and caregivers received gift cards to Target for $10. Parents and caregivers who completed the program during a week that the study administrator was not able to attend, or arrived late after the study administrator had left, were contacted by the study administrator via telephone to finish the post-test. Participants who completed the post-test set of surveys were mailed the $10 Target gift card.

**Data Analysis**

Composite scores were calculated for the PMI, BTPS, and CSQ and their associated subscales. The PMI total scale score was calculated by summing the 24 item scores (each ranging from 1 = *strongly disagree* to 5 = *strongly agree*). The Perceived Ability to Change subscale was calculated by summing the following PMI items: 14, 17, 20, and 23. The Desire to Change subscale was calculated by summing the following PMI items: 1, 3, 6, 9, 12, 15, and 18. Finally, the Readiness to Change subscale was calculated by summing the following PMI items: 2, 4, 5, 7, 8, 10, 11, 13, 16, 19, 21, 22, and 24. Higher scores on the PMI and PMI subscales indicate greater motivation for treatment, greater perceived ability to change, greater desire to change, and greater readiness to change.
Similarly, the BTPS total scale score was calculated by summing all of the 38 individual items on the BTPS scale (each ranging from 1 = *never a problem* to 5 = *very often a problem*). However, because Cronbach’s alpha could not be calculated in the present sample due to a zero variance problem, each BTPS item was dichotomized to reflect 0 = *did not experience that barrier* to 1 = *experienced that barrier*. Then, the values were summed to create the variable representing the summation of the barriers each participant experienced; this variable was used in later hypothesis testing.

Additionally, the BTPS is comprised of four subscales, Stressors and Obstacles to Treatment, Treatment Demands and Issues, Perceived Relevance of Treatment, and Relationship with the Facilitator. For each of these subscales, the same additive approach that was used to sum the total BTPS score was used to calculate the total subscale scores. The Stressors and Obstacles to Treatment was calculated by summing the following BTPS items: 2, 3, 4, 6, 14, 16, 17, 18, 20, 31, 34, 35, 36, and 38. The Treatment Demands and Issues subscale was calculated by summing the following BTPS items: 1, 5, 9, 10, 12, 13, 22, 23, 24, and 33. The Perceived Relevance of Treatment subscale was calculated using items 7, 11, 15, 21, 25, 28, 29, and 30 on the BTPS scale. Finally, the Relationship with the Facilitator subscale was calculated using the following BTPS items: 8, 19, 26, 27, 32, and 37. Lower BTPS total scores, Stressors and Obstacles to Treatment subscale scores, and Treatment Demands and Issues subscale scores reflect fewer barriers to treatment participation, fewer stressors and obstacles to treatment, and fewer treatment demands and issues. Lower scores in the Perceived Relevance of Treatment subscale reflect higher perceived relevance of the treatment program, and lower scores on the Relationship with the Facilitator subscale reflect stronger client-facilitator relationships.

Finally, the CSQ total scale score was calculated by summing all of the 8 individual items
on the CSQ scale (each ranging from 1 to 5; in some cases, 1 = poor or 1 = quite dissatisfied while 5 = excellent or 5 = very satisfied). Higher values on the CSQ total scale score represent greater program satisfaction.

The primary questions of interest included the effect of experimental condition on (1) treatment completion, (2) parent motivation for treatment, (3) barriers to treatment participation, and (4) program satisfaction. To test the effect of experimental condition on treatment completion (i.e., Hypotheses 1.1 and 1.2), chi-square tests of independence were performed. Effect size was calculated using Cramer’s $V$.

The effect of experimental condition was tested on barriers to treatment participation (Hypotheses 2.1 and 2.2), parent motivation (i.e., Hypotheses 3.1 and 3.2) and program satisfaction (i.e., Hypotheses 4.1 and 4.2) using Kruskal-Wallis tests. In addition, the two intervention groups (i.e., Early Intervention and Late Intervention) were combined to test intervention versus control and, in those cases, Wilcoxon Signed Rank tests were used. It is worth noting that Kruskal-Wallis tests could also have been used as in the case of two independent samples, Wilcoxon Signed Rank tests and Kruskal-Wallis tests can be used interchangeably and the $p$ values from these two tests will be identical. Effect size was calculated using odds ratio to accompany the chi square tests of independence, eta squared ($\eta^2$) in the case of tests of three-group comparisons (i.e., Kruskal-Wallis tests), and Cohen’s $d$ in the case of two-group comparisons (i.e., Wilcoxon Signed Rank tests).

While the typical Cronbach’s alpha ($\alpha$) level used to determine significance is $p < .05$, the present study used an alpha level of .10 instead (Cohen, 1992). An alpha level of .10 is recommended for exploratory studies and studies with small samples with low levels of power (Cohen, 1992). In studies with small sample sizes, trends that are significant at an alpha level of
.10 will likely become significant at the more traditional alpha level of .05 in a study with a larger sample size (Cohen, 1977). Because the present study is both exploratory and has a small sample size ($N = 22$), an alpha level of .10 was adopted.

Qualitatively, the open-ended items on the Motivation Questionnaire (item 1, the second part of item 2, and item 3) were analyzed using the qualitative analytic strategy of memoing (Birks, Chapman, & Francis, 2008). A memoing technique was implemented in that the present researcher recorded general thoughts and ideas as they evolved over the course of reading participants’ responses to the open-ended questions, and as the researcher recorded these thoughts, the notes became more extensive and increasingly focused on themes or core concepts that repeated in many participants’ responses. Thematic analysis is the most common form of qualitative data analysis and it emphasizes the pinpointing and recording of patterns in data (Braun & Clarke, 2006). Reports on these themes by item number are presented below.

**Chapter III: Results**

**Motivation Questionnaire**

$N = 14$ participants were assigned to the intervention condition ($n = 5$ to Early Intervention, and $n = 9$ to Late Intervention) and thus completed the Motivation Questionnaire (MQ). The remaining $n = 8$ participants were assigned to the control condition and thus did not complete the MQ. Means and standard deviations of items 2, 4, and 5 are listed in Table 2. The results of the remaining two qualitative, open-ended questions on the Motivation Questionnaire are described below.

Example responses from the MQ item 1 “Why did you sign up for this class?” include the following: “To come to learn new parenting skills such as behavior, and so DCF will see more improvement [in] me [so I may] get my seven-year-old back” and “This is part of my case plan
for reunification [with my child].” A substantial number of study participants \( n = 14 \) (63.8%) reported involvement with the Department of Children and Families (DCF) and were mandated by DCF to attend the CSP parenting education program in which they were enrolled. It is important to note, however, that participants were not required to report DCF involvement, and so it is possible that greater than 63.8% of participants were DCF mandated to attend the course. The second most common reason participants reported for taking the course was to improve parenting skills. Responses from participants included “I want to become a better parent and improve my parenting,” and [I am in this program] to learn new parenting techniques.”

Further, example responses from the MQ item 3, “If you could wave a magic wand to make these changes immediately, how would things be better for you and your family?”, include “Everything will be [all right]. I’ll be able to get anything my son wants [and] be a better mom,” and “[My children] would be home with me now,” “Less stress,” and “I would have my children instead of someone else taking care of them.” The primary themes that emerged in the responses to this question included (a) less stress and fewer financial struggles, (b) reunification with children, and (c) the desire to strengthen parenting skill sets. A more detailed analysis of the qualitative results from items 1 and 3, as well as the second part of item 2, are explored in the Qualitative Results from the Motivation Questionnaire subsection.

The remaining MQ items were continuous in nature. Item 2, “Is it important for you to see changes in your family life?” was rated on a 5-point Likert scale, ranging from 1 = no, things are okay right now to 5 = yes, I am eager for things to change. The average score for this item was 4.29 (SD = 1.07). Item 4, “Do you feel able to make changes in your family life right now?” ranged from 1 = no, it’s a fixed system. There is no room for change to 5 = yes, I am able to use information from classes such as this one at home. The average score for item 4 was a 4.21 (SD
Item 5, “Do you feel supported in your efforts to make changes in your family life?” ranged from 1 = no, I don’t have any support to 5 = yes, I have a lot of support. The average score for item 5 was 4.43 (SD = 0.65). The mean scores of these two items indicate that participants generally felt supported by others in their efforts to make changes in their family lives, as well as being generally quite eager for things to change in their family lives.

**PMI**

Parent and caregiver motivation for treatment was evaluated using the Parent Motivation Inventory (PMI; Nock & Photos, 2006). The average total score on the PMI was 88.55 (SD = 18.85, range = 52-118). The total scores on the PMI were normally distributed with skewness of -.27 (SE = .49) and kurtosis of -.92 (SE = .95). The PMI has three subscales, Perceived Ability to Change, Readiness to Change, and Desire to Change. On the Perceived Ability to Change subscale, participants scored 14.41 on average (SD = 4.09, range = 3-20). Participants’ Perceived Ability to Change subscale scores were non-normally distributed with skewness of -1.13 (SE = .49) and kurtosis of 1.445 (SE = .95). On the Readiness to Change subscale, M = 48.18 (SD = 10.47, range = 25-65). Participants’ scores on the Readiness to Change subscale were normally distributed with skewness of -.46 (SE = .49) and kurtosis of -.33 (SE = .95). On the Desire to Change subscale, participants scored 25.95 on average (SD = 5.26, range = 18-35). Participants’ scores on the Desire to Change subscale were normally distributed with a skewness of .02 (SE = .49) and kurtosis of -1.25 (SE = .95). Participants’ mean scores on the PMI and PMI subscales reflect average motivation for treatment, above average perceived ability to change, average readiness to change, and slightly below average desire to change.

**BTPS**

The barriers to treatment participation that parents and caregivers may have faced during
the time of their enrollment in the parenting education program were measured using the Barriers to Treatment Participation Scale (BTPS; Kazdin et al., 1997). Average total score on the BTPS was $M = 2.31$ ($SD = 1.93$, range = 0-3).

The BTPS has four subscales, Stressors and Obstacles to Treatment, Treatment Demands and Issues, Perceived Relevance of Treatment, and Relationship with the Facilitator. On the Stressors and Obstacles to Treatment subscale, participants scored 0.54 on average ($SD = 0.88$, range = 0-3). On the Treatment Demands and Issues subscale, participants scored 11.46 ($SD = 1.56$, range = 0-2). Participants scored 8.38 on average on the Perceived Relevance of Treatment subscale ($SD = 0.65$, range = 0-2) and 6.92 on average on the Relationship with the Facilitator subscale ($SD = 1.32$, range = 0-1). These scores suggest that, on average, the sample (a) experienced relatively few stressors and obstacles to treatment, (b) considered the treatment demands of the program to be relatively minimal, (c) considered the program to be relevant, and (d) had few barriers to high-quality relationships with the program facilitator.

**CSQ**

Participants’ satisfaction with their program experiences was assessed using the Client Satisfaction Questionnaire (CSQ; Larsen, et al., 1979). The average CSQ total score was 28.69 ($SD = 3.43$, range = 22-32). The average score of 28.69 on the CSQ suggests that participants who completed the post-test were generally highly satisfied with their program experiences. Participants’ scores on the CSQ were normally distributed with skewness of -.75 ($SE = .62$) and kurtosis of -.90 ($SE = 1.19$).

**Treatment Completion**

Of the total number of participants enrolled in the study ($N = 22$), $n = 9$ (40.9%) individuals did not complete the post-test. The study administrator could not reach five of those
participants to complete the study program, and the remaining four participants dropped out of the program. Of the nine participants who did not complete the post-test, three (33.0%) were participants from the Control group, two (22.2%) participants were from the Early Intervention group, and 4 (44.4%) participants were from the Late Intervention group. Of the four participants who dropped out of the program, one participant (25.0%) was in the Early Intervention condition, one participant (25.0%) was in the Late Intervention condition, and two participants (50.0%) were in the Control condition.

**Convergent Validity of the Motivation Questionnaire and the Parent Motivation Inventory**

Among the primary purposes of this study was to examine the psychometric relationship between the Motivation Questionnaire (MQ) and the Parent Motivation Inventory (PMI; Nock & Photos, 2006). The Desire for Change subscale on the PMI and the Importance of Change item on the MQ should, in theory, be correlated, as they both represent the core concept of these scales: a parents’ desire to – or the value placed on – change. Additionally, the Perceived Ability to Change subscale on the PMI should be correlated with the Perceived Ability to Change subscale on the MQ.

As can be observed in Table 3, bivariate correlations among parent motivation measures (i.e., Motivation Questionnaire items 1, 3, and 5, PMI and MQ total scores, and PMI subscale scores) help to delineate which items, subscales, and scales converge (i.e., are related to the same construct) and which do not. Of the items, scales, and subscales that were expected to converge, there were three significant positive correlations: the Desire for Change subscale on the PMI and the Importance of Change item on the MQ were significantly, positively correlated, $r = .552$. The Perceived Ability to Change subscales on the PMI and MQ were not significantly correlated, as was expected. Instead, Perceived Ability to Change subscale on the MQ was significantly,
positively correlated with the Desire for Change subscale on the PMI, $r = .563$. While the total MQ score was not significantly correlated with the total PMI score, it was significantly, positively correlated with the Desire for Change subscale on the PMI, $r = .550$. These results indicate that the Desire for Change subscale of the PMI was significantly, positively correlated with Importance of Change, Perceived Ability to Change, and the total MQ score, which supports the validity of the Motivation Questionnaire as an instrument for measuring motivation for treatment. While these relationships offer some evidence for the validity of these aspects of the MQ, it also suggests that perhaps the items on the MQ were tapping into the same, rather than separate, constructs, and that for participants completing the MQ, perceived ability to change and desire to change were highly related to one another. Further research should investigate the reasons for why Perceived Ability to Change on the PMI and on the MQ were not correlated, and why the total scale scores on the PMI and MQ were not correlated.

**Hypothesis Testing**

**Hypothesis 1.1:** Parents and caregivers who complete the motivation questionnaire during the first week of the program will be least likely to drop out of the parenting program in which they are enrolled, followed by parents who complete the motivation questionnaire during the second week of the program, and individuals in the control condition will have the highest rates of the three groups of treatment non-completion.

**1.1:** A chi-square test of independence was performed to examine the relation between experimental condition (i.e., intervention, week 1, intervention, week 2, control) and treatment completion. The relation between these variables was not statistically significant, $\chi^2(2, N = 22) = 0.087, p > .10$. The null hypothesis is retained, which indicates that experimental condition did not have a significant affect on treatment completion. The results of this analysis are outlined in
Table 4.

**Hypothesis 1.2:** *Parents and caregivers who complete a motivational questionnaire are less likely to drop out of the parenting education program in which they are enrolled than parents and caregivers who do not complete the motivational questionnaire.*

1.2: A chi-square test of independence was performed to examine the relation between experimental condition (i.e., intervention versus control) and treatment completion. The relation between these variables was not statistically significant, \( \chi^2(1, N = 22) = 0.060, p > 0.10 \). Odds ratio = 1.25 (95% CI: 0.2107, 7.4142), \( p = 0.806 \). This result indicates that the estimated odds of treatment dropout is 1.25 times as large in the Intervention group than in the Control group; however, this result is non-significant, as \( p > .10 \).

**Hypothesis 2.1:** *Parents and caregivers who complete the motivation questionnaire during the first week of the program will have the least number of perceived barriers to treatment, followed by parents who complete the motivation questionnaire during the second week of the program, and individuals in the control condition will have the highest number of perceived barriers to treatment of the three study conditions.*

2.1: The results of a Kruskal-Wallis test indicated that the relation between experimental condition (i.e., intervention, week 1, intervention, week 2, control) and perceived barriers to treatment was not statistically significant, \( H = 1.9931, df = 2, p = 0.369 \). The null hypothesis is retained, which indicates that experimental condition did not have a significant effect on perceived barriers to treatment. Eta squared was calculated to test effect size of condition on perceived barriers to treatment, \( \eta^2 = 0.153 \), indicating a small effect size. The results of this analysis are outlined in Table 5.

**Hypothesis 2.2:** *Parents and caregivers who complete the motivational questionnaire...*
report fewer perceived barriers to treatment than those who do not complete the motivational questionnaire.

2.2: Additionally, a Wilcoxon Signed Rank test was performed to test the effect of experimental condition (i.e., intervention versus control) on barriers to treatment participation. The results of the test were not statistically significant, \( Z = 16.5, p = 0.652 \), suggesting that experimental condition (i.e., intervention versus control) was not significantly related to participants’ barriers to treatment participation. Cohen’s \( d \) was calculated to test effect size of condition on perceived barriers to treatment, \( d = -0.814 \), indicating a large effect size, such that individuals in the control condition perceived fewer barriers than individuals in the intervention condition.

Hypothesis 3.1: Parents and caregivers who complete the motivation questionnaire during the first week of the program will have greatest motivation for treatment, followed by parents who complete the motivation questionnaire during the second week of the program, and individuals in the control condition will have the least motivation for treatment of the three study conditions.

3.1: A Kruskal-Wallis test was performed to test the relationship between experimental condition and parent motivation for treatment (as measured by the PMI). The results of the Kruskal-Wallis test were not statistically significant, \( H = 1.7297, df = 2, p = 0.421 \). The effect size of condition on parent motivation for treatment was calculated using eta squared, and \( \eta^2 = 0.079 \), which suggest no effect of condition on motivation for treatment. These findings suggest that experimental condition did not have a significant effect on parental motivation for treatment. The results of this analysis are described in Table 6.

Hypothesis 3.2: Parents and caregivers who complete the motivational questionnaire
have higher levels of motivation for treatment than those who do not complete the motivational questionnaire.

3.2: A Wilcoxon Signed Rank test was performed to test whether experimental condition had an effect on parent motivation for treatment. The results of the test were not significant $Z = 10, p = 0.159$, suggesting that experimental condition (i.e., intervention versus control) was not significantly associated with parental motivation for treatment. Cohen’s $d$ was calculated to measure the effect of condition (i.e., intervention versus control) on parent motivation for treatment, and $d = -.629$. This indicates a medium effect size, such that individuals in the control condition had higher levels of motivation for treatment than individuals who received the intervention.

Hypothesis 4.1: Parents and caregivers who complete the motivation questionnaire during the first week of the program will have the greatest satisfaction with their parenting program experiences, followed by parents who complete the motivation questionnaire during the second week of the program, and individuals in the control condition will have the lowest levels of satisfaction with their program experiences of the three study conditions.

4.1: A Kruskal-Wallis test was performed to test the relation between experimental condition and client satisfaction with the parenting education program. The results of the Kruskal-Wallis test were not statistically significant, $H = 1.3356, df = 2, p = 0.513$. Eta squared was calculated to determine effect size, and $\eta^2 = .103$, indicating a small effect of condition on client satisfaction. Together, these findings suggest that experimental condition did not significantly impact client satisfaction in the present sample. The results of this test are illustrated in Table 7.

Hypothesis 4.2: Parents and caregivers who complete the motivational questionnaire
are more satisfied with their program experiences than those who do not complete the motivational questionnaire.

4.2: In addition, a Wilcoxon Signed Rank test was performed to test whether experimental condition on client satisfaction with the parenting education program $Z = 15, p = 0.502$, indicating that experimental condition (i.e., intervention versus control) was not significantly associated with client satisfaction. In addition, Cohen’s $d = .512$, indicating a medium effect size for condition on satisfaction such that individuals in the intervention condition were more satisfied with their program experiences than those in the control condition.

Qualitative Results from the Motivation Questionnaire

Motivation for change. Example responses from the MQ item 1 “Why did you sign up for this class?” include the following: “To come to learn new parenting skills such as behavior, and so DCF will see more improvement [in] me [so I may] get my seven-year-old back” and “This is part of my case plan for reunification [with my child].” A substantial number of study participants $n = 14$ (63.8%) reported involvement with the Department of Children and Families (DCF) and were mandated by DCF to attend the CSP parenting education program in which they were enrolled. Along similar lines, one participant reported that she signed up for the class because she “Had to come.” This participant still reported a high level of motivation for change in later parts of the MQ, but did report that she was mandated by DCF to attend the program, and that that was her primary reason for attending the class. Participants who were mandated to attend CSP by DCF or by their residential treatment program still exhibited high levels of motivation for treatment, which may be conceptualized as extrinsically motivated. It is important to note, however, that participants were not required to report DCF involvement, and so it is possible that greater than 63.8% of participants were DCF mandated to attend the course.
The second most common reason participants reported for taking the course was to improve parenting skills. A total of seven (50.0%) participants endorsed this theme in their responses. Responses from participants included “I want to become a better parent and improve my parenting,” and [I am in this program] to learn new parenting techniques.” Another parent reported wanting to “have better parenting skills to raise [her] children.” Parents were especially concerned with improving their discipline practices and considered the program as a means to do so. More on discipline practices and their centrality to the responses of participants is explored in the following subsection.

**Importance of change.** Participants who said that it is important to see changes in their family lives were asked to elaborate on why these changes were important to them. Two primary themes emerged from participants’ responses to the question, “Why is this important to you?” The first theme that emerged is the desire to improve parental discipline practices, endorsed by seven participants (50.0%). Participants reported that changes were important because “[I want to] learn child appropriate discipline,” “I need to change as a parent,” and “I need more discipline in the house.” Another parent said that he “want[s] to be the best and equally balanced dad [he] can be.” These parents felt that change was particularly important because it would result in new and better parenting practices, and that these practices would in turn improve the quality of their family life experiences. In this way, it is reasonable to assume that these parents held beliefs that their parenting practices – and any changes or improvements to those practices – greatly impacted their family life as well as the quality of the relationships that they had with their children.

The second theme that emerged is parents’ emphasis on the importance of family and their children’s futures, endorsed by five participants (35.7%). One participant reported that
change was important because “My family needs come before anyone else.” Another participant said that she wanted her children to “know love” so that they could in turn “show love to their children in the future.” Two other participants said that “It’s important that my children get better educated” and “I [would] like to give [my children] more.” These parents’ thoughts regarding the importance of change were very family- and child-focused and forward thinking. Some participants, however, chose to focus on the past; one participant reported that she “[didn’t] want [her] children to go through what [she] went through as a child.” This parent placed a great deal of importance in her family-related changes, and her reasoning for doing so was child-centered, but reflective on her past experiences and how she wanted to do better for her own children.

Two participants (14.3%) reported that change was important because “DCF is involved in my life” and because “I was told to change.” For these parents, it was still important for them to see changes in their family lives, but it is possible that they were more extrinsically motivated to do so, and that they had adopted those extrinsic messages regarding change into their own internal self-determination and motivation for change.

**Hopes for the future.** Example responses from the MQ item 3, “If you could wave a magic wand to make these changes immediately, how would things be better for you and your family?”, include “Everything will be [all right]. I’ll be able to get anything my son wants [and] be a better mom,” and “[My children] would be home with me now,” and “I would have my children instead of someone else taking care of them.” Another mother references reunification with family members: “I would have my baby and his father could be released to us.” Another reports that things would be better if she “had [her] children instead of someone else taking care of them.” Given that many participants (86.5%, \( n = 19 \)) cited mandatory attendance in CSP either by DCF or by their residential treatment program, it comes as no surprise that reunification
with children and with other family members is a common theme that parents discuss in their answers to this question.

One parent considers a scenario where she could have done it all over again and she reported that she would “never have become an addict and it never would have affected [her] parenting.” Another does the same, focusing on the past: “I realize what I did was wrong and I just want to be a good mom to my child.” Parents also cite less stress and more money as reasons why their family lives would be better if they could make any changes that they wanted to. These parents seemed aware that these situational/structural factors would greatly improve their family lives, and in this way, mirror our understanding of how external, situational factors greatly impact intrinsic motivation and self-determination for change.

Discussion

The study hypotheses were not supported. No significant results were found for the effect of experimental condition on parent motivation (as measured by the PMI), perceived barriers to treatment participation (as measured by the BTPS), parent and caregiver satisfaction with the program (as measured by the CSQ), or likelihood of treatment non-completion. In addition, there were no differences between the Early Intervention and Late Intervention groups with respect to any of the outcomes of interest, so it is unclear whether administering a motivational intervention in survey format at the beginning of a program or during the second week of the program is best. Further research with a larger sample size is needed to answer this question.

A Wilcoxon Signed Ranks test was performed to assess whether there were differences between intervention and control groups with respect to parent and caregiver satisfaction with the program. While the results of the test were not significant, the effect size was of medium size, Cohen’s $d = .512$. This suggests that, with a larger sample size, it is possible – perhaps even...
likely – that the motivational intervention may have a positive effect on parent and caregiver satisfaction with the program.

The results of the chi-square test of independence suggest that treatment completion was not affected by experimental condition. In addition, the effect size of experimental condition on treatment completion was non-significant. Of the total number of participants enrolled in the study, nine (40.9%) individuals did not complete the post-test, and this proportion is line with previous research on attrition rates in parenting education programs. Indeed, Frey and Snow (2005) suggest that, on average, 30% to 50% of participants drop out of parenting education programs prematurely, and the rate of treatment non-completion in the present study is in line with Frey and Snow’s (2005) previously cited attrition rate statistic.

In the present study, it is possible that the non-significant findings of the Motivation Questionnaire are a result of small sample size or simply due to a need for a modified study design. Additionally, there are a number of other possible reasons why the Motivational Questionnaire may not have had an effect in this sample, each of which are explored below.

Firstly, the research literature on parent-therapist alliances, also referred to as ‘therapeutic alliances’ (Diamond, Diamond, & Little, 2000) suggest that the relationship parents and caregivers have with their therapists in the context of child psychotherapy is known to predict therapeutic change, such that positive therapeutic alliances are associated with desirable treatment outcomes, for example, sustained positive behavior change (Kazdin, Whitley, & Marciano, 2006). It is possible that the Motivation Questionnaire did not have an effect on attrition due to the fact that participants in the intervention conditions completed the MQ with the study administrator, rather than with the facilitator of the program. Unlike the study administrator, the program facilitator served as a reliable, constant resource for many
participants, someone that they could (and often did) form a strong, trusting relationship with. It is entirely possible that participants may have taken more away from the MQ experience had the interactive process of completing the questionnaire been with the facilitator instead of the study administrator, in part because the constant presence of the facilitator, as well as occasional check-ins during classes, may reinforce participants’ treatment goals and feelings of responsibility for the change process.

Pelletier et al. (1997) have argued that intrinsic motivation is bolstered by the support of autonomy from external sources of great importance to the individual, such as the facilitator. It is possible that completing the Motivation Questionnaire with the facilitator would have communicated some level of support on behalf of the facilitator for each of the clients who completed it with her. It is also the case that individuals who perceive a controlling external environment are less likely to be intrinsically motivated due to a perceived external locus of control (Deci & Ryan, 1985). If individuals perceive the environment to be controlling (i.e., for an external source to have dictated that he or she needs to change, such as DCF or the residential treatment program in which some participants were enrolled), change may be less likely to happen due to a lower likelihood that controlling environments will give be supportive of growth in intrinsic motivation for change.

The qualitative results of the Motivation Questionnaire suggest that participants were, on average, quite motivated for change. It was not the case that participants who completed the MQ were significantly, quantitatively different in motivation for treatment than the Control group; however, it is possible that the Motivation Questionnaire – specifically, the open-ended questions (items 1, part two of item 2, and 3) – helped to improve participants’ motivation for change by identifying discrepancies between where they were and where they wanted to be in their family
lives, and by acknowledging problem areas that they could address with the help of the program facilitator.

Convergent validity suggests that the Motivation Questionnaire and the Parent Motivation Inventory are not the same; the Motivation Questionnaire’s total score and individual item scores correlated only with the Desire to Change subscale on the Parent Motivation Inventory. It is perhaps the case that all items on the Motivation Questionnaire are tapping into a single construct, motivation for change. It is possible that these measures are different from one another in part because of how they are administered. While the Parent Motivation Inventory has three distinct subscales, the Motivation Questionnaire seems to be tapping into the same construct; perceived ability to change and support for change are highly correlated with one’s desire to change on the MQ. It is possible that these differences are the result of the interactional nature of the MQ – perhaps individuals who are completing the MQ with another person inherently feel a sense of support for change and, by being asked to explain to another person the changes they want to make, they feel a perceived sense of competence in their ability to make these changes. It is worth further exploration of the merits of providing participants of parenting education programs interactive motivational interventions and the reasons for why the interactive Motivation Questionnaire may be a superior option to a simple pen-and-paper survey like the Parent Motivation Inventory for the purposes of a motivational intervention.

It is worth noting that the Motivation Questionnaire may have not been a potent enough intervention to have a significant effect on six sessions worth of treatment, given the other demands and stressors that participants may have experienced outside of class over the course of those six weeks. This sample was definitively at-risk, given the nature of court-mandated attendance for many participants, as well as the frequent citing of family life stress as a central
theme in their Motivation Questionnaires. One main premise of motivational interviewing (and, likely, motivational interviewing-inspired interventions such as this one) is that clients are active rather than passive by insisting that they take responsibility for changing (Miller, 1983). However, given that many participants were not in attendance by choice, it is possible that the Motivation Questionnaire was not effective in helping parents and caregivers to feel as though the need for change was not imposed upon them, but rather their decision.

The present researcher chose to develop a survey-based motivational intervention to use in the context of a parenting education program because it was assumed that parents in this program were substantially less at-risk than those enrolled in child psychotherapy treatments, but this assumption may have been unfounded in this sample. For example, the vast majority of participants were single, never married, and not living with a partner (refer to Table 1). Previous research in disproportionate risk of attrition suggests that single parents (single mothers in particular) are more at risk of dropping out of treatment due to additional burdens associated with raising children without the assistance of another adult figure (Prinz & Miller, 1994). In addition, the majority of the sample \( n = 19 \) (86.4\%) were mandated to attend the program by DCF or by their residential treatment program (i.e., Coventry House). According to Myers-Walls (2012), non-voluntary participation in parenting education programs, particularly in cases where parenting education is mandated for parents or families judged as inadequate (e.g., in cases where parents or caregivers have been found to be abusive or neglectful, where parents are involved in domestic violence, or in cases where parents have children involved the juvenile justice system) can present unique challenges in that sometimes participants feel as though they cannot direct their own learning or are not allowed to focus on their self-perceived needs. As a result, this brief intervention may not have been intensive enough to elicit substantial motivation
for change in that, even if parents and caregivers desired change, it may not have been logistically possible at the time, given their life circumstances.

An alternative possibility to consider in future research in this area is instead administering the Motivation Questionnaire at each session rather than just once during the program. The Motivation Questionnaire is a relatively straightforward, quick survey – it would not be entirely unreasonable to ask parents and caregivers to complete – or, at the least, revisit previously completed – Motivation Questionnaires for each of the six parenting education sessions. It is possible that additional check-ins would help to reinforce parents’ and caregivers’ efforts to make positive changes in their family lives.

The qualitative results of the study suggest that the participants were generally motivated to attend the program. Arguably, many of these parents and caregivers were either extrinsically motivated to attend CSP, or had internalized the goals that DCF or their residential treatment program had previously laid out for them, and so their intrinsic goals were deeply influenced by these external agents. However, it is important to acknowledge that, in this high-risk sample, DCF or residential treatment program requirements for CSP attendance were likely not the only external influences that impacted these individuals’ lives. While many participants were able to cite clear connections between CSP program goals, improved parenting practices, and DCF and residential treatment program requirements for reunification and meeting their treatment goals, many parents also pointed to the fact that these experiences usually coincided with a great deal of personal and family life stress and other structural concerns such as lack of financial provisions to live comfortably. In this way, it is possible that the lack of these basic structural and psychosocial needs being met for many participants prohibited them from reaching optimal levels of motivation and other treatment-related goals.
Limitations

There are several important limitations to the current study. First, the sample size was very small. \( N = 22 \) participants completed the pre-test surveys, and of those, \( n = 13 \) (59.0\%) also completed the post-test surveys. It was particularly challenging to ensure that participants who completed the pre-test were also able to finish the post-test. For 41\% of the sample, post-tests were not completed. The study administrator could not reach approximately one half of the individuals who did not complete the post-tests because their phones were no longer in service or because they did not have telephone access at their current place of residence. Because some participants arrived late to the weekly sessions, after the study administrator had already left the site, the study administrator sometimes missed participants during their last sessions and then could not get in touch with those participants via telephone. Future studies that utilize pre- and post-tests in parenting education settings should consider the feasibility of getting in contact with participants after program completion via telephone and whether some other method is better.

The study was created under the assumption that the sample recruited from the parenting education program consisted of parents and caregivers of children who were not at or above the clinical threshold for various clinically significant problematic behaviors; however, DCF involvement in the majority of these individuals’ lives, as well as self-disclosure on behalf of many participants to the study administrator, suggest that larger problems existed in this sample that may suggest that a brief, survey-based motivational intervention will not affect much change in their motivation to improve their parenting behaviors and their children’s behaviors. Instead, more intensive motivational interventions in this population might be considered.

In hindsight, it would have been worthwhile to tailor the motivational intervention to the parenting program in which the participants were recruited from; however, the motivational
The questionnaire was created prior to partnering with a specific parenting education program and facilitator. As a result, it is possible that the questionnaire itself was not appropriate for the specific population that the parenting education program served. Specifically, the program that the study recruited from catered to participants who were, for the most part, experiencing serious personal and family-related problems; many participants were involved in multiple treatment programs (e.g., drug rehabilitation programs, men’s and women’s shelters) and may have benefitted from a motivational intervention better steeped in their lived realities.

Conclusion

The issue of treatment completion and program engagement in the parenting education realm is a worthwhile area of study. The present study aimed to add to the existing parenting education literature and to add a methodologically solid exploration of motivation for change in parenting education programs to the literature base. Unfortunately, the proposed motivational questionnaire did not yield significant improvements in clients’ motivation for treatment, perceived and experienced barriers to treatment, program satisfaction, or in the likelihood of dropping out of the program. However, it is possible that the small sample and lack of power was responsible for the non-significant results. It is worth noting that the effect sizes, particularly of the Motivation Questionnaire on client satisfaction, are promising and offer some evidence to suggest that statistically significant impacts would be found in larger samples. It is important that future research on engagement in parenting education programs is conducted; in particular, it is important for studies with large enough sample sizes so that statistically significant differences between experimental groups can be captured.
References


*Family Court Review, 34*(1), 60-81.


ABOUT PARENTING EDUCATORS. (2007). Retrieved March 30, 2015, from

http://ctpen.org/special/menu/aboutparentingeduc/


*Journal for Specialists in Pediatric Nursing, 6*(2), 73-82.


*Journal of Marital and Family Therapy, 37*, 273–289. doi: 10.1111/j.1752-0606.2009.00170.x


Thousand Oaks, CA: SAGE.


### Table 1  
**Participant Demographics**

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<th>SD</th>
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<td>Count 2</td>
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Table 2
*Means for the Total Sample*

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<th>Scale, Subscale, or Item</th>
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<th>SD</th>
<th>Actual Range</th>
<th>Possible Range</th>
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<td>Item 5</td>
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<td>18.85</td>
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<td>24-120</td>
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<tr>
<td>PMI</td>
<td>Readiness to Change</td>
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<td>48.18</td>
<td>10.47</td>
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<td>13-65</td>
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<td>Perceived Ability to Change</td>
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<td>14.41</td>
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<td>4-20</td>
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<td>Desire to Change</td>
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<td>BTPS</td>
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Table 3
Correlation Matrix of PMI Total Score, PMI Subscale Scores, and MQ Item Scores

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<tr>
<th></th>
<th>Importance MQ</th>
<th>Perceived Ability to Change MQ</th>
<th>Support for Change MQ</th>
<th>Desire to Change PMI</th>
<th>Readiness to Change PMI</th>
<th>Perceived Ability to Change PMI</th>
<th>Total PMI</th>
<th>Total MQ</th>
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<td>.907**</td>
<td>.700**</td>
<td>.552*</td>
<td>.381</td>
<td>.152</td>
<td>.401</td>
<td>.960**</td>
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<tr>
<td>Perceived Ability to Change MQ</td>
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<td>.563*</td>
<td>.289</td>
<td>.042</td>
<td>.329</td>
<td>.965**</td>
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<td>.177</td>
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<td>.185</td>
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<td>1</td>
<td>.862**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.062</td>
</tr>
<tr>
<td>Total PMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.347</td>
</tr>
<tr>
<td>Total MQ</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Note. ** p < .01, * p < .05.
<table>
<thead>
<tr>
<th>TC</th>
<th>Intervention, Week 1 ( n = 5 )</th>
<th>Intervention, Week 2 ( n = 9 )</th>
<th>Control ( n = 8 )</th>
<th>( \chi^2 )</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0.087</td>
<td>0.063</td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>9</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* **** \( p < .001 \); *** \( p < .01 \); ** \( p < .05 \); * \( p < .10 \).
Table 5

Results of the Kruskal-Wallis Test for Barriers to Treatment

<table>
<thead>
<tr>
<th>Source</th>
<th>$H$</th>
<th>df</th>
<th>$p$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MQ Condition</td>
<td>1.9931</td>
<td>2</td>
<td>0.369</td>
<td>0.153</td>
</tr>
</tbody>
</table>
Table 6
Results of the Kruskal-Wallis Test for Parent and Caregiver Motivation

<table>
<thead>
<tr>
<th>Source</th>
<th>H</th>
<th>df</th>
<th>p</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>MQ Condition</td>
<td>1.7297</td>
<td>2</td>
<td>0.421</td>
<td>0.079</td>
</tr>
</tbody>
</table>
Table 7  
*Results of the Kruskal-Wallis Test for Client Satisfaction*

<table>
<thead>
<tr>
<th>Source</th>
<th>H</th>
<th>df</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>MQ Condition</td>
<td>1.3356</td>
<td>2</td>
<td>0.513</td>
<td>0.103</td>
</tr>
</tbody>
</table>
Figure 1. The transtheoretical model of behavior change.