A Replication and Extension of the Effects of Three-Step Prompting on Compliance with Spanish-Speaking Caregivers

Roxana Juarez

A Master's Thesis Submitted to the Faculty of

The Chicago School of Professional Psychology

In Partial Fulfilment of the Requirements

For the Degree of Masters of Arts

July 8, 2014

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

A Replication and Extension of the Effects of Three-Step Prompting on Compliance with Spanish-Speaking Caregivers

---

A Master's Thesis Submitted to the Faculty of
The Chicago School of Professional Psychology
In Partial Fulfilment of the Requirements
For the Degree of Masters of Arts

Roxana Juarez

2014

Approved By:

Eric Carlson, PhD, Chairperson
Associate Professor

Mitch Fryling, PhD, Member
Affiliate Faculty

Acknowledgements

I wish to thank my parents, Jose and Marcelina Juarez, for their love, patience, and belief in me. There are no words to express my love and gratitude. The determination to succeed was modeled by both of you. Without it, I would not be here.

I wish to extend my sincere thanks to Dr. Eric Carlson, my thesis advisor, for his constant patience, guidance, and knowledge. I truly appreciate all that you have done for me. Working with you was a pleasure.

A special thanks to Dr. Mitch Fryling for agreeing to be my second reader. Your critique during my defense will always stay with me.

Abstract

Previous studies have found a three-step prompting procedure effective in increasing child compliance with caregiver instructions. In this study, a study (Tarbox, Wallace, Penrod, & Tarbox, 2007) has been replicated and extended to a Spanish-speaking population. In a multiple baseline across a two-subject design, caregivers were trained to follow a least-to-most prompting procedure contingent on a child's noncompliant behavior, within a home setting. Participating children demonstrated low levels of compliance during baseline, but, following caregiver training on a three-step prompting procedure, the children's compliance increased. This extends the generality of these procedures to a novel linguistic population. This procedure and set of findings also support the view that non-professional caregivers may be taught how to follow procedures for extending instructional control over the behavior of the children whose welfare they are responsible for.

Keywords: Spanish-speaking, caregiver training, prompting, compliance

Table of Contents

List of Figures

Chapter 1: Introduction

Compliance is typically held to occur when an individual completes an instruction given by another individual. It is a key component in the development of social and academic skills (Kalb & Loeber, 2003). Children who fail to comply with task demands may have difficulty successfully learning within school or home environments. This may further lead to difficulties with peer or adult interactions. In addition, compliance with basic task demands may be necessary in order for children to learn more complex tasks that may lead to the development of consistent independent living skills in adulthood. The following paper will discuss the social significance of compliance, previous research with respect to this behavior, the importance of caregiver training, and, lastly, the current investigation that replicates and extends compliance training research reported by Tarbox, Wallace, Penrod, and Tarbox (2007).

Background

According to Kalb and Loeber (2003), compliance is a significant behavioral concern for most teachers. Following simple task instructions is an important pre-skill for children to have when entering the preschool or kindergarten grade level as this may facilitate learning academic and social skills (Kalb & Loeber, 2003). Engaging in noncompliance can hinder learning more complex skills. Miles and Wilder (2009) address the importance of instructing caregivers on how to effectively target compliance issues. This may be beneficial for children who engage in noncompliance behaviors prior to entering a preschool or kindergarten grade level. In effectively training caregivers, compliance issues may be addressed more promptly.

Noncompliance is a prevalent problem and children may be referred for behavioral services because of this issue (Miles & Wilder, 2009). Children who engage in noncompliant behaviors may be at high risk for exhibiting more problematic behaviors, such as aggressive or

criminal behavior (Wierson & Forehand, 1994). Because behavioral intervention services are provided for a limited amount of time, caregiver involvement is a key component to ensuring that behavioral strategies are learned and consistently implemented and maintained by caregivers within the home setting as well as other environments. In California, owing to ongoing budget constraints, funding and oversight agencies contracting with service providers that provide behavioral treatment services to children with developmental disabilities have implemented stricter guidelines for caregivers to adhere to. If caregivers choose to receive behavioral treatment services, they are required to actively participate during sessions, implement treatment plans outside of sessions, and possibly share costs of treatment (Board of Directors, 2010). Children reside a significant amount of time within the home setting, and, therefore, the success of an intervention program depends, at least in part, on the extent to which caregivers can correctly and consistently implement treatment procedures (Mueller, Piazza, Moore, & Kelley, 2003). An increased rate of effective interaction between caregivers and children may also be achieved, and direct implementation of behavior interventions by caregivers allows behavior analysts to treat behavioral problems more efficiently and effectively. This can enhance a child's progress. In addition, parental involvement is a cost-efficient method for those agencies funding behavioral intervention services as it can help decrease the amount of time required by the service providers. This may lead to the dissemination of more behavioral services to other individuals with needs.

In moving towards more parental involvement and training, factors such as linguistic and/or ethnic backgrounds of clients is an important issue for behavior analysts to consider. Currently, the North Los Angeles County Regional Center services approximately 41% Latino and/or Hispanic consumers (North Los Angeles County Regional Center, 2013). New

consumers may not be familiar with the field of applied behavior analysis and may require extensive training. Considering how the Latino and/or Hispanic population has grown in the Los Angeles County area (currently, 48.3% compared to 44.6% in 2000), behavior analysts may have to consider how to make empirically validated procedures and strategies accessible to this population (United States Census Bureau, 2013). According to Morris (1985), the dissemination of our practices and research should be a concern when relying on public funding. Behavior analysts need to be concerned with how the field of behavior analysis is being portrayed and how behavior principles and/or strategies are being presented to the public (Morris, 1985). Therefore, disseminating procedures to other linguistic and/or ethnic populations may be one significant area for the field of behavior analysis to expand into.

Chapter 2: Review of the Literature

Wilder, Atwell, and Wine (2006) conducted research on the effects of three levels of treatment integrity on child compliance when implementing a three-step prompting procedure. A three-step prompting procedure was implemented by the therapist at three levels of treatment integrity (100%, 50%, and 0%). During 100% integrity sessions, the therapist implemented the three-step prompting procedure for each instruction in which the child did not comply. For 50% integrity sessions, the three-step prompting procedure was implemented for half the trials in which the child engaged in noncompliance. For 0% integrity sessions, no prompting procedures were implemented. Results demonstrated that compliance with 100% integrity increased from low baseline levels ranging from 0 to 20% and 0 to 10% for participants one and two, respectively, to 91% and 79%. For compliance with 50% integrity, participants one and two were complying at 54% and 41% following training. Lastly, for compliance with 0% integrity, participants one and two were at 6% and 0%. Therefore, compliance improved most when the three-step prompting procedure was consistently implemented following every instance of noncompliance. A significant contribution of this study was that it adds support to the finding that a three-step prompting effectively increases compliance in children when consistently implemented. A limitation to this study is that it does not examine whether the child's compliance generalized to novel caregivers. It also did not extend training to other caregivers.

Miles and Wilder (2009) examined the effectiveness of a behavioral skills training package when training caregivers on guided compliance. The behavioral skills training package (BST) consisted of modeling, rehearsing, and feedback components that experimenters implemented when training caregivers. When a child engaged in noncompliant behaviors, caregivers followed a three-step prompting procedure that consisted of verbal, model, and full

physical prompts, delivered in this exact sequence, not omitting or adding additional prompts. For instance, if the child did not comply with the instruction, "Take the puppy back to the doghouse," the caregiver would implement a combined verbal and model prompt. If the child continued to refuse to comply after prompts were presented, a full physical prompt was presented by caregivers. Although guided compliance consisted of three levels of prompting, it should be noted that verbal and model prompts were technically combined, making this appear as a two-step prompting procedure, i.e., "take the puppy to the doghouse" (verbal prompt) plus modeling the action at the same time. Moreover, caregivers were expected to follow the 10 steps once trained by instructors; all caregivers were provided a written description of these steps during training.

The 10-step procedure consisted of the following:

1. making eye contact with child before delivering the instruction,
2. calling the child by his/her name,
3. stating the demand clearly using an even tone of voice and ensuring that the demand is not a question,
4. not immediately rephrasing or repeating the demand,
5. waiting 10 seconds for the child to respond,
6. delivering reinforcement in the form of praise if the child complied,
7. repeating the demand (verbal prompt) with a model prompt if the child does not comply, implementing a full physical prompt if the child continues to refuse to comply,
8. recording data, and
9. waiting a minimum of five seconds before presenting another demand.

All sessions were recorded and accuracy of data was reviewed by instructors at a later time. Correct responses were scored if the child complied with the instruction the first time it was presented. Responses were scored as incorrect once caregivers implemented the prompting sequence. Each child practiced only one instruction, for a total of five trials. For instance, one child was asked to "put the toys away" in different locations within the home setting, five times; this child was not presented with additional instructions. During the training phase, caregivers read through the 10-step procedure and rehearsed this procedure with their child three times, uninterrupted. Experimenters then provided appropriate feedback and modeling of procedures if needed. Rehearsing and modeling were repeated until the criteria of 100% correct implementation across three consecutive days was met.

During post-training, caregivers followed the 10-step procedure and were given brief feedback on their performance from their previous session. Caregivers were required to meet the criteria of 100% correct responses across three consecutive five-trial sessions. Generalization probes were conducted for all three children in a different setting in the community, i.e., outdoor park or school playground. The same instruction that was targeted during training and post training phases was presented in the community setting for one five-trial session. Based on the implementation of the BST package, the three caregivers improved significantly after training. Mean levels of correct responses during baseline were 38%, 36%, and 29% for caregivers one, two, and three, respectively. After training, mean levels of correct responses were 99%, 98%, and 95% for the same caregivers, respectively. Baseline for compliance was 37%, 39%, and 45% for child one, two, and three, respectively. Compliance after training was 35%, 50%, and 63% for the same children, respectively. Compliance slightly increased in two of the three child participants. The results confirm that a BST package is effective in training caregivers on

implementing guided compliance. In training caregivers effectively on giving guided compliance, there was a slight increase with compliance in children.

Based on the experimenters' results, a behavioral skills training package could be shown to be effective when attempting to efficiently train caregivers. Caregivers successfully learned to implement a three-step prompting procedure and increased compliance in non-compliant children. A limitation in this study was that feedback was provided to caregivers during the post-training phase. Therefore, implementation of a three-step prompting was not independently implemented by caregivers. This limitation threatens the internal validity of this study. It is unclear if feedback during the post-training phase was a variable that contributed to increased prompting by caregivers and not caregiver prompting training. However, this study confirms that caregiver training can be effective with supervision. This would make training caregivers in future studies more efficient. In addition, each component in the BST package was not evaluated separately. Therefore, more research needs to examine if each component is necessary or if there are specific training components that are more effective than others. This would make training caregivers more efficient. Moreover, information regarding the recruitment of participants was not provided; therefore, the study does not disclose sufficient information regarding participants such as the linguistic and/or ethnic background of caregivers.

Prompting Procedures

In behavior analysis, the term *prompt* is used to describe a temporary and supplementary antecedent stimulus used to occasion a response when an organism is being trained to respond to another critical discriminative stimulus that does not yet (or "has not yet come to") occasion the response. Once control by the critical discriminative stimulus is established, the prompt is no longer presented. A prompting procedure can be composed of least-to-most prompts, i.e., verbal,

model, and full physical, as well most-to-least prompts, i.e., full physical, model, and verbal. A prompting procedure may be used in a specific sequence, or instructors may use only one type of prompt, depending on the skill they are teaching. For instance, when increasing the verbal repertoire of a child, verbal prompts may be the most effective. When teaching children with developmental disabilities, an errorless learning procedure may be implemented where most intrusive prompts are utilized to minimize the number of errors made by the learner, i.e., full physical or verbal prompt (Wolde, 2009). However, some children may learn through traditional error correction procedures and do not need the instructor to implement the most intrusive prompts; they may acquire skills more rapidly with a least intrusive prompt or prompt sequence (Wolde, 2009).

Contributions and Limitations

Tarbox et al. (2007) evaluated the effects of a three-step prompting procedure with caregivers of three children diagnosed with different developmental disabilities such as autism, attention deficit hyperactivity disorder, and Asperger's syndrome. The results of the Tarbox et al. (2007) study demonstrated that a three-step prompting procedure consisting of least-to-most prompts can effectively increase compliance in children with their caregivers. Previous studies only address utilizing a three-step prompting procedure during behavioral assessments and interventions. During baseline, compliance ranged from 15% to 51%. Once intervention began, compliance ranged from 64% to 94%. In addition, the mean number of prompts presented per trial decreased from baseline to intervention. During baseline, the number of prompts presented per trial ranged from three to 26. During intervention, the number of prompts ranged from one to three per trial. Increases in compliance as well as decreases in the frequency of prompt usage were observed across all participants. Furthermore, generalization data across 10 novel

instructions were collected for three of the five dyads, and data showed that compliance with task demands was at 100%. In addition, prompts per trial ranged from one to two prompts. Therefore, the results achieved for the three dyads during the study generalized to novel responses. The main contributions of this study were that it further confirmed that the training of caregivers on a three-step prompting procedure was successful as compliance increased to 100% for all dyads within 35 minutes of sessions (Tarbox et al., 2007). In addition, generalization data also confirmed that compliance to other novel instructions may also be attained. Some limitations to this study were that sessions were conducted for 5-minute durations, and novel task requests utilized during the generalization phase were not probed during or prior to baseline. Therefore, it is unknown whether these tasks were actual novel tasks for the participants. Furthermore, of the five caregivers that participated, two were teachers and one was a teacher's aide; the last two participating caregivers were mothers. All school personnel specifically participated with one child (dyads one, two, and three). This suggests that the child learned to comply with more instructions across three adults as opposed to the other participating children. Therefore, compliance for this child was at 87%, 74%, and 94% as opposed to the other two dyads that were at 41% and 64%, post-training. The child participating in dyads one, two, and three may have demonstrated a higher increase in compliance due to more practice with instructions across three adults. Moreover, for the first three dyads, sessions were conducted in a school setting, while the last two dyads had sessions in the home setting. Participating caregivers did not consist of all mothers and fathers, and, therefore, it can be misleading to state that this study specifically targeted caregiver training. In addition, the linguistic and/or ethnic backgrounds of participants were not disclosed. Therefore, the study did not address generalization across other types of populations.

Previous research addresses caregiver training; however, the types of "caregivers" vary, i.e., teachers or nannies. Some studies do not specifically address training mothers and fathers only within the home settings. In addition, the ethnic and/or linguistic backgrounds of caregivers trained are not disclosed. For example, the Tarbox et al. (2007) study trained various kinds of caregivers that consisted of one teacher, a teacher's aide, and two mothers, but the ethnic and/or linguistic backgrounds of these caregivers were not disclosed. Tarbox et al. examined the effects of a three-step prompting procedure on compliance with children with developmental disabilities. The results demonstrated that training caregivers is effective, and, with consistent and systematic implementation of prompting procedures, caregivers can effectively learn to increase compliance in children with developmental disabilities. In addition, the various research on prompting procedures has demonstrated that the frequency of prompts delivered by caregivers are minimized over time. Prompting procedures can assist caregivers in increasing desired responding through guided compliance as well as decreasing disruptive behaviors (Freeman & Piazza, 1998). Therefore, past research, such as Tarbox et al. (2007), Wilder et al. (2006), and Miles and Wilder (2009), confirm that a three-step prompting procedure is effective in increasing compliance.

Purpose of Study

Studies that address three-step prompting procedures have confirmed that caregiver prompts can decrease over time and that caregiver training is an efficient way for caregivers to sequentially implement prompts. However, these studies have not specifically addressed particular cultural and linguistic populations. These issues are of social significance in the culturally diverse region of Southern California. Therefore, the purpose of the current study was to extend the Tarbox et al. (2007) study to another linguistic population by specifically

evaluating three-step prompting on compliance with task requests of Spanish-speaking caregivers. In addition, the limitations in the Tarbox et al. (2007) study were addressed, such as the extension of session durations and the inclusion of novel instruction probes. By specifically training caregivers to implement treatment procedures, we address the social issues of effective caregiver and child interactions and teach caregivers effective and efficient way to target noncompliant behaviors.

Chapter 3: Method

Participants and Settings

Two children, 6–7 years old, diagnosed with developmental disabilities, and two primarily Spanish-speaking caregivers participated in this investigation. Both children were male Latinos (born in California) and enrolled in special education classrooms in different cities in the San Fernando Valley, e.g., Van Nuys and Reseda areas. Both children were referred by North Los Angeles County Regional Center for behavioral intervention services due to noncompliant behaviors, which consisted of ignoring instructions or verbally refusing to comply, i.e., "No." However, the six-year-old participant received "In-Home Parent Training" services that consisted of one session per week, versus the seven-year-old participant who received "Direct Intervention" services that consisted of three to four sessions per week. Both children demonstrated basic echoics and could complete some one-step directions independently. The children also completed instructions for tasks given in Spanish for 50% of common requests.

The caregivers were mothers and the primary caregivers of the children. The caregivers were born in Mexico and El Salvador and attained their high school diploma in their country of birth. Both caregivers have taken free English courses (if time permitted) offered in their communities and can speak some English. However, both demonstrated some difficulties in

reading and in the pronunciation of more complex English words and/or sentences. Participants were from one-income households (low socioeconomic status). All experimental sessions were conducted within the home settings in the cities of Van Nuys and Reseda.

Materials

During training phases, caregivers were provided with a sheet that listed all procedures to follow, i.e., deliver vocal instruction, wait 5–10 seconds, etc. (see Appendix A). All experimenters utilized a datasheet and pencil for scoring during sessions (see Appendix B). During the intervention phase, caregivers were provided with a sheet with 10 instructions (see Appendices C and D). It should be noted that one caregiver delivered instructions in English and the other caregiver requested delivering instructions in Spanish. However, all materials provided during training were in Spanish and training was conducted in Spanish.

Response Measurement and Interobserver Agreement

The independent variable in this study was the implementation of a three-step prompting procedure. A correct implementation consisted of implementing each prompt in the correct sequence without adding additional prompts, i.e., verbal, model, and physical. In addition, the prompting sequence was terminated contingent on compliance. An incorrect implementation was providing additional prompts, omitting any step, or altering the sequence of the prompts. Each prompt was scored by the experimenter to ensure that prompting sequence was implemented correctly. The dependent variable was the frequency of trials in which the child independently complied with an instruction. Each session consisted of 10 trials for a total duration of 30 minutes per session. Treatment integrity was assessed for 100% of sessions on the total number of trials with correct implementation. Integrity was assessed by dividing the number of correct trials by the total number of correct and incorrect instances and multiplying

the result by 100. Interobserver agreement was assessed for approximately 22% and 18% of sessions by two observers (for dyad one and two, respectively). Percent agreement was calculated for correct and incorrect responses for compliance and correct and incorrect implementation of prompts. It was calculated by dividing the number of agreements by the number of agreements plus disagreements and multiplying the result by 100.

Procedures

A multiple baseline across participants was used to evaluate the effect of the three-step prompting procedure on the compliance of three children.

Baseline. During the baseline condition, a list of 10 tasks was provided to the caregiver. The list consisted of tasks caregivers reported as instructions that consistently occasioned noncompliance. Tasks on the list consisted of cleaning up and self-help skills. The caregiver was instructed to give instructions as normally as possible. During these sessions, the experimenter had no interaction with caregivers or children, but was present in the room to record data.

Training. Caregivers were trained utilizing the following three steps: (a) a written description of the three-step procedure in Spanish as well as a written description on how to precisely, vocally deliver an instruction; (b) a model was provided to the caregivers by the experimenter and therapist; and (c) roleplaying sessions with experimenter in which the caregivers delivered prompts and the experimenter provided feedback. Training was terminated once caregivers implemented the three-step prompting procedure with 90% accuracy, across three consecutive 10-trial sessions.

Intervention. This condition consisted of caregivers independently implementing the three-step prompting procedure contingent upon the child not complying with an instruction, i.e.,

verbal, model, and physical prompt. Caregivers: (a) delivered the instruction, (b) waited 5–10 seconds for the child to respond independently, (c) if the child responded independently, verbal and/or physical praise was delivered (i.e., high-five or pat on the back), (d) if the child did not respond, the prompting sequence was initiated with verbal and model prompt, (e) waited 5–10 seconds for child to respond independently, (f) if child did not respond, a full physical prompt was presented, and (g) mildly praised child, i.e., "Thank you" (no physical touching/praise).

Chapter 4: Results

The results demonstrated that training was effective in teaching caregivers to implement a three-step prompting procedure. This procedure was an efficient method that increased compliance in the participants. During baseline, caregivers provided several prompts per trial (approximately $M = 29$ and $M = 28$ prompts per session for caregivers one and two, respectively). Both children displayed very little compliance (approximately $M = 2$ and $M = 4$ instructions per session). After intervention, prompts per session slightly decreased (approximately $M = 15$ and 10 prompts per session for caregivers one and two, respectively). Compliance increased (approximately $M = 6$ and 9 instructions per session for children one and two, respectively). See Figure 1.

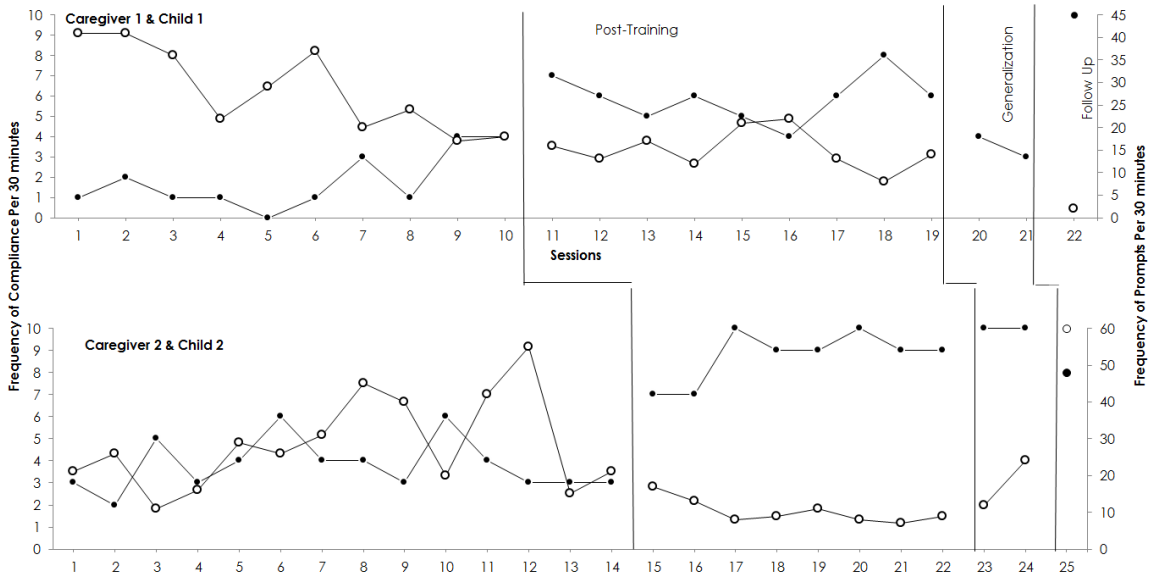

Figure 1. Number of prompts caregivers implemented and number of times children complied with instructions during baseline, post-training, generalization, and follow-up phases.

It should be noted that the trend during baseline for prompts per session did not stabilize for both caregivers and, therefore, baseline phase was extended for longer than the standard five sessions. Prompts per session during baseline for caregiver one ranged from 17 to 41, and it ranged from 8 to 22 during intervention phase. During generalization sessions (across 10 new instructions), caregiver prompting ranged from 15 to 21 prompts per session, with a mean of 18 prompts (across two sessions total). Child compliance ranged from three to four instructions, with an average of four instructions completed correctly. During follow-up, caregiver prompts were a total of two prompts during session, and the child completed all 10 instructions correctly.

For caregiver two, prompts per session during baseline ranged from 11 to 55; during intervention, prompts decreased and ranged from 7 to 17 per session. The level and trend during baseline for frequency of compliance was low and stable and ranged from two to six correct instructions. The trend during intervention for frequency of compliance increased and ranged from 7 to 10 correct instructions. During generalization sessions (across 10 new instructions), caregiver prompts ranged from two to four prompts per 30-minute session, with a mean of three prompts, across two sessions. Child compliance was a frequency of 10 correct instructions per 30-minute sessions. During follow-up, the caregiver totaled 10 prompts during session, and the child completed eight instructions correctly.

Chapter 5: Discussion

The purpose of this investigation was not only to examine the effects of a previously reported three-step prompting procedure on compliance with Spanish-speaking caregivers' requests, but also to disseminate an empirically validated procedure to caregivers of a different linguistic and/or ethnic background. This is socially significant as Spanish-speaking caregivers and/or the Latino/Hispanic populations comprise the largest consumer group served by North Los Angeles County Regional Centers (40%) for applied behavior analysis services (North Los Angeles County Regional Center, 2013). Therefore, behavior analysts working within the Los Angeles County may need to learn to effectively and efficiently teach caregivers of a different linguistic population to effectively interact with their children. This will further provide caregivers with empirically validated parenting techniques that are typically unfamiliar and inaccessible. This allows behavior analysts to treat behavioral problems more efficiently and effectively. This is significant in that budget cuts have affected not only NLACRC, but also most of the 21 regional centers in California. Regional centers are under "extreme stress and [have their] very existence threatened primarily due to inadequate funding" (Board of Directors, 2010, p. 1). Because of the value in behavioral treatment, alternative ways of funding them have become extremely important. For instance, Senate Bill 126 (renewed Senate Bill 946 of 2011) requires health insurance companies to provide coverage of behavioral health treatment for autism spectrum disorders (California Legislative Information, 2013). The bill clearly defines "behavioral health treatment" as "treatment programs, including applied behavior analysis and evidence-based behavior intervention programs that develop or restore, to the maximum extent practicable, the functioning of an individual with pervasive developmental disorder or autism" (California Legislative Information, 2013, p. 2). Today, 96% of children with developmental

disabilities live at home with their families, as do 55% of adults with developmental disabilities (Board of Directors, 2010). Therefore, in-home behavioral services may be a necessity for many caregivers in order for their children to lead independent and productive lives.

The results in the present study are consistent with the Tarbox et al. (2007) study in that teaching caregivers to implement a three-step prompting was an effective method that not only increased compliance in the children, but also decreased the amount of prompting caregivers implemented. Because prompts are used to occasion correct responding, eventually the discriminative stimulus will control the behavior and the need for prompting will decrease. However, it should be noted that during generalization phase, although child one only complied with approximately four instructions, the caregiver did consistently implement a three-step prompting procedure, according to training. Perhaps if a generalization phase had been extended a few more sessions, frequency of compliance may have increased. Unfortunately, due to time constraints, this was not possible. Therefore, the current investigation makes several potential contributions to behavior analysis in extending this study to another linguistic population and further confirming that empirically validated procedures that are technological can be taught to caregivers, regardless of linguistic and/or ethnic background.

Limitations

Although data from only two dyads used in the current study limits generality, the results nevertheless extend the generality of the findings from the larger body of three-step prompting procedures to novel linguistic populations. Another possible procedural limitation might have been the presence of the experimenter or trained data collector, which may have functioned as a discriminative stimulus for the children. This variable may have played a significant role in compliance behavior. Future studies should highly consider training across caregivers for two-

parent households. This may increase treatment integrity, making treatment interventions more successful. Future studies should also address the issue of disseminating other effective ABA strategies and procedures to other linguistic and/or ethnic communities in order to increase further access to more empirically validated techniques as well as expand the role of caregivers in treatment implementation.

References

Board of Directors, Frank D. Lanterman Regional Center. (2010). *Sustaining the entitlement for the developmental services system: A regional center perspective* (pp. 1–34). Retrieved from http://www.nlacrc.org/

Freeman, K. A., & Piazza, C. C. (1998). Combining stimulus fading, reinforcement, and extinction to treat food refusal. *Journal of Applied Behavior Analysis*, *31*, 691–694.

Kalb, L. M., & Loeber, R. (2003). Child disobedience and noncompliance: A review. *Pediatrics*, *111*, 641–652.

Mueller, M. M., Piazza, C. C., Moore, J. W., & Kelley, M. E. (2003). Training parents to implement pediatric feeding protocols. *Journal of Applied Behavior Analysis*, *36*, 545–562.

Morris, E. K. (1985). Public information, dissemination, and behavior analysis. *The Behavior Analyst*, *8*, 95–110.

Miles, N. I., & Wilder, D. A. (2009). The effects of behavioral skills training on caregiver implementation of guided compliance. *Journal of Applied Behavior Analysis*, *42*, 405–410.

North Los Angeles County Regional Center. (2013). *Information for April 10, 2013 Board of Trustees meeting* (pp. 35–131). Retrieved from http://www.nlacrc.org/

California Legislative Information. (2013). *Senate Bill No. 126*. Retrieved from http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB126

Tarbox, R. S. F., Wallace, M. D., Penrod, B., & Tarbox, J. (2007) Effects of three-step prompting on compliance with caregiver's requests. *Journal of Applied Behavior Analysis*, *40*, 703–706.

United States Census Bureau. (2013). *State & county quickfacts: Los Angeles County, California*. Retrieved from http://quickfacts.census.gov/qfd/states/06/06037.html

Weirson, M., & Forehand, R. (1994). Parent behavioral training for child noncompliance: Rationale, concepts, and effectiveness. *American Psychological Society*, *3*, 146–150.

Wilder, D. A., Atwell, J., & Wine, B. (2006). The effects of varying levels of treatment integrity on child compliance during treatment with a three-step prompting procedure. *Journal of Applied Behavior Analysis*, *39*, 369–373.

Wolde, T. H. (2009). *The effect of errorless learning procedures on rate of skill acquisition in teaching children with autism* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1484545)

Appendix A: Three-Step Prompting Instructions

Tres-Pasos Para Cumplir Con Instrucciones

Explicación:
Los tres-pasos para cumplir instrucciones es un estrategia que le ensenara a su hijo, que es lo que usted quiere que el haga. Usted le modelara y físicamente lo guiara si el no cumple con lo que usted le pide. Esta estrategia no dejara a su hijo escapar instrucciones. Si usted utiliza esta estrategia constantemente, usted notara que su hijo cumplirá instrucciones y no necesitara ayuda conforme el tiempo pase. Esta estrategia se tiene que ocupar todo el tiempo y para todas las instrucciones que le dan a su hijo.

1) Diga el nombre de su hijo.

2) Dígale lo que tiene que hacer. Nunca le pregunte.

3). Dígale claramente la instrucción para que su hijo sepa lo que tiene que hacer (por ejemplo, "recoge el crayón que esta en la mesa" y no "recoge la crayón que esta allá" Mantenga la instrucción corta y especifica (por ejemplo, "recoge el crayón rojo" y no "ve a recoger el crayón pare que coloríamos este dibujo").

4) Espere de 5 a 10 segundos para que su hijo complete la instrucción. No repita la instrucción.

5) Si su hijo completa la instrucción, refuércelo con frases como, "Buen trabajo" o "Que bueno hiciste ____"

6) Si su hijo no cumple la instrucción, demuestrele cómo hacerlo, por ejemplo "Ponte la camisa, haci" (demuestre como).

7) Espere 5 a 10 segundos para que su niño lo haga. No diga la instrucción.

8) Si lo hace, felicítelo pero no lo toque físicamente.

9) Si su hijo no cumple, físicamente guíelo (ayúdele con poner sus manos sobre las manos de él).

10) Nunca complete la instrucción usted. Cuando de una instrucción, su hijo tiene que completarla.

11) Considere estos pasos como "Decir, Enseñar, y Hacer."

Appendix B: Data Sheet

Date:	Staff Initials:		
Trial	SD	Data	Prompts used
1		C I P	VP MP FP
2		C I P	VP MP FP
3		C I P	VP MP FP
4		C I P	VP MP FP
5		C I P	VP MP FP
6		C I P	VP MP FP
7		C I P	VP MP FP
8		C I P	VP MP FP
9		C I P	VP MP FP
10		C I P	VP MP FP
Date:	Staff Initials:		
Trial	SD	Data	Prompts used
1		C I P	VP MP FP
2		C I P	VP MP FP
3		C I P	VP MP FP
4		C I P	VP MP FP
5		C I P	VP MP FP
6		C I P	VP MP FP
7		C I P	VP MP FP
8		C I P	VP MP FP
9		C I P	VP MP FP
10		C I P	VP MP FP

Appendix C: Child One Compliance Instructions

Child 1. Compliance Instructions

1. Siéntate
2. Ven Aquí
3. Tráeme los carritos
4. Tíralo en la basura
5. Dame el libro
6. Tráeme una camisa
7. Tráeme un pantalón
8. Tráeme agua
9. Ve a usar el baño
10. Lávate las manos

Appendix D: Child Two Compliance Instructions

Child 2. Compliance Directions:

1. Sit Down
2. Give me the book
3. Go Potty
4. Bring me the keys
5. Bring me the phone
6. Put away___
7. Go Wash Hands
8. Go change your shirt
9. Go change your pants
10. Go brush your teeth