Proceedings of The National Conference
On Undergraduate Research (NCUR) 2019
Kennesaw State University
Kennesaw, Georgia
April 11-13, 2019

Comparing Rates of Child Compliance with Statement versus Question, and Directive versus Prohibitive Commands

Danielle Berube
Psychological Sciences
Eastern Connecticut State University
83 Windham Street
Willimantic, Connecticut 06226 USA

Faculty Advisor: Dr. Jeffrey Danforth

Abstract

The purpose of this study was to investigate if there were differences in rates of child compliance with two types of teacher directives: statement (in the imperative form) versus question (in the interrogative form) commands, and also directive ("do") versus prohibitive ("don't") commands. This study was important because previous research failed to isolate these instructional components from other effective instruction delivery techniques. Naturalistic observations were conducted to record child compliance (or noncompliance) to the above commands. Full-time teachers and part-time teaching assistants were observed in each of four classrooms in the Child and Family Development Resource Center at Eastern Connecticut State University. One-hundred and sixty, 15-minute direct naturalistic observations were conducted in 4 classrooms (40 observations done in each classroom) over three months. There were 2,217 directives presented to 40 children, ages 3-5, by 12 teachers. A chi-square contingency test was conducted to compare compliance with statement commands versus question commands. Results showed that children complied significantly more often with statement commands than question commands X^2 (1, N = 2217) = 79.91, p<.001. Another chi-square contingency test was conducted to compare compliance with directive commands versus prohibitive commands. Results showed significantly greater compliance with prohibitive commands than directive commands X^2 (4, N = 2217) = 2222.86, p<.001. Results of this study could serve as useful information for parents and teachers to increase child compliance with their instructions and prevent potential problems associated with child defiance. This study can be used as evidence to support teacher training programs and early childhood education training.

Keywords: Child Compliance, Command, Teacher Training

1. Introduction

1.1 Basis for Command Training

Child noncompliance and failing to follow instructions is one of the most common and widespread problems parents and teachers face. Left untreated, defiance is a predictor of serious conduct problems later in life[12]. Child compliance to teacher commands and following rules were rated by teachers as two of the most important behaviors for child adjustment[16], but even typical children do not comply with 17% of commands[8]. Child noncompliance that is more severe is called defiance. This often leads to delinquency, underachievement, depression, challenging authority, failure to finish high school, and difficulties maintaining relationships in adolescence. These problems extend into adulthood. Intense noncompliance predicts incarceration, increased likelihood of multiple arrests, drug and alcohol abuse, difficulties maintaining relationships and jobs, lower income, depression, and shorter lifespan[12]. Therefore, it is very

important to study how effective instruction delivery can decrease child noncompliance to prevent defiance before it leads to serious lifelong problems.

McMahon and Forehand designed a parent training program to decrease child noncompliance, specifically, the refusal to comply with parental commands[12]. This program included the use of alpha commands, defined as instructions that were clear and appropriate, so that it was possible for the child to understand and comply. On the other hand, a beta command was defined an instruction that was vague, interrupted, unrealistic, or difficult for the child to comply with. An important component of McMahon and Forehand's program focused on clear instruction giving[11]. Unclear instructions included chain commands, vague commands, question commands, "let's" commands, and commands followed by an explanation. The research proposed here will address two forms of directions: "statement" versus "question" commands, and "directive" versus "prohibitive" commands. Statement commands presented in the imperative form do not give an option to comply. Examples may include, "Put on your coat," or "Tie your shoes." In contrast, question commands are presented in the interrogative form as a question. Examples may include, "Do you want to put on your coat?" or "Can you tie your shoes?" Question instructions may be problematic because they confuse the distinction between a request and command, so the child may think they have the option to comply.

Directive commands are presented in the positive form, instructing a child what to do, called "do" commands. Examples may include, "Move away from the hot stove," or "Speak quietly." In contrast, prohibitive commands are in the negative form, instructing a child what not to do, called "don't" commands. Examples may include, "Don't go near the hot stove," or "Stop speaking so loudly." Previous research on the efficacy of question versus statement commands, and directive versus prohibitive commands is reviewed here.

1.2 Importance of Command Training

Forehand, Wells, and Sturgis questioned how well parent and child behaviors, and parent reports of child behavior, could predict child compliance[6]. Eighteen children, ages 2-9, clinically referred for noncompliance, and their mothers participated in the study. Researchers asked parents to complete a Parent Attitude Test and observed parent-child interactions during a command and free play situation in a playroom, at a clinic, and at their home. Maternal questions, total maternal rewards, rewards for compliance, total maternal commands as well as beta commands, and child compliance were recorded. Children complied less often with beta commands, and more often if they received more rewards. Most important to this proposal, the form of the parent directive was the best predictor of child compliance.

Roberts, McMahon, Forehand, and Humphreys explored how effective command training impacted child compliance[12,14]. Twenty-seven children ages 3-7 and their mothers were randomly assigned to an experimental group: command training, command with time-out training, and placebo training in which the parents listened to and were empathetic towards the child. Command training focused on giving alpha commands, which were specific, given one at a time, and followed by a five second wait period. Child compliance was defined as initiating the instruction within five seconds. Command training increased child compliance, especially when combined with time-out training.

Matheson and Shriver investigated how command training affected students' compliance and academic achievement[9]. Three noncompliant males (one in fourth grade, two in second grade) were recommended for the study by their teacher and principle. The teachers were trained to give effective commands, defined as direct, positive, specific instructions for a clear goal, given one at a time followed by a five second latency period. Rates of compliance with teacher commands were higher after command training than before, so compliance training was effective. A limitation of the above research was that none of the individual components of the command were isolated, so their individual efficacy is unknown.

Bertsch et al. did not research child compliance, but rather focused on the frequency at which teachers give different types of commands[3]. Thirteen teachers were observed naturalistically in a classroom of 1-3-year-olds, 3-4-year-olds, and 4-6-year-olds during eating times, free play, music and games, art, academics, and transition times. The percentages of statement, question, and prohibitive commands were recorded. There were significant differences in frequencies of command types for different age groups and activity times. Specifically, question commands were more frequently given in the 1-3 and 4-6-year-old classrooms, but statement commands were more frequently given in the 3-4-year-old classroom. Also, prohibitive commands were never given in the 1-3-year-old classroom and used in the other classrooms less frequently than directive commands.

1.3 Frequency and Efficacy of Various Command Types

Some research suggests that children comply more frequently with certain command types. Atwater and Morris naturalistically observed the frequency of and compliance with different command forms issued by preschool teachers[2]. Forty-five teachers were observed giving commands to 21 girls and 15 boys, ages 45-78 months, all typically developing. The teacher directives were classified as follows: direct statements, "let's" statements (e.g., "Let's put our coats in our lockers."), questions, and declaratives (e.g., "It's time to put our work away."). Compliance was defined as initiating a directive within ten seconds of its delivery. Teachers gave statement commands more often than question, and directive commands more often than prohibitive. There were no differences in child compliance with the command forms. A limitation of this study was that there was a very low frequency of prohibitive commands.

Ndoro, Hanley, Tiger, and Heal observed how command type may affect child behavior[13]. Four teachers gave commands to 15 typical children ages 30-48 months in a classroom, indoor activity room and playground. Command types were classified as directive or prohibitive, statement or question, or embedded, which directed a play activity with no specific goal. Child responses included compliance (completing the task within five seconds), active avoidance (avoiding the teacher and/or command all together), and problem behaviors. Children complied most with directive statement commands. Rates of compliance were also higher with embedded and directive commands in general, but this could be because prohibitive and embedded commands were rarely used.

1.4 Statement versus Question Commands

Some research has focused on differences in child compliance to statement versus question commands. Shatz studied child responses to statement and question maternal instructions[15]. Mothers of two typical boys and one typical girl with a mean age of 2.4 years, and one typical boy and girl with a mean age of 1.7 years were observed playing with their child. The child response to statement and question maternal directives was recorded. An appropriate behavior was coded if the child-initiated compliance with an instruction. There were about equal appropriate responses to both types of directives for all children.

McLaughlin and Barry compared child compliance with statement and question commands directed by mothers and fathers[10]. Twenty-four typical children (four males and four females of each of the following ages: 1.5, 2.5, and 3.5) took part in the study. Researchers observed the children playing in their homes with their parents and coded whether commands were given by the mother or father, statement or question, and directive or prohibitive. Compliance was classified as attention compliance (parent requested child's attention) or action compliance (child physically carried out the request). In this study, there were no differences in compliance with maternal or paternal commands. However, 1.5-year-old children were more likely to comply with statement commands, and 3.5-year-old children were more likely to comply with question commands. Directive and prohibitive commands showed little effect on compliance. A limitation of the study was that parents knew they were being observed, and consequently may have acted differently. Also, parents rarely used prohibitive commands so statistical power was limited and this category lacked significant results.

Everett, Olmi, Edwards, and Tingstrom considered how children's compliance with statement and question commands might be increased with eye contact and contingent praise[5]. Four typical children (two males and two females) ages 4-9 were given parental commands in a therapy room of a university-based psychology clinic. The command deliveries varied in proximity of the parent from the child, the degree of descriptiveness of the command, if eye contact was required prior to the command, if there was contingent praise, and if the command was in the statement or question form. Compliance was defined as initiating the task within five seconds of the command. Eye contact and praise increased the probability that a child would comply with a command. However, command type (statement or question) had no effect on child compliance. One problem with this study was that the effect of command type was not separated from the effect of eye contact and praise.

1.5 Directive versus Prohibitive Commands

Limited research has been conducted on differences in child compliance to directive versus prohibitive commands. Previous reviews compared compliance with directive and prohibitive commands, but that variable was confounded with other command types or techniques. One study isolated compliance with directive and prohibitive commands.

Houlihan and Jones investigated differences in child compliance with directive and prohibitive commands[7]. Participants were two boys and one girl, ages 5-6, all identified by their teacher as noncompliant. Experimenters

instructed the teachers to give ten directive commands with reinforcement for compliance. Then, experimenters instructed the teachers to give a prohibitive command any time the child performed an undesirable behavior, and to reinforce compliance. Compliance was defined as completing the desired request or ceasing the undesired behavior within 20 seconds of the request. Reinforcement together with directive or prohibitive commands increased rates of compliance for both command types. However, rates of inappropriate behavior increased with increased compliance to prohibitive requests.

1.6 Limitations of Existing Research

Unfortunately, many studies examined the effect of a combined series of instruction delivery techniques on child compliance but failed to isolate components to test their individual efficacy. Matheson and Shriver failed to isolate any components from a set of effective instruction-giving techniques[9]. Everett et al. isolated command type, eye contact, and praise, but failed to separate command type from eye contact and praise[5]. Roberts et al. trained parents to use alpha commands, but the definition of alpha commands was very broad, including statement, question, directive, and prohibitive commands[14]. This definition contrasted with that of McMahon and Forehand[12].

Some studies did code for command type specifically, but there was little data to support their findings. For example, several studies observed how children responded to prohibitive commands, but because the parents and teachers rarely used this type of command in naturalistic observation, there was insufficient evidence to come to any conclusions[2,10,13]. Also, Bertsch et al. found that teachers used many types of commands but did not research which were more efficacious in limiting child noncompliance at different times[3].

The purpose of this study was to use naturalistic observation to investigate if there are differences in rates of child compliance with two types of adult directives: statement versus question, as well as directive versus prohibitive commands. This study is important because previous research has failed to isolate these components from effective instruction delivery techniques. Understanding which command type is more effective can be essential information for teachers and parents to help prevent child noncompliance, especially since behavior of the parent was the best predictor of child compliance[6]. Efficaciously managing child noncompliance can prevent detrimental consequences of untreated noncompliance in adolescent and adult life.

2. Method

2.1 Participants and Setting

Two full-time teachers (a lead teacher and teacher associate), and one to two part-time assistant teachers were observed in each of four classrooms in the Child and Family Development Resource Center at Eastern Connecticut State University. Although the part-time assistant teachers may have been less experienced, they were included in the study to increase the probability that prohibitive directives would be delivered, because insufficient prohibitive commands were a common limitation of previous studies. Because so few male teachers work at the Child and Family Development Resource Center, they were not observed to maintain uniformity and to prevent confounding data. The teachers were debriefed on the purpose and results of the study upon completion.

From 8 to 12 children ages 3-5 from the community of Willimantic, Connecticut and enrolled in preschool at the Child and Family Development Resource Center were observed in each classroom. The Resource Center website states that “The classroom environment is intentionally created to provide the young child with many opportunities to engage in thinking and problem-solving skills. Centers include blocks, a literacy station, math and science investigation tables, writing area, library, creative arts, and dramatic play”[4].

2.2 Measures

2.2.1 teacher instructions

Teacher commands/directives served as the independent variable and were defined as:

Statement command: Statement commands sounded like an order, in the imperative form. “Orders that were stated directly and specified the child behavior to be initiated or inhibited.” Some examples of statement commands: “Come here.”, “Color it red.”, “Put the block on the table” [11]. If a question command and statement command were given

consecutively together, the latter command was recorded. For example, "Do you want to pick up your toys? Pick them up" would be recorded as a statement command.

Question command: Question commands were presented as a question or favor, in the interrogative form. Examples of question commands may have begun with, "Do you want to…?", "Will you…?", "Why don't you…?". Commands with a rise of inflection at the end of the sentence were question commands. An example may have included, "Pick up the toy, OK?"

Directive command: Directive commands were in the positive form and instructed the child to initiate a behavior, sometimes called a "do" command. Examples may have included, "Walk to the door.", "Sit with your bottom in the chair."

Prohibitive command: Prohibitive commands were in the negative form and instructed the child to inhibit a behavior, sometimes called a 'stop' command. Examples may have included, "Stop running.", "Do not stand on the chair."

Beta command: Beta commands were difficult or impossible for a child to comply with. There were two types of beta commands. The first type of beta command was if/then conditional statements that offered the child a choice. Examples may have included, "If you sit down, then move the toys", "If you want to, you can pick up the blocks"[11]. The second type of beta command was vague commands that "did not specify the child behavior to be initiated or inhibited." Some examples may have included: "Be careful.", "Act like a big boy, please.", "Calm down" [11].

If a statement was a beta command and a question command, it was considered a beta command. Examples may have included, "Do you want to act like a big boy now?", or "Will you be careful?" Child compliance with beta commands was not scored because children did not have a chance to comply.

2.2.2 child behaviors

Child behaviors served as the dependent variable and were defined as:

Compliance: The dependent variable was the percentage of child compliance, calculated by the number of commands the children complied with divided by the total number of commands issued by the teachers. Compliance to an instruction was coded if there was "an appropriate motoric response initiated within 5 seconds" following the termination of appropriate teacher command[11]. Also, if a prohibitive command was delivered in a negative form (e.g., "Do not run."), and the child refrained from that action for the five second period following the instruction, the child would have complied.

Four responses were coded for compliance: "Movement toward a specified goal object within 5 seconds, initiation of a specified task within five seconds, verbalization after a command for a verbal response within five seconds, and inhibition of a specified motor or verbal response for 5 seconds"[11].

Noncompliance: Noncompliance was coded if there was "failure to initiate a motoric response within 5 seconds" following the termination of an appropriate teacher command, or if the child did not inhibit the motor response for a full five seconds[11].

2.3 Procedure

One-hundred and sixty, 15-minute observations were conducted in four classrooms (40 observations done in each classroom) over three months, March through May, 2018. Observations were all done in the morning during 'Group Time,' 'Center Time,' 'Snack Time,' or 'Lunch Time.' During 'Group time,' children were gathered and seated while the teacher lead an activity such as reading a book or singing a song. During 'Center Time,' children choose a center, such as dramatic play, math, science, art, etc. where the teachers supported free play. Observations were also done during transition times between above activities.

A coding sheet was used to code all observable commands. Each teacher command was described as statement or question, as well as directive or prohibitive, to isolate the effect of each command type. Teacher command types were coded for as follows: 'QD': Question Directive, 'QP': Question Prohibitive, 'SD': Statement Directive, 'SP': Statement Prohibitive. On the coding sheet, child response types were recorded directly below each corresponding teacher command and were coded 'N' for noncompliance or 'C' for compliance.

2.4 Observation Rules

Only one command was coded at a time. So, when a command was presented to a child, there was a five second wait period to determine if the child complied or not. If multiple commands were given in succession, only the first

command was coded. When that command/comply sequence coding was complete, then the next command presented by the teacher was coded. If a command was directed to multiple children, the number of those children who complied and did not comply was recorded. Only ongoing commands asking for an immediate child response were recorded. An example may have included, "Play with dolls now." Commands expected to be followed in the future were not coded. An example may have included, "Next time say please." Also, only verbal commands were recorded. Nonverbal commands, such as putting a finger on the lips indicating that a child should be quiet, were not recorded. To prevent observer drift, the observer took a five-minute break after every fifteen minutes of observation. After every four fifteen-minute observation sessions, the observer took a thirty-minute break. The individual who created the research question was the observer, so observer bias should be taken into consideration.

3. Results

There were 2,217 directives presented to 40 children ages 3-5 by 12 teachers. The abundance and nature of commands delivered by teachers varied throughout the day. Most commands were given during transition times, when children were asked to clean up, wash their hands, and prepare for a new activity. Many commands were also given during snack and lunch times, as children were directed to practice proper clean eating habits and table manners. Fewer commands were observed during Center Times, as children were encouraged to creatively play on their own with some teacher support. During this time, teacher commands were needed to resolve arguments between students and avoid unsafe behaviors. There were also fewer commands during Group Times, as children were generally engaged in the teacher's activity and discussion; although, reminders to sit quietly and focus were noted.

Overall, children in this study complied with 78.80% of commands. Each command was described as statement or question, as well as directive or prohibitive, to isolate the effect of each command type. The different command types were given at different frequencies by the teachers. Statement Directive commands were delivered most often (72.03%), followed by Question Directive (18.49%), Statement Prohibitive (8.94%), and Statement Directive (0.54%) (Figure 1).

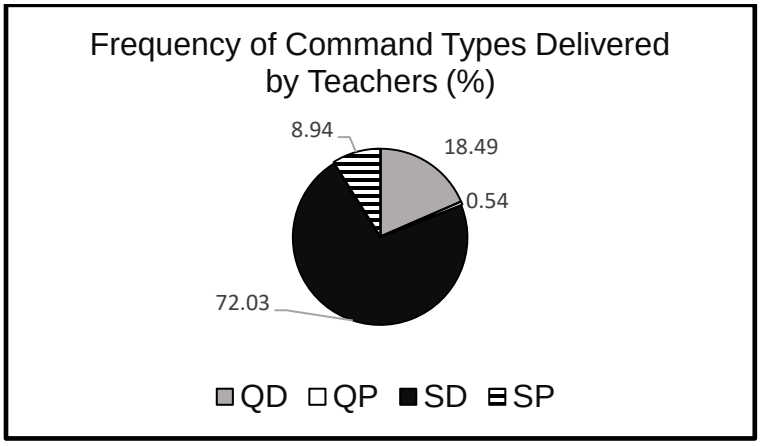

Figure 1. The frequencies of different command types that were delivered by teachers. Frequency was calculated by the total occurrences of each type of command divided by the total number of commands delivered between 4 classrooms over 40 hours.
Note: QD = Question Directive Command; QP = Question Prohibitive Command; SD = Statement Directive Command; SP = Statement Prohibitive Command.

A chi-square contingency test between all four commands (QD, QP, SD, and SP) determined compliance was contingent on command type. Results showed that the differences in percentage rates of compliance with each command type (QD: n=410, 63.9%, QP: n=12, 25%, SD: n=1597, 82.02%, and SP: n=198, 86.87%) were too great to be due to chance alone X^2 (3, N = 2217) = 92.94, p<.001 (Figure 2). However, statistical analysis could be unreliable because the frequency of compliance to QP commands was less than five.

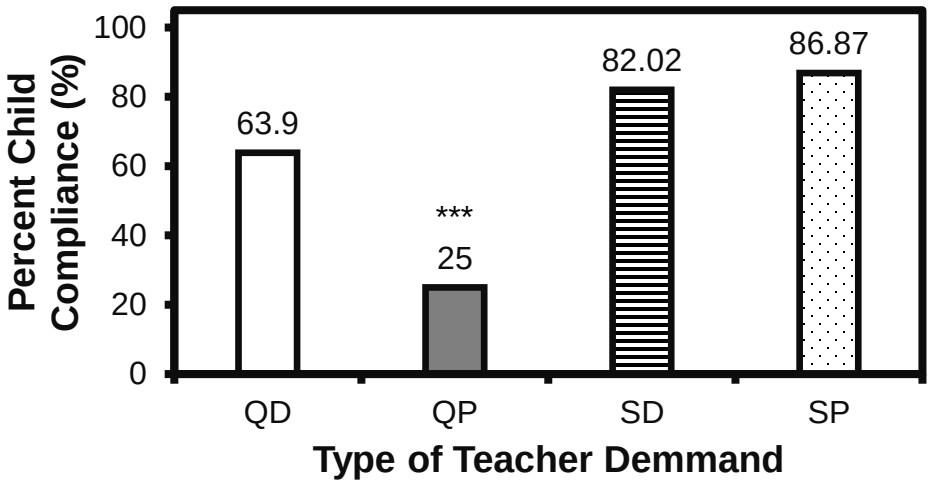

Figure 2. Child compliance to teacher commands was dependent on command type, as the mean rates of compliance to the four command types (QD: Question Directive, QP: Question Prohibitive, SD: Statement Directive, SP: Statement Prohibitive) were statistically different. Results were compared by a chi-squared contingency test. The rates of compliance were noted above their respective bars. ***p<0.001.
Note: Percent Child Compliance was defined as the percent of commands children complied with divided by the total number of commands they were given.

A second chi-square contingency test compared compliance with statement commands (SD and SP summed together) versus question commands (QD and QP summed together). Results showed that children complied significantly more with statement commands than question commands X^2 (1, N = 2217) = 79.91, p<.001. Percent compliance with statements commands was 82.56% (n=1795), and that with question commands was 62.8% (n=422) (Figure 3).

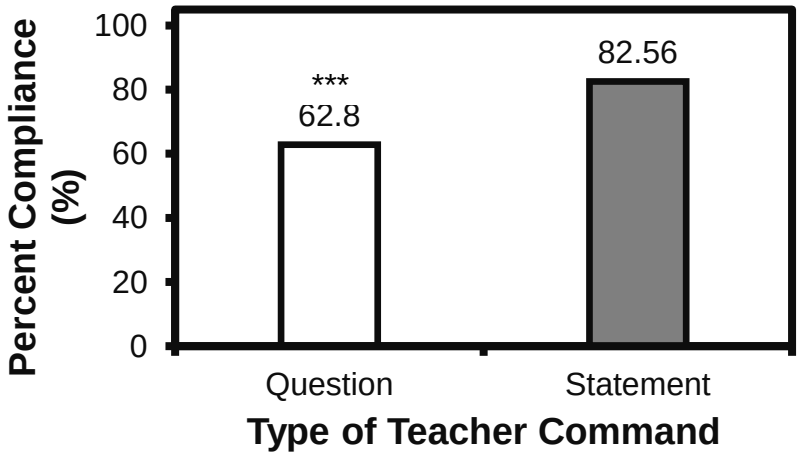

Figure 3. Child compliance to teacher commands was dependent on command type, as the rates of compliance to question and statement commands were statistically different. Results were compared by a chi-squared contingency test. The rates of compliance were noted above their respective bars. ***p<0.001.
Note: Percent Child Compliance was defined as the percent of commands children complied with divided by the total number of commands they were given.

A final chi-square contingency test was done to compare compliance with directive commands (SD and QD summed together) versus prohibitive commands (SP and QP summed together). Results showed significantly greater compliance with prohibitive commands than directive commands X^2 (4, N = 2217) = 2222.86, p<.001. Percent compliance with prohibitive commands was 83.33% (n=210) and that with directive commands was 78.33% (n=2007) (Figure 4).

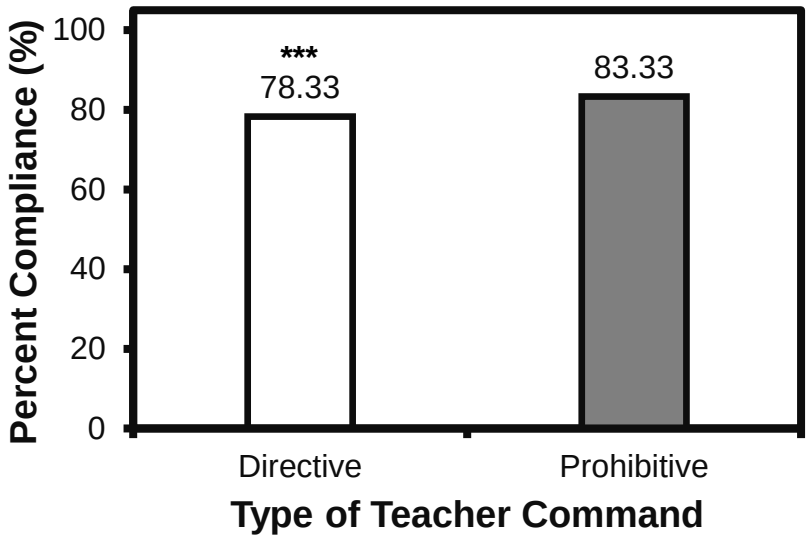

Figure 4. Child compliance to teacher commands was dependent on command type, as the rates of compliance to directive and prohibitive commands were statistically different. Results were compared by a chi-squared contingency test. The rates of compliance were noted above their respective bars. ***$p<0.001$.
Note: Percent Child Compliance was defined as the percent of commands children complied with divided by the total number of commands they were given.

4. Discussion

There were significant differences in rates of compliance between statement versus question commands, and directive versus prohibitive commands. The percentage of compliance to all commands (regardless of type) in this study (78.80%) was very similar to that defined as normal for typical children (83.00%)[8].

4.1 Statement versus Question Commands

Children in this study complied more often with statement commands than question commands. Although previous research did not isolate command type as a component of instruction delivery, these findings support effective command training programs by Roberts et al.[14] and Matheson and Shriver[9], which instructed teachers to use statement commands (Fig. 2 and 3). One potential explanation for this finding is that question commands may suggest that the child has the option to comply. In several situations, when a question command was given to a child, for example, "Can you go wash your hands?", the child simply responded with "No!" The child failed to comply. Also, the rise of inflection in an interrogative command could make compliance seem optional, and less important.

4.2 Directive versus Prohibitive Commands

There was an inconsistency in the data with regards to directive and prohibitive commands. Children complied more with question directive commands than question prohibitive commands, and children complied less with statement directive commands than statement prohibitive commands (Fig. 2). Nonetheless, children complied more often with prohibitive commands than directive, overall (Fig. 4). This inconsistency could be because far fewer prohibitive commands were given in the study than statement commands, especially question prohibitive commands, so the children had less opportunity to fail to comply with these commands (Fig. 1). The finding that children would comply more often with prohibitive than directive commands conflicts with a previous study by Ndoro et al. who found greatest compliance with statement directive commands[13]. However, Ndoro also reported low occurrence of prohibitive commands which could explain the inconsistencies between these studies[13].

One explanation for why children complied more often with prohibitive commands than directive (assuming these results are not due to insufficient occurrence of prohibitive commands) could be that the word "no," associated with prohibitive commands, elicits negative emotions, making the child more responsive. Also, children may associate negative emotions with consequences, making the command seem more important with which to comply. Thus, children may be more likely to comply with prohibitive commands.

An alternative explanation for this finding may lie in neurobiology. A study by Alia-Klein et al. supports this idea, reporting that the word no, associated with prohibitive commands, elicits negative emotions, creating increased responsivity in the right lateral orbitofrontal cortex than there is to directive commands[1]. Greater activation of this area of the brain may make children more likely to comply with prohibitive commands.

4.3 Debriefing

The teachers at the Child and Family Development Resource Center at Eastern Connecticut State University were debriefed following the completion of the study and asked why they thought they gave statement and directive commands more often than question and prohibitive commands.

5. Limitations and Future Directions

There are several limitations to this study that should be noted. First, the teachers were observed to emit only 210 prohibitive commands, so these data will need replication with a larger number of prohibitive commands.

Also, the reliability of this study may lack strength, as there was no secondary observer. The nature of the study as an undergraduate student's Honors Thesis project discouraged the concept of a second observer due to time constraints. Additionally, since there was no second observer and the primary observer also created the research question, the validity of this study could be compromised due to a potential risk of researcher bias. However, it should be noted that there was no motivation to sway the results in one way or the other, as it was an objective study to compare compliance rates with different command types. This study may be replicated in the future with two blind observers.

Despite the limitations, results of this study could serve as useful information for parents and teachers to increase child compliance with their instructions and prevent potential lifetime problems associated with child defiance. This study can be used as evidence to support teacher training programs and early childhood education training, which would recommend the use of statement and directive commands over question and prohibitive commands, to increase the likelihood of child compliance.

6. Acknowledgements

The author wishes to express her appreciation toward her mentor, Dr. Jeffrey Danforth for his support and contributions. Also, to the Honors Council of Eastern Connecticut State University who funded the study.

7. References

1. Alia-Klein, N., Goldstein, R. Z., Tomasi, D., Zhang, L., Fagin-Jones, S., Telang, F., & Volkow, N. D. (2007). What is in a word? No versus Yes differentially engage the lateral orbitofrontal cortex: Correction. *Emotion*, *7*(4), 735. doi:10.1037/1528-3542.7.4.735

2. Atwater, J. B., & Morris, E. K. (1988). Teachers' instruction and children's compliance in preschool classrooms: A descriptive analysis. *Journal of Applied Behavior Analysis, 21*(2), 157-167. Doi:10.1901/jaba.1988.21-157

3. Bertsch, K. M., Houlihan, D., Lenz, M. A., & Patte, C. A. (2009). Teachers' commands and their role in preschool classrooms. *Electronic Journal of Research In Educational Psychology*, *7*(1), 133-162.

4. Child and Family Development Resource Center (2018). Frequently asked questions. In *Eastern Connecticut State University* (Child and Family Development Resource Center). Retrieved from http://www.easternct.edu/cfdrc/frequently-asked-questions/

5. Everett, G. E., Olmi, D. J., Edwards, R. P., & Tingstrom, D. H. (2005). The contributions of eye contact and contingent praise to effective instruction delivery in compliance training. *Education & Treatment of Children*, *28*(1), 48-62.

6. Forehand, R., Wells, K. C., & Sturgis, E. T. (1978). Predictors of child noncompliant behavior in the home. *Journal of Consulting and Clinical Psychology*, *46*(1),179. Doi:10.1037/0022-006X.46.1.179

7. Houlihan, D., & Jones, R. N. (1990). Exploring the reinforcement of compliance with 'do' and 'don't' requests and the side effects: A partial replication and extension. *Psychological Reports, 67*(2), 439-448. Doi:10.2466/PR0.67.6.439-448

8. Jacobs, J. R., Boggs, S. R., Eyberg, S. M., Edwards, D., Dunning, P., Querido, J.G., McNeil, C. B., & Funderburk, B. W. (2000). Psychometric properties and reference point data for the Revised Edition of the School Observation Coding System. *Behavior Therapy, 31*, 695-712.

9. Matheson, A. S., & Shriver, M. D. (2005). Training teachers to give effective commands: effects on student compliance and academic behaviors. *School Psychology Review*, *34*(2), 202-219.

10. McLaughlin, B. (1983). Child compliance to parental control techniques. *Developmental Psychology*, *19*(5), 667- 673. Doi:10.1037/0012-1649.19.5.667

11. McMahon, R. J., & Forehand, R. L. (1981). *Helping the noncompliant child: A Clinician's guide to parent training*.,1st ed. New York, NY, US: Guilford Press.

12. McMahon, R. J., & Forehand, R. L. (2003). *Helping the noncompliant child: Family-based treatment for oppositional behavior., 2nd ed*. New York, NY, US: Guilford Press.

13. Ndoro, V. W., Hanley, G. P., Tiger, J. H., & Heal, N. A. (2006). A descriptive assessment of instruction-based interactions in the preschool classroom. *Journal of Applied Behavior Analysis*, *39*(1), 79-90. Doi:10.1901/jaba.2006.146-04

14. Roberts, M. W., McMahon, R. J., Forehand, R., & Humphreys, L. (1978). The effect of parental instruction-giving on child compliance. *Behavior Therapy*, *9*(5), 793-798. doi:10.1016/S0005-7894(78)80009-4

15. Shatz, M. (1978). Children's comprehension of their mothers' question-directives. *Journal Of Child Language, 5*(1), 39-46. Doi:10.1017/S0305000900001926

16. Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices*. Pacific Grove, CA: Brooks/Cole.