

THE RELATIONSHIP BETWEEN PATERNAL PRAISE AND
PRESCHOOLER MOTIVATION TO PERSIST ON
A CHALLENGING TASK

by

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A CHALLENGING TASK

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Abstract

The current study had three research aims: 1) Examine the nature of praise (type and frequency) used by fathers during a task with their child. 2) Determine the association between paternal praise and child motivation. 3) Examine possible associations between father praise and factors such as father involvement, parenting, mental health and socioeconomic status. The sample population consisted of 55 families with preschool age children. Results revealed no significant difference between frequency of praise between parents. Similarly, type of praise used by fathers and mother was similar, only significantly differing for generic praise. The association between parent praise and motivation for both parents was significantly, positive correlated for non-generic, ambiguous and total praise, such that as praises increased, total time motivated also increased. Generic praise did not have this effect. Lastly, praise was not related to any father characteristics examined. Future direction should aim to obtain a more diverse sample population or employ an experimental design to better explore effects of generic praise.

Introduction

The use of praise to motivate children is important to society due its implications for teachers, parents, and other professionals working with children. Motivation can be observed as high engagement in a task, which predicts positive developmental and educational outcomes, such as high grades and lower problem behavior or delinquency (Wang & Degol, 2014). It is the role of educators and parents to help children achieve successful outcomes. Failure, however, is an unavoidable part of academic and daily life. The decision to persist or to quit in the face of failure or challenge is determined by one's motivation. Motivation begins to develop early in life, as differences in persistence can be found as early as age two (Matas et al., 1978 in Zentall, 2009). Adults working with children must have strategies to increase motivation in children to increase the likelihood of persistence and ultimately success (Zentall, 2009).

Praise is one tool that adults can utilize to increase motivation and thus persistence in children. Previous research explores the frequency and effects of different types of praise on motivation and examines how child gender impacts the type of praise given (Gunderson et. al, 2013 & 2018; Dweck et al., 1978; Kamins & Dweck, 1999; Morris & Zentall, 2014; Mueller & Dweck 1998). Past research predominantly focuses on praise given by mothers or female teachers. However, there is a lack of research on the use of praise by fathers and its impact on children's outcomes. Thus, the current study will examine the link between praise type and child motivation, giving specific attention to father praise to determine the effect of parent gender. We will also examine factors such as SES, mental health, and involvement that may reveal links between paternal traits and praise habits. This research is important because fathers and male figures play significant roles in the lives of children. The role of men in children's lives is

increasing as gender roles become less rigid and society experiences an increase in stay at home dads and males in child-related professions.

Motivation

Motivation can be intrinsic or extrinsic in nature. Intrinsic motivation occurs when the incentive to engage in an activity or behavior is derived from no reason other than sheer pleasure, enjoyment, challenge, or interest gained from that activity itself (Lepper, Corpus, & Iyengar, 2005). Alternately, extrinsic motivation involves external incentives or contingencies to engage in an activity, such as pleasing a parent or receiving a prize (Lepper, Corpus, & Iyengar, 2005). Not every task in school will inherently be enjoyable and intrinsically motivating for a child therefore it is important to study external ways to motivate a child, such as praise.

Motivation can be measured by examining one's engagement in a task. Engagement refers to sustained goal-directed action that consists of three different dimensions: emotional, cognitive and behavioral (Skinner, Kindermann, Connell, & Wellborn, 2009). The behavioral dimension of motivation in terms of task engagement includes persistence, perseverance, and efforts (Skinner, Kindermann, Connell, & Wellborn, 2009). The cognitive and emotional dimensions are more difficult to examine in younger children who have not developed the verbal or cognitive capabilities to self-report feelings, thoughts and motivations (Skinner, Kindermann, Connell, & Wellborn, 2009). Thus, observation of child engagement behaviors, such as focus and persistence, is the preferred method of measuring motivation.

It is important to understand motivation and engagement in children because it is a predictor of educational and developmental success. High engagement is linked with completion of high school and increased academic performance as well as fewer behavioral issues and decreased substance abuse (Wang & Degol, 2014). One Head Start study found motivation and

persistence to be among the most important predictors of positive social and emotional adjustment and school success (McDermott, 2014). They found a large disparity in motivation and persistence between children who ultimately fail and children who ultimately succeed in the American school system (McDermott, 2014). Student engagement is a critical aspect of interventions aimed at reducing dropout rates (Wang, 2014). Dropping out of high school has many negative long-term impacts on the individual and society. Over a lifetime, dropouts earn roughly \$9,200 less annually than high school graduates (Bridgeland, Dilulio, & Morison, 2006). According to the Bureau of Labor Statistics the unemployment rate was 1.56 times that of the high school graduate and 3.21 times that of a college graduate in 2009 (Franklin & Trouard, 2016). Less education is associated with higher risk behaviors and lower life expectancy. In addition, high-school dropouts have the highest probability of incarceration than any other group; therefore, it is critical to study factors that contribute to lowering dropout rates, increasing positive social behavior and improving school success (Franklin & Trouard, 2016).

Praise

Parent interaction is typically the first source of learning and socialization for children. One mechanism through which parents influence their child's motivation is via feedback (praise or criticism) during challenging tasks (Kamins & Dweck, 1999). Praise is an expression through which children are made aware of the beliefs and values of others, namely teachers or caregivers. Different types of praises will convey different messages and influence a child's belief system (Gunderson et. al, 2013). The two main types of verbal praise are person (trait, generic) praise and process (effort, non-generic) praise. Person praise, such as "Good girl!" or "You are strong!", evaluates a child based on his or her traits and suggests that his or her worth and abilities are innate and fixed rather than malleable. In contrast, process praise such as, "Good job

on the puzzle” or “Good thinking” evaluates a child’s strategies and task-related efforts; it focuses on a behavior or outcome rather than stable traits (Gunderson et al., 2013; Morris & Zentall, 2010 & 2014).

The type of praise a child receives can have an impact on their motivation and how they handle challenging tasks (Gunderson et al., 2013). Gunderson et al. (2018) found that caregiver praise predicts a child’s motivational framework five years later which in turn predicted academic achievement. Focus on specific behaviors (i.e., process praise) allows children to associate specific strategies with success or failure instead of stable attributes. Children receiving process praise are more likely to alter their strategies and come up with constructive solutions during setbacks to achieve mastery (Kamins & Dweck, 1999). Past research demonstrates that person praise leads to helpless reactions when facing challenges, whereas process praise led to higher persistence and motivation (Kamins & Dweck, 1999). Person praise was found to have adverse effects on a child’s self-image and worth and fostered the belief that “badness” is a stable trait contingent on a small sample of performance (Gunderson et al., 2013; Kamins & Dweck, 1999). Ultimately, it was concluded that person praise is not a favorable type of praise because it leads children to believe their self-worth is contingent upon performance and associate their successes and failures with a fixed quality (Cimpian et al., 2007; Gunderson et al., 2013; Kamins & Dweck, 1999; Morris & Zentall, 2010).

Some praise does not fit into either the person or the process categories and thus are labeled as ambiguous. Gunderson et al. (2013) found that the majority of praise a child hears is ambiguous (e.g., nice! or yay!). Ambiguous praise does not explicitly tie the outcome or behavior with anything. When someone says “Nice!” there is no implication as to whether they are praising a stable trait or the effort and strategy a child employed. Ambiguous praise also

includes nonverbal gestures such as a high-five or thumbs up (Morris & Zentall, 2014). Past studies found that ambiguous praise has similar positive effects as process praise and is successful in motivating children (Morris & Zentall, 2014; Pruitt, 2015).

Fathers in Child Development

The role of fathers in child development is relatively understudied. Researchers first began to take interest in the active, direct role of fathers in the 1970s (McBride & Lutz, 2004). Since then, the study of father involvement in child rearing has risen dramatically. McBride and Lutz (2004) list many factors that contributed to this increase interest, such as the shift in societal conceptions of parental roles, increase in maternal employment, increasing policy debates of child well-being, and the shifts in expectations for fatherhood. Increasing literature on father involvement has also contributed to an increase in the active father role (McBride & Lutz, 2004).

Studies have consistently found that children with highly involved fathers had increased cognitive competence, empathy, and internal locus of control as well as decreased sex-stereotype beliefs (Lamb & Tamis-LeMonda, 2004). Conversely, studies have also found a link between children from father-absent homes and increased academic, behavioral, and emotional problems when compared to children from two-parent homes. Some problems include increased likelihood of school dropout, violence, joblessness, and early sexual activity. (Shannon & Tamis-LeMonda, 2005). Children from two parent homes scored higher on language and cognitive assessments, although higher education and SES could also be contributing factors (Tamis-LeMonda et al., 2004). Observational studies demonstrate the importance of the father-child relationship quality to child development beginning at infancy (Lamb, 2002). For example, paternal sensitivity, one quality of the father-child relationship, is associated with problem-solving and social competence in toddler-age children (Shannon & Tamis-LeMonda, 2005). Sensitivity of both mothers and

fathers to their infants predicts toddler linguistic and cognitive abilities (Shannon & Tamis-LeMonda, 2005). Clearly, the involvement of fathers has an impact on child development and thus warrants further study of the nature of father-child interactions and its impact.

Mothers and Fathers: Similarities and Differences

Limited and conflicting research exists regarding the similarities and differences between mothers and fathers in parenting interactions. One study that examined the influence of parent play on children's language and cognitive development found that mothers and fathers engaged similarly and found fathers to be equally sensitive, positive, and cognitively stimulating (Tamis-LeMonda et al., 2004). Similarities between father and mother interaction with their infants and toddlers have also been found in areas such as responsiveness, affection, play, slower and shorter speech, and instruction (Tamis-LeMonda et al., 2004). Yet, other studies point to several differences in parent-child interactions with regard to parent gender. Studies found fathers to be less engaged and sensitive, encourage more risk-taking behavior, prohibit infant activities and engage in more "rough" play and teasing (Tamis-LeMonda et al., 2004). One study that examined the influence of parent language concluded that fathers used simpler language, less overall utterances, less supportive and less negative language, and more directive and informing language in comparison with mothers (Pancsofar & Vernon-Feagans, 2006). Overall, there does not seem to be a consensus on whether or not mothers and fathers differ in their interactions with children or to what degree and nature. Instead, both similarities and differences have been found in different capacities, affirming the need for further exploration of parent-child interactions. It is important to better understand the nature of father-child interactions in order to help fathers become aware of their natural tendencies and to provide education on the most effective parenting strategies.

Factors influencing Paternal Praise

Father Involvement. Extensive literature suggests that father involvement and nurturing behavior tends to facilitate child development in areas of motivation, cognition and social competence as well as psychological adjustment (Lamb & Tamis-LeMonda, 2004). One model of father involvement created by Lamb et al. (1985) identifies three main components: accessibility, engagement, and responsibility. This model examines the time available for children, regardless of the occurrence of direct interaction, time spent engaging in developmentally beneficial activities, and the arrangement of resources and activities for children (Lamb et al., 1985). It is important to note that father-child interaction is not sufficient in itself, but instead the quality and quantity of interactions must be considered.

Father Parenting Style and Behavior. Overall parenting style can be defined as the set of behaviors that make up parent-child interactions in a variety of situations and environments (Zahed Zahedani et al., 2016). Parenting style impacts child development and growth in cognitive, behavioral, moral and emotional realms (Zahed Zahedani et al., 2016). Parenting style is typically categorized using the dimensions of demandingness (or control) and responsiveness (warmth). Demanding parenting behaviors relate to the emphasis placed on control, supervision, and maturity. Responsiveness refers to the amount of affection, support, and reasoning used in parenting (Baumrind, 1991). From these two dimensions come the four recognized parenting styles: authoritative (high on both dimensions), authoritarian (high control but low warmth), permissive (low control, but high warmth), and uninvolved (low on both dimensions; Baumrind, 1991). Many parents likely use a combination of parenting styles, but tend to learn toward one most strongly (Martínez, 2019). Authoritarian parenting is widely accepted as the form of parenting that yields the best results for child and parent although some studies found permissive

parenting to yield similar or better outcomes (Martínez, 2019). Authoritarian and uninvolved styles are associated with several negative outcomes such as low self-esteem, emotional instability, academic success, and increased behavioral problems (Martínez, 2019). The nature of one's parenting behavior has many implications for how that parent interacts with his or her child and would undoubtedly extend to the way in which a parent communicates or praises their child.

Father Mental Health. The mental health of both mothers and fathers has a strong impact on their child's development (England & Sims, 2009; Vallotton et al., 2016). Although the direct link between paternal mental health and child praise and motivation has yet to be explored, there is much research to suggest a link between parental depression and impaired parenting (England & Sims, 2009). Depression is associated with increased hostile and withdrawn parenting behaviors and less warmth and responsiveness (England & Sims, 2009). These findings are primarily related to mothers. Less is known about depressed fathers relative to mothers, but findings from studies that do exist on fathers are consistent with findings about mothers. Vallotton et al. (2016) found that depressive symptoms in both parents impacted parent-child interaction and furthermore, predicted later social skills and problem behaviors in children. These findings substantiate the examination of how father mental health impacts the nature of child praise and motivation.

Father Socioeconomic Status. Shifts in gender roles, marked by increasing numbers of women entering the workforce, has occurred across all demographic groups; however, the shift in father involvement is largely determined by socioeconomic status. Middle-class, working fathers have expanded their paternal roles to include more caregiving, nurturing behaviors. In contrast, low-income fathers have been more likely to withdraw from the father role entirely

(Carlson & Magnuson, 2011). One study found fathers' scores on a cumulative protective index that included a combination of factors such as relationship status, education and income were found to best predict responsiveness and instructive interactions. Specifically, high school graduates with above median income that are married and residing with their infants have more desirable father-child interactions (Shannon, Tamis-LeMonda & Margolin, 2005). The current study was the first to examine whether father SES influences the type and amount of praise used as well as levels of child motivation.

The Current Study

The current study had three research aims. First, to examine the nature (quantity and type) of praise used by fathers during a developmentally challenging task with their preschool-age child. Specifically, we were interested in how the nature of paternal praise compares to maternal praise. Second, we aimed to determine the association between paternal praise and child motivation, defined as their time spent engaged in a task. I hypothesized that these results would align with maternal praise data from past research, such that higher rates of process and ambiguous praise would correlate with increased child motivation. Finally, the third aim is to examine possible associations between father praise habits and factors such as father involvement, parenting style and behavior, mental health, and socioeconomic status.

Method

Participants

55 couples visited our research lab on campus for an observational visit with their child ($M = 3.21$, $S = .24$). Fathers ranged in age from 27 to 48 ($M = 36.29$, $SD = 4.496$) and were predominantly college educated (83.64%) and had incomes above 75,000\$ (72.7%). All

participants were part of a larger, longitudinal study that included mothers and fathers. However, only the father demographics were examined in this study.

Procedure

Prior to the visit, parents were emailed information about their study visit and a series of questionnaires to complete online. Upon arrival, parents completed informed consent for their participation and permission for their child. In addition, all children completed a verbal assent or a gestural consent. The parents and child then engaged in several tasks as part of a larger study. The task used for analysis in this study was a moderately challenging puzzle. The parent was given the following instruction: “Let (child’s name) work on the puzzle and then give him/her any help you think he/she needs.” The child was instructed to use the pieces to create a farm (or ocean) puzzle. The child completed the task twice, using one puzzle with their mother and another, equally challenging puzzle with their father. A coin flip was used to determine which parent would engage in the task first. The task was designed to be challenging, so that the child would need parental assistance, thus providing opportunity for the parent to provide feedback. The child and parent were given ten minutes to complete the puzzle. The task was stopped at the end of ten minutes or upon completion of the puzzle, whichever came first. However, the child was always given the opportunity to work beyond the ten minutes to finish the puzzle if they desired. Following the completion of both puzzle tasks, the parent and child went on to participate in a variety of tasks not assessed in this study. At the end of the visit, the family received a \$50 gift card as compensation and the child was given a small toy for their participation.

Measures

Praise. Parent praise during the task was coded based on a system developed by Zentall (2009). Independent coders were trained with a gold standard coder until they reached acceptable levels of interrater reliability (70% agreement). Parent praise was coded when they were in response to a child's action (verbal, "this is a pig" or physical, picking the correct piece) that was relevant to the puzzle task. There were three general categories of parent praise: person, process, and ambiguous. Person praise suggests a fixed quality of the child that would be applicable in other contexts (e.g., "You are so smart!"; "You are good!"). Process praise refers to the task itself and the efforts of the child (e.g., "That's right."; "You did it."; "Good Job."; "What a good strategy!"). If the statement was not specific enough to fit into either of these categories then it was coded as ambiguous (e.g., "Good!"; "Gasp"; "Yes"). Nonverbal praise was coded as ambiguous (e.g., clapping, thumbs up, high-five). Total scores were calculated for each types of praise, as well as an overall score indicating the proportion of time engaged in all types of praise. Interrater reliability for the coding of parent feedback for this sample was 80% agreement.

Motivation. For this study, child motivation is defined as visual focus or engagement with the task. Many continuous performance task (CPT) tests, designed to measure sustained and selective attention, center on visual focus. Attention and engagement are closely related; therefore, it is logical that visual focus is also an effect measure of engagement. Research demonstrates that CPT tests are most effective for preschool-age children when the overall length is five to seven minutes or less. In contrast, preschoolers have more difficulty completing tests that are longer than nine minutes (Mahone & Schneider, 2012). Since the current study employs a task that is meant to be challenging, 10 minutes is an appropriate length for task. According to McCall (1995) for a task to be considered a valid measure of motivation mastery, it must be challenging and ensure failure or at least struggle (McCall, 1995 in Zentall 2009). The

challenging task for this study is a puzzle used by Pruitt (2012). Parents were in the room with their child during the puzzle task and instructed to allow the child to work individually, but provide help as they see fit.

Independent coders were trained (to attain acceptable levels of interrater reliability ($k > .70$)). The child's behavior was coded on a second-by-second basis. Child behavior was coded as either "engagement" or "no engagement." Engagement was coded when the child was actively looking at a puzzle piece or at the puzzle as a whole. This coding system accounts for passive engagement, in which the child interacts with the puzzle in an inappropriate manner, but are not actively placing pieces to complete the puzzle (e.g., playing with the pieces, making the fish piece swim). Holding a puzzle piece without visual focus on the piece was not coded. Behaviors that were obviously not working toward the completion of the puzzle or that were actively working toward putting the puzzle away (ie: racing with pieces, putting pieces in the corner of a room, putting pieces back in the puzzle board and saying "I'm done" or staring at the puzzle while screaming "I don't want to" were not coded as persistence). When a puzzle piece fell off the table and the child stopped working to retrieve it, this was counted as continued engagement because it was working toward completing the puzzle. Eye focus was the key component of coding in hopes to account for the cognitive engagement and processes that occur while working on a task, without physical action being taken. Proportion scores were calculated to determine the quantity of time spent engaged in (motivated on) the puzzle. The interrater reliability for child motivation for this sample was .871.

Paternal Involvement. Father involvement was measured using the adapted Father Involvement Scale (FIS; Sendil & Simsiki 2014.) This is an established self-report measure to assess involvement of fathers who have children ages 3-6. The adapted FIS consists of 21 items

that were rated on a 4-point Likert-type scale (1 = “never or hardly ever” to 4 = “almost daily”). A high score reflects a high level of involvement. Example items include “Spend time one-on-one with your child.”, “Share your values with your child.”, “Took measures to ensure your child’s safety.”)

Paternal SES. To assess the socioeconomic status of fathers in the study we used their income level from the demographics survey.

Parenting Style. The Coping with Children’s Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990) was used to measure parenting style. The CCNES is a widely used, reliable, and valid measure that reflects the types of responses parents have in situations during which children would likely show negative emotions. Twelve hypothetical scenarios were presented with six responses (a-f) on which parents rate the degree to which they are likely to respond that way. Ratings are on a 7-point Likert scale (1 = “very unlikely” to 7 = “very likely”).

Father Mental Health. The Center for Epidemiologic Scales Depression Scale (CES-D; Radloff, 1977) was used to measure parental depressive symptoms and mental health status. This is an established self-report measure of the symptoms of depression experienced by an individual during the past week and consists of 20 items. Individuals rated how often they felt or behaved on a 4-point Likert scale (0= “rarely or none of the time” to 3 = “most or all of the time”). Higher scores reflected more depressive symptoms. A score of sixteen or higher is used as a cut-off to indicate the possibility of clinical depression.

Results

Parent Differences in the Use of Praise

A one-way between subject analysis of variance (ANOVA) examined the effects of parent gender (father or mother) on type of praise used. There was no significant effect of parent

gender on praise for ambiguous, non-generic or total praise, $F(1, 108) = .772, p = .382, F(1, 108) = .041, p = .840, F(1, 108) = .687, p = .409$). Fathers used 14.33 ($sd = 9.02$) ambiguous praises per video and mothers used 15.87 ($sd = 9.42$). On average, fathers used 6.87 ($sd = 6.00$) non-generic praises and mothers used 7.09 ($sd = 5.27$). The average total praises used by fathers and mothers were 21.33 ($sd = 13.13$) and 23.38 ($sd = 12.88$) respectively (See Table 1). There was, however, a significant effect of parent gender on generic praise use, $F(1, 108) = 6.986, p = .009$. Fathers used .05 generic praises per interaction ($sd = .23$) whereas mothers used .42 generic praises ($sd = .99$) (See Table 1).

Associations between Praise and Motivation

The relationship between paternal praise use (ambiguous, non-generic, generic, and total) and time motivated on the puzzle were analyzed using a Pearson product-moment correlation (see Table 2). There was a significant positive relationship between ambiguous praise and time motivated, $r = .560, p < .001, R^2 = .314$, and between non-generic praise and time motivated, $r = .477, p < .001, R^2 = .228$, and between total praise and time motivated, $r = .606, p < .001, R^2 = .367$. Overall, as ambiguous, non-generic and total praise increased, the time spent motivated on the puzzle task also increased. There was no significant correlation between generic praise and time motivated, ($r = -.045, p = .746, R^2 = .002$).

Next, the relationship between maternal praise use (ambiguous, non-generic, generic, and total) and time motivated on the puzzle were analyzed using a Pearson product-moment correlation (see Table 3). There was a significant positive relationship between ambiguous praise and time motivated, $r = .597, p < .001, R^2 = .335$, and between non-generic praise and time motivated, $r = .499, p < .001, R^2 = .249$, and between total praise and time motivated, $r = .655, p < .001, R^2 = .429$. Overall, as ambiguous, non-generic and total praise increased, the time spent

motivated on the puzzle task also increased. There was no significant correlation between generic praise and time motivated, ($r = .180, p = .189, R^2 = .032$).

Parent Praise Predicting Child Motivation

A simple linear regression analyzed paternal praise (ambiguous, non-generic, generic, and total) as predictors for time spent motivated on the task. For ambiguous praise and time motivated, a significant regression equation was found, $b = .576$ ($SE = .048$), $t = 12.105$, $p < .001$ (See Table 5). Specifically, the results show that for each additional instance that fathers used ambiguous praise, the amount of time children spent engaged with the puzzle increased by .576 seconds. For non-generic praise and time motivated, a significant regression equation was found, $b = .653$ ($SE = .041$), $t = 15.989$, $p < .001$ (See Table 5). Specifically, the results show that for each additional instance that fathers used non-generic praise, the amount of time children spent engaged with the puzzle increased by .653 seconds. For total praise and time motivated, a significant regression equation was found, $b = .555$ ($SE = .046$), $t = 11.940$, $p < .001$ (See Table 5). Specifically, the results show that for each additional instance that fathers used praise, the amount of time children spent engaged with the puzzle increased by .555 seconds. A significant regression equation was not found for generic praise and time motivated, $b = .778$ ($SE = .031$), $t = 24.872$, $p < .001$ (See Table 5).

A simple linear regression analyzed maternal praise (ambiguous, non-generic, generic, and total) as predictors for time spent motivated on the task. For ambiguous praise and time motivated, a significant regression equation was found, $b = .551$ ($SE = .049$), $t = 11.322$, $p < .001$ (See Table 6). Specifically, the results show that for each additional instance that mothers used ambiguous praise, the amount of time children spent engaged with the puzzle increased by .551 seconds. For non-generic praise and time motivated, a significant regression equation was found,

$b = .627$ ($SE = .045$), $t = 13.946$, $p < .001$ (See Table 6). Specifically, the results show that for each additional instance that mothers used non-generic praise, the amount of time children spent engaged with the puzzle increased by .627 seconds. For total praise and time motivated, a significant regression equation was found, $b = .510$ ($SE = .049$), $t = 10.507$, $p < .001$ (See Table 6). Specifically, the results show that for each additional instance that mothers used praise, the amount of time children spent engaged with the puzzle increased by .510 seconds. A significant regression equation was not found for generic praise and time motivated, $b = .627$ ($SE = .045$), $t = 13.946$, $p < .001$ (See Table 6).

Paternal Factors Predicting Praise

Simple linear regressions were used to analyze several paternal factors as predictors for paternal praise. No significant results were found (See Table 7).

Discussion

The current study aimed to explore the gap in research that exists on the association between father praise and child motivation. Specifically, we examined paternal praise patterns and their impact on motivation in preschool age children. We were interested in how paternal praise differed from that of mothers in both quantity and quality (generic, non-generic, or ambiguous). Several father characteristics were examined to determine underlying reasons as to why paternal and maternal praise differed. Overall we found that father and mother praise habits were very similar and that an increase in praise resulted in an increase in motivation. We did not discover a significant association between any paternal factors and praise.

The first aim of this study was to examine the nature of praise used by fathers, as compared to mothers, during a challenging task with their preschool-age child. Contrary to hypotheses, I found that mothers and fathers were similar in both the frequency and types of

praise used. Both parents used a majority of ambiguous praise followed by non-generic praise. One factor in ambiguous praise accounting for the majority of praise could be due to the fact that we were generous in our definition of praise and included “yeah”, “mhmm”, gasps and other wow or excited noises. Additionally, ambiguous praises were often paired with other praises. For example, “Wow, good job” would count as both ambiguous and non-generic, leading to a large amount of ambiguous coded praises. The results did however show a significant difference in the use of generic praise between mothers and fathers. Fathers were using significantly less generic praise (e.g., “You are so good at this!”) compared to mothers. It is important to interpret these findings with caution, as there were relatively low instances of generic praise across both parents. A possible explanation for the significant difference in mother and father generic praise could be the difference in female and male communication styles. Research shows that females tend to use communication to increase intimacy and social connections whereas men use it to achieve tangible outcomes (Leaper, 1991; Maltz & Borker, 1982; Wood, 1996; Mason, 1994 as cited in Merchant, 2012). This supports the notion that men would be less likely to compliment an individual over the process, because their goal is to obtain the desired outcome, which in this case is completion of the puzzle. Women, on the other hand, may desire to use this interaction to complement their child in hopes of creating a closer tie with them. Women are more expressive overall, and thus could lead to more diversity in wording of compliments (Merchant, 2012).

The second aim of the study was to determine the association between paternal praise and child motivation. I hypothesized that father-child results would align with the results found in past mother-child praise research, such that higher rates of non-generic and ambiguous praise would be associated with increased child motivation. The results supported this hypothesis, indicating that as ambiguous praise, non-generic praise, or total praise increase, the total

proportion of time motivation on the task also increases. These associations were also seen for the mother-child dyads in our sample. The relationship between total praise and motivation can perhaps be explained by the fact that the vast majority of praise was comprised of ambiguous and non-generic praises, which are linked with increased motivation. It would be interesting to see if this association was still present if we had seen an equal amount of generic praises. These results suggest that it is important to increase ambiguous, non-generic, and total praise, but not generic praise, in both mothers and fathers in order to increase motivation on a challenging task in preschool age children. Furthermore, our data suggests that fathers and mothers affect their children in the same way and thus we can treat them the same when teaching parents about praise and motivation. The results from this study support the idea that father behavior and father-child interaction is equally as important as the mother-child relationship. This is important because research and child-rearing education historically places emphasis on mothers and neglects the significant role played by fathers.

The final aim of the current study was to examine factors that might explain the frequency and types of praise that fathers use. Contrary to my hypotheses, the analyses revealed that paternal praise was not significantly related to aspects of father involvement, parenting style, mental health, or SES. The factors examined in this study were determined using the data from report measures used in a previous study conducted in our lab. Therefore, we were only able to include factors that were indicated from the previously selected scales. In future research, it would be interesting to examine whether parent attachment style, partner satisfaction, the parenting style used when they were a child, warmth and sensitivity, or other measures had an impact on praise.

There are several limitations of the current study that warrant discussion. First, the sample population in this study lacked diversity and was not representative of the total U.S population. The parents in this study consisted of majority Caucasian, college educated, high socioeconomic (SES) families. All fathers in the study were in committed relationships and were found to have low levels of depressive symptoms. This limitation could be a possible explanation for the lack of generic praises in our data, as well as the lack in differences between paternal and maternal praises. Typically higher SES families have better access to parenting resources and knowledge and thus may be aware of the more beneficial ways to praise their children (Bornstein & Bradley, 2003). One way to combat the lack of generic praise in future research would be to conduct an experimental design. Children would be assigned to different conditions (generic, non-generic, ambiguous and a control group) to ensure that each praise type is present and to test how different types compare in terms of impact on motivation. A few final limitations of the current study lie within our praise coding system. The system did not account for tone of voice, inflection, or facial expression. Facial expressions and tone can reveal much more meaning in a phrase than the words themselves, so this would be a factor to consider and account for in future study. Additionally, our coding system was perhaps too generous with the inclusion of “yeah”, “yes”, “mhm” and other gasping noises – therefore I would recommend perhaps a more in-depth, complex coding scheme outlining when to include a ‘yes’ or ‘mhm’ versus when not to include them. Lastly, there were several phrases such as “there you go” that could have been intended as or perceived as encouragement instead of praise and vice versa. We were not able to assess whether preschool age children perceived certain phrases as praise or not which could also be a factor in the effectiveness of those praises leading to motivation.

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Appendix

Table 1

Praises Used by Fathers and Mothers During the Challenging Task

Type of Praise	<i>N</i>	Minimum	Maximum	Mean	<i>SD</i>
Ambiguous Praise - Father	55	1	41	14.3273	9.02272
Ambiguous Praise - Mother	55	0	40	15.8727	9.42034
Non-Generic Praise - Father	55	0	31	6.8727	6.00634
Non-Generic Praise - Mother	55	0	21	7.0909	5.27142
Generic Praise - Father	55	0	1	0.0545	0.22918
Generic Praise - Mother	55	0	4	0.4182	0.99426
Total Praise - Father	55	1	58	21.3273	13.12625
Total Praise - Mother	55	0	57	23.3818	12.87905

Table 2

Differences Between Father and Mother Praise Use

Type of Praise	Sum of Squares	df	Mean Square	F	p
Ambiguous Praise	65.682	1	65.682	0.772	0.382
Non-Generic Praise	1.309	1	1.309	0.041	0.84
Generic Praise	3.636	1	3.636	6.986	0.009**
Total Praise	116.082	1	116.082	0.687	0.409

* denotes $p < .05$, ** denotes $p < .01$

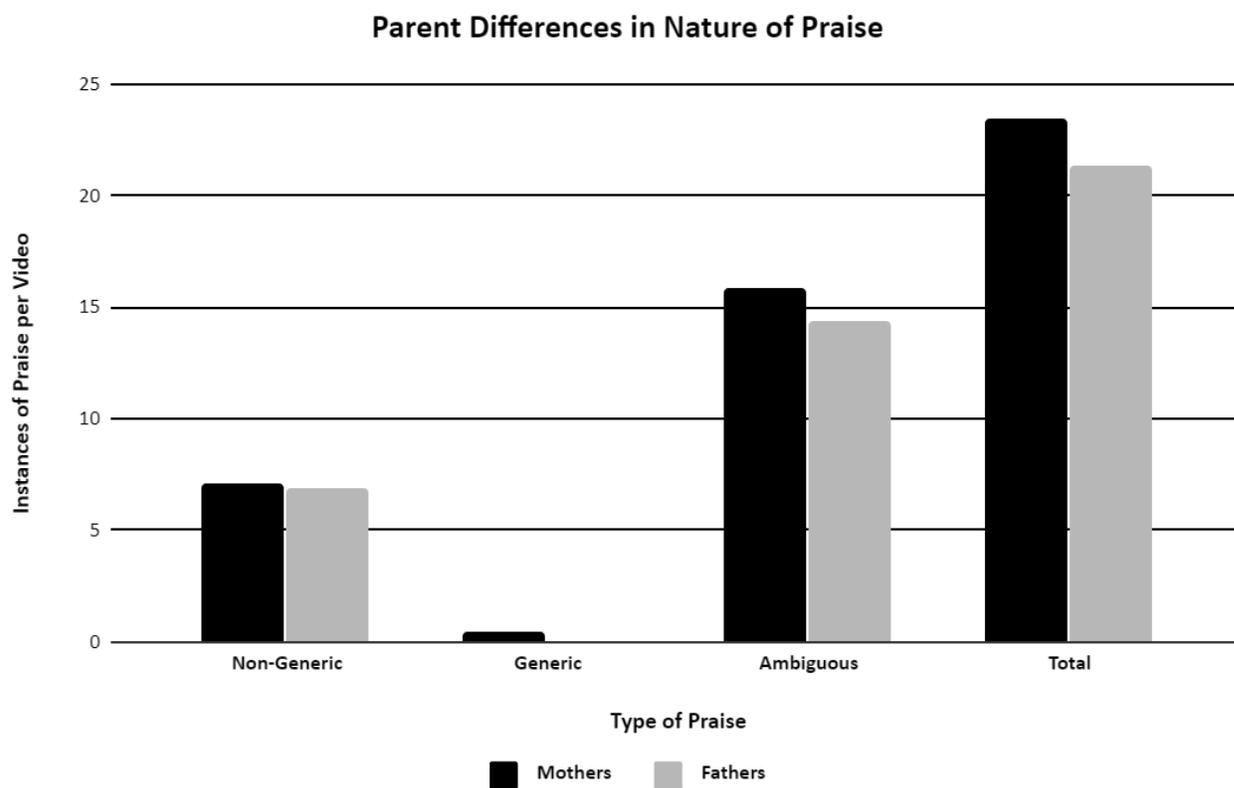


Figure 1. Comparison Between Types of Praises Used by Fathers and Mothers.

Table 3

Relationship Between Paternal Praise and Proportion of Time Motivated on the Puzzle

	Proportion of Time Motivated	Total Praise	Ambiguous Praise	Non-Generic Praise	Generic Praise
Proportion of Time Motivated	1				
Total Praise	0.606**	1			
Ambiguous Praise	0.560**	.911**	1		
Non-Generic Praise	0.477**	.797**	.479**	1	
Generic Praise	-0.045	0.142	0.036	0.180	1

* denotes $p < .05$, ** denotes $p < .01$

Table 4

Relationship Between Maternal Praise and Proportion of Time Motivated on the Puzzle

Mothers	Proportion of Time Motivated	Total Praise	Ambiguou s Praise	Non-Generic Praise	Generic Praise
Proportion of Time Motivated	1				
Total Praise	.655**	1			
Ambiguous Praise	.597**	.922**	1		
Non-Generic Praise	.499**	.736**	.425**	1	
Generic Praise	0.180	.316*	0.211	0.205	1

* denotes $p < .05$, ** denotes $p < .01$

Table 5

Paternal Praise Predicting Child Motivation

	B	SE	β	<i>t</i>	<i>p</i>
Constant	0.576	0.048		12.105	0
Ambiguous Praise	0.014	0.003	0.560	4.925	0
Constant	0.653	0.041		15.989	0
Non-Generic Praise	0.018	0.004	0.477	3.954	0
Constant	0.778	0.031		24.872	0
Generic Praise	-0.044	0.134	-0.045	-0.325	0.746
Constant	0.555	0.046		11.940	0
Total Praise	0.010	0.002	0.606	5.545	0

Table 6

Maternal Praise Predicting Child Motivation

	B	SE	β	<i>t</i>	<i>p</i>
Constant	0.551	0.049		11.322	0
Ambiguous Praise	0.014	0.003	0.597	5.418	0
Constant	0.627	0.045		13.946	0
Non-Generic Praise	0.021	0.005	0.499	4.195	0
Constant	0.761	0.033		23.163	0
Generic Praise	0.041	0.031	0.180	1.330	0.189
Constant	0.510	0.049		10.507	0
Total Praise	0.011	0.002	0.655	6.309	0

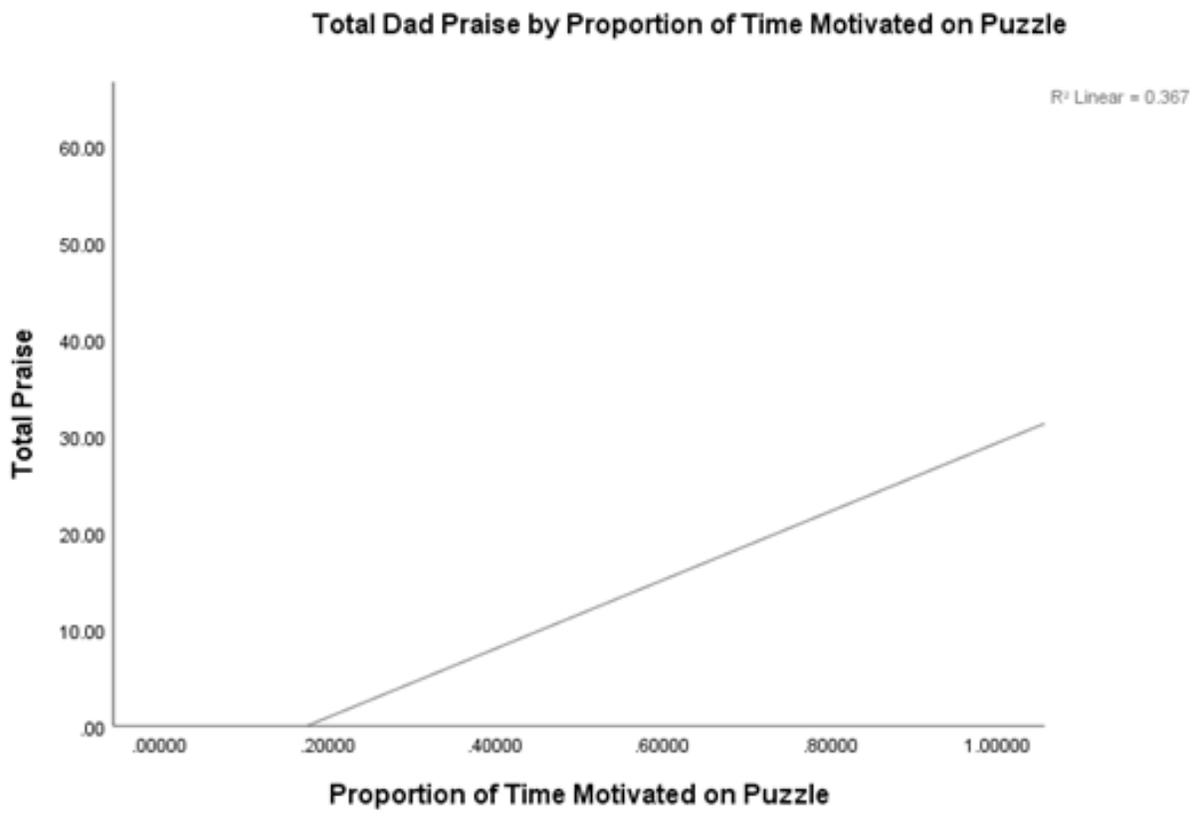


Figure 2. Total Paternal Praise Predicting Child Motivation.

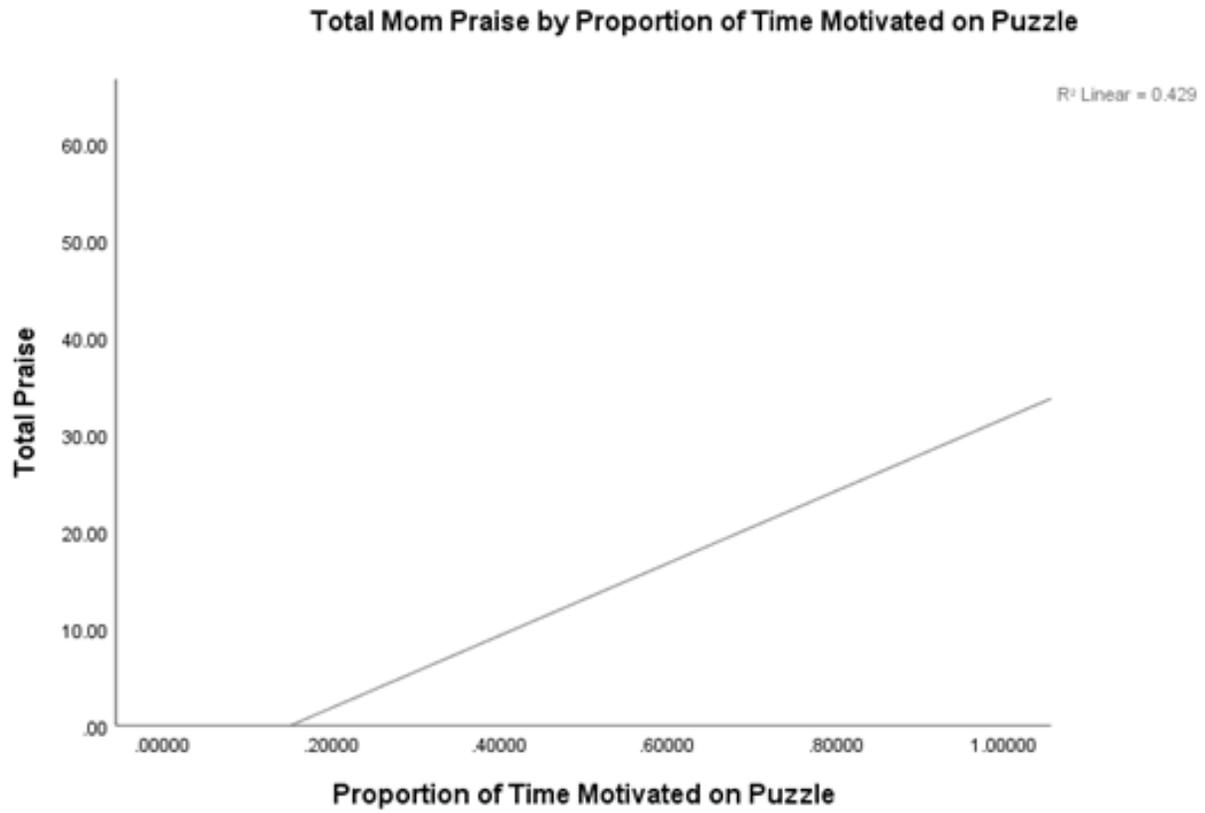


Figure 3. *Total Maternal Praise Predicting Child Motivation*

Table 7

Paternal Factors Predicting Total Praise

Paternal Factors	B	SE	β	<i>t</i>	<i>p</i>
STAI State Anxiety	-0.308	0.217	-0.193	-1.417	0.162
Depressive Symptoms	-0.31	0.25	-0.169	-1.24	0.221
CCNES Distress Reactions	0.728	2.667	0.039	0.273	0.786
CCNES Expressive Encouragement	-0.047	1.63	-0.004	-0.029	0.977
CCNES Problem-Focused Reactions	-0.28	2.187	-0.018	-0.128	0.899
Total Caregiving Involvement	-5.758	4.368	-0.18	-1.318	0.193
Caregiving Only Subscale	-4.999	3.023	-0.224	-1.654	0.104
Impulsiveness Scale	-0.067	0.212	-0.05	-0.314	0.755
CSI Total	0.044	0.08	0.077	0.556	0.581
Income Level - SES	0.247	1.122	0.03	0.22	0.826