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U.S. parents' attitudes toward playful learning

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Introduction: There has been a surge of research on the power of play to facilitate learning in recent years. Guided play, specifically, has emerged as an optimal learning approach over free play and direct instruction. However, whether parents' attitudes toward play align with the emerging research remains largely unexplored. Addressing this gap, the present study is the first to operationalize play by using the playful learning spectrum (i.e., free play, guided play, games, and direct instruction) to investigate parents' attitudes toward play.

Methods: The study surveyed a broad, national sample of parents with at least one child aged 2 to 12 years living in the United States ($N = 1,172$). To understand preferences for each approach and the factors related to those preferences, we examined how individuals regarded each of the four learning approaches and ran a series of regressions predicting perceptions of learning from the approaches as a function of demographic and attitudinal factors. These regressions were estimated in two different ways, allowing us to identify which predictors were related to each outcome as well as which explained these perceptions uniquely, over and above other predictors.

Results: The findings revealed a preference for play over direct instruction, with parents likely to perceive free play as most conducive to learning. Regression analyses uncovered significant variations in perceptions based on demographic and attitudinal factors, with highly educated respondents most likely to endorse free play, more knowledgeable respondents most likely to endorse guided play and the least educated respondents most likely to favor direct instruction.

Discussion: While the study reveals parents' evolving, positive attitudes toward play, it also underscores a gap between academic research, which highlights the advantages of guided play, and parents' perceptions. Implications for parent support initiatives are discussed.

KEYWORDS

playful learning, guided play, parent attitudes, free play, play attitudes, play spectrum

1 Introduction

Play has long been regarded as a critical activity for children's learning and development (Rousseau, 1779; Plato, 1952; Singer et al., 2006; Elkind, 2008; Fisher et al., 2008; Zigler and Bishop-Josef, 2009; Lillard et al., 2013). However, shortly after the turn of the twenty first century, there was a notable shift away from acknowledging its significance due to the prioritization of more didactic, academically-focused learning experiences (Barros et al., 2009; Miller and Almon, 2009; Bassok et al., 2016; Ring and O'Sullivan, 2018). In the United States, this shift was reinforced by policies such as the No Child Left Behind Act

(NCLB) and the Every Child Succeeds Act (ESSA), which emphasized success in academic skills and test scores. As a result, parents felt increasing pressure to ensure their child's academic achievement, often replacing their child's play time with structured activities (Hirsh-Pasek et al., 2004; Elkind, 2007; Frost, 2012; Kane, 2016; Sahlberg and Doyle, 2019). The absence of play led psychologists and policy experts to argue that play was under siege (Zigler and Bishop-Josef, 2009) and had been reduced to a mere four-letter-word (Hirsh-Pasek et al., 2004).

There has been a resurgence of interest in the power of play in recent years, with calls to let the children play echoing the urgent need to reinstate play as an essential component of children's learning and development (Yogman et al., 2018; Sahlberg and Doyle, 2019). This renewed attention is reflected in government initiatives mandating the inclusion of play in education policies, schools revising their curricula to incorporate principles of playful learning, and communities actively embedding playful learning catalysts into their infrastructure (Hirsh-Pasek et al., 2022a,b; Pesch et al., 2022; Nesbitt et al., 2023). Support for the importance of play for children's development was documented in the recent past (Piaget, 1945; Rubin et al., 1983; Bergen, 1998). However, a revival of interest in play is driven by cutting-edge research that has unveiled the potential of playful learning to not only foster subject-specific knowledge but also to cultivate a range of interdisciplinary skills essential for children to thrive in an increasingly globalized and automated world (Golinkoff and Hirsh-Pasek, 2016; Hirsh-Pasek et al., 2020). During playful learning, children have agency to direct their learning as they engage in meaningful and socially interactive experiences with appropriate scaffolding from an adult toward specified learning goals (Zosh et al., 2018; Hirsh-Pasek et al., 2022a,b).

Despite the apparent renewed interest in play within contemporary society and the growing body of research highlighting its capacity to facilitate powerful learning experiences in the academic and educational realm, little is known about whether parents' play perceptions and attitudes toward play are in concert with the newest findings. How do parents' perceptions of play align with the most cutting-edge play and learning research? This study delves into this inquiry to gain a deeper understanding of parents' perspectives regarding the learning value of playful learning.

Though play is often hard to operationalize (Reilly, 1974, p. 58; Sutton-Smith, 1997; Bergen, 1998), Zosh et al. (2018, 2022) noted that play could be described as learning opportunities that occur on a spectrum (Figure 1). This approach uses three dimensions to characterize different play experiences: the level of adult direction, whether there is child agency, and the presence of a learning goal (see Zosh et al., 2018, 2022). At one end of the spectrum is *free play*, which is both initiated and directed by children without any specific learning goals. *Guided play* maintains the agency of child-directed play, but differs from free play, given that it is initiated by the adult with a learning goal in mind. It can happen in the home and as families move about the world, as in a well-curated classroom (Lillard, 2013), museum (Callanan et al., 2020), or park (Bustamante et al., 2020). During guided play, adults intentionally design the learning environment and gently scaffold the child's learning through open-ended questions or prompts toward specific learning goals (Weisberg et al., 2016). *Games* are also child-directed and have built-in rules and constraints to guide children to build new knowledge (Hassinger-Das et al., 2017). *Direct instruction* is both initiated and directed by an adult with a learning goal.

This operationalization of play as lying on a spectrum has allowed researchers to explore the pedagogical conditions that promote specific learning and developmental outcomes. Free play is essential for a child's well-being and promotes social, physical, and executive function development (Singer et al., 2006; Santer and Griffiths, 2007; Yogman et al., 2018; White et al., 2021; Colliver et al., 2022). By allowing children to be in charge, they come to develop agency and can correct course without others' intervention. Direct instruction facilitates the learning of specific procedures and facts (Klahr and Nigam, 2004, but see Dean and Kuhn, 2007) by telling children what they need to know as they passively listen. Guided play, when children have agency with subtle adult guidance, has emerged as the foremost demonstration of the playful learning principles and an optimal pedagogical approach for learning.

In a comprehensive systematic review and meta-analysis of 39 intervention studies, Skene et al. (2022) established that guided play emerged as a superior approach for children to acquire a wide range of skills, including mathematics and language skills, surpassing both free play and direct instruction. This finding corroborates a prior meta-analysis by Alfieri et al. (2011), which demonstrated that guided instruction had a more substantial

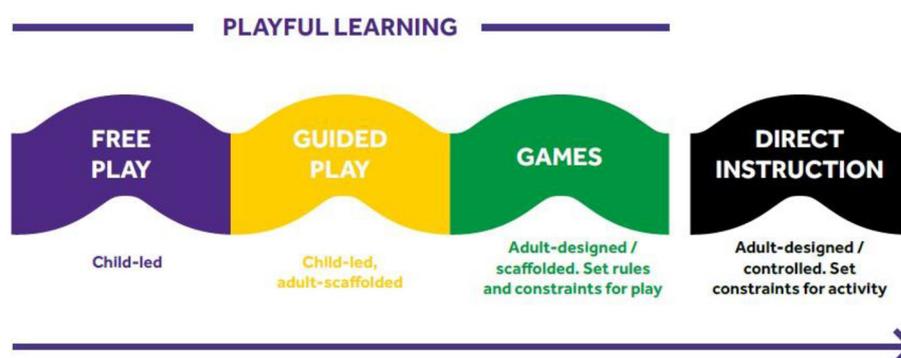


FIGURE 1
The playful learning spectrum (Zosh et al., 2018; Wright et al., 2022a).

impact on learning outcomes compared to didactic instruction and unassisted discovery (like free play). Furthermore, additional studies have consistently highlighted the benefits of guided play in areas such as problem-solving (Hollenstein et al., 2022), early language and literacy skills (Han et al., 2010; Cavanaugh et al., 2017; Toub et al., 2018), math skills (Fisher et al., 2013; Jirout and Newcombe, 2015) and increased spatial and math talk during play (Eason and Ramani, 2020).

While the growing body of evidence supports the effectiveness of guided play as a pedagogical approach, parents' perceptions of the learning value of guided play as compared to other approaches to learning like free play and direct instruction, remain unknown. Thus, the first objective of this study is to investigate and compare how much learning parents attribute to free play, guided play, games, and direct instruction. Parents are the driver of at-home learning and have an increasing influence over learning at school in the U.S. (Eichner, 2023), it is crucial to align parent perceptions with research on how children learn best. Understanding parents' perceptions is a foundational step toward providing targeted support to bridge gaps between research findings and parental perspectives. As attitudes around play are significantly associated with parent behaviors, supporting parents to foster effective learning environments for children at home can only be accomplished if we know how parents think. Parents who believe in the learning potential of play tend to devote more time and space to play activities and are more likely to actively engage in their child's play (Fisher et al., 2008; Bulotsky-Shearer et al., 2016; Manz and Bracaliello, 2016). This, in turn, has been associated with positive social-emotional and cognitive outcomes for children (Tamis-LeMonda et al., 2004; Fogle and Mendez, 2006; Walker et al., 2011; Roopnarine and Jin, 2012; Bierman et al., 2015; Rowe et al., 2017; Amodia-Bidakowska et al., 2020; Metaferia et al., 2020).

Prior research has revealed inconsistencies in parents' perceptions regarding both what constitutes play and the learning value attributed to play vs. structured activities. For instance, Fisher et al. (2008) conducted a study in which mothers and experts were asked to rank activities based on their playfulness and their perceived relationship to academic learning. They found the mothers in their study had varying play "profiles." Some mothers classified all activities ranging from structured to unstructured, as play, while other mothers classified just unstructured activities as playful. A third group favored structured activities and ascribed less value to play activities. Overall, mothers generally attributed greater educational value to structured activities compared to unstructured play, exactly the opposite of how experts in the study rated these activities.

In their qualitative study with parents of preschool children, Hatcher et al. (2012) found few parents mentioned play as an important part of preschool and no parents tied play to learning or desired "kindergarten readiness" outcomes. A more recent study with 232 low-income mothers in the United States found most mothers valued play to enhance their child's school readiness. The mothers in their study were more inclined to endorse play that more closely aligns with the definition of guided play rather than free play (LaForett and Mendez, 2017). In sum, U.S. parents seem to have interest in play activities that facilitate their children's learning, such as school readiness activities.

The second objective of this study is to investigate whether parents' valuations of play experiences change when the experience is identified as free play, guided play, or games. Given the complexities and different connotations inherent in the term "play," perceptions of play can vary considerably, arising not only from diverse conceptualizations of play but also from how play descriptions or scenarios are presented (Gonzalez-Mena, 2008). Even when descriptions refer to identical ideas, identifying the experience as "free play," "guided play," or "games" may influence perceptions of that experience as these terms have certain connotations and associations. For example, some may see the term "free play" and associate it with creativity and active learning (Sahlberg and Doyle, 2019), whereas others may perceive "free play" as just-for-fun or frivolous, and therefore not associated with learning (Elkind, 2007; Brown, 2009). Thus, explicitly naming certain experiences as "free play," "guided play," or "games" may have a framing effect. For instance, do parents rate the learning value of guided play experiences differently when the experiences are labeled as "guided play" vs. when they are not? We expect that when the experiences are labeled as "free play," "guided play," and "games" when presented to parents, they may attribute less learning value to the approaches due a traditional dichotomization of play and learning (Pramling Samuelsson and Johansson, 2006).

Parents' perceptions about play and learning are influenced by both individual experiences and cultural norms (McGillicuddy-De Lisi, 1982; Sigel and McGillicuddy-De Lisi, 2002; Legare and Harris, 2016). Thus, our third and final objective is to explore the influence of demographic and attitudinal variables on parent attitudes toward play. Previous research found that White, Euro-American parents saw the educational and developmental value of play, whereas Asian and Latine parents conceptualized play as more for fun, rather than for learning (Farver and Howes, 1993; Farver et al., 1995; Parmar et al., 2004). More recent research has challenged this finding and revealed how perceptions of the value of play are shifting across diverse demographic and geographic contexts (Hyun et al., 2021; Foulds, 2022). Fasoli (2014) found both Euro-American and Latine parents perceived play as important for learning. However, Euro-American parents gave their children more agency during play than Latine parents, highlighting the importance of studying parents' perceptions of learning through play using more nuanced conceptualizations of play. In sum, the literature on the potential influence of race and ethnicity to influence parent play perspectives is varied, thus we take an exploratory approach to investigate the impact of this variable on parents' perceptions.

Parental education and income levels may significantly impact parent play and learning perceptions, with higher levels of education predicting more positive attitudes toward play and lower emphasis on academic readiness (Fogle and Mendez, 2006; Rose and Elicker, 2008; LaForett and Mendez, 2017). Conversely, parents with lower levels of education may value direct instruction teaching methods (Stipek et al., 1992). Given the prior literature on the association between parent education level and play perceptions, we hypothesized that parents with lower levels of education would favor direct instruction and parents with higher levels of education would be more likely to prefer forms of play. The role of income level in influencing U.S. parents' play perceptions has yet to be

investigated. Other studies conducted in Australia (Smith et al., 2015), Canada (Lukie et al., 2014), Taiwan (Lin and Yawkey, 2013) and Qatar (Ihmeideh, 2019) found socio-economic status (SES) influenced parents' play perceptions and behaviors such that parents with higher SES were more likely to have positive perceptions of play and to engage their child in play. Nevertheless, the scarcity of related research done in the United States prevents the formulation of a well-established hypothesis, thus prompting us to adopt an exploratory approach in investigating the potential impact of income level on parents' perceptions of the learning value of different approaches on the playful learning spectrum.

Prior literature has found that child characteristics, such as gender and age, influence parents' perceptions of play. Gleason (2005) found that parents of daughters viewed pretend play more favorably than those with sons. Elkind (2010) reported a similar finding where mothers were more likely to have play interactions with their daughters than with their sons. Regarding the influence of child age, past studies found that parents' support for play tends to decrease as children get older (Huisman et al., 2013; Warash et al., 2017). In a survey study with parents of children ages three to five, Warash et al. (2017) found parent valuations of play tended to decrease the closer their child was to entry to kindergarten. The heightened emphasis on standardized testing as children progress in age may lead parents of older children to place greater learning value on direct instruction in comparison to play approaches. Therefore, we hypothesize that parents will ascribe more learning value to play (i.e., free play, guided play, and games) for daughters than for sons. We expect that parents of older children will be more likely to think children can learn a lot from direct instruction while parents of younger children will be more likely to think children can learn from play.

Other factors like child development knowledge and self-efficacy can play a role in how parents engage in play with their child (Damast et al., 1996; Tamis-LeMonda et al., 1998; McMillin et al., 2015; LaForett and Mendez, 2017). LaForett and Mendez (2017) found that lower levels of self-efficacy positively predicted parents favoring academic activities over play. Similarly, McMillin et al. (2015) found that mothers' child development knowledge helped predict the way they interact with their child during play, with mothers with lower child development knowledge engaging in more structured interactions. Challenges such as lack of time may also influence parents' play beliefs and behaviors, such that they are less likely to have positive perceptions of play and engage in less play time with their child (Shah et al., 2019a). Thus, we anticipated parents who scored highly in child development knowledge and self-efficacy would be more likely to think children can learn from play, and parents who reported high levels of challenges would be more likely to think children can learn from direct instruction.

This study explores how parents' attitudes toward play align with cutting-edge play and learning research. Using a multidimensional operationalization of play, *the playful learning spectrum*, we investigate how parents value learning across different approaches to play and direct instruction. Additionally, we examine whether parents' valuations of play experiences differ depending on whether the experiences are explicitly named in the description presented to parents. Finally, we explore how parent perceptions of different types of play and direct instruction vary by demographic

background (i.e., parents' income, race and ethnicity, education level, child gender, and child age), and attitudinal factors (i.e., knowledge, self-efficacy, and challenges). This study is a crucial first step toward improving parents' intervention programs aimed at enhancing parental understanding of optimal learning approaches. By offering insights into how parents' perceptions may differ based on demographic and attitudinal variables, findings allow practitioners to provide tailored support to align current parental understanding with emerging scientific findings.

2 Methods

2.1 Participants

A broad national sample of 1,172 parents living across the U.S. were recruited by Qualtrics Panels in 2023 to complete a large-scale survey of parent beliefs and behaviors related to play and learning. Parents ranged from 18- to 75- years-old ($M = 37.67$, $SD = 8.59$) with children aged 2 to 12 ($M = 7.44$, $SD = 3.01$). The cohort was 14.4% Hispanic, 68.9% White, 10.3% Black, 3.4% Asian, 0.4% American Indian or Alaska/Native, 2.6% Multiple Races. About half the sample identified as female (51.6%), and about half identified as male (48%), with 0.4% describing themselves as non-binary. About twelve percent of parents reported an income of <\$25,000, 17.8% reported an income of \$25,000 to \$49,999. Over a third of parents (36.7%) made between \$50,000 and \$99,999 while 32.8% made more than \$100,000. In terms of education level, 4.4% of parents had some high school, with no high school diploma, 32.4% completed high school, 29.8% completed some college, 21.5% were college graduates and 11.9% of parents had a postgraduate degree.

2.2 Procedure

Prior to data collection, the Institutional Review Board (IRB) of a university in the Mid-Atlantic region of the United States granted approval for the study. Survey participants were recruited through Qualtrics Panels, which utilizes diverse recruitment sources and offers appropriate incentives based on the method of recruitment. The survey was conducted from January to March 2023. Parents who had at least one child aged between 2 to 12 years living in the household were eligible for the survey. As part of the study, parents were asked to provide the name of one of their children. Subsequent child-specific questions were asked by inserting that child's name.

2.3 Measures

The subset of questions used for this study are from a larger survey which consisted of 115 multiple choice questions and one open response question. Demographic questions taken from the US Census related to parent education level, income level, race, ethnicity, child age, and child gender were used for this analysis.

2.3.1 Playful learning items

Parents were asked five questions based on the categorization of free play, guided play, games, and direct instruction consistent with Zosh et al.'s (2018) playful learning spectrum. Four items measured how much children could learn from each of the four approaches (i.e., free play, guided play, games, and direct instruction) and one item asked which approach they thought children would learn the most from. For the items related to each approach, parents were provided a description of the approach and asked to rate how much they thought children could learn from the approach (i.e., "How much do you think a child can learn...?") on a 5-point Likert scale. Response options were "Nothing at all" (coded: 0), "A little" (0.25), "A moderate amount" (0.5), "A lot" (0.75), and "A great deal" (1).

To investigate our second objective, whether naming the approaches explicitly in the description had a framing effect on parents' valuations of the described learning experience, about half ($N = 659$) of the sample was randomly assigned to receive just the description of the approach (e.g., "Imagine a situation where a parent gives their child free time and lets them play with available materials and resources freely. The child decides what to do and how to play in this interaction.") and the other half ($N = 513$) was also given the names of the approaches along with the descriptions (e.g., "Free play is when a parent gives their child free time and lets them play with available materials and resources freely. The child decides what to do and how to play in this interaction.")

For the item related to which approach children learn the most from, all respondents were asked, "What type of interaction do you think children can learn the most from?" and were provided with the same four descriptions as in the earlier questions, but not the name. Cycles of expert review and revision of the items were completed to ensure the descriptions of each playful learning spectrum approach clearly and accurately reflected existing literature.

2.3.2 Attitudinal factors items

A *Knowledge* score was created by indexing three items from the Knowledge of Infant Development Inventory (KIDI; MacPhee, 1981). A *Challenges* score was created by indexing three items that asked parents how often they experienced challenges due to insufficient time to support their child and difficulties accessing materials and places to play and learn. A *Self-Efficacy* score was created by reversing the *Challenges* score and combining it with one item that asked parents to rank how much what they did mattered for their child's future success compared to their child's teachers and another item that asked parents how confident they feel in their ability to support their child's learning at home.

3 Results

3.1 Parent perceptions overall about the playful learning spectrum approaches

Parents generally reported that each of the approaches was relatively effective. For all four questions the median response

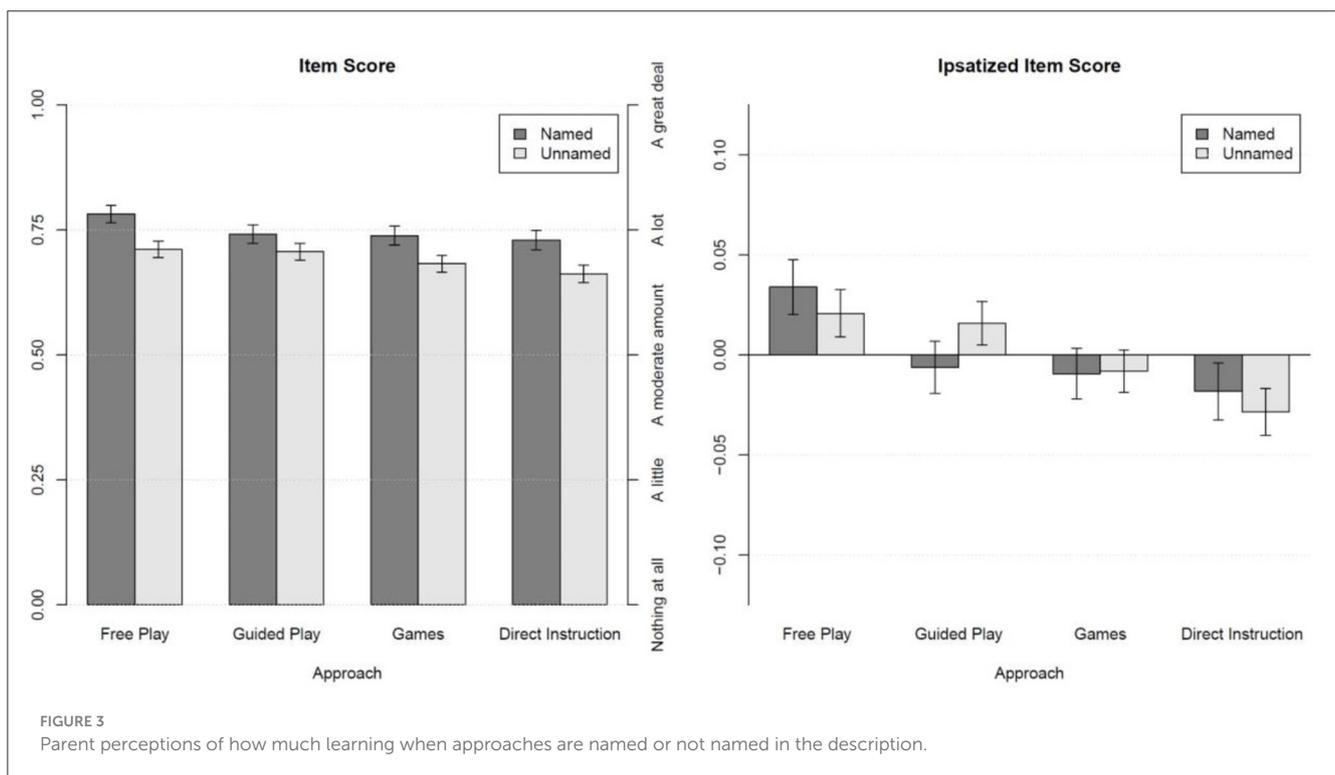
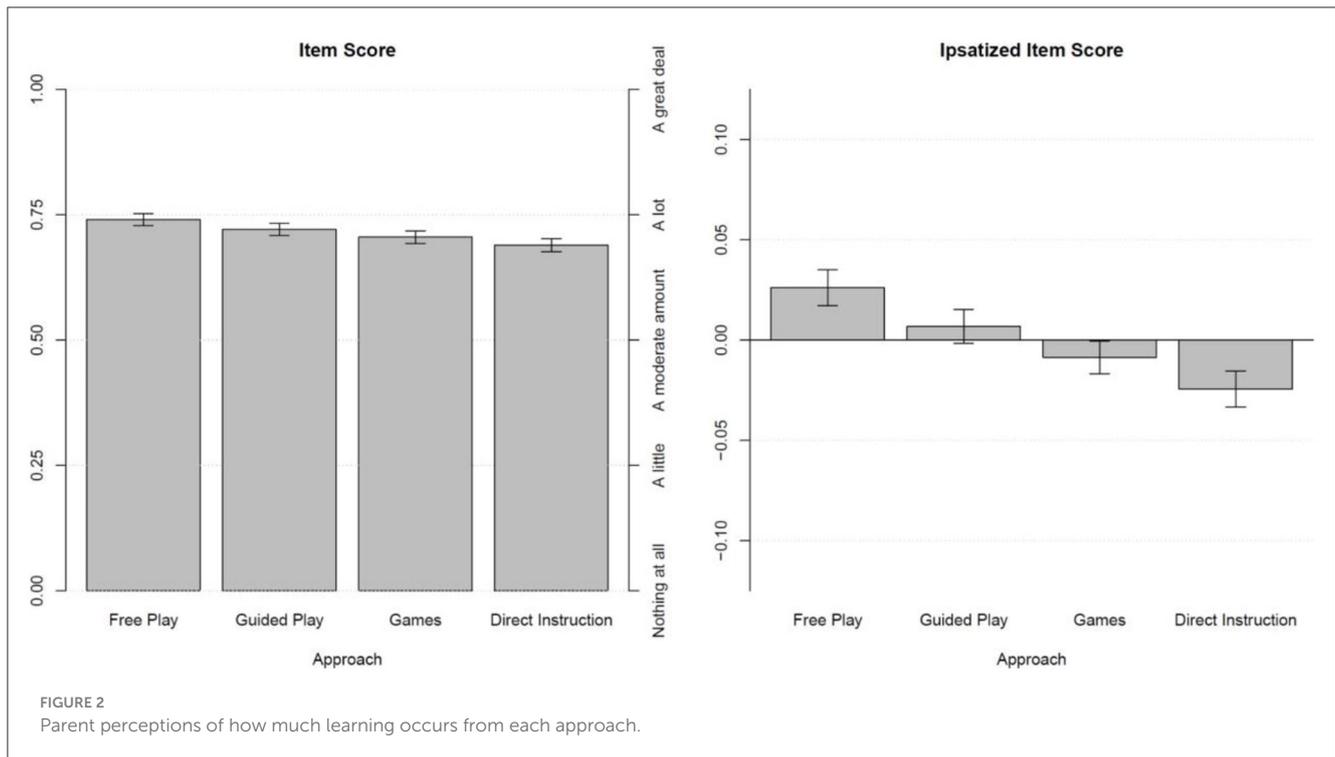
was that children could learn "a lot" from the method (a 0.75 on the scale) and a small number said that children would learn "nothing at all" (a mere 15 of 4,688 responses). Although parents were convinced that all of these facilitated at least some learning, they did not view the approaches as equal; only 18.9% of parents gave the same response to all four questions. Parents also differed notably in how they used the response scales. For instance, 14.2% of parents reported that either 3 or 4 of the methods produced "a great deal" of learning whereas 46.6% of respondents said that none of the approaches yielded that much learning. These differences in response patterns led us to examine how parents viewed each of these approaches relative to the others rather than focusing on the specific answers that parents gave. For most of the analyses in the paper, we therefore present ipsatized results, where each individual's average score was subtracted from the value for each item. The ipsatization accounts for method biases whereby respondents who give relatively higher ratings to all items may be concentrated in certain demographic groups.

Overall, parents were the most likely to say that learning results from free play ($M = 0.74$), followed by guided play (0.72), games (0.70), and direct instruction (0.69). The raw and ipsatized means of the answers that parents gave are presented in Figure 2 (in the left and right panel, respectively) along with associated 95% confidence intervals. While both methods reveal identically sized differences between the evaluations of the different approaches, standard errors for the estimates are much smaller when individual differences in response styles are accounted for (as this removes a large extraneous source of variability). Hence, we can conclude from both strategies that free play is preferred over all the other approaches and that guided play is preferred over direct instruction. *T*-tests using the ipsatized method also reveal that the differences between guided play and games ($t = -2.58, p = 0.01$) and between games and direct instruction ($t = 2.55, p = 0.01$) are statistically significant.

When the description included the name of the approach to learning, parents reported that each of the approaches would result in more learning (Figure 3, left panel; $ps < 0.01$). Although the relative ordering of the approaches was the same, the preference for free play as compared to the other methods was stronger when types were named and there was no longer a significant difference between guided play and either games or direct instruction.

3.2 Parent perceptions about the playful learning spectrum approaches according to demographic and attitudinal variables

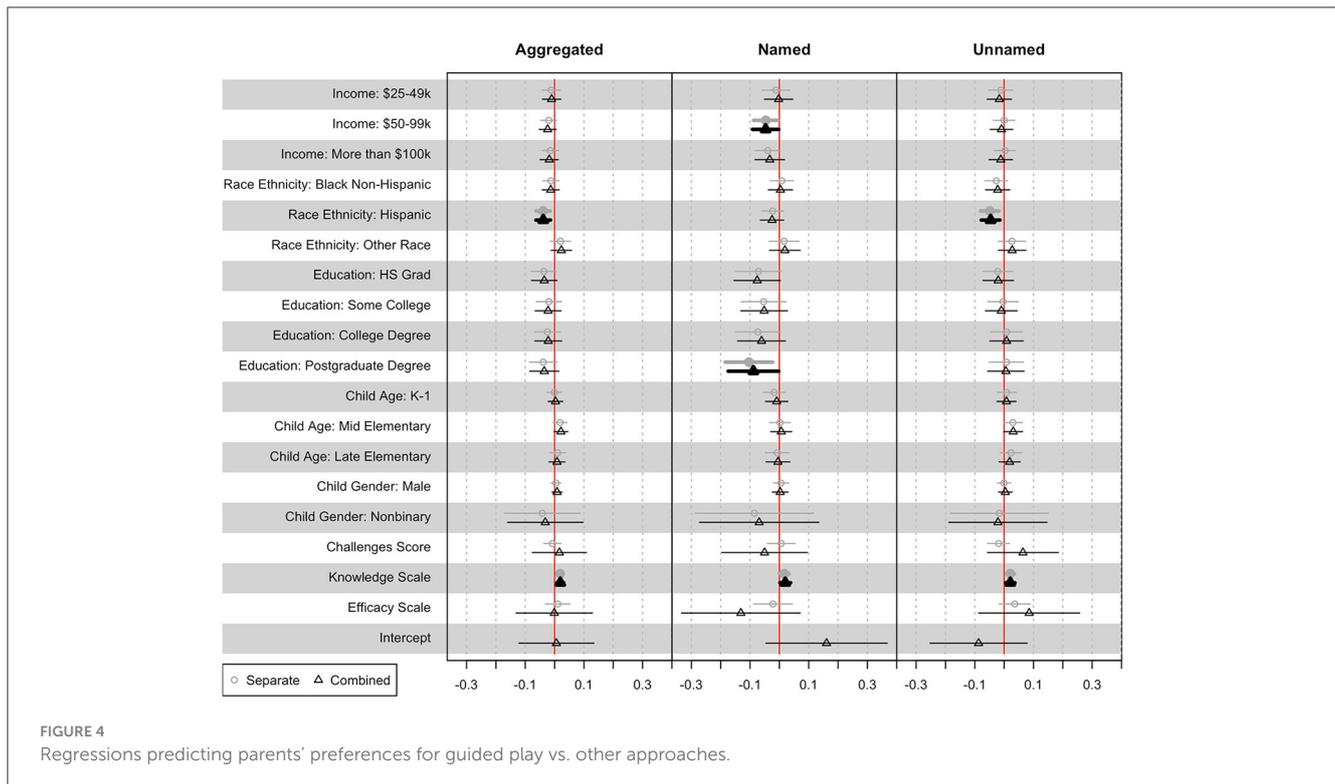
To assess how demographics and associated attitudes relate to perceptions of learning according to the different approaches on the playful learning spectrum, we examined respondents' answers in two ways. First, we examined how respondents' ratings of the learning questions vary across demographic and attitudinal groups. Second, we attempted to identify which demographic categories contribute most to the approach preferences that respondents report. To do this, we assess demographic and attitudinal differences in relative preferences by running regressions predicting each learning outcome with one demographic or attitudinal variable at a time (separate); we then identify the unique



predictors by including the same variables simultaneously in a larger model (combined). We ran separate regression analyses across three types of datasets: aggregated (named + unnamed conditions), named condition, and unnamed condition to capture significance both in the combined (aggregated) sample, as well as each condition.

3.2.1 Guided play regressions

Figure 4 presents the results of regression analyses predicting parents' guided play preference over other methods such as free play, games, and direct instruction. Across the three datasets, having a higher knowledge score significantly predicted a parent's preference for guided play over other approaches in both separate



($bs = 0.02$, $ps < 0.001$) and combined regression approaches ($bs = 0.02$, $ps = 0.00$; bolding indicates significance across regressions). This indicates that parents who scored higher on questions about child development were more likely to prefer guided play over other approaches.

Both income level and education level were associated with preferences for other methods over guided play. Specifically, when guided play was named (Figure 4, Column 2), parents with an income of \$50,000–\$99,999 were significantly more likely to prefer other methods over guided play compared to the reference group (below \$25,000) both in the combined ($b = -0.04$, $p = 0.04$) and the separate regression ($b = -0.05$, $p = 0.03$). Parents with a postgraduate degree were also significantly more likely to prefer other methods over guided play compared to the parents who only graduated HS in the separate ($b = -0.10$, $p = 0.01$) and the combined regression ($b = -0.09$, $p = 0.04$).

In both the aggregated condition (Figure 4, Column 1) and the unnamed condition (Figure 4, Column 3), parents who identified as Hispanic were more likely to prefer other methods over guided play in both the separate ($bs = -0.05$ – -0.04 , $ps < 0.001$) and combined regressions ($bs = -0.05$ – -0.04 , $ps < 0.001$), meaning Hispanic parents showed significant preference for other approaches over guided play.

3.2.2 Game regressions

In the aggregated condition (Figure 5, Column 1), both separate and combined regression analyses revealed that having a child in late elementary school significantly predicted a parent's preference for free play, guided play or direct instruction over games compared to parents whose child was in Pre-K ($bs = -0.03$, $ps = 0.02$). Also, a

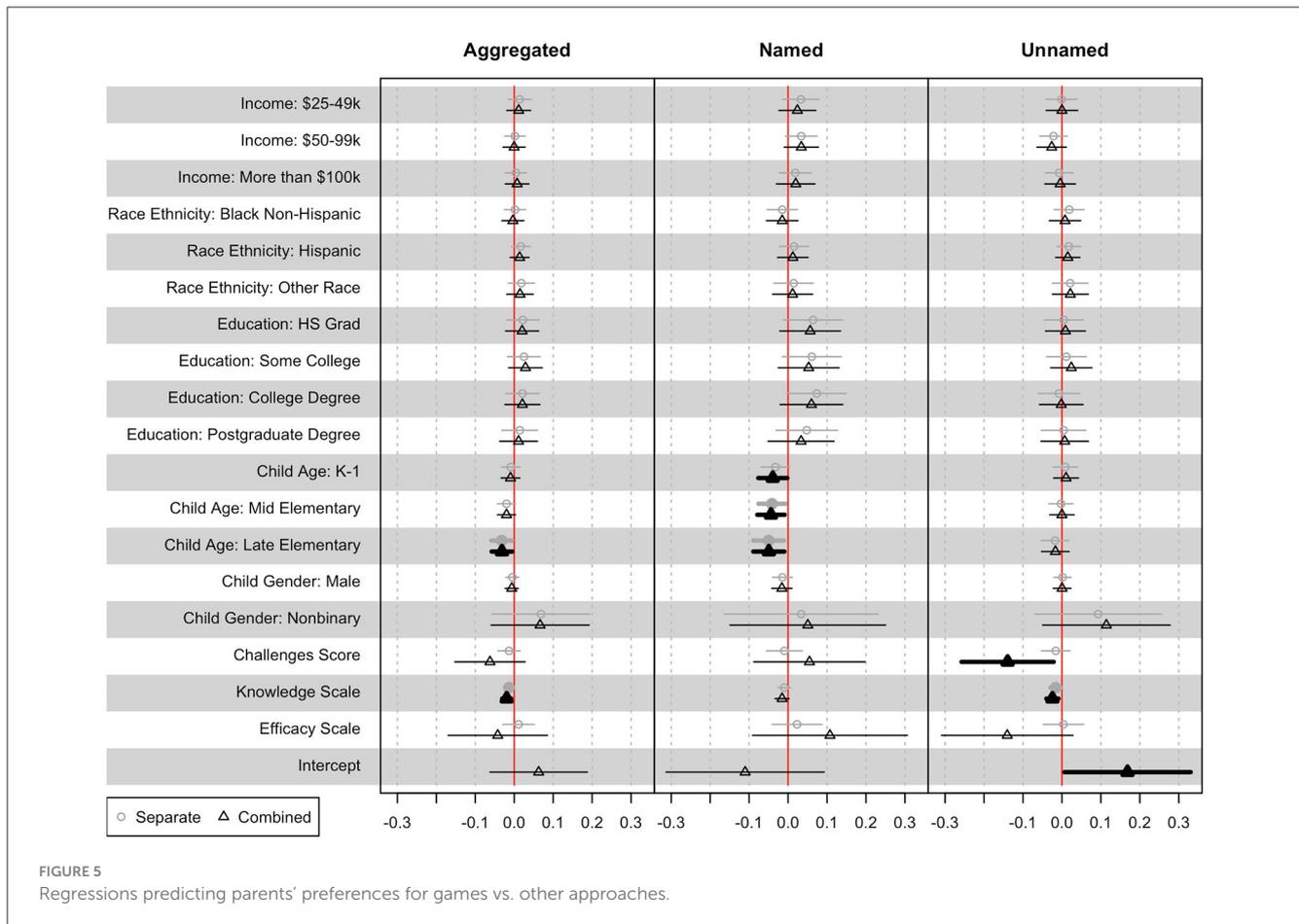
higher knowledge score significantly predicted a parent's preference for free play, guided play, and direct instruction over games ($bs = -0.02$ – -0.01 , $ps = 0.00$ – 0.01), meaning parents who scored higher on child development questions were more likely to prefer other approaches over games.

When the approach was named as games in the description (Figure 5, Column 2), parents were likely to prefer other approaches. For example, parents who had a child in late elementary school were significantly more likely to prefer other approaches over games than parents with a Pre-K child across separate ($b = -0.05$, $p = 0.01$) and combined ($b = -0.05$, $p = 0.02$) regression approaches. Similarly, parents who had a child in middle elementary school were significantly more likely to prefer other approaches over games than parents with a Pre-K child across separate ($b = -0.04$, $p = 0.02$) and combined ($b = -0.04$, $p = 0.01$) regressions. The parents who had a K-1 child were more likely to prefer other approaches over games compared to the parents with a Pre-K child ($b = -0.04$, $p = 0.04$), however this was only true in the combined regression.

When the learning approach was not introduced as games in the description (Figure 5, Column 3), parents who had higher challenges score significantly predicted preference for other approaches than games only in the combined regression approach ($b = -0.14$, $p = 0.02$). Also, parents who had higher knowledge score significantly preferred approaches other than games both in separate ($b = -0.02$, $p = 0.02$) and combined ($b = -0.02$, $p = 0.00$) regressions.

3.2.3 Free play regressions

In the aggregated condition, parents who had an income level between \$50,000–\$99,999 were significantly more likely to prefer



free play than parents who had an income under \$25,000 in the separate regression ($b = 0.04$, $p = 0.01$) (Figure 6, Column 1). Likewise, parents who had an income of more than \$100,000 had a significantly higher preference toward free play compared to parents who had incomes under \$25,000 in the separate regression ($b = 0.04$, $p = 0.01$). Also in the separate regression, parents who graduated HS ($b = 0.05$, $p = 0.03$), completed some college ($b = 0.05$, $p = 0.03$), had a college degree ($b = 0.07$, $p < 0.001$), and those that had a postgraduate degree ($b = 0.08$, $p < 0.001$) were significantly more likely to prefer free play over the other approaches. In the combined regression, having a college degree ($b = 0.06$, $p = 0.03$) or postgraduate degree ($b = 0.07$, $p = 0.01$) was a significant predictor of a parent's preference for free play. This indicates that the higher the education level of parents, the more they prefer free play. Answering the questions according to a son, rather than a daughter, also significantly predicted preference for approaches other than free play in the combined regression ($b = -0.02$, $p = 0.05$).

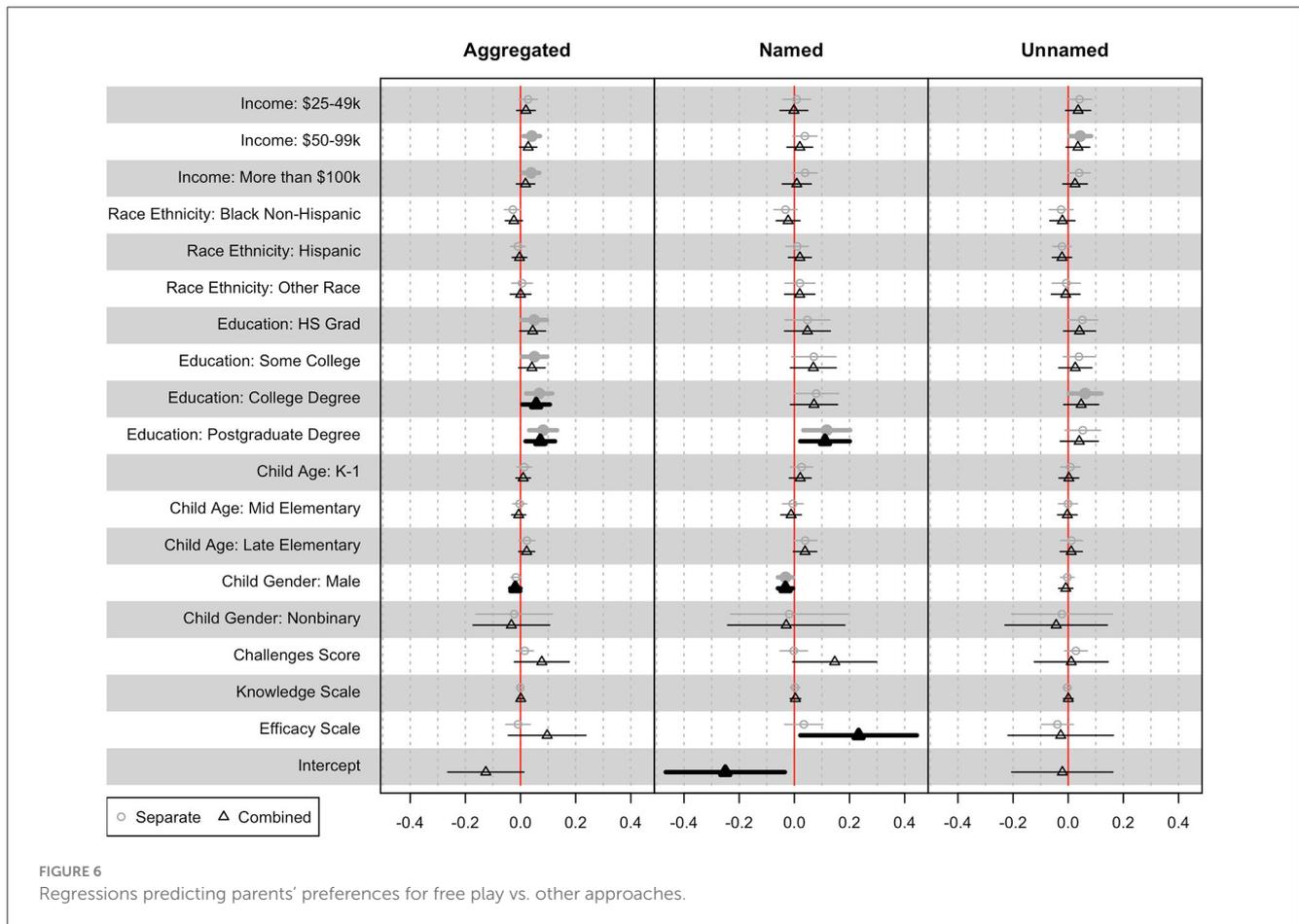
When free play was named (Figure 6, Column 2), parents with a postgraduate degree were significantly more likely to prefer free play compared to the parents who completed some high school or less in the separate ($b = 0.12$, $p = 0.01$) and combined ($b = 0.11$, $p = 0.02$) regressions. Parents of boys were significantly more likely to prefer other approaches over free play compared to parents of girls across the separate

($b = -0.03$, $p = 0.02$) and combined ($b = -0.03$, $p = 0.02$) regressions. Parents who had higher efficacy scores were significantly more likely to prefer free play than other approaches only in combined regression ($b = 0.23$, $p = 0.03$) when free play was named.

When free play was unnamed (Figure 6, Column 3), parents who had an income level between \$50,000 and \$99,999 ($b = 0.04$, $p = 0.03$) and those that reported incomes of more than \$100,000 ($b = 0.04$, $p = 0.05$) were significantly more likely to prefer free play compared to parents who had less an income level of <\$25,000 in the separate regression. Parents whose highest education completed was college ($b = 0.06$, $p = 0.04$) were significantly likely to prefer free play over other approaches on the spectrum compared to parents who had completed some high school or less in the separate regression when free play was not named in the description.

3.2.4 Direct instruction regressions

In the aggregated condition (Figure 7, Column 1), parents with some college ($b = -0.06$, $p = 0.02$), a college degree ($b = -0.06$, $p = 0.01$), and a postgraduate degree ($b = -0.06$, $p = 0.03$) significantly prefer the other approaches on the spectrum over direct instruction when compared to the parents who completed some high school or less in separate regressions. The parents with some college ($b = -0.05$, $p = 0.04$) and those with college degrees ($b = -0.06$, $p = 0.03$) were also significantly more likely



to prefer other approaches over direct instruction in the combined regression. Black and Hispanic parents were significantly more likely to prefer direct instruction over other approaches in both the separate ($b = 0.03$ – 0.04 , $p = 0.01$) and combined ($b = 0.03$ – 0.04 , $p = 0.01$ – 0.04) regressions. This indicates that Black and Hispanic parents are more likely to prefer direct instruction over play approaches.

When direct instruction was named (Figure 7, Column 2), having a child in mid-elementary school significantly predicted a parent's preference for direct instruction over other approaches across separate ($b = 0.05$, $p = 0.02$) and combined ($b = 0.05$, $p = 0.01$) regressions. Parents who took the survey according to their son significantly preferred direct instruction over other approaches on the spectrum compared to parents who took the survey according to their daughter, both in the separate ($b = 0.04$, $p < 0.001$) and combined ($b = 0.05$, $p < 0.001$) regressions.

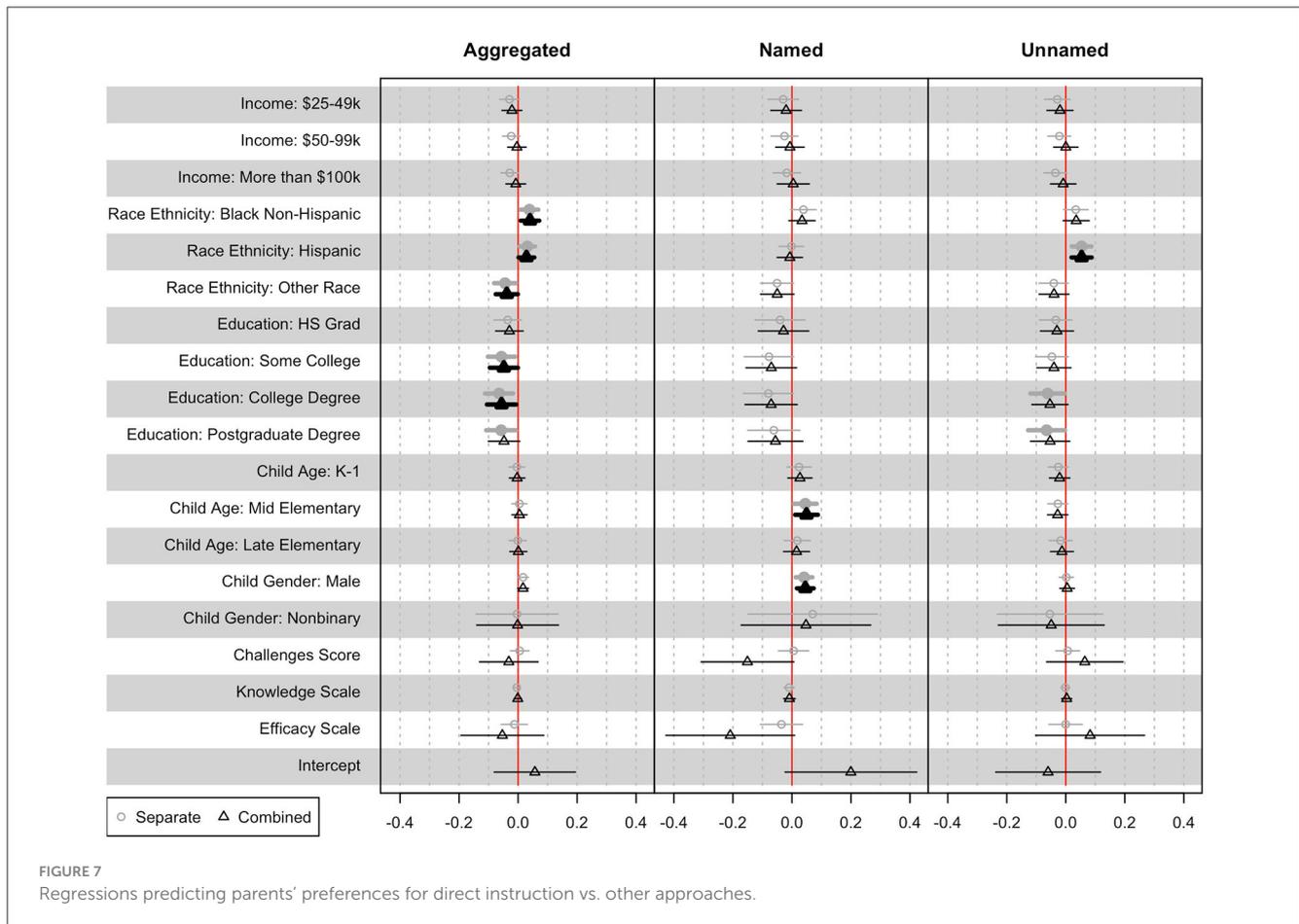
When direct instruction was not named (Figure 7, Column 3), parents with a college degree ($b = -0.06$, $p = 0.04$) and parents with a postgraduate degree ($b = -0.07$, $p = 0.04$) were significantly more likely to prefer other approaches over direct instruction in the separate regression. Hispanic parents were more likely to prefer direct instruction over approaches in both the separate ($b = 0.05$, $p < 0.001$) and the combined

regression ($b = 0.05$, $p < 0.001$) when direct instruction was unnamed.

4 Discussion

Previous research indicates that parents may assign higher learning value to structured activities over unstructured ones (Fisher et al., 2008) and view play as valuable when it is used as a means to support academic outcomes (LaForett and Mendez, 2017). Building on this research base, we hypothesized that parents would perceive guided play and direct instruction as having more learning value than free play or games. However, our findings challenge this expectation and reveal a surprising trend. Contrary to our hypothesis, parents were likely to believe that play (i.e., free play, guided play, and games) fosters greater learning potential than direct instruction. Specifically, parents tend to perceive that the highest degree of learning occurs during free play, followed by guided play, games, and direct instruction.

These results indicate American parents tend to favor pedagogies that grant their children agency over conventional structured and adult-led approaches to learning. It is difficult to explain the underlying factors behind these unexpected results. Perhaps parents are responding to the call to “let the children



play” and the evident rise in play advocacy in more recent years (Klass, 2018; Sahlberg and Doyle, 2019; Strauss, 2020). After prolonged periods of confinement indoors and increased screen time during the COVID-19 pandemic (Hoofman and Secord, 2021), parents may now better appreciate the importance of unstructured play for their children’s development and wellbeing. Furthermore, the pandemic’s toll on parents themselves could be a contributing factor (Brown et al., 2020; Adams et al., 2021). Parental exhaustion or emotional strain might lead them to seek learning approaches that require less active involvement on their part, making free play a more attractive option compared to guided play or direct instruction.

4.1 Parents’ valuations of play for learning

The preference pattern among parents for free play, guided play, games, and direct instruction remained consistent, regardless of whether the learning approach was named in the description. Initially, we hypothesized that presenting the names of approaches would influence their perception of the learning potential associated with each approach. We expected that if parents were exposed to these terms, they would attribute less learning to the approaches containing the term “play” due to the traditional

dichotomization of play and learning. However, contrary to our hypothesis, the results revealed the opposite effect: parents who were provided with the named approaches alongside the corresponding descriptions, were more inclined to acknowledge the potential for learning in each approach compared to parents who were not provided with the names. Encountering the names of the approaches generally bolstered parents’ belief in the learning value of these approaches. Notably, the preference for free play was even stronger when approaches were named. This suggests that parenting support programs and educational institutions need not hesitate to employ names of the types of play when describing pedagogical approaches. Our results suggest that incorporating these terms may generally foster a more positive perception among parents regarding the learning potential of free play, guided play and games.

The finding that parents recognize greater learning potential in play compared to direct instruction is notable and indicates that research emphasizing the learning benefits of play is effectively reaching and resonating with parents. However, the preference for free play among parents suggests that their understanding of play largely centers around unstructured, spontaneous activities without adult involvement. When Fisher et al. (2008) discovered that mothers in their study tended to place more value in structured over unstructured activities, they declared a “crisis in translation” (p. 314). Our results reveal this same crisis, but of a different

kind. Parents may be missing the key understanding that much of the recent research on the power of play for learning finds that guided play, play that maintains child agency with scaffolding from an adult toward a learning goal, supports children's learning of most concepts better than free play (Skene et al., 2022). As guided play, is a concept introduced by the academic world in recent years it is likely not yet used or understood among the general public. Findings from this study reveal that "guided play" is not a term used in natural parlance and that academics who tout this term have not gone far enough yet to share its meaning with the general public. To address this, parents need support to understand the multi-dimensionality of play, and their important role in facilitating learning through guided play. It is particularly important to highlight the distinctions between free play and guided play for the public in accessible ways such as in op-eds, blogs, videos, and interviews.

4.2 The role of demographic and attitudinal variables in parents' play attitudes

Our regression analysis revealed variations in parent perceptions based on demographic and attitudinal variables. Notably, higher income and education levels were significant predictors of parents' preference for free play compared to other approaches (i.e., guided play, games, or direct instruction). These results suggest that more educated and wealthier parents may receive messages about the positive influence of play on children's learning more frequently than less educated and low-income parents. To ensure equal access to information and support, advocates and parent support practitioners should prioritize finding effective ways to translate research about play, particularly guided play, and its benefits to less educated and low-income parents.

Parents who self-identified as Hispanic showed a significant preference for other approaches over guided play. Interestingly, this finding was not significant in the named condition, suggesting that when the experience was specifically labeled as "guided play," parents no longer exhibited a significant preference for other approaches. Black and Hispanic parents were both significantly more likely to prefer direct instruction over other approaches. The significant differences in perspectives regarding the approaches based on race and ethnicity underscore the need for parent initiatives and interventions to prioritize understanding parents' unique perspectives about play and learning. This understanding is essential for developing culturally responsive strategies that can effectively support parents from diverse backgrounds.

In line with our hypotheses, child age and child gender significantly influenced parents' perceptions. However, the results did not support our hypothesis that parents of older children would show a preference for direct instruction significantly more than parents of younger children. We found that parents of children in mid-elementary school and late-elementary school displayed a significant preference for other approaches over games. These findings indicate that parents of older children perceive less learning value in games compared to parents of younger children. It highlights the need for more information about the learning

potential of well-designed games (see Hassinger-Das et al., 2017) to be shared with parents of children in mid-elementary school and beyond.

When free play was named, parents of sons were significantly more likely to prefer guided play, games, or direct instruction over free play, in contrast to parents of daughters. Furthermore, parents of sons were also more inclined to prefer direct instruction over other approaches when it was named in the description. This finding supports our hypothesis that parents of sons would be more likely to favor direct instruction over play approaches than parents of daughters. This demonstrates a general perception among parents that boys benefit more from structured learning than from play and highlights the need for better understanding that all children, regardless of gender, can learn from playful learning experiences.

Parents' higher child development knowledge and parent self-efficacy significantly predicted their preference for play over other approaches. However, higher child development knowledge predicted preference for guided play whereas higher self-efficacy predicted preference for free play. This supports our hypothesis and aligns with past research that child development and knowledge and self-efficacy predict parent play attitudes and behaviors (McMillin et al., 2015; LaForett and Mendez, 2017). These findings call for more comprehensive support for parents by showing that changeable factors like knowledge and efficacy influence perceptions of play. Parent support programs and interventions should support parents to develop a deeper understanding of child development and self-efficacy, with a specific focus on building understanding of playful learning research. Past parenting interventions found success in shifting parents' child development knowledge and efficacy by incorporating home visits paired with feedback and by providing resources paired with modeling and explanations at the pediatrician's office (Shah et al., 2016, 2019b; Cates et al., 2018; List et al., 2021).

Crucially, parenting, play, and learning are highly nuanced, context-dependent, and culturally informed concepts. Every parent possesses funds of knowledge related to supporting their child and has diverse goals for their child. The wealth of knowledge, experience, and values that each parent brings to facilitate their child's play and learning must serve as the foundation of any parent support initiative [see Pesch et al. (2022) and Hassinger-Das and Fletcher (2023) on how playful learning initiatives can be co-designed with parents and communities]. Initiating discussions with parents using questions like, "How do you and your child play?" "How do you support your child's learning?" "What are your goals for your child?" and "What activities do you enjoy doing with your child?" centers parent voice and stimulates meaningful dialogues to establish a foundation for contextualizing the playful learning research presented in this paper. By gaining insight into the specific knowledge, experiences, and values that shape parents' preferences for different learning approaches, initiatives can work with parents to explore how the playful learning research can be meaningfully applied in their own, unique context. Furthermore, while this paper emphasizes that the research on the advantages of guided play must be sufficiently shared with parents, it is important that messages to parents avoid presenting guided play as the only way to play or learn. Children need opportunities for unstructured free play, which offers its own distinct benefits.

Moreover, certain skills and knowledge may necessitate direct instruction. Please see [Wright et al. \(2022a,b\)](#) for further research and guidance.

4.3 Limitations

This study updates the literature regarding parents' attitudes toward play and playful learning using new research that reflects a playful learning spectrum. Next steps should include further validation of these measures. Qualitative approaches like interviews, focus groups, and observations could provide deeper insights and enhance validity. Furthermore, future studies can more specifically operationalize the concept of "learning" to investigate if parents perceive certain approaches on the playful learning spectrum as best for specific learning and development outcomes. There is a need for more systematized examinations of cross-cultural and within-culture variance in terms of both playful learning attitudes as well as behaviors. This study's sample was slightly skewed toward an overrepresentation of middle-class families due to sampling constraints. Future research should have a representative sample to generalize the results for U.S. parents. Future studies can also consider exploring messages targeting parents about play and learning in the media to further investigate the playful learning content therein and how it aligns with free play and guided play. Lastly, parent initiatives aiming to close the gap between research and parents' attitudes toward playful learning should investigate the impact of such initiatives on parent and child outcomes.

5 Conclusion

This study found that parents in the U.S. perceive play as able to facilitate more learning than direct instruction. Parents with higher income levels and more education were more likely to prefer free play over guided play, games, and direct instruction. Hispanic and Black parents, as well as the least educated parents were significantly more likely to prefer direct instruction over free play, guided play, and games. Higher child development knowledge and self-efficacy predicted preference for play over direct instruction. These research findings have implications for parent support initiatives and interventions. Establishing an understanding of parents' play perceptions and their alignment with research findings is a critical initial step in equipping parents with the knowledge to effectively support their child's learning. This study revealed that many U.S. parents hold perceptions that do not align with evidence-based research, such as attributing more learning value to free play or direct instruction than guided play. This underscores the need for messages and support to enhance parent understanding of the multifaceted nature of play, and the advantages of guided play. Critically, parent support initiatives must put playful learning research in context by centering parents' voices. All parents have valuable funds of knowledge and unique goals for their children that must act as the foundation for research-based support. When parents' unique knowledge and values are prioritized, they can be supported to help facilitate their child's

learning through play in ways that are relevant and meaningful ([Wright et al., 2022a](#)).

By addressing gaps in understanding and providing parents with accurate information, strategies, and culturally-responsive support, interventions can bridge gaps between parents' perceptions and research findings. When parents fully understand the positive outcomes that come from playful learning experiences and are empowered to support this way of learning at home and in the community, children will be better equipped to develop 21st century skills and go on to be creative, engaged, lifelong learners.

Data availability statement

The dataset supporting the conclusions of this article can be made available by the authors. Please contact the corresponding author.

Ethics statement

The studies involving humans were approved by Temple University Institutional Review Board. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

CW: Conceptualization, Data curation, Investigation, Methodology, Project administration, Resources, Supervision, Visualization, Writing—original draft, Writing—review & editing. JP: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Visualization, Writing—review & editing. JL: Data curation, Formal analysis, Methodology, Software, Writing—review & editing. AM: Conceptualization, Writing—review & editing. RG: Supervision, Writing—review & editing. BT: Conceptualization, Methodology, Project administration, Writing—review & editing. KH-P: Conceptualization, Funding acquisition, Methodology, Project administration, Resources, Supervision, Writing—review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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