Association between children’s home play opportunity and school readiness: Object and social mastery motivation as mediators?

**Abstract**

This study investigated the direct relationship between home play opportunity and prospective school readiness, and the indirect relationships as mediated through object and social mastery motivation among Hong Kong Chinese kindergarten children. Participants were 106 local children (44.4% girls, mean age = 60.0 months) and their parents and teachers. Parents reported the demographic information and children’s home play opportunity at time 1 (beginning of the school year), whereas children’s object mastery motivation, social mastery motivation, and school readiness were reported by their teachers at time 2 (six months later). Results from the path analytic model revealed that children’s home play opportunity significantly predicted their object mastery motivation, but not social mastery motivation or school readiness. Both object and social mastery motivation were positively associated with school readiness. Furthermore, the indirect relationship between home play opportunity, object mastery motivation, and school readiness was significant, but the one via social mastery motivation was non-significant. The findings highlight the collective roles of object and social mastery motivation in predicting children’s school readiness. The results also suggest the desirability of providing kindergarten children with a varied and accessible home play environment which may promote their mastery motivation and school readiness.

**Keywords**: home play opportunity, object mastery motivation, social mastery motivation, school readiness, kindergarten children

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Mastery motivation reflects children’s internal desire to acquire competencies in performing goal-directed behaviors in different domains (Morgan et al., 1995). Children’s object mastery motivation (i.e., persistence in tackling moderately challenging tasks; Wang et al., 2011) is an important predictor of early cognitive development (Gilmore et al., 2003) and considerable research has examined its impact on school readiness (e.g., MacPhee et al., 2018; Martin et al., 2013; Turner & Johnson, 2003). A separate line of research, however, has also revealed the association of social mastery motivation, defined as one’s desire to initiate, sustain, and control the social interaction processes (MacTurk et al., 1985), with children’s social-emotional competence (Fung et al., 2019a) and school readiness (Józsa & Barrett, 2018). Despite the distinctive nature of object and social mastery motivation (Fung et al., 2018), previous work has seldom considered them simultaneously and it remains unclear whether these motivational factors make unique contributions to school readiness. Prior research has also examined the role of the early socializing environment in the development of mastery motivation and school readiness, but most of this focused on the impacts of parenting practices (Lunkenheimer & Wang, 2017; MacPhee et al., 2018; Martin et al., 2013) or considered the level of cognitive stimulation as an antecedent (Jeon et al., 2014; Korucu et al., 2020). The present study examined whether and how the availability of household playmates and play materials (i.e., home play opportunity) would predict children’s prospective object and social mastery motivation in a sample of Hong Kong Chinese kindergarten children. It also investigated the possible mediating roles of object and social mastery motivation in the relationship between home play opportunity and school readiness across two time points.

**Home play opportunity and mastery motivation**

Play has long been suggested as an important context for children to develop their early cognitive and social skills (Piaget, 1976; Vygotsky, 1967). Children’s household play context such as the availability of playmates, and variety and accessibility of play materials (i.e., home play opportunity) can have significant impacts on their level of enjoyment and overall play experience, while these feelings and experiences may give them impetus to acquire competencies (i.e., mastery motivation) and become skillful players (Wang et al., 2011). Specifically, children with increased exposure to a wide variety of household play objects may develop advanced object mastery motivation (i.e., task-related persistence; Morgan et al., 1995; Wang et al., 2011) since the extensive exploration and manipulation of those play items are fun and intrinsically rewarding. A broad range of toys and availability of peer play opportunities also create a natural context for children to communicate with play partners either for the enjoyment of social interaction or for the obtainment of objects and information, which are the driving forces to exercise their social mastery motivation (Fung et al., 2018; MacTurk et al, 1985). Therefore, the home play opportunity may determine children’s object and social mastery motivation development. Grounded on Busch-Rossnagel et al.’s (1995) framework suggesting the role of the early socializing environment (i.e., parents’ provision of inanimate toys or didactic interaction) in mastery motivation development, previous research has examined the antecedents of mastery motivation, but a majority of the studies emphasized parenting behaviors. For example, parent-child dyadic persistence during play (Lunkenheimer & Wang, 2017), parental supportive communications (Martin et al., 2013), and autonomy support (Moorman & Pomerantz, 2008) were suggested to foster children’s mastery motivation. In contrast, a handful of studies examined the association between the variety of home materials and children’s mastery motivation, but the results were inconsistent (e.g., Wang et al., 2011; MacPhee et al., 2018). Therefore, the relationship between children’s home play opportunity and mastery motivation, and how these factors jointly predict children’s developmental outcomes (e.g., school readiness) warrant further examination.

**Home play opportunity, mastery motivation, and school readiness**

School readiness is a multidimensional concept consisting of various academic (e.g., language and mathematics) and cognitive (e.g., attention and inhibition) skills (e.g., Duncan et al., 2007; Eisenberg et al., 2010; Portilla et al., 2014). Theoretically, object and social mastery motivation may impact children’s school readiness through different pathways. Object mastery motivation predicts kindergarten children’s early cognitive development (Gilmore et al., 2003), while their higher-order cognitive skills such as executive functioning are fundamental to the formal school transition (Blair & Raver, 2015). Alternatively, children with higher social mastery motivation are more likely to develop advanced social-emotional competence (e.g., Fung & Chung, 2019a; Fung et al, 2018; MacTurk et al., 1985), which may lead to better student-teacher relationships (Hernández et al., 2016) and engagement in classroom learning activities (Galindo & Fuller, 2010), and further contribute to school readiness (e.g., Campbell et al, 2016; Denham & Brown, 2010; Fung et al., 2020). Accumulating research has documented the interconnectedness of object and social mastery motivation with school readiness. For instance, kindergarten children’s object mastery motivation positively predicted their prospective school readiness (MacPhee et al., 2018) and academic skills including vocabulary knowledge, word reading, spelling, and mathematics (e.g., Gilmore et al., 2003; Martin et al., 2013; Turner et al., 2003). Similarly, Józsa and Barrett (2018) reported that children’s social mastery motivation positively predicted later social skills, but not their reading and mathematics achievement. Earlier research, however, primarily examined how object or social mastery motivation predicts school readiness, and none of the studies included both motivational factors and investigated their unique contributions. Researchers may also have integrated measures of object and social mastery motivation into a single score in the model estimation (e.g., MacPhee et al., 2018), which further complicated the interpretation of the existing findings. Thus, it is important to include object and social mastery motivation as separate variables to examine their distinctive impacts on school readiness. The present study filled this gap by including both object and social mastery motivation to explore their relationship with school readiness.

Ample research has investigated how the home environment would affect kindergarten children’s school readiness. For example, a rich home literacy environment (e.g., Baker, 2014), a wide range of household learning materials (Jeon et al., 2014), parental involvement in household learning (Lahaie, 2008), and stimulating parent-child interactive experience (Korucu & Schmitt, 2020) were reported as positive predictors of children’s school readiness. Nevertheless, these studies focused on the possible impacts of learning-oriented cognitive stimulation or parent-child interaction on school readiness. Little of them have explored how household contexts specifically related to daily play behaviors predict children’s future school readiness. Building on the developmental theories underscoring the vital role of play in children’s early learning and development (e.g., Piaget, 1976; Vygotsky, 1967), this study extended previous work by examining the antecedents of children’s school readiness through the lens of play. Considering that the availability of household playmates and play materials can shape children’s play behaviors (Fung & Chung, 2022) and that children develop early mastery motivation through play (Fung & Chung, 2019a; Wang et al., 2011), it was contended that children with increased home play opportunity may develop advanced object and social mastery motivation and, in turn, demonstrate better school readiness. The present study tested this proposed framework by investigating the indirect relationship between children’s home play opportunity and their subsequent school readiness, considering both object and social mastery motivation as potential mediators.

**The present study**

This study examined the direct and indirect relationships among home play opportunity, object mastery motivation, social mastery motivation, and school readiness of Chinese kindergarten children in Hong Kong. Based on the theoretical framework (Busch-Rossnagel et al., 1995) and prior research evidence (e.g., Fung & Chung, 2019a; Józsa & Barrett, 2018; MacPhee et al., 2018; Martin et al., 2013), it was hypothesized that children’s home play opportunity at time 1 would positively predict their object and social mastery motivation at time 2. It was also expected that children’s object and social mastery motivation at time 2 would be positively related to their concurrent school readiness. Considering the absence of theory conceptualizing and empirical evidence supporting a direct relationship, it was anticipated that the direct link between children’s home play opportunity at time 1 and school readiness at time 2 would be non-significant, whereas their indirect relationships as mediated through object and social mastery motivation at time 2 would be positive and significant.

**Method**

**Participants**

Participants were 106 Hong Kong kindergarten children (44.4% girls, mean age = 60.0 months, range = 40 to 78 months, standard deviation = 7.23 months) and their teachers and parents. Children in Hong Kong usually attend three years of kindergarten education. At time 1, 49 children were in the second kindergarten year, whereas the remaining 57 were in the third year. A majority of parents (78%) were aged between 31 and 40, and they reported demographic information of child’s age, gender, and parental education level: (1) primary, (2) secondary, (3) college, (4) university, and (5) postgraduate. The results showed 72% of fathers and 66% of mothers completed college or above. Among the 17 participating teachers, 90% of them had a bachelor’s degree in early childhood education or relevant discipline, and 58% of them had taught for more than four years.

**Procedure**

Ethical approval was granted by the respective university. Approval was also endorsed by the principals of the participating kindergartens. Informed consent and questionnaire forms were sent to the parents and teachers to invite their participation. At time 1 (beginning of the school year), parents reported the demographic information and rated children’s home play opportunity. Six months later at time 2, teachers rated children’s object mastery motivation, social mastery motivation, and school readiness.

**Measures**

***Home play opportunity at time 1***

Children’s home play opportunity was assessed by the opportunities in the environment

subscale from the My Child’s Play Questionnaire (Schneider & Rosenblum, 2014), which was previously employed in research of local kindergarten children with adequate reliability and validity (Fung & Chung, 2021). The subscale consisted of five items (e.g., “Child has enough toys for varied enjoyable play”, “Child has opportunity to play with other children”). Parents rated each item on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). The average score represented home play opportunity. The Cronbach’s alpha was .75.

***Object and social mastery motivation at time 2***

Children’s object and social mastery motivation were assessed by the object persistence and social persistence subscales of the Dimensions of Mastery Questionnaire – Chinese version (Morgan et al., 2017), which is commonly employed in research of kindergarten children (e.g., Fung, 2021; Józsa & Barrett, 2018; Lunkenheimer & Wang, 2017; Wang et al., 2011). Since children’s desire to interact with teachers and peers can influence teacher-student relatedness and peer relationships that may, in turn, contribute to their school readiness (e.g., Coolahan et al., 2000; Heatly & Votruba-Drzal, 2017), both social persistence with adults and peers subscales were considered in this study. The object persistence subscale had five items (e.g., “Works long to do something challenging”, “Tries to complete toys like puzzles”), whereas the social persistence subscales consisted of ten items (e.g., “Tries to keep adults interested in talking”, “Tries to keep play with kids going”). Teachers rated each item on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). The average scores of object persistence and social persistence (with adults and peers) subscales represented object and social mastery motivation, respectively. The Cronbach’s alphas of object persistence and social persistence subscales were .91 and .96, respectively.

***School readiness at time 2***

Children’s school readiness was assessed by the Gumpel Readiness Inventory (GRI; Gumpel, 1999). The Chinese version of GRI was employed in local research which revealed its internal consistency, test-retest reliability, construct and concurrent validity, and unidimensionality (Fung et al., 2020; Ho et al., 2013). The Chinese GRI contained six items: academic skills (“Counts forwards and backwards”, “Demonstrates understanding of concepts such as: before-after, bigger than-smaller than, more-less”), strategic working skills (“Is able to work independently without help from an adult”, “Can break down a complex task into its constituent parts”), and role-governed skills (“Raises hand when s/he wants to participate”, “Pays attention during class”). Teachers rated each item on a 5-point scale to indicate children’s frequency of showing the described behavior from 1 (never) to 5 (always). The average score represented school readiness. The Cronbach’s alpha was .87.

**Data analysis plan**

Hierarchical regression analysis was first conducted to examine the relationship between home play opportunity and school readiness with and without considering object and social mastery motivation as mediators. Path model investigating the relationships among home play opportunity, object mastery motivation, social mastery motivation, and school readiness was then estimated with the lavaan package (version 0.6-5) in R (version 3.6.1; R Foundation for Statistical Computing, 2021), with child’s age, gender, and parental education (as a proxy of socioeconomic status; Schmitt et al., 2014) statistically controlled. Intraclass correlations of the outcome variables were examined to probe the possible impact of the nested sampling structure (i.e., teachers’ ratings on social mastery motivation, object mastery motivation, and school readiness), and the values were between .087 and .193. The lavaan.survey package (Oberski, 2014) was employed to account for the multilevel nature of the data by correcting the parameter estimates and standard errors, and this approach was applied in recent research (e.g., Jackson & Cunningham, 2017; Stühmann et al., 2020). Model fit was evaluated by the Chi-square index (non-significant *χ2*), comparative fit index (CFI ≥ .95), non-normed fit index (NNFI ≥ .95), root mean square error of approximation (RMSEA ≤ .06), and standardized root mean square residual (SRMR ≤ .08) (Hu & Bentler, 1999). The significance of the indirect relationship was examined by using the bias-corrected bootstrapping approach with 5000 resampling (Hayes, 2009).

**Results**

**Preliminary analyses**

Table 1 illustrates the descriptive statistics of and bivariate correlations among the study variables. The data were complete with no missing values, and the skewness and kurtosis of all variables were within the range of plus and minus one. Home play opportunity was significantly related to subsequent object mastery motivation (*r* = .24, *p* < .05) and school readiness (*r* = .21, *p* < .05), but unrelated to social mastery motivation (*r* = .17, *p* = .08). Object and social mastery motivation were significantly associated (*r* = .70, *p* < .01), and both were significantly related to school readiness (*rs* = .65 to .79, *ps* < .01).

Table 2 shows the results of hierarchical regression predicting school readiness from home play opportunity with (model 2) and without (model 1) controlling for object and social mastery motivation. In model 1, home play opportunity accounted for 5% of the variance of school readiness. In model 2, object and social mastery motivation in step 1 collectively explained 65% of the variance of school readiness, whereas home play opportunity in step 2 contributed no unique variance in school readiness. These results suggested the plausible mediating roles of object and social mastery motivation in the relationship between home play opportunity and school readiness and, thus, a path analysis was conducted to further examine the indirect associations.

**Path analysis**

Figure 1 shows the parameter estimates and model fit statistics for the path model of home play opportunity, object and social mastery motivation, and school readiness, which demonstrated a good fit to the data *χ2* (*df* = 8, *N* = 106) = 9.09, *p* = .34, CFI = .99, TLI = .99, RMSEA = .04 (90% CI: .00, .12), SRMR = .06, *R2 T2 Object mastery motivation* = .06, *R2 T2 Social mastery motivation* = .03, *R2 T2 School readiness* = .64. Object and social mastery motivation at time 2 were significantly associated (*r* = .69, *p* < .001). The path from home play opportunity to later object mastery motivation was significant (*β* = .24, *SE* = .10, *p* < .05), but the one to social mastery motivation was non-significant (*β* = .17, *SE* = .10, *p* = .06). Additionally, the paths from object (*β* = .64, *SE* = .08, *p* < .001) and social (*β* = .19, *SE* = .08, *p* < .05) mastery motivation to concurrent school readiness were significant, whereas the direct path from home play opportunity to school readiness was non-significant (*β* = .01, *SE* = .06, *ns*). The indirect relationship between home play opportunity and school readiness as mediated through object mastery motivation was significant (indirect effect: *β* = .15, *SE* = .06, *p* < .05), but the one via social mastery motivation was non-significant (indirect effect: *β* = .03, *SE* = .02, *ns*).

**Discussion**

The present study examined the relationship between kindergarten children’s home play opportunity and their subsequent school readiness by considering their object and social mastery motivation as possible mediators. The results revealed that children with increased home play opportunity may show advanced school readiness through a better development in object mastery motivation. Moreover, children’s social mastery motivation uniquely predicted their school readiness, above and beyond the potential impact of object mastery motivation. The present findings have expanded the existing studies (e.g., Fung & Chung, 2019a; Józsa & Barrett, 2018; Lunkenheimer & Wang, 2017; MacPhee et al., 2018; Martin et al., 2013; ) by demonstrating the relationships between a diverse and accessible home play environment and children’s mastery motivation and school readiness. The results also disentangled the positive links of object and social mastery motivation with children’s school readiness.

**Home play opportunity and mastery motivation**

As expected, home play opportunity was significantly predictive of subsequent object mastery motivation. Aligned with Busch-Rossnagel et al.’s (1995) framework and previous findings (e.g., Wang et al., 2011), children with increased exposure to a large variety of toys maybe more eager to explore the possible effects on and feedback from the toys. The exploratory processes not only bring enjoyment which reinforces children’s future attempts, but also fulfill their internal needs to gain competencies (e.g., problem-solving and fine motor skills). Therefore, these children are more likely to exhibit higher persistence in object manipulation (i.e., object mastery motivation). Nevertheless, only 6% of the variance of object mastery motivation was explained by home play opportunity, and the path between home play opportunity and social mastery motivation failed to reach statistical significance (*p* = .06). A possible reason is the current conceptualization of home play opportunity emphasized the availability of playmates, and the exposure to and characteristics of toys, but it did not adequately reflect other aspects of the socializing environment, such as emotional exchanges and didactic interactions with parents, that may scaffold children’s mastery motivation (Busch-Rossnagel et al., 1995). Future research may consider including multiple aspects of the socializing environment to examine their contributions to children’s object and social mastery motivation across time.

**Mastery motivation and school readiness**

Notably, the path model explained above 60% of the variance in school readiness in these children and the results supported the contention that object and social mastery motivation are distinct contributors to school readiness. Prior research investigating the link between children’s mastery motivation and school readiness has either focused on one of these motivational factors (e.g., Gilmore et al., 2003; Józsa & Barrett, 2018; Martin et al., 2013; Turner & Johnson, 2003) or combined them as a composite score (MacPhee et al., 2018). In line with the emerging evidence suggesting the connectedness among cognitive skills, social-emotional competence, and school readiness (e.g., Blair & Raver, 2015; Campbell et al., 2016), future investigations of the motivational influences on kindergarten children’s school readiness should include both object and social mastery motivation as predictors to examine their unique contributions. Researchers may also explore the possible mechanisms like executive functioning (Blair et al., 2015) and emotional regulation (Fung et al., 2020) underlying these motivational influences on school readiness.

**The indirect relationships among home play opportunity, mastery motivation, and school readiness**

The present results revealed a significant indirect relationship between home play opportunity, object mastery motivation, and school readiness. Worth noting, in Table 1 and Table 2, home play opportunity was positively correlated with children’s later school readiness; but this direct relationship was non-significant and fully mediated by object mastery motivation in the path model, which concurred with the hypothesis. Yet, the indirect path as mediated through social mastery motivation was non-significant, probably due to the non-significant path between home play opportunity and social mastery motivation. Following the aforementioned argument, further studies may conceptualize home play opportunity by including additional aspects of the socializing environment such as parental scaffolding during play. Supposedly, this approach may better capture the association between home play opportunity and social mastery motivation and may result in a significant indirect relationship with school readiness. Given the small number of participants in the current study, further studies with a larger sample size may yield significant path coefficients.

**Limitations**

The present study has at least four limitations. First, this study was correlational and the results indicated no direction of effect. The present study employed a half-longitudinal design (i.e., mediators and outcome were all assessed at time 2; MacPhee et al., 2018) and, thus, the findings did not represent a true longitudinal mediation. Moreover, parents in different cultural contexts support household play with differing socialization goals, expectations, and levels of engagement (Roopnarine & Davidson, 2015). For example, Chinese parents tend to involve more in child play for learning than for fun (Lin & Li, 2018). Furthermore, kindergarten programs in Hong Kong are more academically focused and last longer, while the play-based curriculum is not widely implemented (Fung & Cheng, 2012). Therefore, the generalizability of the current results in other cultural contexts remains an open question. Longitudinal cross-cultural studies with repeated measures at more than two-time points or experimental studies are needed to verify the present findings and better inform the causality. Second, the current operationalization of home play opportunity focused on the availability of playmates, and variety and accessibility of play materials based on parental ratings, but such an operationalization may subject to self-report bias and undermine the possible impacts of adult scaffolding and guidance on social mastery motivation and school readiness. Further research may include additional assessments of home play opportunity such as interviews and observational tools (e.g., HOME; Bradley et al., 2003) to triangulate the present results. Similarly, although the present conceptualization of school readiness aligned with the psychobiological framework (Blair & Raver, 2015), the use of Gumpel Readiness Inventory (GRI; Gumpel, 1999) for tapping children’s academic skills, strategic working skills, and role-governed skills may overlook the social and emotional aspects of school readiness (Eisenberg et al., 2010). Future work should measure children’s social-emotional competence as extra predictors. Third, children’s mastery motivation and school readiness were both reported by teachers. Although this approach amply anchors the choice of assessment (teacher-report) to the relevant context (children’s behaviors in school) (Campbell et al., 2016), the shared method variance is a limitation in the research design. Replications are required by employing independent measures such as systematic observation of children’s object and social mastery motivation or behavioral assessment of their school readiness (e.g., behavioral regulation, academic competence) to validate the present findings. Finally, the small sample size in this study precluded by using more sophisticated statistical approaches such as structural equation modelling. Future studies with a larger sample size would enable modelling the concerned constructs as latent variables.

**Conclusions and implications**

Despite these limitations, the present results contributed to the theory by showing how a varied and reachable home play environment might impact children’s subsequent mastery motivation and school readiness. Prior research primarily examined how a learning-oriented and cognitively stimulating home environment may facilitate children’s school readiness (e.g., Baker, 2014; Korucu et al., 2020; Lahaie, 2008). Findings from this study indicated an alternative perspective in supporting children’s formal school transition by attuning the home environment to promote children’s mastery motivation through daily play activities. This perspective emphasizes the utility of strengthening family support policies, such as the further popularization of toy libraries (Bastiansen & Wharton, 2015) and the promotion of parental play belief (Hyun et al., 2021), which can extend the beneficial impacts of household play, especially to those from the low socioeconomic strata. These approaches may promote children’s school readiness more naturally and enjoyably. Practically speaking, the findings also highlighted the distinctive relationships of object and social mastery motivation with children’s school readiness. Apart from the predominant focus on fostering children’s persistence in tackling challenging cognitive tasks (e.g., consistent praising of children’s effort instead of success; Zentall & Morris, 2010), intervention effort targeting children’s persistence in having social interaction, such as increased home play opportunity with parental scaffolding (Lunkenheimer & Wang, 2017) or heightened day-to-day parental responsiveness (Fung, 2021), may also promote children’s school readiness. In the kindergarten context, teachers can keep track of and advocate for children’s constructive social communication while engaging in learning tasks or play activities given that these social mastery behaviors may contribute to school readiness, over and above the cognitive effort children make.

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Table 1

*Descriptive statistics of and bivariate correlations among the study variables*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | |  | Correlations | | | |
| Variables | | | (1) | | (2) | (3) | (4) |
| 1. T1 Home play opportunity | | | -- | |  |  |  |
| 2. T2 Object mastery motivation | | | .24\* | | -- |  |  |
| 3. T2 Social mastery motivation | | | .17 | | .70\*\* | -- |  |
| 4. T2 School readiness | | | .21\* | | .79\*\* | .65\*\* | -- |
| Descriptive statistics | | Mean | 3.84 | | 3.53 | 3.64 | 3.97 |
| Standard deviation | 0.73 | | 0.76 | 0.84 | 0.73 |
| Minimum | 1.80 | | 1.80 | 1.30 | 2.00 |
| Maximum | 5.00 | | 5.00 | 5.00 | 5.00 |
| Skewness | -.39 | | -.21 | -.55 | -.61 |
| Kurtosis | -.21 | | -.60 | -.09 | -.19 |
| Cronbach’s alpha | .75 | | .91 | .96 | .87 |
| *Note.* T1 = time 1; T2 = time 2; \* *p* < .05; \*\* *p* < .01 | | | | | | | |
|  |  | | | | | | |

Table 2

*Hierarchical regression predicting children’s school readiness from home play opportunity, object mastery motivation, and social mastery motivation.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | T2 School readiness | | | | |
| Step/Independent variable |  | Final *β* | *SE* | Total *R*2 | Δ*R*2 | Δ*F* |
| Model 1 |  | -- | -- |  |  |  |
| 1. T1 Home play opportunity |  | .21\* | .10 | .05 | .05 | 4.93\* |
| Model 2 |  | -- | -- |  |  |  |
| 1. T2 Object mastery motivation |  | .63\*\*\* | .08 | .65 | .65 | 94.47\*\*\* |
| T2 Social mastery motivation |  | .16\* | .07 |  |  |  |
| (2) T1 Home play opportunity |  | .02 | .06 | .65 | .00 | .13 |
| *Note:* T1 = time 1; T2 = time 2; \* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001 | | | | | | |

Figure Legend

**Figure 1.** Path model for predicting children’s school readiness from home play opportunity, object mastery motivation, and social mastery motivation controlling for parental education, and child’s age and gender. Standardized coefficients are reported. Solid paths are statistically significant. Dashed paths are non-significant. \* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001; T1 = time 1; T2 = time 2. Fit indices *χ2* (*df* = 8, *N* = 106) = 9.09, *p* = .34, CFI = .99, TLI = .99, RMSEA = .04 (90% CI: .00, .12), SRMR = .06, *R2 T2 Object mastery motivation* = .06, *R2 T2 Social mastery motivation* = .03, *R2 T2 School readiness* = .64.

**Figure 1.**

