How Play Energizes Your Kids Brain

Scientists have long studied play to gain insights into the developing human mind.

By Cassandra Willyard

July 21, 2020

Swiss psychologist Jean Piaget, one of the founding fathers of developmental psychology, spent hours each day observing his children as they grew. He recorded his observations in a raft of notebooks. Lore has it that his wife even carried a notebook on her necklace to jot down observations that Piaget himself missed.

One day, in 1925, his 7-month-old daughter, Jacqueline, was playing with a plastic duck in her crib. She tried to grasp it, but the duck slid down behind a fold in the sheet. Jacqueline saw the duck fall, "but as soon as the duck has disappeared — nothing more!" Piaget wrote. She seemed to forget the duck's existence. Piaget picked up the duck and held it out and, just as Jacqueline was about to grasp it, he mo

Pk f]ldafdj pn] ej a` fa\ua(f]l h] uf[l] j fdaai f]ej haoo(fiha] apepe ra(f5l eǹ fl k nfdk k heod*f5l qpfl h] uf[l] j flk lbanf]
s ej ` ks fej pk f]ldaf l ar ah kl ej cfil ej ` *f]l ej capfrleas a` f[lamp] ej fdjej ` ofklbfll h] uf]l ofil ehaopk j ao(fbecjo
pd]pf]l f[lde ǹ fd] ` fiha] _da` f]l fjl as fdp] cafklbfl ar ah kl i aj p*f 0pq` eaof[lk j ` q_pa` flk r anf]ldafll] opfibas
` a_] ` aofbqccaopfll h] ufibanr aof]l fil k naf[lnq_e] h fi n k ha*f]l h] uf[l] j fdlah l fdjè ofha] nj (fll h] j f]l j ` fdraj
l amoar anafej f]ldafld] _afk lbf]l ` r amoepu*

>] ^eaofdp] npfll h] uej cf]l h i k opf] ofdk kj f]l ofidauf^a_ki af]l s] nafk lbf]ldaenfdq nn k qj ` ej co*f]l P dau falr aj
_k j ` q_pf]ldaenfk s j flej ufio_ea j _afalt l are aj poflk fdlah l f]ldai f^appanf]dj ` anop] j ` f]ldafSl k nh ǹ *f5l qp
ok i afiha oa] n_dfbqccaoopf]dp] pf]ldaufil ecdpf]lk pfd] r afdk fha] nj far anupodej cflhk rki fib_n] p_d(f]ldu] pfdjè o
] naf^k nj f5l epfdfdbqn]l meoej churfdk l deope_] pa` faltl a_p] pek j of]l ^k q pf]dlk s f]ldaS l k nh ǹ fbdk kqh ǹ f5l k nng(fihega
] f^a] oe_fbt n] ol fk lbfdt n] r epufk nfil] pd*

ÈPd] p]dofdj ks ha` caf]l pfdl of]l ] __ qa` f]l dnk q cdfah r k nupek j (fll d d*@*f^l
l rk kbaook nfk lbfll ou_dk lk cę]h f]l j ` f^]n] ej fej fb_ea j _aof]l pfFkdjof ofD kl g ej ofD jer anoepuf]l j ` f]l k) ` ena_pknfk lb
pdlaenf[ldeǹ fl ar ah kl i aj p fik ^^f@^a_] ` aofk lbfhaoa] n_df]l ra fodk ks j fl db] dop] pfdbfu

A , . I
, . A
.
,
?
, ,
B
.

A
. F , I
?
.

, D ,G . . A
C . , B
.

I ?
D . G
- 4 -
,
.
H .
, . -
H . B

.

- - ,
.
;
.

D . . G
I . D BE . G . ,
B .

wooden box and asked kids to pretend it was the birthday machine. Then she suggested a different block as a pretend zando. "What will happen if we put this zando on the machine?" the researcher asked. "What if we pretend this isn't a zando, then what will happen?"

Again, about two-thirds of the kids answered correctly, the same children who performed well in the first experiment. That is, the ones who could imagine hypotheticals that hadn't occurred were also the best at pretending to operate an imaginary machine with an imaginary zando.

Dr. Gopnik and her colleagues have shown in other experiments that asking kids to pretend before presenting them with hypotheticals improves their performance. These studies suggest that pretend play is a steppingstone to the important adult skill of planning.

Pretend play might also help kids regulate their emotions and persevere through difficult, tedious or frustrating tasks. In one experiment, researchers at the University of Minnesota put a toy inside a glass lockbox and handed 4- and 6-year-olds a ring of tiny keys. Open the box, they told the kids, and you'll be able to play with the toy.

They asked a quarter of the children to pretend to be someone else while they completed the task — Batman or an intrepid adventurer like Dora the Explorer. They even offered them props to make them feel more like that character.

Stephanie Carlson, Ph.D., a developmental psychologist at the University of Minnesota who ran the experiment, and her colleagues hoped to get the kids to step outside themselves. They hypothesized that this kind of psychological distancing might help the children better manage their emotions during what turned out to be a frustrating task.

And the kids did get frustrated. In an odd twist, none of the keys actually worked (though the kids did get to play with the toy at the end). The children who pretended to be the hardworking fictional characters stayed calmer. They also spent more time trying to open the box and tried more keys.

This "Batman effect" — coined by Dr. Carlson and her col

they develop the skills they need to succeed as adults.

Ca a d a W a d a f ee a ce hea h a d c e ce a Mad , W c .