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Why do little kids ask to hear the same story over and over?

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Abstract

One way people learn new words is through reading books and stories. Little kids love hearing their favorite stories over and over and are also very good at learning new words. We wondered if reading the same stories could be helping preschool kids learn new words. Our research tested if it was better to read the same stories over and over or to read a few different stories. Here we tell you about three studies that show preschool kids learn more words from the same stories over and over. Our research suggests that it's easier to learn new words from stories when you have heard the story before and know what is going to happen.

We know little kids like hearing stories and will ask to hear the same story over and over again. You may have noticed this if you have ever read a story to a younger sibling. Kids learn a lot of things from stories. They can learn about colours, shapes, numbers, relationships and places—and they can learn new words. You probably learn a lot of new words from reading too. Kids who hear more stories, learn more words than kids who hear fewer stories. They are also more likely to do better at school. So we know that hearing stories helps kids learn new words, but could we help kids learn even more?

What helps learning from storybooks?

Kids learn best from stories with plots that are easy to understand and relate to. They also learn better from books with photos than books with cartoon style drawings (1). We know that pointing to things in the pictures helps kids learn words from stories. Giving definitions of new words is helpful too, or asking questions about things mentioned in the story. The more times kids hear the new words the more chance they have of learning them, so repeating the words is really helpful in storybooks.

We know kids love hearing the same stories over and over so we wondered whether this was helpful for word learning. This is what our studies are about.

Our studies

Do kids learn more words from hearing the same story over and over or from hearing different stories? Our studies will tell us.

If we want to see if kids learn new words from hearing a book there are different ways we could do this. We would, of course, read them a story and then measure how many words from the story they know. But is it really that simple? How would we know that the kids didn't already know those words before they heard the stories? We have a

really fun solution: we write our own storybooks so we can put special words in them! These special words are called “target words.” The special words we use are made-up words like “sprock” and “manu.” They sound like real words but we make them up. Now we can know that kids don’t already know the words before we even read the stories. Lots of studies use words like these for the same reason. One famous study is “the Wug Test” (2). Kids haven’t heard the word wug before, but if you tell them “Here is a wug, here is another wug, now there are two ___” they know the next word is “wugs.”

The special words in our stories are names for weird objects. Like the words, we use these objects so we know that kids don’t already have a name for them. These weird objects are called “novel objects” because they are new. Take a look at an example of these special words and objects from a set of our storybooks in Figure 1.

Our stories

For these studies we wrote nine stories about a girl named Rosie. We tried to make them sound like real storybooks. Each story has a beginning, a middle and an end. Each story has a happy ending. In one story Rosie makes cookies. But she uses salt instead of sugar by mistake! The cookies taste really bad. But her family still has a nice day.

Each story is nine pages long with nine pictures. We took photos of real people acting out each page. One picture shows Rosie and her father putting cookies into the oven. Then we used the computer to make them look more like drawings.

In some of the pictures you can see the novel objects. But the stories aren’t really about the objects. The stories are really about something Rosie is doing.

There are two weird objects in each story. Each weird object has a name like “sprock.” The name is always the same for the same object. For example, the object with the

green wheel is always the “sprock.” You hear the name (target word) for each object four times in each story. So if you read a story three times you will hear the target words 12 times.

In three stories the two objects are the “sprock” and “tannin.” In another set of three stories the two objects are the “manu” and “zorch.” In the last set of three stories the two objects are the “gaz” and “coodle.” Remember these are supposed to be new names and objects that kids do not know before the stories!

Learning and testing

We wanted to know if kids learn more words from hearing the same story over and over or from hearing different stories. So we read our stories to two groups of preschool kids. Kids were English-speaking and from middle class homes in a seaside town in the South of England. The *same stories group* heard the same story three times in a row. The *different stories group* heard three different stories instead, but these three different stories had the same words. Each kid in the same stories group heard *one* of the stories with “sprock” and “tannin” three times. Each kid in the different stories group heard *all three* of the stories with “sprock” and “tannin.” But every kid heard “sprock” and “tannin” 12 times.

In our first study we visited kids at home on three days in about one week. For example, Tuesday and Friday and then Monday. Every time we visited we read three times: either the same story three times or three different stories (take a look at Figure 2A). After we read the stories we wanted to see if the kids learned the names for the objects. So we showed them pictures of the novel objects and asked them “can you point to the *sprock*?” (or one of the words they heard). We asked them to point to each of that day’s objects twice. There were always four pictures on a page, so if kids had

not really learned the word and were guessing they should point to the correct object for about one of the four questions. So, we asked kids to point out each target object once and didn't say whether they were right or wrong. Then we asked them to point out each target object again. So, if kids pointed to the correct objects for more than about two questions we know they were not guessing and had really learned the words!

Every day we visited we read kids stories with a new pair of words and tested them on that pair of words. Our favorite part of this study is that on the last day we also tested them again on the words from the first and second days (which they never heard since those stories). Would kids remember the words? Would they remember more words from hearing the same stories over and over?

Take a look at Figure 2B. The dark bars show the number of correct points by the kids in the same stories group. The light bars show the number of correct points by the kids in the different stories group. Kids in the same stories group *always* did better than kids in the different stories group. But what about the last test? Look at the last bars: kids in the same stories group remembered the words really well! And kids in the different stories group didn't score any better than if they were just guessing. They had forgotten the words.

In our second study we also had a same stories group and a different stories group. Sometimes kids do ask for the same story over and over, but not on the same day. So in this study the same stories group heard three stories but they were the same three stories on each day (Figure 3A). In the different stories group kids heard three different stories every day. This study was a lot harder for kids because they heard all six target words (but only four times each) each day.

Take a look at Figure 3B. Once again, the kids who heard the same stories over and over learned the words really well. They learned more words than the kids who heard different stories.

For another study we teamed up with a lab in Germany and tested reading the same stories in preschool children diagnosed with developmental language disorder (DLD, previously known as specific language impairment, (3). Children diagnosed with DLD may have trouble speaking and understanding language, and later on they may struggle with reading and writing. The lab in Germany translated our storybooks into German. Then, all of the German kids were tested the same way as the English children in the same stories condition of the first study. Children diagnosed with DLD did not learn the target words as well as kids in our other studies. However, on the last day of the study there was no longer a real difference between the children with developmental language disorder and the typical children. This means that repeating stories is a good idea for children with special needs too.

Summary

Remember that in each study all kids heard the target words the same number of times. This means the only difference was whether or not the stories were repeated. Kids learned more words from repeated stories than different stories. When stories were only repeated days later, kids still learned more words, so there must be something very special about hearing things over again.

But reading and hearing different books is still good for learning too. It could be that kids hearing the different stories are learning something different. Maybe they are learning more about the different uses of the object. Or maybe they learn how to use the word correctly in a sentence better. There is still a lot we don't know. Our work in this research area isn't over yet!

What does it all mean?

Kids learn more words from hearing the same stories over and over. It reminds us of how kids like to watch the same tv shows over and over (4). Sometimes when you watch a movie for the first time it can be a little confusing to follow the story and work out who the key characters are. But when you watch the same movie for a second or even third time, you know what is coming and can think about different parts of the movie because you no longer need to concentrate so hard on the story.

This is what we think is happening here. With each new reading of the story, kids are able to focus on something new: they have time to work out what these novel objects are and to learn their names. Kids hearing different stories are always hearing the story for the first time, so they have to concentrate on understanding the story. They just do not have so much time or brain power to add anything extra.

It is important to understand how kids learn words. We want to find ways to help kids learn words even better so we can help everyone do well at school. But understanding how kids learn helps in lots of other ways too. Not everybody learns to speak at the same speed. Some kids take longer to learn language, and some might always find reading difficult. Imagine if we could use storybooks to help some of these kids learn a little bit more. What an easy way to help! Even adults like to hear stories when they already know the ending (5). Maybe you are learning a second language. Maybe English *is* a second language to you. Maybe you just find it hard to concentrate when reading. Reading the same stories and books over and over might help you too.

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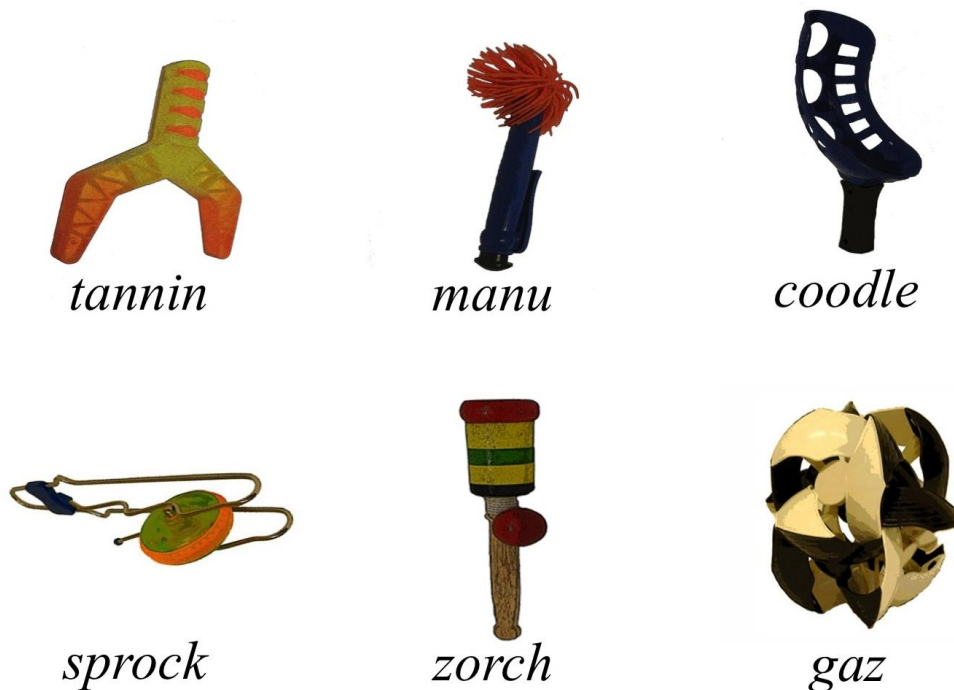
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Zoe M. Flack

I had a job in a bank at first, but all I ever wanted was to do something more exciting, something useful. So when my two daughters started school I started studying Psychology. Now I get to spend every day thinking about different ways to find out things to help young children learn. What a fantastic job I have!

Jessica S. Horst

I'm an American living in England. I started writing my first book when I was 9 years old. I've always liked reading and writing, but my interest grew when I moved to Germany when I was 14. I didn't speak *any* German at the time, so I noticed each new word I was learning. Now, I'm a professor who studies word learning in kids. When I'm not at work I enjoy playing board games with my son—and reading him the same



stories over and over!

Figure 1. These are the target words and novel objects we use in our studies.

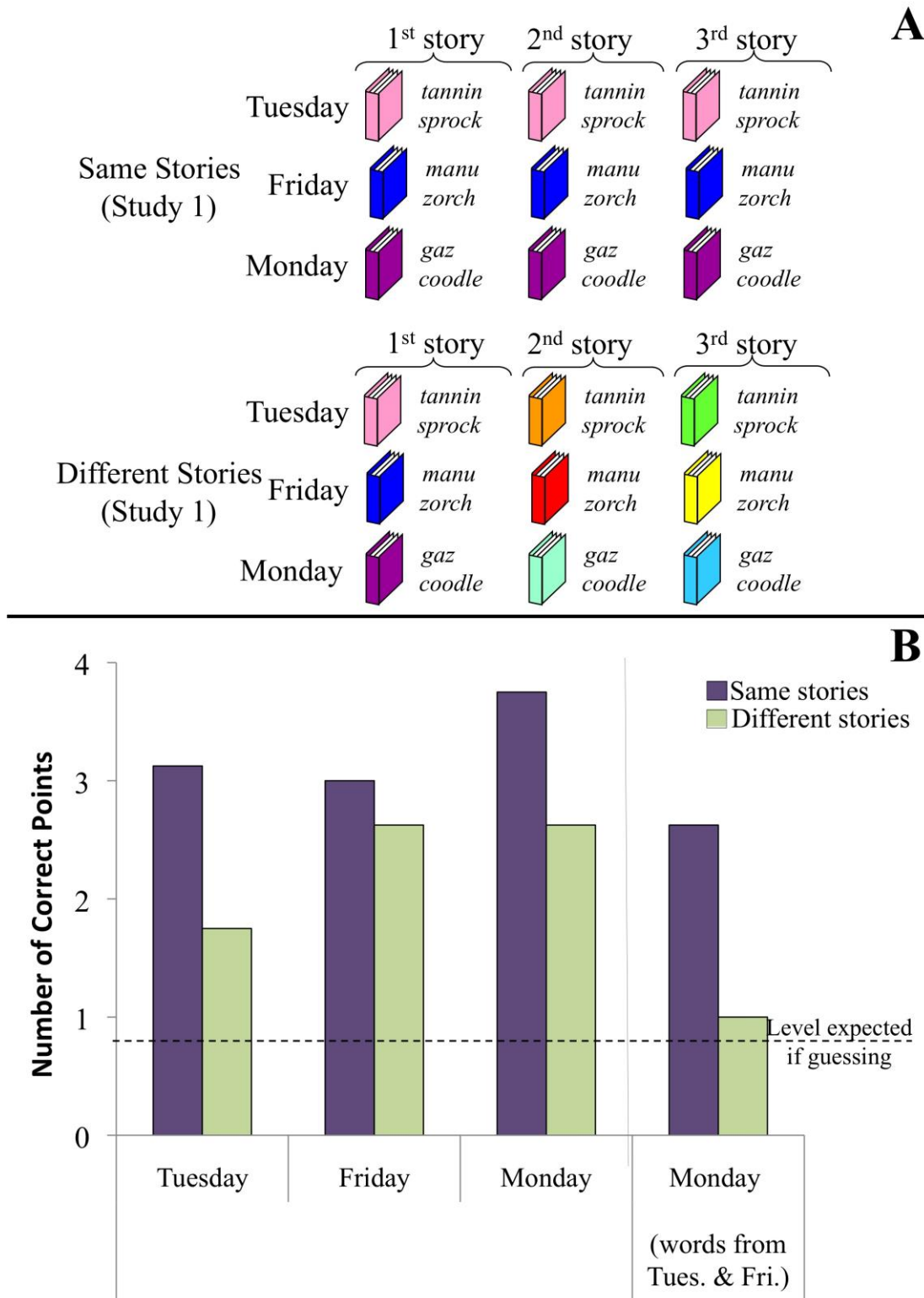
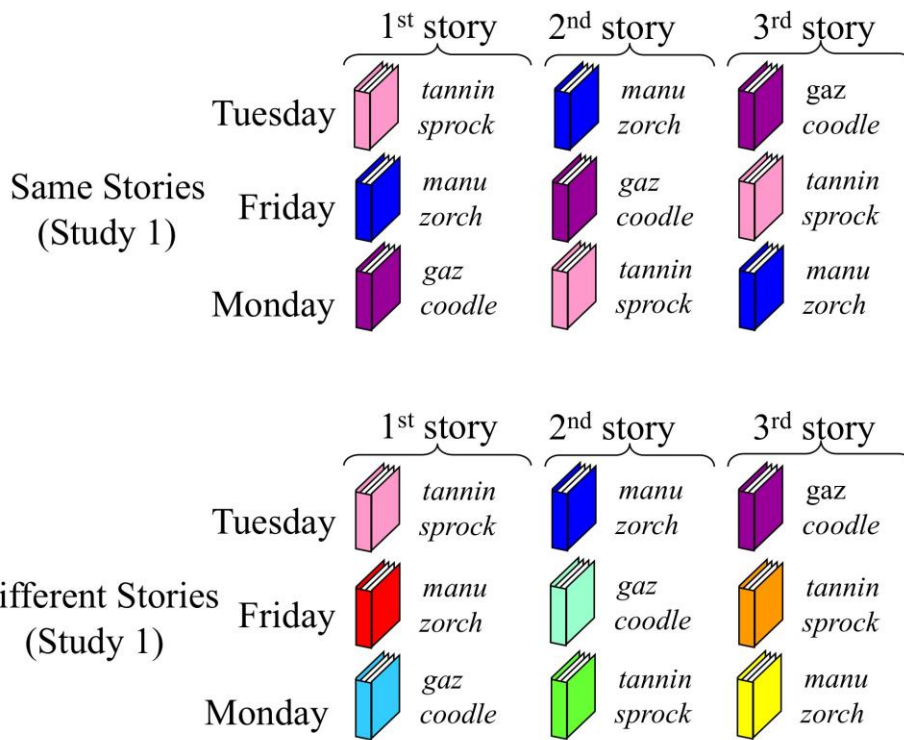


Figure 2. (A) The story order in the original paper. Kids in the same stories group heard a different story each day, but the same story over and over. Kids in the different stories group always heard three different stories, but with the same target words. (B) Word learning scores in the original paper. Kids in the same stories group always scored higher than kids in the different stories group. This is really important on Monday when we tested the words from Tuesday and Friday again.

A



B

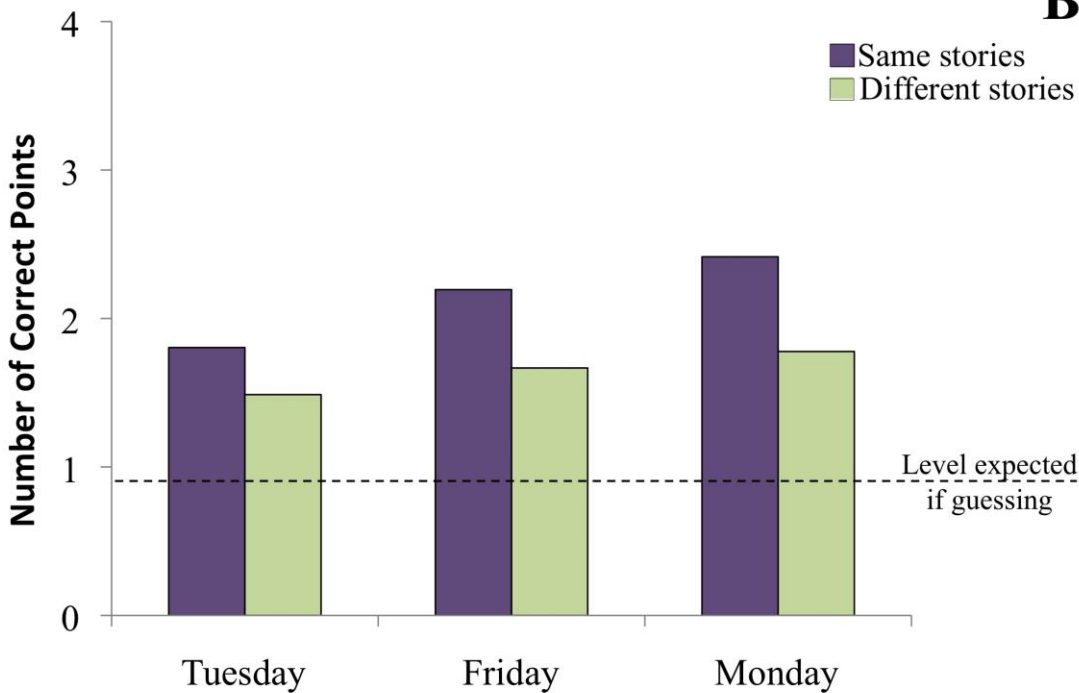


Figure 3. (A) The story order in the later study. Now, all kids heard three different stories, but for kids in the same stories group they were the same three stories each day. For kids in the different stories group they were always different stories. Notice, this study was a lot harder because kids heard six target words each day of the study. **(B)** Word learning scores in the later study. Kids in the same stories group always scored higher than kids in the different stories group.