

# Fidget Widgets

Kathleen Patterson/ kmpatte4@asu.edu

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## Abstract

Considering the influx of screens in education and workspaces, this project explores tactile ways of increasing focus that can be implemented in every day objects.

## Precedents and Prior Research

- Minor distractions such as the handling of physical objects while working have been shown to stimulate the brain to increase focus.
- A 2005 study showed that students with permission to fidget learned faster than those without permission.
- According to the Polytechnic Institute of New York University, fidget widgets are objects that people play with while engaged with a main task. Researchers at NYU have also found that people have preferences for the objects they fidget with. The fidgeting associated with those objects is often repetitive. The objects themselves are often pliable and sentimental. Research on objects with high tangibility led to the development of the Sifteo platform, which is an app on a miniature screen block involving tasks like popping infinite bubble wrap.
- The fidget cube elements were explored individually through buttons, switches and toggles.
- The PopSocket was also considered as it connects to a phone, thus it is easy to transport and not a standalone object. These qualities make it more than an at-home desk fidget.
- NYU researchers define a playful technology as one that is:
  - Has no measurable goals
  - Occurs for the enjoyment of experience
  - Typically has sense of delight or silliness



Left: PopSocket, Right: Fidget Cube

## Research Questions

How can an everyday object be purposeful, but also have elements to fidget with?

## Process

I looked into the collection of fidgets that NYU researchers had amassed as well as asked multiple students about their fidgets to note their similarities and forms. I did a material study involving a multitude of fabrics and plastics. I began designs for simple fidget objects. The first iteration was similar to the PopSocket as they were multiple buttons and toggles that attached to the back of phone cases. The latter iterations focused on the object being dual purposed with the option for fidgeting. These included a phone case that also had components to fidget with as well as a pencil case that was highly tactile. These both include buttons casted from resin. The phone case is to be casted and the pencil pouch is to be sewn.

## Results

I found that external additions to phone cases that are not retractable, like the PopSocket, added bulk to phone cases and decided to focus on built-in additions to a pencil case that were a bit easier to manage. I decided to add buttons to a handmade pencil case of a thin foam-like material. The objects one fidgets with vary as sensory stimulus that is engaging to individuals also varies. The texture and size of fidgets are important because the fidgeting action must fit within two hands.

## Conclusion

Fidget elements can be added to a variety of surfaces. Further research may be done toward additions or designs of workspace objects like keyboards and desks.

## References

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