Spaced Out: Exploring Attention Deficit Hyperactivity Disorder Through Animation

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SPACED OUT:
EXPLORING ATTENTION DEFICIT HYPERACTIVITY DISORDER THROUGH ANIMATION

by

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ABSTRACT

Spaced Out is about a 16-year-old high school student named Penny, who arrives home from school after a long day. She has astronomy homework that is due, and she is determined to sit down and get it done as fast as possible so that she can have some evening time to herself. This all goes awry when Opal, a dragon who is a manifestation of her ADHD, shows up to distract her. Penny must find a way to finish her assignment, not by ignoring Opal and pretending she isn’t there, but by embracing the fact that she is a part of her and using it to her advantage.

This short film is an educational fantasy based on my own experiences living with ADHD, and with it I hope to offer others a glimpse into my daily struggles. Many people still believe in harmful stereotypes about ADHD and assume it can manifest in only one way. Spaced Out is my attempt to bring further understanding to this complex mental health challenge.
To anyone who has ever wondered if something was wrong with them, you are not alone.
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CHAPTER ONE: INTRODUCTION

What is ADHD?

Attention Deficit Hyperactivity Disorder, or ADHD, is a condition in which the chemical dopamine is unable to properly travel along the neurological paths to the prefrontal cortex, resulting in issues related to executive function. These issues in executive function result in poor concentration, forgetfulness, lack of planning, and impulsivity, among many other symptoms (Selikowitz 90-93).

ADHD is an extremely prolific condition. The numbers vary between sources, landing anywhere between three percent (Selikowitz) and eleven percent (NIH). Despite how common it is, many people believe harmful stereotypes about ADHD, such as it only affects children, that it is not a real condition and only the result of laziness, or that it can only affect boys (Selikowitz 18). While boys are far more often diagnosed than young girls, this is likely due to an inability to recognize the symptoms as they manifest in young girls (Skogli et al. 3-6). This is despite the fact that there is little evidence that gender makes a difference in the symptoms that people experience (22-23).

My Personal Experience with ADHD

I was diagnosed with ADHD when I was 14 years old. My ADHD affects me in many different ways. I suffer from forgetfulness, with both long term and working memory, lack of motivation, time blindness, among a host of other issues. I discover new things about myself that relate to my ADHD diagnosis every day but the two that relate to Spaced Out the most are my overabundance of creativity and my lack of focus.
My ADHD drives my creativity, the constant need to bounce from one subject to the next has the unintended effect of continuously coming up with new ideas to hold my interest. Whether I want it to or not, my brain will always be thinking about these ideas in the background. This causes me to come up with new creative ideas at such a rapid pace that I could never bring them all to life.

However, because my brain is constantly bouncing from thing to thing, it is extremely hard to focus on a task for an extended period of time. The amount of time that I can focus depends on a multitude of different factors, such as interest, energy level, challenge, urgency, among others. Sometimes, my eyes can go out of focus, often subconsciously, because my brain is constantly searching for stimulation and the task at hand is not getting to the point fast enough. Soon, I’ll realize an hour, two hours, three hours have passed. And I’m still stuck on the same sentence I was when I started.

Throughout my life, my ADHD has presented me with many personal challenges. But I have also faced many interpersonal challenges as a result of my diagnosis. Many of my teachers would reluctantly grant me my accommodations, many believing I used these accommodations as a way to cheat on my exams. I was treated differently than other students in class. Multiple teachers expressed that they did not believe I had ADHD because my grades were so high. *Spaced Out* rose out of a desire to give others an insight into my invisible struggles that are outside of what a layperson might expect of someone with ADHD.
CHAPTER TWO: ADHD IN MEDIA

Although I was diagnosed at a young age, I never fully understood what having ADHD meant for me. It was not something often talked about outside the context of school. I rarely saw any sort of depiction of the struggles I was going through on television as a child. As a result, I assumed many of my ADHD traits that did not specifically deal with focus were character flaws. The study *Social Representations of Attention Deficit/Hyperactivity Disorder* found that ADHD only became popularized in print media from the late 1980s to the 1990s “indicating an important shift in the societal awareness and perceptions of ADHD” (Schmitz et al. 387-388). This research only further resolved me to create *Spaced Out*.

When I set out to create this project, I wanted to see how ADHD is represented in entertainment to see how *Spaced Out* compares to them. I only reviewed characters who are explicitly stated to have ADHD within the text in the work and excluded examples that relied on speculation. The examples I chose to dig further into were Bart Simpson from *The Simpsons*, Barney Stinson from *How I Met Your Mother*, Percy Jackson from *The Lightning Thief*, and George Fayne from *Nancy Drew*.

Both Bart and Barney play on ADHD as a punchline, perpetuating harmful stereotypes such as kids with ADHD are addicted to harmful drugs, that they are just lazy, and they just do not care enough to pay attention. These harmful stereotypes prevent people who need accommodations in the workplace or school from asking for the help that they need, and further, they teach those with ADHD to treat it as a hinderance, as a character flaw, and to beat themselves up over their constant failings. Additionally, these harmful stereotypes cause people
who do not understand ADHD to believe that those of us with it are just lazy or unmotivated. A 2010 study shows this is still an issue. Parents with children diagnosed with ADHD were interviewed and among them, forty four percent were concerned with their diagnosis resulting in their children being labelled some variation of a “problem child” and forty percent were concerned about themselves and/or their children facing social isolation (dosReis et al. 812). Often, people with ADHD do not open up about their shortcomings or ask for help for fear of being met with scrutiny instead of compassion.

In the episode “Brothers Little Helper” from The Simpsons, Bart Simpson is diagnosed with ADHD by the school’s assistant principal, Skinner. He is put on a fictional drug called Focusyn which is meant to be a fictional brand version of Focalin, an ADHD drug. The medication almost instantly makes him a genius, “focusing” his otherwise delinquent and chaotic energy into him doing more productive things with his time, such as reading or organizing Homer’s lawsuits. He then becomes a deranged conspiracy theorist, steals a tank, and shoots down a satellite. At the end of the episode, they take him off Focusyn and put him on a well-known ADHD drug, Ritalin. He is repeatedly referred to as a “Junkie” and how “the only thing more effective than (Focusyn) is regular exercise,” explicitly implying that ADHD medication is unnecessary which discourages anyone with ADHD from seeking treatment.

The only piece of media that I consumed as a child that explicitly mentions ADHD was the Percy Jackson series written by Rick Riordan. The main character, Percy Jackson, who is introduced in the first book, The Lightning Thief, is diagnosed with ADHD and dyslexia. Percy’s father is the Greek god Poseidon, so he is a demi-god or half blood. In the text, his ADHD and
dyslexia, conditions that are often combined, allow him to read ancient Greek as well as having faster reflexes to survive in battle.

Riordan based Percy Jackson off of his son when writing *The Lightning Thief*, and later went into depth about why he made this choice in a post on his personal website, *The Learning-Disabled Hero*. “I thought about Haley’s struggle with ADHD and dyslexia. I imagined the faces of all the students I’d taught who had these same conditions. I felt the need to honor them, to let them know that being different wasn’t a bad thing. Intelligence wasn’t always measurable with a piece of paper and a number two pencil. Talent didn’t come in only one flavor.” Percy Jackson is fantastic representation for kids with ADHD and the idea that having it can make you a demigod or a hero was something that struck a major chord with me as a child. However, outside of a few references to ADHD, the rest of the work did not meaningfully explore it on a deeper level. *Percy Jackson* is about gods and heroes first, not people with ADHD.

Finding representation of ADHD in women is even more difficult, as white, young boys are most commonly the ones shown to have ADHD (Schmitz et al. 395). So I was pleasantly surprised to find that in *Nancy Drew* (2019) Season 4 Episode 7, “The Reaping of Hollow Oak,” a female secondary character named George and Nancy’s adopted father and a prominent town attorney, Carson, have a conversation about invisible disabilities. Specifically, George admits that she suspects that she has undiagnosed ADHD. She mentions that she thought a learning disability was “something to be ashamed of,” but then realizes that not talking about it makes it a bad thing. Her ability to process information out of traditional sequence gives them insight into the case they are working together. This is a meaningful point to make, but this seems to be the only conversation about ADHD they have, and it lies within one episode of a lengthy series
that was cancelled at the end of this run. Only those who watched all four seasons of Nancy Drew would ever see this conversation, and even then, it leaves a limited impact on the viewers. This point is seemingly never explored again.

Even though it does not explicitly mention ADHD, Season 2 Episode 17 of SpongeBob SquarePants, “Procrastination,” Directed by Walton Dohrn and Paul Tibbit, masterfully explores the feeling of struggling to complete a task. In the episode, SpongeBob finds himself struggling to focus on writing an essay that is due the next day. He finds himself doing anything but writing his essay, including cleaning the kitchen for so long it sparkles, calling his friend, and spending an exceedingly long amount of time embellishing the first and only word on the page, “The.” The visuals are used to emphasize the feelings of dread and panic, such as one scene where SpongeBob is running towards his desk as the desk moves further and further away from him in an endless hallway of clocks. Something unique that this episode does as opposed to the example from The Simpsons, is that it brings the audience into SpongeBob’s mindset through his dialogue and focuses on the feeling of dread through the visuals. It does not solely rely on using SpongeBob as the punchline.

This episode had a lasting impact on me as a child, as it was able to portray the looming threat of dealing with a task so seemingly large in a way I could relate to and understand, even as a child. To this day, the episode remains hilarious and extremely relatable. But as is the case with all episodes in the series, it is played for laughs. In the end, SpongeBob finishes writing his paper only to discover that the teacher, Mrs. Puff, has cancelled the assignment all together. This frustratingly hilarious twist works well within the rest of the context of the series. But the
work does not address why someone may procrastinate for so long or how to effectively deal with that.

There is no question presented in the work as to why SpongeBob has so much trouble completing his essay. Foreshadowed with Mrs. Puff’s ominous warning to “work hard and no goofing off,” the episode relies on SpongeBob’s characterization to imply that he is just not responsible enough to stay focused on his homework. Other characters within the work repeatedly admonish Spongebob for purposefully procrastinating from working on his essay. This is the characterization which *Spaced Out* provides a counterbalance. Penny is not an irresponsible goofball. And yet, she deals with the same problem.

In recent years, ADHD diagnosis has become increasingly more common. According to survey data from the Center for Disease Control, *ADHD Throughout the Years*, ADHD diagnosis has been on a steady upward trend since 1997. With so many people being honest and open about their limitations and discussions around mental health becoming far more common, it is time that we have art and media that not only portrays ADHD and other mental health challenges but lets audiences of all ages see that these kinds of struggles are not just personal shortcomings. Creating *Spaced Out* was not only a form of self-discovery, but a rarely seen explicit depiction of someone struggling with ADHD.
CHAPTER THREE: ADHD IN *SPACED OUT*

To come to a full understanding of the emotional core of *Spaced Out*, I was forced to deeply examine my unique way of dealing with challenges. Everything in *Spaced Out* was designed with the concept of focus at the forefront, the title itself is a euphemism for losing focus. Every moment spent working on this project was a moment spent examining myself and how these ideas could play further into the final project.

**How Penny reflects my experience with ADHD**

Penny is a smart, determined student who struggled with inattention and focus due to ADHD, a representation of myself when I was younger. As we saw with the analysis of the examples earlier, the inattentive aspect of ADHD is not often represented in media and is mostly relegated to the punchline of a joke about laziness or implied stupidity. Not only is this inaccurate and offensive, but it is also not representative of the many ways ADHD can affect someone. The scope of an animated short is far too small to represent ADHD on a large, universal scale. Therefore, I was careful to only select symptoms of ADHD that I personally had experienced.

One important aspect of my film was the gender of my main protagonist. I chose to make her a young girl not only because it reflects my personal experience, but women with ADHD are often underdiagnosed and underrepresented. The ratio of boys being diagnosed with ADHD vs girls is approximately 3:1 (Women’s Mental Health 215.) As mentioned in Chapter one, gender does not make a significant difference in how the symptoms are experienced (Skogli et al. 22-23), it does seem to make a difference in how often women are diagnosed. According to
data from the National Survey of Children’s Health from 2011, approximately 15.1% of boys were diagnosed with ADHD as opposed to just 6.7% of girls. Penny’s internal struggle is the side of ADHD not often reflected in entertainment, as explored in Chapter two.

Penny’s main struggle is she cannot focus on the extensive reading required to get the information she needs to complete her homework. Despite the distractions, Penny is always attempting to refocus on her homework throughout the film. It is important to show Penny continuing to have trouble focusing despite the fact that she is actively trying to work because this is common for those of us with ADHD; it is not laziness, it’s the way our brains are wired will prevent us from staying focused.

Penny loses focus when she first sits down to read. The words begin to blur on the pages of her book before she’s had time to comprehend a single sentence. She sits back and shakes her head. When she returns her gaze to the book, Opal is laying on her book, physically blocking her from reading. This scene serves as a transition between observing Penny from an outsider’s perspective to viewing the world through her eyes, and in turn, Opal becomes visible to the audience.
In a subsequent scene, Penny uses a ruler to attempt to keep her focus on one line at a time, but the lines begin to blur anyway. I specifically chose this method of studying because it is one that has helped me in the past. But it did not always work, and I would have to come up with another solution. Therefore, it is necessary to show Penny trying and failing to use a conventional focus method, to show non-ADHD viewers that these methods do not always help. This beat also showcased the necessity for a non-conventional solution, foreshadowing the climax.

When Penny becomes frustrated with the ruler, Opal flips to a visually appealing page in her book. Penny becomes distracted by the image on the page and begins to imagine herself and Opal flying through space together. This portrays how easily someone with inattentive
ADHD can become distracted without realizing it. She is focusing on her textbook, but she is not focusing on the part of the textbook that she needs to be in order to finish her homework.

Penny’s daydream of flying with Opal through space is related to the subject matter of Astronomy. This was an obvious choice to me in relation to both the title and the subject matter of the film, but an important one nonetheless. For me, Distractions are not instantaneous. Rather, a question or thought related to the task I am working on will start a chain reaction of thoughts, eventually leading me to something unrelated. It takes time for me to realize that I am distracted and have made no real progress. This is what happens to Penny. She has convinced herself that she is studying, but she does not realize she hasn’t absorbed any of the information she needs to complete her homework until she wakes up and realizes hours of time have been wasted.

Figure 2: Penny and Opal flying through space.
Penny’s panic only truly sets in when she looks at the time and realizes how late it has gotten. Panic and anxiety are exacerbating her symptoms at this stage: she is panicking because she cannot focus, but she simultaneously cannot focus because she’s panicking. In many cases, women with ADHD are often misdiagnosed as just having anxiety and may never realize that their issues stem much deeper than this. “Higher rates of mood disorders and emotional dysregulation often complicate the picture of ADHD in females. Many females seeking treatment for mood and/or anxiety concerns actually may be struggling with unrecognized symptoms of ADHD.” (Quinn 422.) Internalized anxiety is “the most important” self-reported symptom in diagnosing, specifically women, with ADHD (Skogli et al. 2).

Depicting the anxiety that comes with this sort of daydream was necessary to show that ADHD can be debilitating. This daydream is an obstacle to her goals and shows how anxiety can manifest from ADHD symptoms. Not many people can relate to having a magical dragon take them off onto a flying adventure through space, but almost everyone can relate to the stress and panic of realizing hours of precious time have been wasted when a deadline is looming. Though the objective of my entire film is to put others into my shoes, it is my hope that this scene especially will cause viewers to start asking questions about themselves if they find that they relate to this sort of anxiety.

After breaking down in defeat, Penny must come up with a different approach to dealing with Opal. The climax of the film was by far the most difficult challenge to portray visually. It was critical that Penny arrived at the solution through her own agency in a way that felt natural and would read well to the lay person. This caused me to revise this section of the film most
often, trying to not only understand myself and my own unique quirks, but attempting to portray visually something that is only happening within my own psyche.

The original cut of the film had Opal showing the book to Penny and Penny somehow figuring out the visualization solution. I felt this removed Penny’s agency. She had to be the one to find the solution, and in this cut, it felt as if Opal was presenting the solution to her. In another, later version, Opal shoved the book towards Penny. The intention was that she would be shoving her back to the “daydream,” but the feedback I received on this cut indicated that this was unclear, and it felt more that Opal was attempting to get Penny to do her homework, which was the opposite of what was supposed to be happening.

What I eventually decided was Opal ripping the book away from Penny. This act of defiance shows that Opal is completely out of control and it is impossible for Penny to simply move her out of the way or ignore her, as she did earlier on in the film. When Penny is just about to give up entirely, resigning herself to defeat, she sees Opal playing with the planetary objects, visualizations that came from within the book. Penny then gets the idea to try to make the book interesting by visualizing the information in an engaging way. Getting Opal to find novelty in the books boring presentation, using her own creative prowess, allows Penny to not only focus on what she is doing, but to be interested in the subject matter. It is only when Penny takes this gentler approach to Opal, and in turn, herself, that Opal begins to cooperate.
Often when I was young, I needed to use my imagination to my advantage when trying to read long blocks of text. I had to find a way to process the information so it made sense, but also to make it engaging enough to stay focused. I often substituted characters or objects within the text with characters from shows, books, or movies that I was interested in at the time to help maintain my focus. Though many people use visualization when reading, for me, it was something essential for both fiction and non-fiction texts for me to retain any of that information.

**How Opal represents ADHD**

Opal is the visual representation of Penny’s ADHD. She is the manifestation of ADHD, but she only exists in Penny’s mindscape. I imagine that if this became a feature length film that other characters would not be able to see Opal, but she would still be very real to Penny. This
reflects the quiet struggle of the average person with ADHD. She would struggle regardless of whether or not she appeared to be fine to others.

Early on in production, Opal’s antics reflected more of what a physical creature might do to get someone’s attention, rather than how ADHD might affect someone. This was later revised to be a combination of these two things. Opal first appears lying on top of the book, similarly to what a cat might do, preventing Penny from reading. Her actions in this way still reflect a physical creature, in this case, a cat. But her blocking the book also blocks Penny from reading and reflects the purpose she serves, preventing Penny from focusing on the reading.

In the original cut of the film, she started playing with the strings of Penny’s jacket. Which, while cute, did not add anything to Opal’s characterization. This was revised to have Opal nudge Penny’s phone in her direction. Penny eventually sees she has messages and cannot resist taking a second to answer them before she realizes what she is doing. This is a common source of distraction among many people in this day and age. Phones are distracting enough already, but it is worse for those with ADHD. Phones are specifically designed to keep the user hooked by providing instantly gratifying dopamine hits one after another. “Those with ADHD tend to be impulsive, have difficulty controlling their behaviors, and are highly sensitive to reward. The feeling of being in control of a target, co-occurring stimuli, and freedom to express oneself associated with smartphone use can provide high degrees of motivation and reward for adolescents with ADHD” (Kim et al. 6). At first, Penny is just answering missed messages. But she quickly forgets her reading and stays on her phone longer than she intended.
Opal’s final antic as a smaller dragon is knocking over Penny’s cup of pencils. This shows the distraction of doing something less important than the task at hand, to feel accomplished when, in reality, she has gotten nothing done. Sometimes I will take time to organize my desk or files at inappropriate times, so it satisfies the need to complete a task and it satisfies the ADHD to not do the thing I am supposed to be doing. Penny gets distracted and cleans up her mess, instead of ignoring it for later. This also serves the purpose of introducing the ruler for the next shot when she tries to use it to read line-by-line.

Opal’s size changes several times throughout the film. When Opal first appears, she is about the size of a small cat. She is still in a controllable state for Penny. Penny can, and does, simply move Opal out of the way several times throughout the first half of the film. This reflects how ADHD can often feel anywhere between a minor annoyance and an insurmountable obstacle.
It is once Penny enters the daydream sequence that we see Opal at her largest size for the first time. Penny is not in control of what is happening at all during this sequence, but she isn’t yet aware of the ramifications dozing off will have for her. It’s only after Penny snaps back to reality, looks at the time, and begins to panic that we see Opal again. This time, she is as huge as she was in the daydream, looming above Penny from behind. She has, literally and figuratively, become a bigger problem as time has gone on. Opal immediately seizes control of the situation and snatches Penny’s book away from her, once again physically barring her from getting her work done. The two fight over the book for a moment before Penny falls to the ground, defeated. This is the last time Penny physically tries to resist Opal.
Opal never physically tries to attack Penny, only the textbook. After Penny falls to the ground, Opal gets inadvertently distracted again by the planetary objects coming out of the book. These objects are not from the section of the book that she needs to read, but this gives Penny the idea to use her imagination to catch Opal’s attention. It works and Penny is now able to focus. As a result, Opal shrinks to her smallest size. Opal flies around and plays with the floating planetary objects as Penny works. She is not helping her study in any way; she is simply cooperating long enough for Penny to finish her work. At the end of the film, Opal stays with Penny but in a smaller form. This shows that Opal is still there and is affecting Penny, but she is no longer a problem since Penny finished her work for the night.
CHAPTER FOUR: PRODUCTION DESIGN

Character Design - Penny

Penny’s design was chosen to reflect myself without being a one-to-one exact replica. Her hair color was chosen because orange symbolizes innocence, positivity, and creativity (Olesen, “Orange Color Meaning”). Additionally, it is also the color for ADHD awareness (Hullett.) Orange is a color used throughout her design, including her shoes, her freckles, and her jacket. This creativity aspect is very important for Spaced Out, as creativity plays a major role throughout the film, as it does in my life experience. The purple in her design, mainly in her jacket, is meant to emphasize Penny’s imaginative nature and the magical aesthetic of the film (Olesen, “Purple Color Meaning”).

Figure 6: Penny's concept artwork
Penny is an energetic, approachable, bright young girl and the shape language throughout her design reflects this. She is built out of many circular shapes, she has large, round eyes as well as a rounded face to emphasize her youth. These features are heavily inspired by the visual style of Pixar Animation Studios. The character designs of Riley from Inside Out, Guilia from Luca, and Anna from Disney Animation’s Frozen and Frozen II place emphasis on the features of the face, with larger eyes and larger heads. This masterfully puts the emotions of their characters at the forefront of the characters’ designs (van Rooij, 202). As the main character, I want her to look as approachable as possible to encourage the audience to empathize with her and her struggle, even if they cannot relate to her experience.

**Character Design - Opal**

A dragon was chosen to represent ADHD to convey its inherent nature as something large and intimidating. I compare ADHD to fighting a dragon, because some days it can be so overwhelming it is impossible to succeed. Selecting a mythical creature over a real one emphasizes that often these invisible disabilities are not believed by others. My struggles have been dismissed as laziness or lack of care many times in the past. Though this attitude is changing, there were many times throughout my life where my teachers did not believe I had ADHD because I got good grades. If I told them I was being haunted by a magical dragon that prevented me from doing my homework, they would have believed me just as much as if I had said I had ADHD. Finally, dragons have played a huge role in my life and artistic journey, it was only fitting for me to include one.
The decision to make Opal opalescent was specifically to make her visually distracting. Her physical appearance then reflects her role in the film, to distract Penny from doing her homework. The multicolored opalescence also prevents the audience from associating Opal with any one trait based solely on color; it makes her not immediately understandable, and more intriguing. Opal’s physique is reminiscent to that of a cat, due to their tendency to sit on open books and to just generally be in the way. When I was in high school, I would often let my cat sit on my books so I had an excuse to avoid reading. Basing Opal off a cat is not only appropriate for the role she plays, but also personal to my life.
When Opal is smaller, her design uses many round shapes, with larger eyes and thicker, rounder features such as her short tail and big nose. This is to make her seem unintimidating to the audience upon first encountering her. When she is smaller, Penny can physically move her around and dump her off of her book. Though Baby Opal’s rounded shapes build her an innocent façade, her actions prevent her from being seen as inherently good or pure. Opal’s design balances cute and scary to reflect the positive and negative effects of ADHD.

When Opal grows larger and becomes uncontrollable, her shape language changes as well. Triangles and sharper edges are used throughout her design. She grows triangular spines down her back and an arrow at the edge of her tail. This added sharpness creates intimidation where otherwise there would not be any. She still uses the same opalescent effect of the smaller version which makes her visually distracting and impossible to ignore. By keeping the
same light and inviting color scheme of the smaller version, the audience will associate the two
versions of Opal more closely, solidifying the point that she is not evil; she is not purposefully
growing larger out of spite or malice, only because she has become a more formidable
distraction. In this way, her shape language contrasts with her color scheme to create a chaotic
neutral creature, one that is not easy to deal with or understand.

Set Design

Setting the film in Penny’s bedroom allows me to give the audience further glimpses into
her character through her personal items, emphasizing the use of the environment as a
storytelling device. From the knick-knacks that litter on her desk, to the sticky notes with various
reminders plastered across her corkboard, to the vibrant and intricately designed bedspread, to
the small pile of clothes on the floor, her room was set dressed to be a “controlled mess.” This
controlled mess reflects her psychological state throughout the film, her mind is a mess that she
eventually regains some control over.

The design for many of the key props mirror the main outer space aesthetic of the film. Penny has many items that are space-themed such as her backpack, a few pens, and even the
subject she is studying, astronomy. Astronomy was chosen to give the title of the film a double
entendre, and to bring the story’s core message about dealing with a lack of focus right to the
forefront.

The main color in her bedroom is blue. The blue on the walls is meant to contrast nicely
with both Penny and Opal, allowing them to stand out against the backdrop, while also re-
emphasizing Penny’s creative side by not being a plain white or tan. She also has an extremely
colorful bed set, with pinks, purples, and blues. The designs are outrageous and Bohemian, further highlighting Penny’s creative side as well as echoing the chaos inside of her brain.

Figure 9: Spaced Out's bedroom environment

Production

Spaced Out is a deeply personal film. Every aspect of this story about a girl struggling to complete her homework is one that I relate to very deeply. And I faced the exact same struggles when creating it. Despite my past experiences working on animated short films, Spaced Out still took me four years to complete, one year more than originally projected. On top of my ADHD struggles, I had to manage a massive academic workload that frequently took my attention away from the film and severe burnout which paused production on the film for several months.
Before work began on *Spaced Out*, I anticipated my struggles with inattention getting in the way of the final product. Through my training in the University of Central Florida’s Character Animation Track, I was able to anticipate many technical challenges that might arise and specifically designed the film to avoid as many unnecessary issues as possible. The entire film is set in a bedroom with a closed door to avoid having to build any assets or light anything beyond that door. The only exception is the daydream sequence, which takes place inside a largely empty void. I limited the film to two characters, knowing that the workload would dramatically increase with every additional character. Each idea was carefully considered from a technical perspective, and how feasible it would be for the final product. Despite these efforts, I still underestimated the scope of this project.

Something I failed to anticipate was that while I was familiar with each step of the pipeline on some level, there were some areas I was more familiar with than others. I was extremely familiar with areas like rigging and animation, but I only had a basic understanding of modeling, texturing, and surfacing. This left a considerable learning curve when I reached these areas during my production. It was extremely difficult to create something that was up to my own high expectations, while simultaneously learning or re-learning the process.

While creating *Spaced Out*, I was concurrently depicting how my brain works differently and learning more about my own unique way of functioning than I ever had before. This affected the organization of the production. I switched from a range of task-tracking apps, Excel sheets, and Word documents, finally settling on a plain, physical notebook a few months before my defense. My attempts to avoid disorganization ultimately led me to it.
This constant re-structuring of the production schedule led to many technical aspects of the film that were originally planned to be cut from the final product. For instance, in the daydream sequence, there was originally going to be a nebula cloud effect that Penny would run her fingers through. There were also plans to simulate the jacket Penny wears, which was cut very early on. These technical challenges sounded enticing when first conceived, but I knew I needed a backup plan for any technical challenge in the event something were to go wrong or I were to run out of time. For example, Opal’s Scales would have just had a rainbow color scheme painted directly onto them if the iridescent effect I wanted did not work as planned. These important decisions ensured the core of the story stayed intact, despite any missing aspects.

In analyzing the film retrospectively, I discovered one last thing. Penny is not fully successful in this story. At the start of the film, she sets out to complete her homework in a reasonable amount of time. Yet, she still ends up wasting a few hours daydreaming, despite finishing her homework. The same is true of myself and my experience creating *Spaced Out*. Time management and inattention are still struggles for me. This only serves to further my point that you can only learn to live and work with ADHD. But even more than that, learning to live with any sort of neurodivergence, where there is no guidebook on how to function, is a lifelong experience that one will never truly master. I find comfort in the fact that *Spaced Out* taught me that struggling is a part of the process of learning, the struggle in itself is not a personal failing.
CONCLUSION

*Spaced Out* is a story of a girl learning to embrace herself for who she is and forgive herself for her struggles. ADHD is an extremely complex mental health challenge that manifests differently in each individual that has it. Despite this, ADHD is often relegated to cruel jokes that play on harmful stereotypes within entertainment. *Spaced Out* is working to change this stigma into one that is more compassionate to those who have it.

My goal when creating *Spaced Out* was to help others to empathize with my unique challenges and to force them to challenge the stereotypes they believe about ADHD. But more than that, creating *Spaced Out* got me to empathize with myself. It is a reminder to be kind to myself when I am struggling, because ADHD is neither good nor bad, it simply is. And it is my deepest hope that *Spaced Out* will be part of the changing landscape around our understanding of ADHD.


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