

Raising ADHD Awareness through Fashion Design: Analysing Social Media Concepts and Technological Integration

JAYARATHNE K.A. 1* and WEERASINGHE W. M. A. I. 2

¹AMDT School of Creativity, Sri Lanka. <u>kavisha.jayarathne@gmail.com</u>

²Department of Integrated Design, Faculty of Architecture, University of Moratuwa, Sri Lanka. <u>amaniw@uom.lk|amaniiweerasinghe@amail.com</u>

Abstract — Recently, discussions surrounding Attention Deficit HyperSensitivity Disorder (ADHD) in adults have taken a rise in digital media, particularly on social media platforms. This study explores the innovative use of fashion design to raise awareness of ADHD in adults, extracting insights from digital media, particularly ADHD-focused videos on TikTok and the concept of sludge content. These videos often depict how individuals with ADHD experience heightened stimulation and multitasking, elements that formed the foundation of this research. The primary aim was to translate these unique experiences into wearable art, showcasing how fashion can serve as a medium for awareness and representation. The importance of raising ADHD awareness cannot be neglected. Many adults remain undiagnosed or misunderstood, often facing challenges such as difficulty concentrating, impulsivity, and sensitivity to external stimuli. Awareness fosters empathy, reduces stigma, and promotes understanding in both social and professional settings thus making an understanding society. By connecting ADHD awareness to fashion, this research aimed to create a visual medium that communicates these experiences, making them more relatable and understandable to a wider audience. Through literature review and analysis, it became evident that digital media plays a crucial role in enhancing understanding and visibility of ADHD. Especially the COVID-19 lockdown period between 2020 and 2022 significantly influenced the surge of ADHD discussions online. With more time spent on social media during lockdowns, content related to ADHD gained widespread attention. While this increased awareness was beneficial, researchers have found that much of the information circulating online was inaccurate, often exaggerating health risks or presenting misleading symptoms. However, this wave of attention also led to a significant increase in people seeking mental health consultations, indicating that the trend, despite its flaws, did raise awareness among the general public. However, a notable gap exists in how fashion design addresses ADHD awareness, particularly in a way that represents the sensory and cognitive experiences associated with the condition. This literature gap presented an opportunity to explore and innovate, aiming to fill the gap by integrating fashion and neurodiverse storytelling. Building on this, the project centred on

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experimenting with the concept of "having more than one stimulation in one garment." This approach was designed to mimic the multi-sensory and attention-dividing experiences often associated with ADHD. To narrow down the research area, the emphasis of the project was placed on visual stimulations. The research drove towards optical illusion art such as Projection mapping, Barrier grid animations, lenticular art, 3D illusion art, and Light art as they can mimic moving imagery or visually confuse/intriguing for an audience in a static medium. The Samoiloff effect, an optical illusion characterised by a contrasting specific colour combination, was chosen as the most practical and impactful method for this phase of experimentation. Its ability to create moving visual experiences in a two-dimensional static fabric aligned well with the objective of simulating overstimulation in a fashion context. The garments with the artwork with specific colours needed to be exposed to RGB lights to reveal the effect as these contrasting colours help create a movement that the eve can see. This approach added an immersive quality to the project while ensuring that the clothing remained wearable and functional. The effect works like a visual trick that plays with your eye, and mind and the colours themselves as the combination of opposite colours darken or even disappears the image to the human eye. Based on colour theory, the maximum number of images or sequences that can be successfully and functionally created using this technique is limited to three, showing both the potential and the limitations of this method. Challenges included manually extracting cyan, yellow, and magenta colours in Photoshop, manipulating images to create a moving effect when changing colours, the printing process dulling the colours, thus having to produce multiple samples and finding the precise red and green-blue flickering lights. In this project, sublimation printing on satin fabric was chosen for its ability to hold vibrant colours and ease of printing. Initial results demonstrated that integrating the Samoiloff effect into fabric design is not only feasible but effective in conveying moving imagery through clothing. Despite these successes, one limitation of this research was the restricted variation in colour choices, as the Samoiloff effect relies on precise and exact colour combinations to be effective. Further experimentation with different colour variations did not achieve the same impactful results as the original base colours. Additionally, these three specific colours are not the most aesthetically versatile or can be easily integrated into most designs, posing challenges for incorporating them into cohesive fashion pieces. While this phase confirmed the potential of optical illusions in fashion to embody the sensory aspects related to ADHD through Samoiloff effect, it also highlighted that this area of design research is open for further exploration expanding beyond print as a medium, broadening the idea of how fashion can reflect neurodiverse experiences and how fashion could be used as a bridge between art, awareness, and digital media.

Keywords: ADHD awareness, fashion design, social media concepts, technology

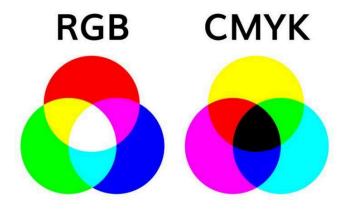
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Figure 1An example of split screen used with two different types of videos (s



 $Note.\ Subway \ surfers\ being\ a\ continuous\ monotonous\ video\ and\ the\ upper\ video\ being\ a\ new\ video\ with\ various\ content.$

Figure 2
Corresponding colours were used to hide the other colours



Note. Samoiloff effect

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Figure 3
Developed print



Note. extracted the cyan, yellow and magenta colours and altering the image therefore it imitates the movement of the plant and butterfly