L'esprit de névrotique

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Contextual Review and Concept Statement: This design is a visual embodiment of the neurodiverse, neurotic mind. Neurodiversity refers to non-pathological variation in the brain regarding sociability, learning, attention, mood, and other mental functions, and is a viewpoint that brain differences are normal, rather than deficits (Emeagwali, 2013). Neuroticism is one of the big five personality traits (OCEAN), which is defined as a tendency toward anxiety, depression, self-doubt, and other negative feelings (Ackerman, 2021). Through this ensemble, it was aimed to convey what it feels like to be fighting to reconcile these neural impulses and neurotic emotions into a sort of functional order so they could be channeled into usable outputs. The idea was to create a wearable ensemble that advocates awareness of mental health as well as neurodiversity challenges and destigmatizes the term "neurotic".

Process, Technique, and Execution: To develop the garment, patterns were initially created by digitizing slopers in size 8 and manipulating them in Optitex PDS by using flat patternmaking techniques (Joseph-Armstrong, 2010). Then, the patterns were exported as ASTM files to CLO3D, which was used to digitally prototype the patterns on the fit model's avatar and perfect garment fit through multiple iterations. After this step, patterns were opened in Adobe Illustrator to create laser cut and engraving lines for the jacket, camisole, and dress (Figures 1a,1b, and 1c).
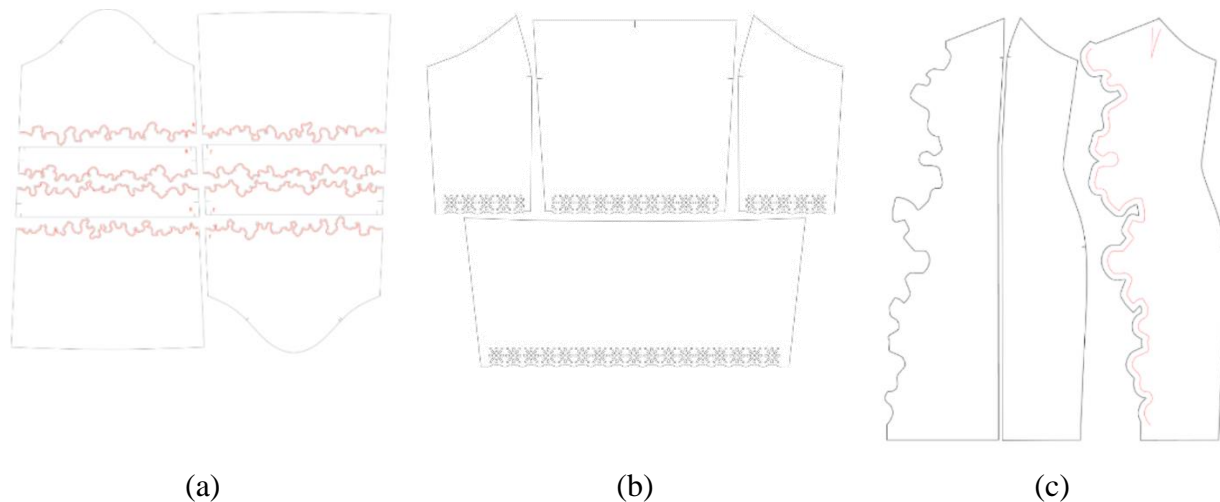

(a) (b) (c)

Figure 1. e 1. (a) Jacket sleeve patterns with cutting and engraving lines, (b) camisole patterns with laser cutting lines, and (c) dress patterns with laser cutting and engraving lines

Laser cutting was utilized to cut and finish the edges of all the pattern pieces. Especially for the camisole, a lace-like hem finish was achieved by using laser cutting. Engraved surface details were placed on the jacket as well as on the dress. TinkerCad was used to create the STL files of two-layer stereoscopic butterflies for 3D printing. The top layer of the 3D printed layer was spray-painted to provide a depth sensation. A 3D printing pen was also used to directly "print" the contour line face detail onto the finished dress.

Traditional sewing methods were used for construction, except around the sleeve ridges, which were attached by using fusible seam tape to avoid the appearance of top stitches. When constructing the jacket sleeve, notches on the top and bottom under layers of ridges indicated where to line up and attach them to the main outer layers. Using heat-fusible seam tape, the layers were adhered and permanently fused by pressing from the fleeced wrong side of the fabric with an iron on low heat. A "spacer" piece was created and cut from the vinyl fabric from the gap cut out between the outer top and bottom layers of the sleeve. This piece could be fitted into the grooves of the outer layers (face down) like a puzzle piece so that the under layers sat on top and the outer layers sat perfectly spaced to the correct final length for the sleeve. A gold tulle mesh rectangle cut roughly a bit larger than the needed size was lined up and adhered with the fusible seam tape to the edges where the top and bottom under layers were attached. To seal in the seam tape which was exposed in between the holes of the raschel tulle knit, a strip of white cotton broadcloth was layered on top of the taped areas of the tulle before pressing to ensure secure attachment and for added comfort. For the camisole, silken cord straps were first attached in the front where the front and front side panels meet then measured out to about 15" and attached to the finished neckline in the back. When sewing the dress, a fabric glue stick was used to baste the front right and front left center panels to the front left panel, overlapping at the ridges to meet the engraved line on the front left panel. The seam was top stitched ~3/16" from the ridge style-line edge to secure panels together and to add to the overall finished surface effect. Front and back pieces were then stitched together at 1/2" seam allowance. The seam allowance was pressed outward. To achieve an unraveled look around the hem, the fabric was frayed up to the 1.1/4" hemline and secured with a fray check. Thin strips leftover from laser cutting were recycled as straps and attached with fusible seam tape.

Originality and Innovation: In order to develop this unique ensemble, a wide variety of digital techniques were used to prepare patterns, test garment fit, and create intriguing and tasteful surface designs by using laser cutting and 3D printing. As a result, the overall visual quality was deeply enhanced to advocate awareness of mental health and draw attention to the challenges stemming from neurodiversity.

References

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