Safety and Security: An Effort to Lessen Trauma in Pediatrics Through Clothing By Jorge Maldonado

In order to obtain a Bachelor in Fine Arts degree at the University of Michigan you must spend the last year of your college career working on an integrative project. This integrative project is so time consuming and rigorous that most professors assign work for you to do during the summer term prior, just so that the first day isn't a waste and gives each student more time to work on their project. The first day of class we were asked to bring with us a list of words that resonated with us. Throughout the process of developing an idea for the project, I also had the opportunity to come up with more keywords but after several revisions; I noticed two words that were on every list that I had made, Safety and Security.

Safety and security were important factors in my life. I had an overly protective mother, which contributed to these keywords. I remembered all the precautions she took to guarantee my safety and security each and every night. Specifically, I recalled a trip to the mall where she had my fingerprints copied to a page and that page sewn into a book that she kept with her. This book persevered my identity and was to be used in case I went missing. Like all mothers, she loved her children and I never feared being in her presence. That was the same sense of safety and security I wanted to emulate in my integrative project, but what field would I choose to explore safety and security in?

Part of the integrative project process was to apply what I knew how to accomplish to what I wanted to accomplish, keeping in mind the keywords that were of value to me. Spending the last four years studying graphic design and fibers, I knew I wanted to experiment with clothing. The integrative project process asked for the one

going through the process to ask themselves a critical question, to challenge themselves and to do so I had to look into my past. I thought, "What events did I participate in that challenged me to develop as a person?" Amongst the events I recalled a time when I volunteered at Mott Hospital as an Art Therapist. Having the opportunity to work with these children, seeing what art did to them and how it helped with their healing process had a profound effect on me. I also recalled coming to the University of Michigan, originally, to explore a medical career. Having experience working at an elderly home, I became accustomed to helping others heal. It was almost decided for me, the topic that I wanted to challenge was safety and security in the field of medicine. With further deliberation, it became obvious to me that pediatrics was the field I had most interest in.

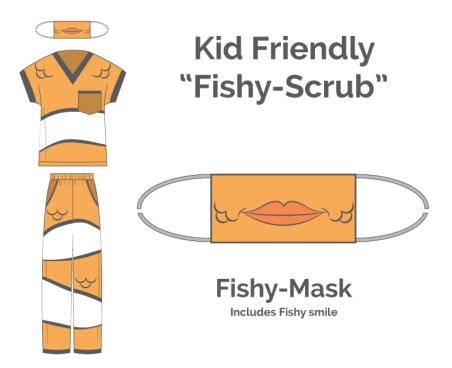
The trauma a child can undergoes while being treated has the potential to haunt them their entire life. Almost everyone can recall a time of how scared he or she were going to the doctor's office as a child or how afraid they were while visiting the dentist. At one point in time, I had eight silver crowns put into my mouth due to cavities during an operation. It took several hours of excruciating pain and till this day it haunts me. I also remembered how it felt to be on the opposite side. I recalled what it felt to be the one providing treatment and how frightening it felt to give treatment to someone who feared me. My mission became evident. I had to find a way to portray someone treating a child as someone who isn't there to cause trauma but rather to relieve trauma and add treatment. The research then began on hospital attire, specifically nursing scrubs. I chose to research nursing scrubs because nurses had the most contact with patients, as far as I could tell while volunteering. Who better than someone in constant contact with multiple patients?

Nurses had traditionally worn uniforms as early as the 19th century as did surgeons. Surgeons however practiced in whatever clothing they desired, simply wearing an apron over their attire. As the evolution of their garments continued throughout the years due to finding a solution that aided in protecting the user from contamination, it was not until the 1970's that green surgical scrubs became mandatory for medical staff. It originally came in shades of green because the bright white color of their previous attire would cause eyestrain during practice. One flaw in the system at the time was the fact that nurses from different departments weren't easily differentiable so different color nonsurgical scrubs became the solution and the standard followed today.

Keeping this information in mind, I explored the materials common hospital attire was made from. Nursing scrubs are made primarily from blends of cotton and polyester but the best nursing scrubs were 100% cotton, due to its softness, durability, and its lowered chance of becoming wrinkled when dry. These garments are typically more expensive than cotton-polyester blends, which are most commonly purchased. The reasons behind using a cotton/polyester blend for scrubs were because of their nature to withstand wear and the ability to be washed multiple times. Many users found spandex blends or rayon blends to be far more comfortable due to their elastic properties.

I set out to recreate nursing scrubs, scrubs and a mask that would relate to the patient that I came in peace, that I was an ally rather than a stranger. There were already types of scrubs that had prints of teddy bears, flowers, and other peaceful objects but I wasn't entirely convinced, let alone, what about the facemasks worn to protect the nurse from contracting various illnesses? Most masks if not all were a solid color. I recalled a moment while volunteering at Mott Hospital; I had to visit a patient under quarantine.

Due to their condition, I had no option but to wear a facemask to protect myself. How uncomfortable the patient must have felt see a stranger, barely recognizable, entering their space in order to give treatment. If I could alter the facemask to show that I was a friend, then the patient could find comfort in knowing that they were safe and secure in my presence. I was motivated to find a way to make both scrubs and facemasks work in conjunction and in doing so I researched things that brought joy and happiness to children. In the list of things that brought joy and happiness, I found that animals were the most common figures that children enjoyed.



One of several animal-like nursing scrubs

Through several illustrated iterations, I found that combining animals and scrubs, transforming the one giving treatment into a friend, was a successful way to relate to the

patient that I was their friend. I thought, "If I came in dressed as a friendly fish, with a smile on my face, how could a child render me as an intruder or someone of harm?" The smile on the facemask was a key element. Through research I found a study done the resulted in findings stating "smiling speeds recovery from stress." It all made sense; I needed to adapt my persona from a healer into an animated fun healer of some sort. The smiling facemask element was created to show friendliness but also evoke smile from the patient, thus speeding recovery. Knowing that hospital protocol was of importance, I set out to design nursing scrubs made to look like animals, following protocol entirely.

I had not only developed iterations of animal-like nursing scrubs but also a reward system that was to be implemented with each scrub. I recalled instances that I had visited the dentist office as a child and the only reason I would talk to the dentist is because I knew at the end of each visit, I would receive a toy from a treasure chest full of goodies. This toy had the ability to make me forget about whatever procedure I had undergone to an extent and with that, an idea came to mind. Why not reward the patient for their visit? I created a reward system to promote positive dialogue between the patient and nurse, thus activating a sense of safety and security.



Types of Stickers

The reward system is rather simple. Each variation of the nursing scrub has a custom sticker designed specifically to remind the patient what animal the nursing scrub is portraying. For instance, the person using the scrub resembling a clown fish has set of starfish stickers, the clown fish's friends if you will. The user of the scrubs then lets the patient know that for every time the user visits the patient; the patient will receive one sticker. The stickers are to be applied to a custom chart and once the designated amounts of stickers were collected, the patient receives their prize. What is to come from this? This reward system allows for the patient to anticipate each and every visit from the nurse with excitement, hoping to collect another sticker, bringing them that much closer to their reward.

All that was left now was to create all the elements necessary for my exhibition. Once the integrative project was complete, it was to be exhibited in one of multiple gallery spaces provided by the University of Michigan. My exhibition was simple, an iMac with a looping presentation of my nursing scrub illustrations and other contextual

elements as well as a mannequin modeling a prototype of one of the new animal-like nursing scrubs. I purchased several yards of cotton/polyester fabric, bond, string, and a stencil used to make the garment. My goal was to recreate in 3-D what I had made originally in 2-D, so as to provide a tactile element for the viewers to fully understand my intentions. I knew that this 3-D element wasn't going to be one ready for use, but something that I could essentially send to a manufacturer so that they could create a perfect version of it. I began sewing, overcoming one obstacle after another, only to encounter more, pushing my understanding of how to sew. After creating two pairs of scrub bottoms, one scrub top, and exploring a new method called applique, I found myself falling in love with the project even more. Spending hours working on the sewing machine, alone with my thoughts, I realized the possible impact this could have on a single child, let alone thousands of children each day. What I had created was a way to "lessen trauma in pediatrics through clothing". I decided that those words best described my efforts. It was an "effort to lessen trauma in pediatrics through clothing"; words that soon became part of the title of my exhibition.

The day to submit my garment and slideshow approached and upon adorning my mannequin with the piece, I couldn't help but smile. To see a human-like figure adorned in my gown that I had created the concept for brought joy to me. It was then that I noticed a strange feeling. I felt a sense of safety and security. I knew that what I created had the ability to make the user feel safe and secure, let alone the patient. I had only wished I had worn this scrub while visiting the quarantined patient. The animal-like nursing scrub and facemask combination had the ability to portray safety and security by being a recognizable, friendly, smiling animal. On top of that, the reward system implemented

with each scrub promoted positive dialogue between the user and patient, making the patient anticipate the return of the user with excitement, awaiting the opportunity to receive their reward. The project had evolved into a representation of who I am today. I am a healer, a graphic designer, a pursuer of fibers, all encompassed and packaged in an effort to think about those other than myself, to provide safety and security in an area that mattered to me.

Works Cited

"The Evolution of Nursing Scrubs." *Jacksonville University School of Nursing*. N.p., n.d. Web. 23 Apr. 2015.

"The History of Nursing Uniforms." A Nurses World Blog By Nursing UniformsNet RSS.

N.p., n.d. Web. 23 Apr. 2015.

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Dimensions: 3'x 6'

Medium: Fibers and Digital Media