



# VCU

Virginia Commonwealth University  
VCU Scholars Compass

---

Theses and Dissertations

Graduate School


---

2021

## Third Culture Kids - Playing to Heal

Amna Sana

Follow this and additional works at: <https://scholarscompass.vcu.edu/etd>

 Part of the [Child Psychology Commons](#), [Cognition and Perception Commons](#), and the [Cognitive Psychology Commons](#)

© The Author

---

Downloaded from

<https://scholarscompass.vcu.edu/etd/6664>

This Thesis is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of VCU Scholars Compass. For more information, please contact [libcompass@vcu.edu](mailto:libcompass@vcu.edu).



# **THIRD CULTURE KIDS**

PLAYING TO HEAL

AMNA SANA

# CONTENTS

<b>List of Figures</b>	4
<b>Acknowledgements</b>	6
<b>Abstract</b>	8
<b>Introduction</b>	12
<b>Background</b>	14
Literature Review	15
Laban's Movement Analysis (LMA)	17
<b>Precedent Studies</b>	18
Overview	19
Tear Gun Project	19
Alma Dolls	20
Rigamajig Modular Toy	21
Imaginary Language	22
Stress Relieving Sand Spheres	23
BCXSY's Mixed Animals Magnetic Soft Toys	24
<b>Research Methodology</b>	26
Overview	27
<b>Investigation 1</b>	27
1.0 Interviewing TCKs	27
1.1 Prompts for the Interview	27
1.2 Emergent Themes	29
<b>Investigation 2</b>	30
2.1 Interviewing Play Therapists	30
2.2 Interview Phase I	30
2.3 Emergent Themes	31
2.4 Design Direction	32

<b>Investigation 3</b>	32
3.1 Exploring Origami and Catapult	32
3.2 Design direction and production	34
<b>Investigation 4</b>	36
4.1 Interview Phase II	36
4.2 Reviews of the Design	36
4.3 Design Direction	36
<b>Investigation 5</b>	37
5.1 Exploring Digging Toys	37
5.2 Design Direction and Production	38
<b>Investigation 6</b>	39
6.1 Exploring Weighted Blanket & Origami	39
6.2 Design Direction and Production	40
<b>Investigation 7</b>	41
7.1 Interview Phase III	41
7.2 Therapist Feedback	41
<b>Outcomes</b>	42
Catapult: Shooting Pains	44
Rolling Pin: Leaving Traces	46
Weighted Blanket: Shape Shifters	48
<b>Reflections</b>	50
<b>Future Directions</b>	52
<b>Citations</b>	54

# LIST OF FIGURES

**Fig 1.1** Yi Fei Chen Tear Gun Project

**Fig 1.2** Yi Fei Chen Tear Gun Project

**Fig 2.1** Yaara Nusboim Alma Dolls

**Fig 2.2** Yaara Nusboim Alma Dolls

**Fig 2.3** Yaara Nusboim Alma Dolls

**Fig 3.1** Cas Holman Rigamajig – Modular Toy

**Fig 3.2** Children engaged in playing with Rigamajig

**Fig 4.1** Imaginary Language is a set of geometric objects that can be combined

**Fig 4.2** Alessandra Fumagalli Romario designed Imaginary Language to encourage creativity

**Fig 5.1** Stress Relieving Sand spheres by Olander Earthworks Screenshot of Photo Courtesy of Macro Malo

**Fig 5.2** Stress Relieving Sand spheres by Olander Earthworks Screenshot of video Courtesy of Macro Malo and Winona Hwang

**Fig 6.1** Mixed Animals Screenshot of video

**Fig 6.2** Mixed Animals

**Fig 6.3** Mixed Animals

**Fig 7.1** Image of Fatima's playroom, Courtesy of Fatima.

**Fig. 8.1** Origami foldable knife

**Fig. 8.2** Origami flapping paper crane

**Fig. 8.3** Origami catapult

**Fig. 8.4** Origami mouse puppet

**Fig. 8.5** Origami catapult made with copper mesh next to paper origami catapult

**Fig. 9.1** Rhino 3D render of catapult

**Fig. 9.2** Rhino 3D render of spoon

**Fig. 9.3** Torsion force created through rope twisting

**Fig. 10.1** 3D printed prototypes for sand play

**Fig. 10.2** 3D cylindrical rollers

**Fig. 11.1** Basic shape illustrations

**Fig. 11.2** Laser cut shapes in ply

**Fig. 12.1** Origami folds exploration

**Fig. 12.2** weighted blanket prototype

# ACKNOWLEDGEMENTS

For my son, Mustafa.

The MFA was a memorable and enriching experience, one that would have been impossible without the support and guidance of many.

To my mother and grandmother – my constants, who pushed me to follow my dreams, and Hira, who picked me up before I could even fall. I owe everything to them for being where I am today.

I'd like to express my heartfelt gratitude to Rab McClure for believing in me and guiding me since the moment I stepped into the program. I'm grateful to my associate advisors, Stella Colaleo and Basma Hamdy for their insightful comments that helped enable me to work to my true potential and special thanks to my reader Byrad Yyelland for his kind words, optimism and unwavering faith.

I am eternally grateful to the wonderful humans I met along the MFA journey, Giovanni Innella, Denielle Emans and Sadia Mir – whose every word was laced with compassion and sincerity. I would also like to thank Marco Bruno, Diane Derr, Michael Wirtz, Yasmeeen Suleiman and Christopher Buchakjian for providing assistance to me whenever I needed it.

A special thanks to the play therapists who played an integral role in my thesis development and assisted me via their professional insight and valuable feedback.

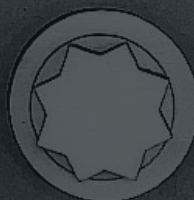
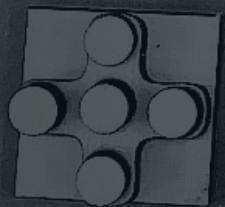
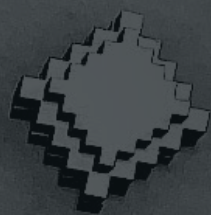
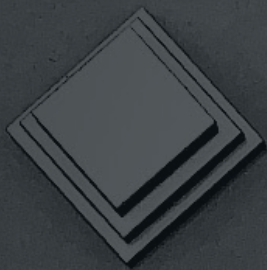
And lastly, I'd like to take a moment to appreciate the beautiful friendships I have made along the way. To each and every one of you, thank you for the irreplaceable memories; they will always have a special place in my heart. Most of all, thank you to Nia for being my guiding compass and never letting me down.





ABSTRACT

With increased globalization and a large expat population, Qatar is home to increasing numbers of Third Culture Kids (TCKs). TCKs are children who live in a country where their parents are non-native, children who grow up between cultures. Young TCKs, especially children between the ages of three and seven, do not possess the skills to adequately vocalize their feelings, but fortunately, play therapy allows them to articulate problems and feelings on their own terms. This thesis addresses the emotional hurdles facing TCKs, using concepts derived from play therapy and offering a series of interactive objects designed to reflect emotional expression through movement. Designed for use in a therapeutic playroom, the objects facilitate communication between the TCK and the therapist.



*Toys and materials should be selected, not collected.*

Landreth, 2012, p. 156

# INTRODUCTION

*“My father would constantly remind me that I’m not Qatari and that this is not my home... I was technically a Pakistani. I spoke Urdu, but I felt no sense of belonging to the country itself.” Omar Saeed (pseudonym) Third Culture Kid*

This was one of the statements that struck me most while interviewing Third Culture Kids (TCKs) in Qatar. Omar Saeed is half Pakistani and half Lebanese, but he lives in Qatar. As such, growing up in a non-native country, he was constantly faced with many issues in terms of identity, culture, and language. There are many children who share similar stories in Qatar.

As a rapidly developing country, Qatar employs a high number of expatriate workers to help power its growing economy, of which many have remained in the country for decades. Documented estimates suggest there are 1.85 million<sup>1</sup> expatriates in Qatar, of which 22% are females and 78% are male.<sup>2</sup> According to the Planning and Statistic Authority in Qatar (2018), 24.5% of the female expatriate population and 6.9% of the expatriate males are less than 15 years of age.<sup>3</sup> Thus, a substantial number of children and young adolescents in Qatar are living in a country and culture that is not their own. Based on the ‘Third Culture Model’ developed by David C. Pollock and Ruth E. Van Reken, “A Third Culture Kid is a person who has spent a significant part of his or her developmental years outside the parents’ culture.”<sup>4</sup>

There may be positive aspects to life as a Third Culture Kid (TCK), such as experiencing life in a land and culture one might not ordinarily be able to experience; however, TCKs also experience significant challenges including feelings of disconnect from both their home culture and their new surroundings. This disconnect can result in a variety of emotional problems including intense feelings of loneliness due to difficulty in transitioning, unresolved anger/grief and challenges in identity development.<sup>5</sup> Such issues are of concern because mental health professionals have pointed that unresolved trauma in children can be carried into adulthood, shaping their lifelong social, and emotional decisions.<sup>6</sup>

As their surroundings and social circles are always changing, TCKs can encounter intense feelings of loss compared to that of an average person. Such feelings can be accompanied by a sense of grief, shifting perceptions of one’s true culture and an underlying confusion of identity. Reken and Pollock claim that “the TCK builds relationships to all of the cultures, while not having full ownership in any. Although elements from each culture are assimilated into the TCK’s life experience, the sense of belonging is in relationship to others of similar background.”<sup>7</sup>

Through interviews with therapists, it was found that children's mental health issues in this region are rarely acknowledged as a legitimate problem. Indeed, some studies show that addressing mental health, especially that of children, is still a taboo in the Gulf region including Qatar, because it is deemed culturally unacceptable and shameful.<sup>8</sup> Perhaps it is no surprise that after conducting a systematic online search and speaking with the two child therapists, one of whom has worked in this area, I learned that there are limited resources available for treating children's mental health issues. Resources for play therapy, for example, are almost nonexistent, which is problematic because play therapy has an 80% success rate in healing emotional trauma in children.<sup>9</sup> The success of this approach is that it acknowledges the issue at hand and enables children to express themselves in an efficient and healthy manner.

Traditional therapy, or talk therapy, usually works with older children where they can express abstract thoughts and emotions through conversation. However, the same technique does not suit children who are too young to understand and process the trauma they've experienced, let alone talk about it.<sup>10</sup> Since play is the primary language of children, as well as an integral part of life as a child, play therapy is often used to treat children between the ages of 3 and 12 that have undergone emotional and/or physical trauma by allowing them autonomy in play. In doing so, children and adolescents are able to subconsciously play out their traumatic experiences. The nature of play therapy varies according to the age of the therapy

recipient. For example, for younger children, play is the talk and toys are the words. This form of therapy allows children to use their creativity in a safe environment where they don't have to worry about meeting any expectations, so there is no fear of failure.<sup>11</sup> It is therefore reasonable to suggest that TCKs in the Qatar region could benefit from this approach as it would give them the opportunity to express their feelings and enable them to become their true self.

My thesis exploration materializes into a series of whimsical and interactive objects aimed at not only bringing into light the hurdles of being a TCK, specifically between the ages of 3 to 7, but also enabling these children to communicate their feelings more efficiently. By providing healthy coping mechanisms through use of these objects, TCKs can use their imagination to project their own stories on to them.

My research is informed by psychological problems experienced by TCKs aged 3 to 7 years, but it is a design exploration that looks at how art and design can inform toys developed for use in play therapy and does not include other forms of therapy. Second, these toys are designed specifically in relation with treatment of traumatic experiences of TCKs. Third, the toys developed in this exploration are intended for use in the therapist's playroom. A fourth delimitation is the age group of the intended user. These toys are meant to be used by children between the ages of 3 to 7 as identified in the literature review. Finally, the toys designed in this exploration are not intended to inform medical research surrounding this topic.

BACKGROUND

# Literature Review

Play therapy is a psychotherapeutic approach mainly used for children between the ages of 3 to 12 years to enable them to develop better emotional and physical communication skills.<sup>12</sup> This type of therapy normally works best for children who have gone through traumatic events in the earlier years of their life leading to possible anxiety, depression, grief, academic problems, and behavioral issues.<sup>13</sup> Some of these problems overlap with the same issues faced by TCKs. Ruth E. Van Reken, with her first-hand experience as a third culture kid, co-wrote 'The Third Culture Kid Experience: Growing up Among Worlds' along with David C. Pollock. They describe TCKs as children that spend most of their developmental years in a culture completely different than that of their parents.<sup>14</sup> Reken and Pollock argue that even though these children are exposed to a multitude of cultures, they do not necessarily feel a sense of belonging to any one culture. In other words, they feel culturally adrift and because of that, these kids encounter a number of problems including loneliness, unresolved grief and more often than not, a confused sense of belonging.<sup>15</sup> In addition, they can experience dysfunctional interpersonal relationships because of their fears of intimacy due to a continued fear of loss – having to say goodbyes to their friends makes TCKs reluctant in forming emotional bonds.<sup>16</sup>

Research has shown that TCKs experience trauma in a number of ways, one of which is unresolved grief.<sup>17</sup> Jessica San Fillipo-Schulz, a PhD researcher at the University of

Leeds, provides useful insight on how TCKs experience grief. She argues that every child experiences grief differently and second, that these experiences can result in acting rebellious and angry.<sup>18</sup> Reken and Pollock define grief as coming from 'recognized and unrecognized losses, but one that [has] never been mourned in a healing way'.<sup>19</sup> This means that they are unequipped to process and heal from it, so they resort to unhealthy coping mechanisms, primarily through denial and withdrawal in an effort to avoid feeling the pain of their losses.<sup>20</sup> As this isn't an efficient solution, it can quickly turn into anger and frustration when it doesn't give them the resolve they are seeking. Furthermore, the grief can be described as existential losses such as loss of trust, safety, and personal identity.<sup>21</sup>

Another prominent emotional trauma faced by TCKs is a feeling of profound loneliness caused by a lack of connection to the new culture they live in. Psychologist Hilary Son explains that this cultural disconnect can lead to feelings of isolation, a fear of rejection, and perhaps most relevant to this research, is the loss of friendships due international mobility.<sup>22</sup> The difficulty in transitioning coupled with culture shock can further escalate feelings of isolation.<sup>23</sup> Virginia Ryan and Andrew Edge, specialists in child and adolescent mental health, have delineated the importance of relationships in a child's emotional development and well-being. They claim that by the age of three to five years children begin to form their own unique interpersonal relationships and develop a



*“At the heart of LMA is a recognition that movement is a psycho-physical process, an outward expression of inner intent.”*

*Ed Groff*

sense of responsibility towards others.<sup>24</sup> Thus, the relationship between therapist and child is key in order to reconstruct feelings of trust and acceptance. This can aid in improving a child’s sense of self which will in turn enable them to better cope with their emotions.<sup>25</sup>

Arguably, a confusion in identity might be the most problematic issue faced by TCKs. These kids feel unsure of themselves as they try to fit into new cultures.<sup>26</sup> The transition process from one culture to another can include experiences of being bullied and/or a constant feeling of being a misfit; of not fitting in. Son talks about this in depth in pointing out that TCKs can be bullied because of cultural differences which in turn causes them to feel confused and unsure of themselves.<sup>27</sup> Furthermore, Ryan and Edge assert that a magnitude of emotions and

behaviors can surface causing confusion. As children get older, they are constantly developing their own sense of self in ways that fit into the surrounding culture.<sup>28</sup>

The challenges experienced by TCKs directly influence the development of their future selves and help shape their identity. These challenges, if properly addressed, can evolve as strengths, but only if the correct kind of support is provided for these children.<sup>29</sup> Different approaches can be determined based on age,<sup>30</sup> and play therapy stands out in particular with an 80% success rate in children that experience trauma.<sup>31</sup> Since younger children lack verbal communication skills, play therapy can provide them with the means to express their feelings through various therapist-led activities in a way that can not only help them cope with their

current emotional issues, but also help them develop a stronger and emotionally healthier personality.<sup>32</sup> David A. Crenshaw, an expert in child and adolescent psychotherapy says play child-centered play therapy is especially effective in children presenting aggression<sup>33</sup> because it requires the patient and therapist to build a relationship based on empathy, trust and understanding. The healing lies in allowing the child to process their feelings of anger and identify the cause of it through play on their own terms.<sup>34</sup> Non-directive play therapy can be used to address these concerns as it focuses more on an effort for self-realization, with specific play themes designed for each individual for their social and emotional development,<sup>35</sup> which in turn can allow these children to process their emotions in a healthier manner as they will feel heard, identified, and accepted.<sup>36</sup> It is no surprise then, that play therapy has shown to be effective in enabling traumatized children to address and resolve their problems by physically playing out their experiences.<sup>37</sup>

The physical act of playing with toys allows the child to disassociate from their painful reality and enables them to see themselves from an outside perspective.<sup>38</sup> Thus, physical play with toys in play therapy can provide children with the ability to process and heal from their emotional wounds. Informed by the extant literature, it appears reasonable to suggest that physical play in play therapy could benefit TCKs' healing processes and manage the anger manifesting from their unresolved feelings of grief. The relationship between physical movement and emotion is discussed in greater detail in Laban's Movement Analysis below.

### ***Laban's Movement Analysis (LMA)***

Laban's Movement Analysis (LMA), devised by Rudolph Laban, is a comprehensive guide to understanding the features of human movement which can be categorized by body, effort, shape and space.<sup>39</sup> Effort, in particular, can be subcategorized into four features, each with two sub features: (1) a person's attitude towards a chosen movement (direct/indirect), (2) the degree of force that is applied to it (heavy/light), (3) the nature of decision (sudden/sustained) and (4) the attitude towards the degree of control or release of movement (bounds/free flow).<sup>40</sup> Laban's theory is more popularly used by dancers to study and enhance non-verbal emotional expression; For example, retreating, condensing or enclosing one's body can elicit feelings of fear,<sup>41</sup> however, the same theory can be used to analyze other movements, including play with toys.<sup>42</sup> Ed Groff wrote an article about LMA in which he says that, "At the heart of LMA is a recognition that movement is a psycho-physical process, an outward expression of inner intent."<sup>43</sup> This shows that different movements can be used to stimulate certain feelings. To explain further, the action of breathing in expands the torso which is an external feeling and could be used to express a sense of pride or confidence.<sup>44</sup> Similarly, if a child's body shrinks in response to something, the movement could be seen as an expression of fear.<sup>45</sup> As a result, this theory can be used to form a guide to assess and identify a child's movements in the playroom, to support in expressing emotions that they are unable to do with words.

# PRECEDENT STUDIES

# Overview

*This section will discuss design precedents to expand on the theories discussed in the literature review. The thesis is centered around the painful experiences of TCKs and how play therapy can be used as a solution to aid their recovery and express themselves better. As a result, the following design precedents have been carefully selected to provide further information on how design can play a vital role in fostering faster and more efficient recovery.*

## **Tear Gun Project**

Yi Fei Chen, a graduate of Design Academy Eindhoven, was raised in Taiwan where she was taught to never question her teachers because that would be considered disrespectful. After she came to the Netherlands to study for her master's degree, she realized that she felt overwhelmed and under a lot of pressure to complete her assignments but couldn't express her concerns to her peers out of fear that she would mistakenly disrespect them.<sup>46</sup>

In response to her feelings of constraint, powerlessness and fear, she made a brass tear gun (Fig 1.2) that collected her tears

into a silicon cup and then froze them in a container. The frozen tear pellets could be loaded into the gun and shot like bullets. The conceptual design of her project speaks about the difficulties of living as a foreigner in a new country and expresses her frustration about the stressful study environment.<sup>47</sup>

Her design is a clever manifestation of how feelings can be transformed into something tangible. The tear gun is not only a poetic representation of her stressful experience, but also becomes a means of self-therapy and a tool of communication through which she is able to express her emotions more effectively.

Fig 1.1 Yi Fei Chen Tear Gun Project (left)

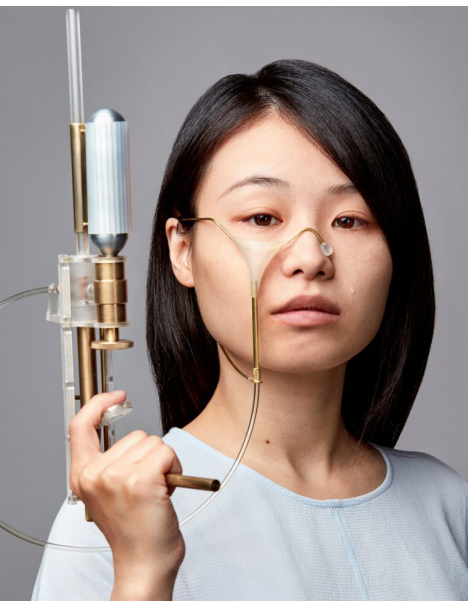
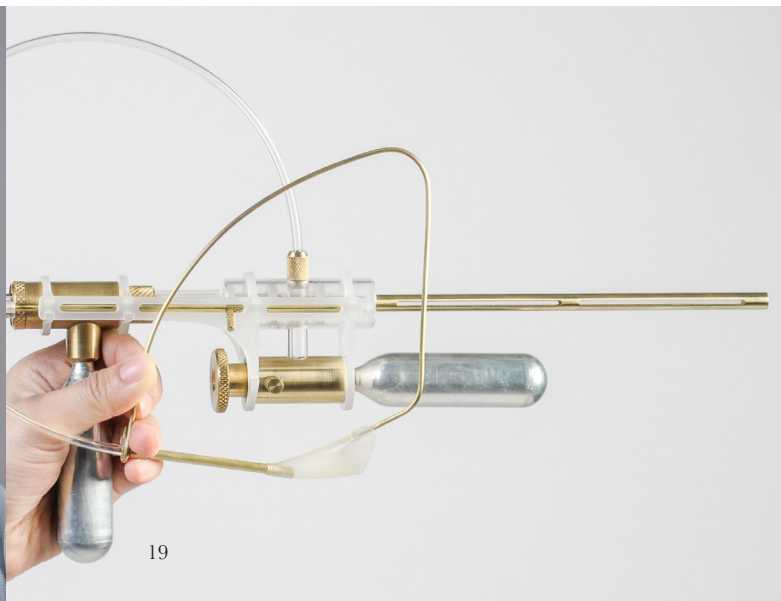


Fig 1.2 Yi Fei Chen Tear Gun Project



## Alma Dolls

Yaara Nusboim, a graduate of Shenkar College, is an Israeli designer who worked closely with child psychologists to develop a series of wooden dolls known as Alma Dolls. These dolls are specifically designed to be used as a part of play therapy to aid children in expressing difficult or suppressed emotions. The set comprises of 6 unique dolls, each used to express a different emotion – fear, pain, emptiness, anger, safety and love. Nusboim developed these dolls because she believed that the toys being used in play therapy are too generic. Nusboim’s research and conversations with play therapists helped her understand how children see themselves in dolls and led her to carefully design them “to convey various possible emotions [the children] could feel by means of using different materials.” Nusboim further explains that, “[Playing] with a toy provides a safe psychological distance from the child’s private problems and allows them to experience thoughts and emotions in a way that’s suitable for their development.”<sup>48</sup>

Nusboim wanted to keep the dolls abstract but at the same time maintain their appeal as interesting so that children would be motivated to use the dolls in projecting their thoughts and feelings. Each doll is handmade and comprised of polished maple wood coupled with softer silicon textures.<sup>49</sup> The Alma Dolls not only allow for emotional expression during play therapy, but also highlight the importance of play itself, as well as the need for more design solutions when it comes to allowing children to express their various internal emotions more efficiently.



Fig 2.1 Yaara Nusboim Alma Dolls (above)

Fig 2.2 Yaara Nusboim Alma Dolls (middle)

Fig 2.3 Yaara Nusboim Alma Dolls (below)

### **Rigamajig - Modular Toy**

Cas Holman is an American educator and toy designer who advocates for open-ended play. Holman believes that children’s lives are becoming increasingly regimented so they should be allowed greater freedom in play. As someone who doesn’t conform to gender, Holman believes in unisex toys and takes an extra step in making the parts multi-functional by not giving them specific names and thereby giving the children the freedom to choose how they use the toys and what they make, so they can “shape the identity and story” of their creations.<sup>50</sup>

Holman has designed various products that encourage children to experiment with and use their imagination rather than being limited by specific instructions. One of these products is a modular toy called Rigamajig which is a 265-part kit consisting of planks, wheels, pulleys, nuts, bolts and ropes, which can be put together in any way the user wants.

Holman recognizes the importance of fostering creativity in children and highlights the positive impacts of non-directive play. In a world where every action is influenced



Fig 3.2 Children engaged in playing with Rigamajig (above)

by rules and regulations, Holman asserts that children should be allowed creative freedom when playing without adhering to preconceived expectations. The more independent they are in their play, the better they will be at expressing themselves – where the play can transform into a tool of self-expression.

Fig 3.1 Cas Holman Rigamajig - Modular Toy (below)



## *Imaginary Language*

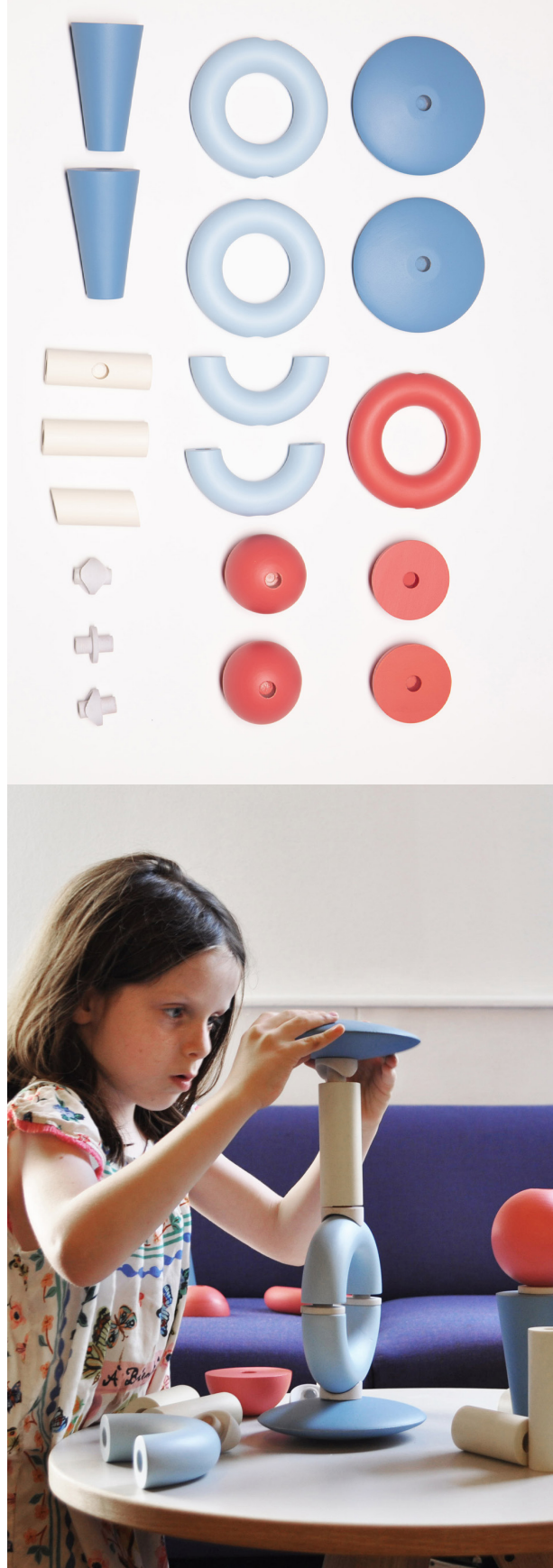
A graduate of Royal College of Art, Alessandra Fumagalli Romario designed a set of geometric objects called ‘Imaginary Language’, which is based on her research of the psychological theory developed by Irving Biederman. Biederman argues that the human brain is trained to recognize objects by dividing them into ‘Geons’, which are geometric three-dimensional shapes as understood by our primordial brain.<sup>51</sup>

Informed by Biederman’s work, Alessandra’s Imaginary Language is a set of tools comprised of various shapes (Fig. 4.1) that the user is free to build up in any way and assign their own meanings and functions. This fosters creativity and encourages the user to be independent in play. The shapes, which come in four colors – red, white and light and dark blue, can be connected using a small key to make larger objects.

Alessandra, being an actor, has also tested these tools to demonstrate dramatic expression, thereby adding to the strength of her project as something that allows and promotes creative thinking. This design concept shows that archetypical toys are not the only play solution for children. In fact, Alessandra’s work indicates children may experience significant emotional growth in simpler forms of play, where the user is made to take initiative and process their thoughts as they engage in building without instructions. Similar to play therapy, children can use these toys as a language for self-expression (Fig 4.2).

Fig 4.1 Users can assign functions and meaning to their creations (above)

Fig 4.2 Alessandra Fumagalli Romario designed Imaginary Language to encourage creativity (below)



### ***Stress Relieving Sand Spheres***

Andrew Lonngquist is a sculptor who founded Olander Earthworks in 2008, where he works alongside his wife Sarah to develop the sand sphere collection. This collection focuses on a playful sensory experience to explore one's creativity. The designs of these concrete textured sand spheres are inspired by forms and patterns found in nature.<sup>52</sup> The spheres cast in cement are hand painted in earthy tones once they dry. The wooden sand trays are also made by Olander Earthworks. The design concept is based on play therapy, through which the user can stamp or roll out continuous patterns to relieve stress. The process can be repeated after tapping the sand tray and levelling the sand.

The duo works with play and occupational therapists and provide them with tools that help in the development of fine motor skills and general stress release. They have a diverse collection of spheres which can be mixed to create one-of-a-kind sets.

Sand play is an important tool in play therapy because it provides a child with the means to create meaningful scenarios and is known to assign new meanings to traumatic experiences.<sup>53</sup> The sand tray acts as a canvas where the user can roll out different patterns and shapes depending on how they feel. The action itself is meant to be therapeutic so the user feels happier and relaxed.

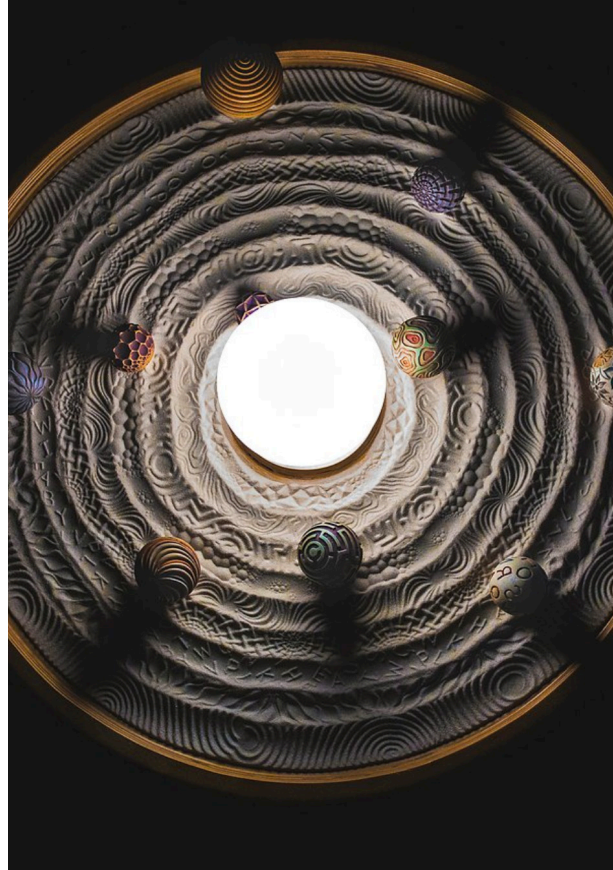


Fig 5.1 Stress Relieving Sand spheres by Olander Earthworks (above)

Fig 5.2 Stress Relieving Sand spheres by Olander Earthworks (below)



### **BCXSY's Magnetic Soft Toys**

The Mixed Animals is a project by BCXSY which is an Amsterdam-based interdisciplinary collaboration between designers Boaz Cohen and Sayaka Yamamoto. The Mixed Animal toys are unique plush toys that feature the use of magnets in the accessories of the toy. The accessories include, paws, noses, horns, tails, shells and wings, which can be attached anywhere and in any way to the plush body which can be put together to create unique 3-dimensional forms.<sup>54</sup> The design offers the user a choice between off-white and black, colors that have intentionally been kept neutral to maximize creativity and freedom of expression.<sup>55</sup>

Fig 6.2 Mixed Animals Screenshot of video

According to the designers, countless options have been provided to maximize creative freedom. The designers said, “depending on where you attach them, your perspectives will change constantly.”<sup>56</sup>

This design is a clever solution to providing options to a simple toy through the use of hidden and carefully stitched magnets. The magnetic element integrated within the design allows the user autonomy in play which is one of the key elements of play therapy.

Fig 6.1 Mixed Animals (right above)

Fig 6.3 Mixed Animals (right below)





# RESEARCH METHODOLOGY

# Overview

*This section provides a detailed description of the research methodology and design explorations utilized in this project from ideation to final product. This section features a brief articulation of the primary research which augments the secondary research shown above in the literature review, and then a detailed discussion of seven investigations. Each of the investigations an explanatory narrative and the design investigations include images.*

Secondary research was the first step of this project. Through this research I learned the predominance of expat families and TCKs in Qatar, the key emotional problems experienced by many TCKs, and the role of play therapy in healing TCKs heal and develop healthy emotional strategies, the ages of TCKs for which play therapy is more beneficial, and the role of toys within play therapy for children in these age groups (3 to 7 years). In addition, for the thesis to be locally relevant, primary research was carried out with three local TCKs and two play therapists, both of whom are outside of Qatar. This aspect of the research is qualitative and exploratory in nature, and all informants were contacted through convenience sampling<sup>37</sup> in order to improve the possibility of locating and accessing individuals with the necessary criteria of being a TCK and/or having experience using play therapy. The later stages of this section focus more on material research based on the findings emerging from the primary and secondary research.

## **Investigation 1**

### **1.0 Interviewing TCKs**

In order to gain an understanding of the TCK life experience, I interviewed three acquaintances who self-described themselves as TCKs. Due to the sensitive nature of the topic, the questions were kept open-ended, and the interview process was conversational. The intention was to gain an overall sense of how these individuals perceive their life experiences in relation with being TCKs. To protect the anonymity of these individuals, pseudonyms have been used in the writing of this thesis.

### **1.1 Prompts for the Interview**

- Would you call yourself a third culture kid? If yes, then why?
- Where would you say your home is?
- Did you ever find it difficult to fit in a culture that was different than yours? If yes, how so?
- Can you recall an instance(s) where you were made to feel like you were an outsider?

## 1.2 Emergent Themes

The participants were comfortable in identifying themselves as TCKs. They began answering the questions happily. However, as the interview gained momentum and they delved deeper into their experiences as a TCK, I noticed that their tone shifted to a more serious one. All the participants could recall more than one instance where they felt like an 'outsider'. Sameen, for example, expressed forcibly having to change

her accent to fit in. The participants also expressed how they realized at a very young age that even though they lived in Qatar, they had no ownership to it. For example, Nadine talked about how she was mistreated by other children just because she was not Qatari. The participants shared the following responses where they talk about their experiences in detail.

*In grade 6, I was often bullied for being Egyptian, that's when I realized that my origin means something else to others, and it made me aware that we're all not the same and where you're from counts. Qatar was my home country at the time, so it was confusing trying to fit in a place that I considered home. When I would go back to my home country Egypt, they would look at me as a foreigner. Eventually, I realized that belonging meant family, my house, my clothes and not the country I'm living in.*

*Nadine Shareef*

*Egyptian, born in Egypt, raised in Qatar*

Through the interviews I was able to gain personal insight on the emotional traumas experienced by these TCKs. I also learned that none of the participants sought or received professional help to support them through their emotional hurdles. During the next stage of the thesis, I reached out to play therapists to understand how practices in play therapy can help in treating unresolved emotional trauma in children.

*There were certain pressures growing up in a community where I wasn't a local. I would speak the Qatari Arabic dialect to fit in with the other children at school. There was also an immense pressure to be at the same financial level.*

*Sameen Ali*

*Syrian, born and raised in Qatar*

*My father would constantly remind me that I'm not Qatari and that this is not my home. In an attempt to teach me about the traditions and cultures of Pakistan he enrolled me in a Pakistani school. There were instances at school where I was made fun of by the other Pakistani kids even though I was technically a Pakistani. I spoke Urdu, but I felt no sense of belonging to the country itself so I would make a conscious effort to learn more about Pakistan in order to fit in.*

*Omer Saeed*

*Pakistani Lebanese, born and raised in Qatar*

## **Investigation 2**

### **2.1 Interviewing Play Therapists**

The direction of the thesis relied heavily on information and feedback garnered from therapists with experience using play therapy in their work. The data was collected through semi-structured interviews conducted via video calls because of Covid-19 lock down restrictions and the international location of the therapists. Each interview lasted approximately one hour. Pseudonyms have been used to protect their identity and no video recordings have been made. Therapist 1 will be referred to as Fatima and therapist 2 as Sarah. A set of questions were designed to investigate the in-depth practices deployed in play therapy for children between the ages of 3 and 7 and the various strategies devised to help them combat emotional hurdles. Each therapist was informed of the intention of the thesis so that they could respond and offer relevant insight.

The interviews were carried out in three phases: Phase I being an open-ended conversation about play therapy, Phase II gearing more towards their professional opinion on a specific design approach and its ability to function as a play therapy toy in real life (please see Exploration 2 below), and Phase III where the therapists provided their feedback on the final designed objects. Detailed field notes were taken during these interviews and after a systemic thematic analysis of these notes, emergent themes were identified. These themes inform the work below.

### **2.2 Interview Phase I: Guiding questions to understand the techniques and experiences in the playroom**

- In your experience, what is the most common problem that is encountered during therapy which prevents communication?
- In your experience what is the age group that finds it most difficult to convey their emotions?
- In your experience which toys work well in allowing children easy communication?
- What is your experience with non-directive play therapy?
- What is your experience with TCKs?
- What is the usual strategy that is deployed for different emotional traumas?
- What is your go-to toy for therapy for children that are 7 and under?

Both therapists shared useful information about play therapy, however, because Fatima had spent a few years practicing play therapy in Qatar she was able to share some unique insights about her experience with TCKs in the playroom. A thematic analysis of the therapists' interviews identified six overlapping themes.



Fig 7.1 Image of Fatima's playroom, courtesy of Fatima

### **2.3 Emergent Themes**

#### **Theme 1: Age of the child is a key factor.**

Both therapists agreed that in their experience, the younger the children are the more difficult it is for them to translate their thoughts into words. Thus, the therapists determined that toys used in therapy must be adaptable to allow for non-verbal play and not be too complicated to use.

#### **Theme 2: Color of the toy can play a role.**

Sarah was comfortable with using colors as long as no specific meaning was attached to them. Fatima extended this argument in stating that colors can have meanings and different colors can mean different things to different children. Fatima therefore prefers toys made with neutral colors. She said that “TCKs are chameleons, but one thing they can’t hide are their subconscious thoughts, so neutral colors such as shades of brown, work better at allowing them to give their own meaning to the toy or object.”

#### **Theme 3: Toys that offer a variety in play are better at expressing emotions.**

Both therapists felt strongly about the use of sand in play therapy. They discussed how a sand box was a common toy in their playroom and was a very successful material due to its malleability and cohesiveness. They also said that therapists need to be aware of symbolism because objects can be interpreted differently based on the region. Fatima in particular said she was, “Hesitant to provide symbols, so a material like sand or clay is especially useful in allowing them [the children] to create their own stories. Since

they are already struggling with identity and other problems, they need toys that are not prescriptive, so that it gives them freedom to investigate whatever problems they have on their own terms.”

#### **Theme 4: Movements or gestures can be used in emotional expression.**

As play therapy is not traditional talk therapy, Fatima relies on observing the body language of the child. She talked about Laban’s movement analysis and how the study is particularly useful in understanding a child’s body language in the playroom.

#### **Theme 5: Toys should be easy to clean up after play.**

These therapists recommended toys which enable a quick and easy clean-up because the therapy room is a space shared by many clients. They recognized that play can be messy, but it is important that the play area, and toys themselves, are easy to clean up and organize before the next session.

#### **Theme 6: Toys must be safe for children to use.**

Both therapists said that the toys must be safe from toxins and any other health hazards.

These themes emerged as key guiding factors in the therapists’ choices of toys for use in play therapy. Therefore, they will act as a framework for design direction in this research. Each theme adds a defining parameter for the design and will be referred to in the following section.



## 2.4 Design Direction

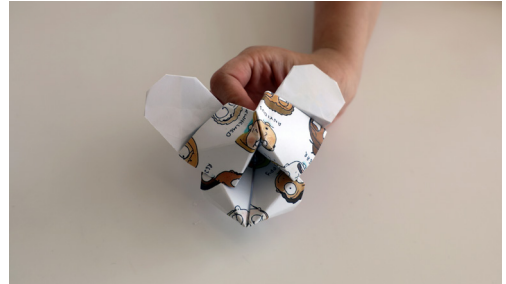
Primary and secondary research have informed the conceptual guideline for the following seven design investigations. Of particular interest to the current research is the role of body movement and the significance of sand. Hence, experiments with different materials and forms were carried out that could incorporate sand and enable physical movements in ways that allow for and facilitate emotional expression. Furthermore, the six themes listed above have shown that toys used in play therapy should be designed in such a way that use of the toys is not fully prescriptive, that aspects of the toy's structure or activation is sufficiently open-ended to allow room for and ideally, to facilitate, children's use of imagination and application of their own meanings during the play experience. It was therefore decided that these toys must be complex enough to be engaging, however the constituting components should be kept basic. It is also understood from the interviews that although the therapy sessions are supervised, the child can choose to use the toys as they see fit.

## Investigation 3

### 3.1 Exploring Origami and Catapult

Experiments were carried out to search for materials that could offer layered interactions, as observed in themes 3 and 4. Paper origami became a point of interest because it offered both movement and play. It showed how a seemingly two-dimensional piece of paper could be folded in different ways to create a number of explicitly three-dimensional objects, where some could also be folded to create movements.

The origami catapult (Fig. 8.3) proved to be the most successful in terms of movement. The paper catapult required for the head to be pulled back and then released in order to propel things forward. The movement was not only playful, but also allowed a release of kinetic energy that can be satisfying to the user. Consequently, more experiments were carried out to see if the change in material or form could enhance that function.



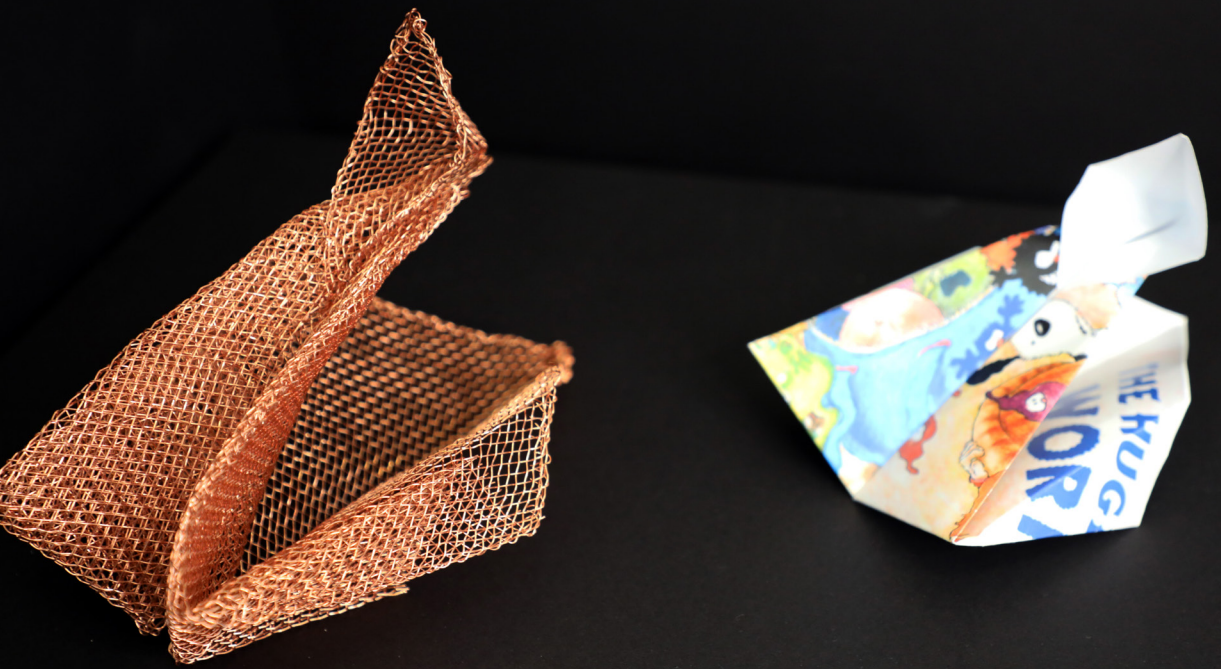


Fig. 8.5 Origami catapult made with copper mesh next to paper origami catapult

Fig 8.1 Origami foldable knife (left top)

Fig 8.2 Origami flapping paper crane (right top))

Fig 8.3 Origami catapult (left bottom))

Fig 8.4 Origami mouse puppet (right bottom))

### 3.2 Design direction and production

The final design prototype took the shape of a more traditional catapult and proved to be the most successful in terms of motion. By changing the material to wood, the motion of pull and release became more prominent. This was possible by using a rope to create a propelling force through torsion (Fig. 9.4). The design concept was then scaled up and designed on Rhino (Fig. 9.2). The question remained however, how to break the form from a traditional catapult to a more child-friendly version. In order to address this question, the catapult lever was replaced with a spoon (Fig. 9.3) which is a generic household object most children would be familiar with and would, ideally, correlate with positive activities such as eating, digging, transferring, and so on.

There was also the question of catapult load, or in other words, what should be propelled through this new object. Informed by themes 2, 3, 4 and 6, kinetic modelling sand was chosen as the load for the catapult. This sand was chosen for four reasons: because it is neutral in color, that is offers a number of interactions, it can be molded using various hand movements and that it is non-toxic. According to Fatima, the play therapist, sand is native to Qatar and forms an instant connection to its desert terrain, however, whether the sand should relate to Qatar or not, it is up to the child to decide.

Fig 9.1 Rhino 3D render of catapult

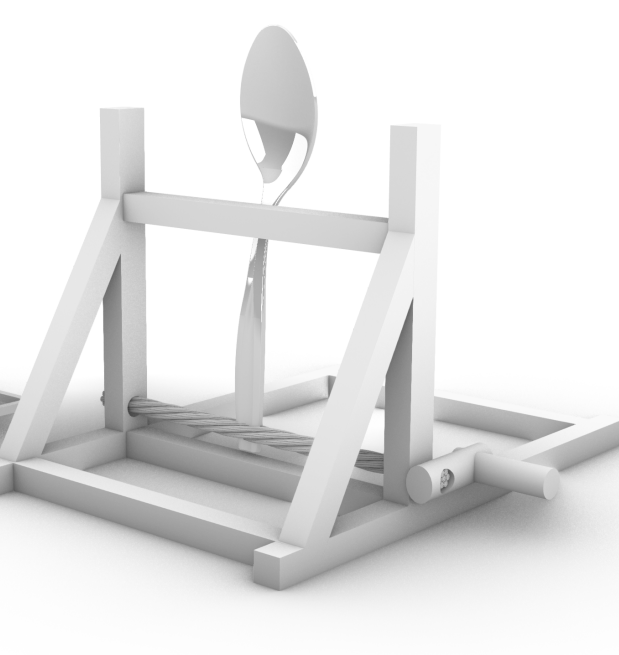


Fig 9.2 Rhino 3D render of spoon





Fig 9.3 Torsion force created through rope twisting

## **Investigation 4**

### **4.1 Interview Phase II: Therapist feedback on the potential of the catapult as a therapeutic toy**

- Do you see this toy being used in the playroom?
- What do you think are some of the strengths of this toy for play therapy?
- Can you think of any additions or revisions to make this toy work even better with TCKs?

### **4.2 Reviews of the Design**

The therapists were shown a video of the working catapult and both said that the catapult could work well in the playroom as a play device intended to target and enable the release of negative (for example, anger, sadness, fear and loneliness) through the motions of pull and release. They also liked the idea of using sand, as it is something they use in the playroom often. Fatima recommended making the catapult at a slightly smaller scale than the initial design so that it could be contained in the playroom (children want smaller spaces), however, Sarah felt the size was good. In addition, they liked the idea of using kinetic sand as they felt it combined the properties of both sand and clay in one material.

### **4.3 Design Direction**

Therapist feedback was crucial in informing the designing of other objects based on similar principles to that of the catapult – for the objects to be interactive, allow some kind of autonomy for the user and for them to be appealing to children.

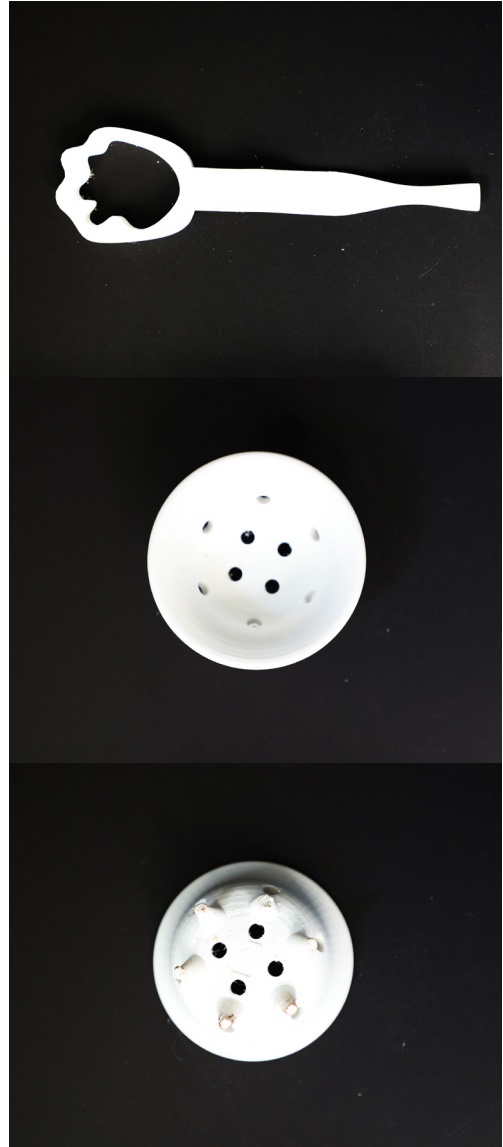


Fig 10.1 3D printed prototypes for sand play

## **Investigation 5**

### **5.1 Exploring Digging Toys**

Based on findings from theme 3, an investigation was carried out to see what kind of toys can be designed for sand that could allow autonomy in play. The aim was to search for a design solution that could manipulate and produce a variety of imprints in the sand. Findings from theme 4 were also integrated to see how the object could incorporate body movements to enhance emotional expression.

Application of the designed products showed that patterns created in sand by these prototypes were not clearly distinct, reducing the communicative possibilities of the imprints and could therefore prevent the

child from feeling understood. To address this issue, a different approach was taken to investigate circular forms that could allow a continuous movement while creating defined patterns on the sand (fig. 10.2).

The resulting cylindrical rollers could move easily on a sandy surface but functioned individually. According to themes 1, 2, 3 and 6, the toy needed incorporate a more simplified mechanism for the age group being targeted, is neutral in color, provides options to the user and is safe for children. Further investigations were carried out to see that if, rather than using separate rollers, a single object could work as a base, with attachments that could imprint unique and interesting shapes in the sandbox and could be interchanged with one another.

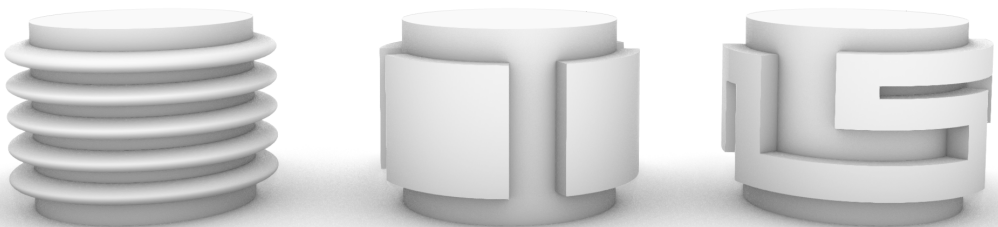


Fig 10.2 3D cylindrical rollers

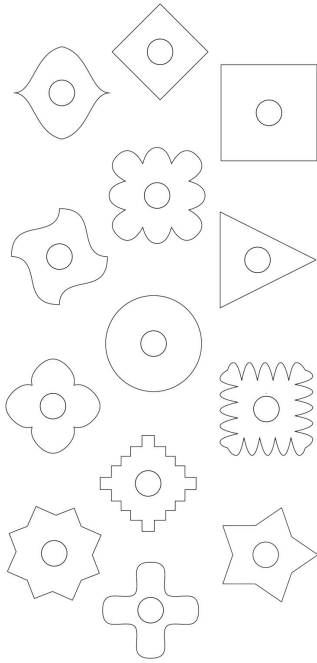


Fig 11.1 Basic shape illustrations



Fig 11.2 Lasercut shapes in ply

## 5.2 Design Direction and Production

After successive design attempts, the base form took the shape of a rolling pin and separate parts were designed that could be plugged into it. A ready-made wooden rolling pin was bought, which was neutral in color, and then customized to fit the design requirements. This was done by reducing its width and drilling holes into the cylindrical body (fig.11.1). The attachments, made in plywood, were inspired by basic shapes including circle, square, triangle, star, and others. When added to the rolling pin by

inserting the pins of the attachment into pre-drilled holes, the toy could create a variety of imprinted patterns featuring combinations of the shapes. The randomized nature of the patterns reduces attachment of specific meanings, thus enabling the child to project their own meanings to the patterns they produce. The action of plugging each attachment to the toy allows the child autonomy in choice. Applying pressure while pressing down can allow the user to exert and release pressure – a movement that could be satisfying to the user, similar to the catapult.

## **Investigation 6**

### **6.1 Exploring Weighted Blanket & Origami**

Weighted blankets were used as a starting point for this section because of their ability to simulate a comforting hug.<sup>58</sup> I decided to recreate the weighted blanket as a modular concept that could join together to create a larger blanket capable of being wrapped around or placed over a child. I also investigated how each flat piece of the blanket could become something playful, which took me back to my earlier investigations about origami. Investigation section 3 discussed how origami is a form of play that begins with a single piece of paper and goes on to take various forms. Building off this idea, I investigated how some basic folds could be manipulated to create a number of shapes which aligned with theme 3 (Fig. 12.1).

Furthermore, I had to find a method that kept the essence of origami by providing options and could replicate the tactility of a blanket which, according to theme 1, was simple to play with since the intended users were under the age of 7. I realized that increasing the size from a normal paper to a larger one could make origami easier to play with so a 30cm-by-30cm square sheet was used to explore folds with simple variations.

Fabric was looked at as an alternative material to paper because certain types of fabrics can create crisp folds like that of origami, but fabric also has capacities such as softness to the touch. The first prototype was stitched using colored thread to accentuate the lines on white cotton and followed the second pattern (Fig. 12.2). It was lined with buckram to give it stiffness and then filled with rice to see if the fabric kept its shape with the added weight, however it was not successful because the fabric was still too soft. During this, magnets were added to the corners so that the fabric could hold its shape when it was folded. The magnets proved to be a successful solution to linking the modular blankets but were not powerful enough to attract each other through a layer of fabric.

The second prototype was more successful as it was made using white stiff felt on the inside and a softer one on the outside. The magnets were replaced with neodymium magnets, which were strong enough to attract the other magnets and the rice was replaced with kinetic modelling sand.



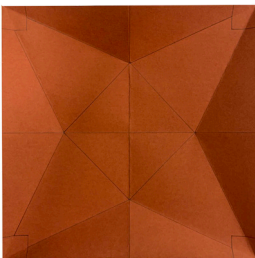
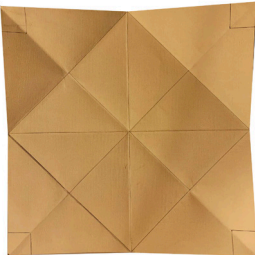
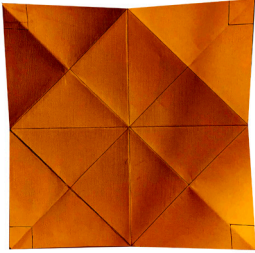


Fig 12.1 Origami fold exploration

## 6.2 Design Direction and Production

After successive prototyping, the final pieces were to be stitched in 4 layers of 30cm by 30cm felt. The central 2 layers would be made of stiff felt, stitched following the pattern, to hold the sand. The outer two layers, made of soft green felt, would be stitched over it. Green was chosen because it is considered to be a gender-neutral color. Kinetic modelling sand was meticulously placed in each section of the pattern as it was being stitched. The neodymium magnets were carefully stitched in each corner with opposing polarity for a seamless attachment between the pieces. Each piece was replicated three times so that a larger blanket could be created when joined. This toy gives a number of play options, e.g., the parts could be joined together to create a weighted blanket or folded individually to create a number of 3-dimensional shapes to which they could assign their own meanings.



Fig 12.2 weighted blanket prototype

## **Investigation 7**

### **7.1 Interview Phase III: Concluding interview, preliminary showcase of final designed objects**

In phase III they were shown the complete collection of three designed toys through video call. In order to collect their responses, the therapists were asked to complete an online questionnaire featuring the following questions about each object:

- In your opinion what works well in this design?
- What particularly is your favorite feature of the design?
- Would you recommend any changes to the design?
- Are there any other thoughts you would like to share?
- What other types of toys are you interested in seeing more of in the playroom?

### **7.2 Therapist Feedback**

The responses from the therapists were critical in determining the function and usefulness of each toy in the playroom. Both therapists said that the catapult could be helpful for children to address their unresolved feelings of anger. Fatima said, “The physical movement of the pull and release action will be effective in releasing emotions in a physical form.” Sarah was more inclined towards the neutral color of the design and how it could allow the children to “...shoot away their worries.”

Both therapists were somewhat familiar to the rolling pin because they had seen similar toys in the playroom, however, they both appreciated that variety of attachments that could be plugged into the pin. Fatima pointed out that the various shapes could allow a child to “...feel more than one emotion as a time.” Allowing for greater emotional expression.

Both Fatima and Sarah appreciated the uniqueness of the weighted blanket as being multi-functional e.g., Fatima described it as a “novel idea”. They agreed that the toy was highly versatile because it could be used to help a child feel secure and protected. They particularly liked the modularity of the toy and how the individual parts could be used to create unique shapes but then also joined together to create a larger shape. Sarah liked the use of green felt as a gender-neutral color, and both therapists felt the weighted blanket could be worth investigating further. Fatima mentioned, how muted colors could be used, similar to that of the attachments of the rolling pin.

## Amna Sana

### Third Culture Kids – Playing to Heal

With increased globalization and a large expat population, Qatar is home to growing numbers of Third Culture Kids (TCKs). TCKs are children who live in a country where their parents are non-native, children who grow up between cultures. Young TCKs, especially children between the ages of three and seven, do not possess the skills to adequately vocalize their feelings, but fortunately play therapy allows them to articulate problems and feelings on their own terms. This thesis addresses the emotional hurdles facing TCKs, using concepts derived from play therapy and offering a series of interactive objects designed to reflect emotional expression through movement. Designed for use in a therapeutic playroom, the objects facilitate communication between the TCK and the therapist.

Website: [amnasana.interiorbits.com](http://amnasana.interiorbits.com)  
Instagram: @amnasana



**MAIN ADVISOR**  
Berta Corales

**ASSOCIATE ADVISOR**  
Barbara Hickey

**READER**  
Byrød Nystrand



# OUTCOMES

These final products were vetted by the therapists. During the final interviews they concluded the objects to be functional, adaptable and useful.

*Sarah, "The overall idea of this (catapult) is brilliant."*

*Fatima, "I am very pleased with the ingenuity of these toys."*



### ***Catapult: Shooting Pains***

The catapult was designed in response to the feelings of aggression experienced by TCKs. The design of this toy features a layered interaction. The pull-and release-movement allows the child to take a handful of sand and personally mold it into a form chosen by the child. These physical actions can be beneficial in a therapeutic context because LMA has shown that movements can be used to stimulate certain feelings. The therapeutic objective of this toy is to allow the child to process their feelings of anger by transferring them into a more tangible material, in this case it is the sand. The lever is pulled back and the load is released, in doing so the child can visibly see the sand propelled away from them and burst out of shape as it lands. The pull-and-release movement is metaphoric to releasing these pent-up emotions distancing

themselves from their worries. Playing with the catapult can provide a way for young TCKs to manage their feelings in a healthy way during play therapy, and process them on their own terms.







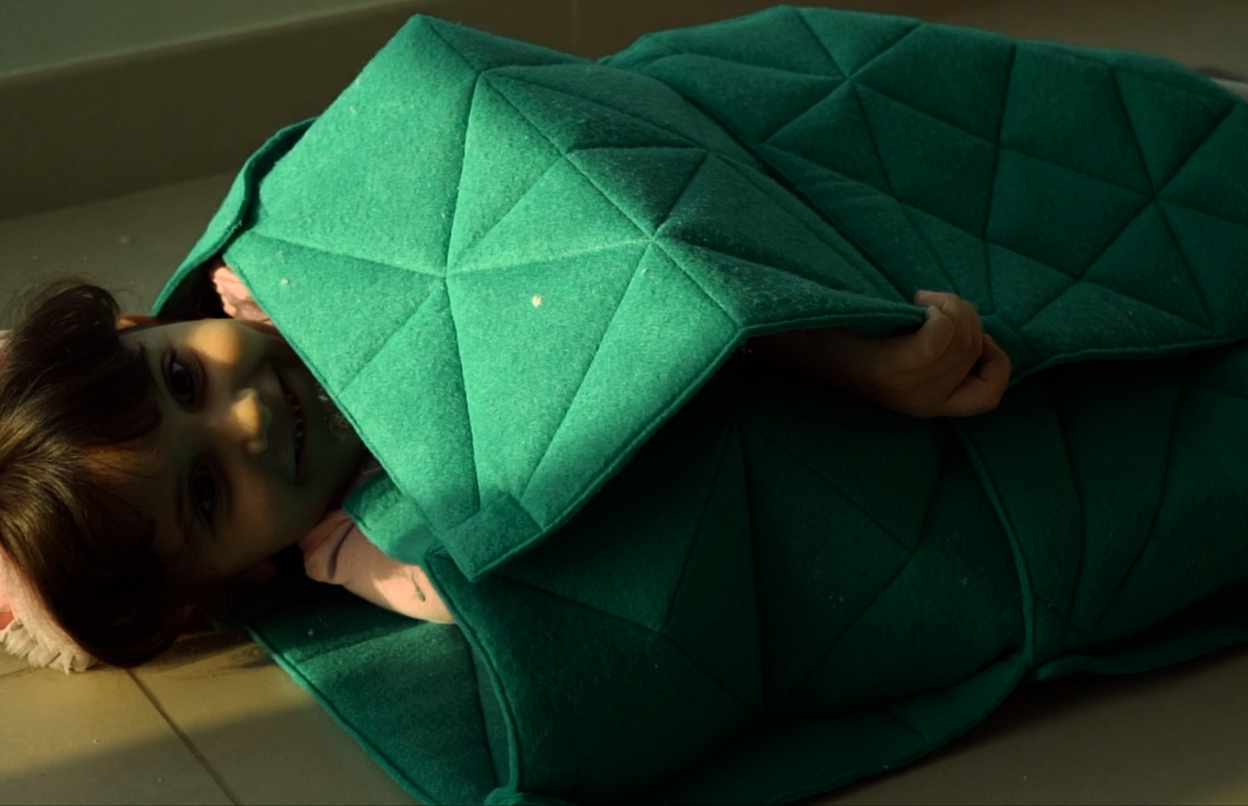
### ***Rolling Pin: Leaving Traces***

This object was designed in response to the identify confusion that is endemic to life as a TCK. Multiple shapes can be pinned into the holes in the rolling pin and then rolled onto modeling sand. This allows the child to create custom patterns onto the sand almost like a footprint that is unique to each individual. Through this activity, the child is given autonomy in choice and is able to take control of the kind of pattern she or he wants to stamp into the sand. The toy is a celebration of individuality and empowerment where the child experiences making conscious choices that create a visible impact.









### ***Weighted Blanket: Shape Shifters***

This object has been designed in response to feelings of loneliness felt by TCKs. The object works as both a weighted blanket as well as toy. The softness of the fabric and the weight of the sand gives the blanket an anthropomorphic quality which can help the child feel more secure and less alone, and the shape shifting quality of the blanket enables the child to express creativity and gain a sense of autonomy. The design consists of multiple felt pieces that can be combined together through neodymium magnets that are stitched within the fabric to create a larger blanket. This design uses sand to add weight, which has been added between the layers of felt. In addition, each piece which is approximately 30cm by 30cm and can be played with individually.





# REFLECTIONS

Children who grow up with undetected trauma in childhood can encounter difficulties later on in life. This is exacerbated when the children have not developed healthy relationships and healthy ways to cope with these challenges. As someone personally affected by emotional trauma, my thesis has been heavily influenced by a drive to help identify childhood issues during with the aim of enabling therapeutic help at younger years to help offset emotional pain and prevent more severe trauma as the individual grows into adolescence and adulthood. Motivated by a personal mission, my initial research revealed the importance and need of introducing play therapy to TCKs in Qatar. Studies show that Qatar has been and continues to witness the growing presence of expatriate families over the past years. And with this growing population, the number of children born into the TCK experience continues to rise as well. Limited knowledge and resources on the topic, including a lack of play therapists in Qatar, further emphasized a need for more work on this topic. In response, my thesis manifested into play therapy toys aimed at helping TCKs in the form of a kinetic catapult, a customizable rolling pin and a modular weighted blanket.

This thesis focuses on play utilized within play therapy by investigating materials and how children relate to them. Through this research, I learned that the experience a child has with an object is defined by the nature of the interaction, and that interactions become increasingly intimate one as the child attaches personal meanings and emotions to the objects. Thus, each object provides a unique interactional relationship with the child. Through playing with the catapult, a child

can learn to manage negative feelings and process them on the child's own terms. The pull-and-release movement of the catapult becomes a physical metaphor enabling the child to experience herself or himself from their worries. The rolling pin enables the child to feel a sense of empowerment and identity construction through choosing the shapes to be pinned into the holes of the pin and then rolling these shapes into modeling sand. This allows the child to create custom patterns onto the sand almost like a footprint unique to each individual. Finally, the shape shifting quality of the blanket enables the child to express creativity, thereby also strengthening the child's sense of autonomy and personal creativity.

Since the interactions with different materials can evoke different emotions and sentiments in a child, materiality became a key factor in the design explorations. My explorations further revealed the fluidity and versatility of a common material, sand, which allows limitless opportunities in its interaction. Consequently, it became an important design element in all of my objects. The use of sand brought about an instant connection to Qatar, with the region being a desert terrain. As such, this could allow the toy to form an even deeper connection with the user. This is manifested in the load of the catapult, the sandbox for the rolling pin and the weights in the blanket. In relation to the loneliness experienced by many TCKs, the softness of the fabric and the weight of the sand gives the blanket an anthropomorphic quality which can help the child feel more secure and less alone.



FUTURE DIRECTIONS

This thesis helps guide future explorations in making more effective toys for use in play therapy. Positive feedback regarding these toys from professional play therapists indicates the next step could be to seek certification which allows their use in therapy. These can be adapted and tailored to larger audiences – particularly other TCKs (3 to 7 years) in other countries in who share a similar demographic and social fabric to Qatar. Although the research primarily focuses on creating toys for TCKs of a specified age group, the research methodology can be revised and adapted to address the emotional hurdles faced by TCKs of other age groups. The complexity of toys for older children could be both intriguing and useful to explore.

With materiality an integral part of the design explorations, due to which sand became a recurring element in the final outcomes, research could be broadened further to look into other materials. The findings of which can be used to design toys which incorporate materials that are endemic to the TCKs under focus.

The gap that exists between design and therapy can be addressed with designers collaborating with play therapists to create toys tailored to the needs of their communities. In doing so, designers can uncover an even greater area of therapy needs that are still unexplored and expand their contribution to play therapy toys.

# CITATIONS

- 1 "Expats in Qatar - Statistics and Trends [Infographic]," GO Gulf Qatar, December 27, 2018, <https://www.go-gulf.qa/expats-in-qatar-statistics-and-trends-infographic/>.
- 2 "Woman\_Man\_2018\_EN.Pdf," accessed April 24, 2021, [https://www.psa.gov.qa/en/statistics/Statistical%20Releases/Social/GenrealSocialStatistics/MenWomenProfile/2018/Woman\\_Man\\_2018\\_EN.pdf](https://www.psa.gov.qa/en/statistics/Statistical%20Releases/Social/GenrealSocialStatistics/MenWomenProfile/2018/Woman_Man_2018_EN.pdf).
- 3 "Woman\_Man\_2018\_EN.Pdf."
- 4 "The Third Culture Kid Experience: Growing up Among Worlds," accessed October 12, 2020, <http://web.a.ebscohost.com.proxy.library.vcu.edu/ehost/ebookviewer/ebook/bmxlYmtfXzU0MTg1X19BTg2?sid=204f1026-baa4-4eb1-ae31-e3f48c4cf3a1@sdv-v-sessmgr02&vid=1&format=EB&rid=1>.
- 5 "The Third Culture Kid Experience: Growing up Among Worlds."
- 6 David A. Crenshaw et al., *Play Therapy: A Comprehensive Guide to Theory and Practice* (New York, UNITED STATES: Guilford Publications, 2014), <http://ebookcentral.proquest.com/lib/vcu/detail.action?docID=1760717>.
- 7 "The Third Culture Kid Experience : Growing up Among Worlds," accessed October 12, 2020, <http://web.a.ebscohost.com.proxy.library.vcu.edu/ehost/ebookviewer/ebook/bmxlYmtfXzU0MTg1X19BTg2?sid=204f1026-baa4-4eb1-ae31-e3f48c4cf3a1@sdv-v-sessmgr02&vid=1&format=EB&rid=1>.
- 8 "Child-and-Adolescent-Mental-Health-Current-Status-Challenges-and-Recommendations-for-Policy-Makers.Pdf," accessed April 24, 2021, <https://2020.wish.org.qa/app/uploads/2020/11/Child-and-Adolescent-Mental-Health-Current-Status-Challenges-and-Recommendations-for-Policy-Makers.pdf>.
- 9 "PaperV2.Pdf," accessed October 13, 2020, <https://playtherapy.org.uk/Portals/0/Research/paperV2.pdf>.
- 10 "The Therapy behind Play Therapy," *Counseling Today*, August 24, 2018, <https://ct.counseling.org/2018/08/the-therapy-behind-play-therapy/>.
- 11 Charles E. Schaefer, Lisa D. Braverman, and Kevin J. O'Connor, *Handbook of Play Therapy* (John Wiley & Sons, Incorporated, 2015), <http://ebookcentral.proquest.com/lib/vcu/detail.action?docID=4042984>.
- 12 "Play Therapy as a Mental Health Intervention for Ch...," JFH, accessed January 19, 2021, <https://www.jfhc.co.uk/play-therapy-as-a-mental-health-intervention-for-children-and-adolescents>.
- 13 "Play Therapy as a Mental Health Intervention for Ch..."
- 14 "The Third Culture Kid Experience: Growing up Among Worlds."
- 15 Beth Melles and Lisa Frey, "'Here, Everybody Moves': Using Relational Cultural Therapy with Adult Third-Culture Kids," *International Journal for the Advancement of Counselling* 36 (September 1, 2014), <https://doi.org/10.1007/s10447-014-9211-6>.
- 16 Melles and Frey.
- 17 Jessica Sanfilippo-Schulz, "Becoming Cross-Cultural Kids in K. J. Fowler's 'We Are All Completely Beside Ourselves,'" *Junctions: Graduate Journal of the Humanities* 4 (April 1, 2019): 23, <https://doi.org/10.33391/jgjh.49.18> Sanfilippo-Schulz.
- 19 "The Third Culture Kid Experience: Growing up Among Worlds."
- 20 Sanfilippo-Schulz, "Becoming Cross-Cultural Kids in K. J. Fowler's 'We Are All Completely Beside Ourselves.'"
- 21 "Self-Destructive Behaviors and Parenting Styles Among Third Culture Kids and Non-Third Culture Kids: An Exploratory Study - ProQuest," accessed October 12, 2020, <https://search-proquest-com.proxy.library.vcu.edu/docview/1899931280?pq-origsite=summon>.



- 22 “Self-Destructive Behaviors and Parenting Styles Among Third Culture Kids and Non-Third Culture Kids.”
- 23 “The Role of Play Themes in Non-Directive Play Therapy - Virginia Ryan, Andrew Edge, 2012,” accessed October 12, 2020, <https://journals-sagepub-com.proxy.library.vcu.edu/doi/full/10.1177/1359104511414265>.
- 24 “The Role of Play Themes in Non-Directive Play Therapy - Virginia Ryan, Andrew Edge, 2012.”
- 25 “The Role of Play Themes in Non-Directive Play Therapy - Virginia Ryan, Andrew Edge, 2012.”
- 26 “The Third Culture Kid Experience: Growing up Among Worlds.”
- 27 “Self-Destructive Behaviors and Parenting Styles Among Third Culture Kids and Non-Third Culture Kids.”
- 28 “The Role of Play Themes in Non-Directive Play Therapy - Virginia Ryan, Andrew Edge, 2012.”
- 29 Information gathered from Interview with Play Therapists.
- 30 “The Therapy behind Play Therapy.”
- 31 “PaperV2.Pdf.”
- 32 “Play Therapy Makes a Difference - Association for Play Therapy,” accessed October 25, 2020, <https://www.a4pt.org/page/PTMakesADifference/Play-Therapy-Makes-a-Difference.htm>.
- 33 Crenshaw et al., *Play Therapy*.
- 34 Crenshaw et al.
- 35 “The Role of Play Themes in Non-Directive Play Therapy - Virginia Ryan, Andrew Edge, 2012.”
- 36 Garry L. Landreth, *Play Therapy: The Art of the Relationship* (London, UNITED KINGDOM: Taylor & Francis Group, 2012), <http://ebookcentral.proquest.com/lib/vcu/detail.action?docID=958282>.
- 37 “Play Therapy as a Mental Health Intervention for Ch...”
- 38 “Play Therapy Makes a Difference - Association for Play Therapy.”
- 39 “Laban Movement Analysis,” studylib.net, accessed April 25, 2021, <https://studylib.net/doc/8395068/lab-an-movement-analysis>.
- 40 “TABLE 2 | LMA Components, with Affinities of Space, Shape and Effort...,” ResearchGate, accessed April 25, 2021, [https://www.researchgate.net/figure/LMA-Components-with-affinities-of-Space-Shape-and-Effort-presented-in-rows\\_tbl1\\_319567255](https://www.researchgate.net/figure/LMA-Components-with-affinities-of-Space-Shape-and-Effort-presented-in-rows_tbl1_319567255).
- 41 Rachelle P. Tsachor and Tal Shafir, “A Somatic Movement Approach to Fostering Emotional Resiliency through Laban Movement Analysis,” *Frontiers in Human Neuroscience* 11 (September 7, 2017): 410, <https://doi.org/10.3389/fnhum.2017.00410>.
- 42 Ed Groff, “Laban Movement Analysis: Charting the Ineffable Domain of Human Movement,” *Journal of Physical Education, Recreation & Dance* 66, no. 2 (February 1995): 27, <http://search.proquest.com/docview/215770928?pq-origsite=gscholar&fromopenview=true>.
- 43 Groff.

- 44 Sabine Koch, "Movement Analysis in Dance Therapy: Semantics of Movement Qualities, Rhythm and Shape According to Laban and Kestenberg.," *Acta Universitatis Carolinae. Medica* 47 (January 1, 2011).
- 45 Koch.
- 46 "Yi-Fei Chen Designs a Gun for Firing Her Tears," Dezeen, November 2, 2016, <https://www.dezeen.com/2016/11/02/tear-gun-yi-fei-chen-design-academy-eindhoven-dutch-design-week-2016/>.
- 47 "Yi-Fei Chen Designs a Gun for Firing Her Tears."
- 48 "Yaara Nusboim Designs Therapy Dolls for Children Struggling with Emotional Trauma," Dezeen, November 18, 2019, <https://www.dezeen.com/2019/11/18/yaara-nusboim-alma-therapy-dolls-design/>.
- 49 "Yaara Nusboim Designs Therapy Dolls for Children Struggling with Emotional Trauma."50 "We Don't Give Children the Freedom to Play,' Says Designer Cas Holman," Dezeen, February 14, 2020, <https://www.dezeen.com/2020/02/14/cas-holman-toy-designer-interview/>.
- 51 Michael J. Tarr and Heinrich H. Bülthoff, "Is Human Object Recognition Better Described by Geon Structural Descriptions or by Multiple Views? Comment on Biederman and Gerhardstein (1993)," *Journal of Experimental Psychology: Human Perception and Performance* 21, no. 6 (December 1995): 1494–1505, <https://doi.org/10.1037/0096-1523.21.6.1494>.
- 52 "Olander Earthworks as Featured in My Modern Met," Olander Earthworks, accessed November 9, 2020, <https://www.olanderearthworks.com/blogs/news/olander-earthworks-as-featured-in-my-modern-met>.
- 53 María D. L. Angeles Tornero and Claudia Capella, "Change during Psychotherapy through Sand Play Tray in Children That Have Been Sexually Abused," *Frontiers in Psychology* 8 (May 4, 2017), <https://doi.org/10.3389/fpsyg.2017.00617>.
- 54 "BCXSY's Mixed Animals Magnetic Soft Toys Launch on Kickstarter," Dezeen, May 29, 2014, <https://www.dezeen.com/2014/05/29/bcxsys-mixed-animals-toys-magnets-kickstarter/>.
- 55 "MIXED ANIMALS: How Wild Is Your Imagination?," Kickstarter, accessed April 20, 2021, <https://www.kickstarter.com/projects/cindyng/mixed-animals-how-wild-is-your-imagination>.
- 56 "BCXSY's Mixed Animals Magnetic Soft Toys Launch on Kickstarter."
- 57 Ilker Etikan, Sulaiman Abubakar Musa, and Rukayya Sunusi Alkassim, "Comparison of Convenience Sampling and Purposive Sampling," *American Journal of Theoretical and Applied Statistics* 5, no. 1 (December 22, 2015): 1, <https://doi.org/10.11648/j.ajtas.20160501.11>.
- 58 Harvard Health Publishing, "Anxiety and Stress Weighing Heavily at Night? A New Blanket Might Help," Harvard Health, accessed April 25, 2021, <https://www.health.harvard.edu/mind-and-mood/anxiety-and-stress-weighing-heavily-at-night-a-new-blanket-might-help>.