The Virtual Sandtray App®

Jessica Stone, Ph.D., RPT-S

The Virtual Sandtray App is a new and exciting way to create, save, load, and share sandtrays with your clients, patients, students, supervisors and during trainings - wherever you may be. With the Virtual Sandtray App you can go above and beyond what is possible in a traditional tray. This app is not a game, rather it is a professional tool designed to enhance and expand a traditional method to new heights and possibilities.

For the purpose of this article a professional working with a client or patient will be referred to as a "specialist". This implies a level of training and experience commensurate with the field the professional works within.

What is Sandtray Therapy?

"Sandtray therapy is an expressive and projective mode of psychotherapy involving the unfolding and processing of intra- and interpersonal issues through the use of specific sandtray materials as a nonverbal medium of communication, led by the client(s) and facilitated by a trained therapist." (Homeyer & Sweeney, 2011)

Traditionally a specialist has a box with sand in it and many miniatures available to be chosen by the client and placed in the sand. Some features of sandtray therapy vary with the approach and foundation of the specialist, however, in general the items are placed by the client into the sand depicting a representation of his/her world view, experiences, and/or difficulties. At times there is a verbal story to complement the tray and at times there is not. A specialist's primary job is to understand trays via this "nonverbal medium of communication" in a way that assists the person through the issues affecting his/her life.

How Does The Virtual Sandtray App Meet the Needs of The Client in a Digital Way?

Margaret Lowenfeld was an early play therapist who spoke of working with children in a non verbal way. Sandplay therapy was a specialty of hers and she is well known for her amazing work. Lowenfeld's World Technique (1979) is still used today. Whichever technique a specialist uses with the sandtray, certain aspects remain crucial.

"I set for myself as a goal to work out an apparatus which would put into the child's hand a means of directly expressing his ideas and emotions, one which would allow of the recording of his creations and of abstracting them for study." (Lowenfeld, 1979)

 The Virtual Sandtray App is a way of meeting many of the traditional needs of therapy with a sandtray and expanding it's use in new ways that were previously impossible. With this app a client can have in his/her hands an apparatus to allow for direct expression of ideas and emotions and it literally has the ability to record them for study. A client can create a tray which includes digging, painting, placing and manipulating models, saving, loading, sharing (encrypted files), taking still screenshot photos, and taking video of the process as desired.

With a deep respect for the various theoretical modalities of working with a sandtray, The Virtual Sandtray App's focus will remain on the key aspects of the therapeutic value of this time honored tool. For instance, the key aspects of Sandtray therapy include a "dynamic interpersonal relationship", an emphasis of promoting "play and relationship", and the Sandtray therapist "facilitates rather than choreographs the process" (Homeyer & Sweeney, 2011). Each of these can be achieved with the Virtual Sandtray App.

Another important concept is the importance of speaking the client's language (Stone, 2015). Therapists frequently have educational instruction regarding this important concept. It is the creation of a safe holding environment for the client. In 2016 the majority of clients speak a digital language and speak it quite well. Young children are quite fluent in it and consider it a fun, familiar medium. To discount the importance of speaking a client's language based on the fact that it is digital is a mistake, especially if that 'language' can lead to important clinical information and interactions.

Touch

Touching and feeling the sand and miniatures is an important part of sandtray therapy. It is acknowledged that this is not present in The Virtual Sandtray App in the same way as a traditional tray. However, there are some important factors to consider.

Some clients do not like the feel of the sand. For instance, many clients who have a diagnosis on the autism spectrum do not like to touch the sand. Some clients do not like to get their hands dirty, including many with a diagnosis of Obsessive Compulsive Disorder. People with tactile and sensory defensiveness may also dislike the feel of the sand. Some clients are unable to reach the sandtray because of mobility issues such as degenerative disorders, wheelchairs which cannot move close enough to the tray, or those in hospital settings who for mobility or health vulnerability reasons cannot access the traditional tray.

The loss of touch is important, however, these needs can still be met with a traditional tray when available The exciting part is that with the Virtual Sandtray App, the digital aspect offers so much more. The digging feature alone has settings which allow the client to change the liquid level from various types of water to lava to poison and more. The models can be placed in whatever quantity desired and then altered for position and size, pushed over, restored, buried and even blown up. In a traditional tray there are limits. If a client wants to place a family of elephants the specialist would need to have a number of elephants to choose from or something symbolic of this family for use. In The Virtual Sandtray App the client has the ability to place what is needed to fulfill the client's desires within the tray's creation. Twelve elephants, fire, water, weather, translucent rainbows, and active volcanoes can be placed. You name it!

Application of Digital Tools in Various Settings

The task of appropriately applying digital tools into play therapy can feel a bit daunting. It is important to carefully analyze what needs and/or goals the specialist hopes to meet when evaluating a digital tool. In addition, does the digital tool detract from the therapeutic

value? What does the digital tool enhance or contribute that is therapeutic? These evaluations are critical so that play specialists can maintain their professional and personal integrity and continue to support and promote the distinction between "just playing" and play therapy.

In order to begin these evaluations it is important to distinguish what is therapeutic about the play itself and then carefully define how the digital tool does or does not meet these needs. Can the therapeutic goal of the session or of the course of treatment be furthered by utilizing this tool? If so, how? What does it provide? If not, why not? What is it either missing or it doesn't meet? A great aspect of the digital nature of these tools is that quantifiable data is relatively simple to compile when incorporated into the code of the program. There is a great need for research with therapeutic use of digital tools.

When conceptualizing The Virtual Sandtray App and researching information to answer the above questions a number of resources were found. Some articles discuss the concept of digital tools however, others offer phenomenological data from actual use. Many of the articles available discuss the benefits of using digital tools to meet goals.

Alternate Settings Using Digital Tools

The use of digital tools in a medical setting was found to be favorable. It was found that the familiar digital format and medium contributed to the younger patient becoming relaxed and at ease. This allowed for the patient to get "exercise and improve range of motion". The digital intervention was found to be fun and the patient appeared to engage in the therapeutic process more quickly.

Some researchers specifically address the use of an iPad in therapy. Snow, Winburn, Crumrine, Jackson & Killian (2012) defined types of digital apps used in session based on Terry Kottman's five categories of play. Once apps were assigned to each category they were used and evaluated for therapeutic value. Therapeutic value was found and the authors depict a case of sexual abuse disclosure. The disclosure was made in direct conjunction with the use of the digital tool. " The iPad provided him a way to express his emotions as he told the therapist a very difficult and painful experience."

The authors also described ways to set up the seating and logistics within the playroom and how to make the iPad available. Further defining the logistics assists in distinguishing the digital tools from game apps the client may play on their own. They posit that the "use of the iPad and associated apps within the playroom is a new concept, and therefore its true potential and purpose has yet to be discovered."

Digital Sandtray Research

The use of the use of a very basic version of a digital sandtray was found to be useful to the specialist attaining their therapeutic goals. Hancock, ten Cate, Carbondale and Isenberg (2010) conducted research regarding the use of an interactive tabletop for sandtray therapy. A combination of computer science students and mental health workers teamed up to explore the therapeutic value and usefulness of a tabletop sandtray. Their research yielded that their

"prototype was sufficient for therapists to gain insight about a person's psyche through their interactions" when using the basic digital form of the sandtray.

The team introduced the concept that a digital form of the sandtray may be more attractive to teens and pre-teen clients and the 'wow' factor of the digital form may engage them further than a traditional tray. In addition, they discuss the clients who "perhaps due to their own response to traumas, dislike the feeling of sand and refuse to play with sand may find a digital sandbox more to their liking."

The specialists involved in this study stated that they could easily interpret meaning from the use of the virtual objects such as object representation, client-object interaction, and object arrangement. The discussion of these categories assists in answering the questions of the digital modality meeting therapeutic needs and goals.

"Specifically, the use of precise interaction and a physics engine can together provide a richness that is sufficient for therapists to understand things about a client's psyche through their interactions with the virtual artifacts. These artifacts thus can take on meaning in a way that is not typically sought after in the design of traditional computer applications. "

Future research with The Virtual Sandtray App will hopefully support these concepts and expand the findings of therapeutic value. A research version of the app could have the ability to track objects used for research purposes and may even result in hard data to further support the use of sandtray as a empirically based intervention.   This would, however, be a research version only, the Virtual Sandtray App does not include this capability for privacy reasons. The ability to save, photograph and video trays will also contribute to research in ways a traditional sandtray setup has not been able to do previously.

At this point it appears there is sufficient evidence to support the use of digital tools in therapy and more research is being done every day. Digital tools can positively contribute to the therapeutic process and goals. In play therapy The Virtual Sandtray tray is completed by the client and the process is observed by the specialist sitting close to the client, as is done in the traditional method. The follow up and discussion can be conducted in the manner the specialist has done traditionally. Object representation, client-object interaction, and object arrangement can all be observed, preserved and analyzed.

The Use of the Virtual Sandtray App

Designed to maximize portability, creativity, and affordability, the Virtual Sandtray App is an additional tool available to a specialist. In educational settings this app can be used within courses to teach components of analyzing trays without the logistics of traditional materials. It can be used in supervision to share encrypted files and videos taken directly in session, with or without sound, and contribute to a very rich analysis of both the specialist's work and the client's. Within a school classroom a teacher can use this app to stimulate creativity in writing and serve as a prompt and communication tool

In hospitals the rich benefits of a sandtray can be brought to the patient who cannot travel to the

Child Life Specialist's room. The patients who previously could not benefit from this great tool to work through anxiety and trauma can now participate. This could benefit an immunocompromised patient immensely as the iPad can be cleaned to the hospital's specifications for the patient's use .

In crisis situations where materials are either scarce or impossible to bring along this app can once again bring the benefits of sandtray work in a manageable way. Instead of carrying models, a tray (however portable), and sand the specialist only need bring the iPad with The Virtual Sandtray App installed to have access to all the basic features, 600+ models, and any expansion packs added along the way.

In the office this app can be incredibly useful when each play room is not equipped with either a sandtray or duplicate miniatures and the specialists share the space. The Virtual Sandtray App allows for consistency among available materials. In a more static setting, the app can be used instead of or in conjunction with the traditional tray. Often clients will complete both within one session when both are available. This can lead to some amazing results when analyzing the themes that stay consistent, the qualities shared that are changed, and how the creativity is manifested in both modalities.

What The Virtual Sandtray App Includes

The basic app package available through the App Store on your iPad device includes the tray which can be moved, rotated and zoomed in and out. The tray has a background or skybox which can be customized to create, enhance or emphasize the tray's mood. In addition, a high resolution digging feature which can be customized to dig down (e.g. two layers down reveals liquid), raise the sand up (e.g. for mountains), the size of the "shovel" can be chosen, and if a client wants to restore a particular portion the eraser can bring it to it's original level. A painting feature is also included. The client can choose a paint texture, the size of the brush used and create a scene using anything from lava to cobblestones to grass to snow to depict different aspects of their tray. The entire tray can also be painted at once if desired to save effort and time.

The basic pack includes over 600 3D models and available expansion packs can be purchased as desired to create a collection to meet your client's needs. The models can be manipulated (e.g. resized, rotated, pushed over, restored, and deleted) by long pressing on the item until the controls appear. Great care was employed to allow for both the traditional two finger control on the screen (e.g. the same technique is used when expanding a photo, for instance) and for those who either dislike the two finger controls or are unable to complete the motions, a larger panel is shown to give additional control options.

Changing the skybox (e.g. background/skyline) and the liquid type (e.g. one digs down to) is possible in the environment options menu accessed through the folder icon.   Some basic options are included and more can be added through expansion packs. The user menu allows you to customize your experience by turning features on or off, such as animation, auto save, and more.

A camera icon allows the specialist or client to take screenshot photos of the work in

progress. The client can zoom in or out, rotate around and get just the perfect angle of their work to preserve in a photo. In addition, an add on feature of video recording capabilities can be purchased. This feature can record with or without audio.   It is important to remember that an iPad Air (or newer)or iPad mini 3 (or newer) is necessary to run the video recording feature.

Unlike a traditional tray, these sandtray files can be saved and reloaded at a future time for reference or to continue the creation. The trays can be saved and named as desired. Retrieving them is simple upon return. As a safety feature, there is a customizable auto save capability in case your iPad unexpectedly quits. The autosave can be set to save every 3, 5, or 10 minutes or it can be disabled. It is recommended that the tray is saved along the way to preserve the work, both as a saved file and through autosave.

The login menu allows for an administrative option where the specialist can share encrypted files with other professionals. The recipient must register as well and retrieve the file from the program to ensure it reaches the intended party. These additional steps have been included to address the privacy of the clients and the needs of the professional.

Conclusion

The Virtual Sandtray App allows the client to have access to an amazingly creative tool to create sandtrays in numerous environments. The specialist assisting the client has the ability to manage the files in a professional manner. The features and models available can be customized to maximize the usefulness of the app for your needs. The research thus far supports the use of digital tools to attain and further therapeutic goals while maintaining the key features of the traditional tray.

Created by a psychologist and registered play therapist and a self taught programmer, this professional app has an attention to detail which is unmatched. The cost is less than half the price of a traditional starter sandtray kit and new model packages will be added continuously to increase your model collection. The Virtual Sandtray App is an important addition to a specialist's toolbox to meet client needs.

With The Virtual Sandtray App the possibilities are virtually endless!

Citations

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