Revealing the Significance in Liminal Period Through Art Expression Extending the Rubber Band Model to Multi-Dimensional Limitations

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Abstract

It has been stated that severe or long-lasting negative stress, for instance, failure of, or rejection from, valuable events or a person that exceeds the individual's competencies and capacities to mitigate the impact of loss which happens alongside our lives, is able to trigger depression. Whereas before jumping into the hardly irretrievable depression directly, a gradual process happens to trigger genetic risk and depressogenic beliefs which helped to generate the progression as the liminal period or "betwixt and between" state and better interpreting and formulating as the elasticity "rubber band model" idea. It was created to better meet the dramatic development of technology and rapid growth from manifold layers in society and aims to extend as a novel perception tool to interpret multiple relationships as humans with humans, and art with technology. The research was conducted with 15 participants by visualizing transition period inner feelings through art expression. Results were generated as three pairs: "nature and simple," "loneliness and feedback," and "limitations and layers" which "feedback" was further explored within various domains and extended the rubber band model to multi-dimensional limitations and considerations.

Keywords: Depression, Liminal Period, Rubber Band Model, Art Expression

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Introduction

The probability of people who get depression every year around the world is continually growing. It had been estimated by the World Health Organization (WHO) that depression will be the leading cause of disease burden by 2030 (WHO, 2013) and especially the COVID-19 pandemic will have an amplified negative impact simultaneously. According to a policy brief on COVID-19 and mental health issued by the United Nations, the pandemic is highlighting the need to urgently increase investment in services for mental health or risk a massive increase in the coming future (WHO, 2020). "The impact of the pandemic on people's mental health is already extremely concerning," said Dr Tedros Adhanom Ghebreyesus, Director- General of the World Health Organization. One study in Ethiopia, in April 2020, reported a 3-fold increase in the prevalence of symptoms of depression, for instance, social isolation, fear of contagion, and loss of family members, compared to estimates from Ethiopia before the epidemic (WHO, 2020).

Background

A substantial body of research has demonstrated the complex incentives of depression from the epigenetic mechanism (Nestler, 2014; Sullivan et al., 2000) to the evolutionary conservation (Anders et al., 2013) perspective. Whereas preventing depression via exercise as a recent study has shown that a small amount of physical activity was associated with a reduced risk of depression (Meyer et al., 2022). It has been demonstrated that participants with 4.4 or accumulating the recommended volume of 8.8 marginal metabolic equivalent task hours per week [mMET-h/wk] had an 18% and 25% lower risk of depression respectively, compared to participants with little physical activity (Pearce et al., 2022). The hippocampus - a brain structure that plays a critical role in the neuropathology of depression (Campbell & MacQueen, 2004) and the prefrontal cortex where the two main areas are most susceptible to mental diseases will gain protective effects after a single workout and gain bigger and stronger to prevent neurodegenerative diseases like depression, Alzheimer's disease, or dementia as well as normal cognitive decline in ageing (Suzuki, 2017).

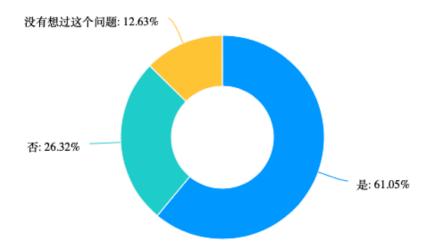


Figure 1: Have you ever suspected have depression or a tendency towards depression.

However abundant research had conducted on aspects of what triggered depression (Beck & Bredemeier, 2016), how to prevent it (Pearce et al., 2022) and multiple operations of psychotherapy (Aktas Oʻzkafacı & Eren, 2020), one period of time before being clinical diagnosed as depression was neglected by and rarely mentioned of. Based on the questionnaire I conducted in December 2020 with 94 valid responses that the number of people who had ever doubted themselves as being depressed though without being officially diagnosed is relatively a common phenomenon with surprisingly over sixty percent (60.64%) respondents. It was assumed that depression was not affected at once after the external force and a gradual process happened either to trigger genetic risk or depressogenic beliefs, (Beck & Bredemeier, 2016, p. 596) whereas it helped me to generate the process as a liminal space or "betwixt and between" state to better interpret depression as a gradual accumulation and to formulate the "rubber band model" idea.

Liminal Period

The word "limen" means "threshold" in Latin, and a liminal space is a space between spaces that is also described as a boundary between two points in time, space, or both (Parvez, 2020). "Liminal" in the depression domain indicate people are neither in a completely healthy psychological state nor clinically diagnosed as having severe depression however stayed in a healthy and depressed state simultaneously which is suitable for describing people who are suspected of getting depression as well. It is a transition corridor between complete healthy and severe depression and being able to throw in unconsciously by the major life events, take divorce for instance.

The thought of treating depression as a liminal period or "betwixt and between" state had brought a relatively new perspective to confront the stigma and discrimination by the society which would be easier to be acceptable. On the other hand, it relieved the mind burden as well of people who get depression rather than forming a self-cognition of "being sick" or "abnormal" which turned out to be a transition period in one's life duration embodied with plenty of possibilities, chances as well as anxiety and painfulness. However, during the liminal period, it is worth noting that not every melancholy experience will initiate a clinical depression due to various genetic predispositions and innate adaptability. An accumulation process appeared, and I applied the mechanization of the rubber band to better interpret the gradual process and the leading severe consequence.

Rubber Band Model

As it was known that rubber band has flexibility in a certain threshold, specifically speaking the attractive and repulsive forces between molecules within a certain distance works together to maintain resilience and balance, which cannot be exceeded or the band will break, whereas such perception can apply to depression as well. Think of depression as a rubber band with various elastic thresholds which depend on an individual's genetic polymorphism either by inheritance or not, suggesting that everyone was born with different resilience and predisposition. Someone was born with a tighter rubber band, for instance, which indicates that the person might have a slightly lower threshold to get depression with the upcoming environmental risk factors. Conversely, if someone has endured environmental risk stressors that are linked to reducing the volume of the hippocampus and cognition vulnerability, the rubber band will become tighter but not enough to break which in this case means getting severe depression. Therefore, the rubber band's flexibility ratio is higher enough to stand the pressure, however undermining the rubber band's internal molecule structure at the same time.

Whereas an early life severe adversity which will higher the prevalence initially is another state of affairs, for instance, if an adult has experienced early parental loss in the early days, such effect is like forming a crack on the rubber band given to the reinforced sensitive of interpersonal losses and the disruption of neural development, therefore the crack point is compounding fragile and sensitive if another misfortune occurred which may result in fracturing all of a sudden. Nevertheless, people also have mechanisms of self-regulation as a rubber band that eventually recover from the external force caused dysfunction within the range of endurance and restore a state of equilibrium unless the force is too strong to handle eventually leading to severe depression, suicide or the rubber band model broke.

Such inherent self-regulation or adaptability, an ancestral distinction of human intelligence (Cogdell, 2009, p. 97) seems no longer enough to get the pace of rapid growth from manifold layers in society according to Paola Antonelli, the Senior Curator of the Museum of Modern Art, and put forward the idea of "elasticity" in order to meet todays' instant "disruptive" variations in rhythm (Cogdell, 2009, p. 97). She regarded elasticity as the byproduct of adaptability and acceleration and the ability to negotiate change and innovation without letting them interfere excessively with one's own rhythms and goals (Antonelli, 2008, p. 14). Based on this advocate, she threw an exhibition related to the elastic mind in 2008 which mainly for stretching one's limit to adapt to rapid growth technology, however compared to that, my work mainly focuses on the attempt to construct an equilibrium in art practice in order to rebalance one's rubber band and preventing it "fracturing" while in the liminal space created by stretching.

The reason to choose the rubber band as the basis of the model is not only because of the similar working mechanism but also the metaphorical function which means depression is a kind of imperceptible situation unless apparent suicidal action or extreme behaviour that made it able to capture people's care and attention which is a close resemblance situation while stretching before rubber band's broken, once it happened it will be hard to recovery and what it has endured is under ignorance.

Method

In order to better know how people experienced during the liminal period and how painful experience becomes implicitly influential in the expression of inner qualities, data from a qualitative study into transitions related to art practice is presented to illustrate how this analysis may help to shed light on resilience and elasticity. To obtain more comprehensive information and to examine relationships among art, transition and elasticity, the research investigated the expressive experiences of 15 voluntary participants, with 11 female and 4 male volunteers from different regions of China, in diverse contexts and backgrounds including students and workers from various disciplines. Informed consent was obtained while the data can only be used in research due to the partially private personal information with guarantees of anonymity.

The study was set with only one requirement: paint when participants have negative thoughts or feelings. A few aspects were considered as reasons for utilizing drawing as a self-representation method to conduct the research. Firstly, most human emotional experience and memory are non-verbal and the information obtained is mostly visual. This information is

stored in our brain through image form which is difficult to be extracted by words. Furthermore, it was suggested that traumatized people are often unable to express their intense emotions verbally and cannot use the appropriate words and concepts because their vocabulary is limited for expressing the emotions they experience (Meijer & Alexithmia, 2006). Thereby visual methodologies were regarded as an appropriate method in order to probe the more subtle, affective and abstract aspects of experience (Rose, 2007; Pink, 2006).

On the other hand, in the psychological field, expressive art therapy can help individuals explore their hidden feelings in a supportive setting which is not used to analyze or solve a problem, nor is it about (striving for) perfection, it is a path to self-expression and a way to release one's feeling (Vaartio-Rajalin et al., 2020, p. 1). Instead of initiating art as a therapy-based communication tool in this part of the research, applying art form during the research is more about self-expression to symbolize the outline of inner pain and is the media through which we come to know ourselves, and let others know more of what we are really about. (Botton & Armstrong, 2016) It is slightly different from what art acts as an assistant helping patients discover their own powers and arrange their relationships in a healthier way in art psychotherapy (Aktas O⁻zkafacı & Eren, 2020), yet it is about sharing the reflective function of making visible the feelings in the participant's inner world through artistic forms.

Otherwise, an "instruction" approach without format limitations is encouraged concurrently, offering a large degree of expression from various perspectives to maximise comprehension of the inside feelings. Crucially, writing is seen more as a complex, socially situated set of meaning-making practices, it is about a process of making meaning which is not just about making texts, but is also about the making of ourselves, in a process of becoming (Gourlay, 2009, p. 183). The similar art making corresponds with words research method has been conducted in exploring the liminal space of the Open Studio in art therapy education by Tess Crane and Libby Byrne (2020), Giorgia Lupi's visualizing the mundane details of our daily lives (2017) and postcard conversation by Jan Allen and Jean Rumbold (2004).

Results and Discussion

In common with the research methods cited above, experiences are described through the drawing and words as well as undertaken the semi-structured short interview via chatting apps in terms which suggest indeterminacy, struggle and pessimistic emotion mostly presented by simple geometry duplicated shapes, intense colours, natural forms and multiple layers. Results were generated from participants' work as three conclusion pairs: "nature and simple," "loneliness and feedback" and "limitations and layers."



Figure 2: Participant drawing.

As a matter of fact that the pandemic halts the progression to the whole world's extent and radiated by several participants in the short interviews as well which was illustrated as partially the reason why people get even further from their dreams, a reason of homesick, lacking social life and deferring admission associated with fierce competition. The resilience of humans inherently and the rubber band model assist to generate a thought that the pandemic might be a chance to rethink the value of technology and nature.

"Loneliness" is what has been mentioned mainly by participants who had experienced diversifying experiences like studying alone in an unfamiliar place as Liang, Jin and Chen. Though under the convenience of technological means such as smartphones, the sense of loneliness still exists which generated a consequence of lacking corresponded feedback based on the research. Studies report that sharing, feedback, and solidarity among group members during group psychotherapy has many benefits, especially decreasing loneliness, alienation, and distrust (Foy, Eriksson, & Trice, 2011) echoing the significance function of profound feedback. On the contrary, online communication or judgment/comment system contains the action of "feedback" though different from what had been proven of the effectiveness by conducting psychotherapy intrinsically and even emphasising one piece of the story without fully perceiving the background and information.



Figure 3: Participant drawing.

Participant experiences painful events that lead to sadness or anger as Cai who had been rejected by his dream school or based on Huang's intense working environment, but these do not culminate in full-blown depression unless there is a perceived loss of what is believed to be a vital investment as a trigger which exceeds the individual's competencies and capacities to mitigate the impact of loss (Beck & Bredemeier, 2016, p. 597). Furthermore, multiple pressures from various aspects may also overload people as an environmental trigger.

In other words, both circumstances are capable to stretch excessively of one's innate elasticity and fracture the rubber band. In this case, the notion of "layer" can be depicted as a multiple-dimensional rubber band with manifold pressures acting upon it. Arguably enough that the critical state still exists based on their experience as the 'rubber band' fracture extreme point which indicates the diversity of the extent or elasticity of each person as an

individual's mental limitation. Nevertheless, it is believed that the incidence of depression is not triggered by merely one frustration given to the elasticity of "rubber band" or the resilience inherently for adapting and resuming, however the adversity has been linked with reduced volume of the hippocampus and exhibits greater sensitivity to stress and lower the "threshold" of being predisposed to depression (Beck & Bredemeier, 2016, p. 606).

Therefore, according to the compensatory nature of art, simplicity as a joint characteristic has been shown as a pursuit in the participants' works accompanied by signs of nature. Compared to the manifold layers of sophisticated reality including but not limited to the relationships with coworkers, leaders, lovers, parents or children, it is hardly incomprehensible an urgent appeal to a controllable life which had partly been reflected in Meng, Dou and other participants' drawings. A portrayal of a busy and complicated life is described as 'Work is frantic across three continents, the inbox is clogged with 200 messages every hour' (Botton & Armstrong, 2016) which is capable to make people feel anxious merely imagining such an ordinary and familiar picture.

As was stated previously, technological means such as smartphones or chatting apps improved efficiency indeed, however, the intensity of immersion in life is far beyond control stretching abruptly and severely the rubber band which leads to a constant chasing after updating and high-efficiency life and living as a piece of machine. Additionally, most of our communication is mainly based on technology, especially during the pandemic period, however, online communication is nearly ineffective to help us get rid of the sense of lonely and most importantly dragging the social distance too close to notice imperfections on every individual or to cause perfectionism anxiety as was demonstrated by Thomas Curran, the social and personality psychologist in 2018 (Curran, 2018).

Conclusion

The rubber band model is currently contributed as a forming or stretching progression to demonstrate the accumulation process of getting depression and the space built by stretching created a liminal period as an unstable state with possibilities. With a bold hypothesis, it will compensate for the lack of description and an exact concept of the ambiguous state in the study of depression, though the effectiveness of this liminal thought in the depression domain is still worth considering. Yet making the invisibility of the liminal period visible is one of the methods to lower the anxiety level (Parvez, 2020) and what art and design can do to handle it is also needed further exploration.

However, this work is mainly focusing on presenting the formation of the rubber band model and the whole process of qualitative research associated with the conclusion and further interpretation of the rubber band model. Since the content became the process such painting methodology gives me access to the participants' "inner landscape" of awareness, thoughts and feelings, impressions and imaginings as three pairs: "nature and simple", "loneliness and feedback" and "limitations and layers." "Feedback" as one of the results will be further explored within various domains and extended the rubber band model to multi-dimensional limitations and considerations. Yet limitations still exist given to the small number of participants who are mostly from one country though some of them have overseas experience. Further research will be conducted as comparison research related to liminal experience between participants from China and from the United Kingdom.

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