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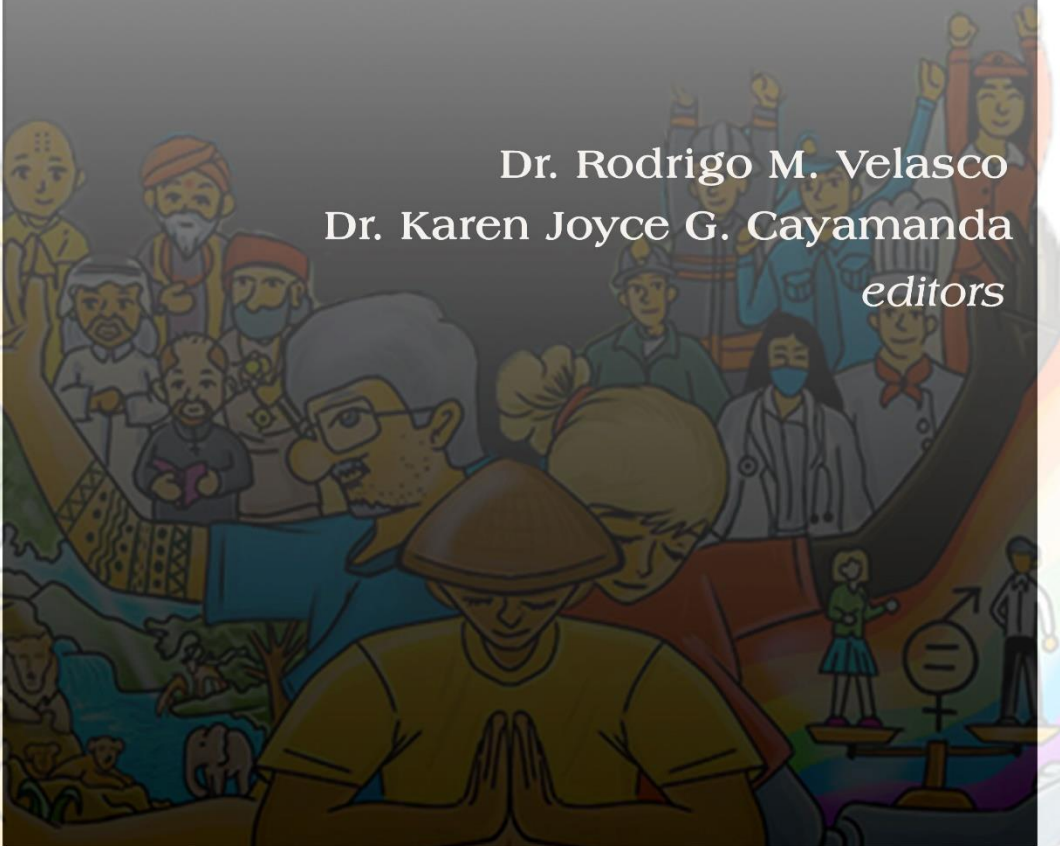
in Different PERSPECTIVES: Rebuilding Lessons after a Crisis

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editors

This is an original copy of the book chapter.

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Preface

The world is in chaos. The emergence of COVID-19 pandemic created the havoc that all parts of the globe had to deal with. In addition, there are still other personal and social crises that everyone endures.

Rebuilding Lessons after a Crisis attempts to present the whys, whats and hows of humanity's risk perception across the world as we embark on this challenging journey and help define the most appropriate and most effective risk-related behaviors for survival.

The current pandemic has brought about the abrupt shift in all sectors of the society in different parts of the world. It has resulted to immediate adjustments and development of coping mechanisms to transcend beyond the challenges of this pandemic. Like any other crisis, the current situation taught us to reflect and manage its overwhelming effects.

This book compiles articles that reflect the different perspectives in varied concerns such as health, economy, education, and social transformations. Its impact to the physical, emotional, psychological and financial conditions of humanity across the world are also presented.

Part I as the opening chapter attempts to describe the situation in terms of how a crisis has been evaluated in different lenses as to the risk perception and the risk related behaviors as to how various sectors have adapted to the situation.

Part II describes the varied effects of the pandemic and the adjustments and coping responses manifested by the different sectors.

Part III offers the strategic actions and coping mechanisms that can help recover and sustain ways of life in these challenging times.

About the editors

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Part 3 – The Strategies to Overcome a Crisis

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Brief Cognitive Restructuring and Cognitive Defusion Techniques

Portia R. Marasigan, Ph.D.

Introduction

All people have days feeling like a dark cloud is following them around which seems normal. If a glass-half-full kind of person, he might bounce back to seeing the sunshine pretty quickly. Unfortunately, far too many of them get stuck in what seems like a never-ending thunderstorm of negative thoughts and worries. Left unchecked, these thought patterns can lead them down a spiral straight to anxiety and depression (Hampton, 2017). Science has determined that unhealthy thinking patterns largely contribute to mental health conditions.

Negative thought patterns can play a big role in causing and worsening depression and anxiety. Furthermore, negative thoughts are cognitions about the self, others, or the world in general that are characterized by negative perceptions, expectations, and attributions and are associated with unpleasant emotions and adverse behavioral, physiological, and health outcomes (Hawkley, 2013).

Cognitive models of psychopathology (Beck, 1979) posit that dysfunctional cognitions directly contribute to negative emotions. Accordingly, a common technique in traditional cognitive behavioral therapy (CBT) is cognitive restructuring, in which the therapist and patient collaboratively identify irrational or maladaptive thoughts and challenge their veracity using strategies such as logical disputation, Socratic questioning, and behavioral experiments (Hofmann & Asmundson, 2008). The goal of this process is to encourage patients to think in more accurate and adaptive ways, which facilitate effective problem solving and living a more satisfying life (Deacon, et al., 2011).

CBT consists of various techniques; however the specific contribution of cognitive restructuring to the overall efficacy of

CBT has recently come under scrutiny. In review of treatment studies for anxiety and depression, Longmore and Worrell (2007) concluded that cognitive interventions do not consistently provide added value to behavioral interventions.

Cognitive restructuring has also been criticized on theoretical grounds by proponents of mindfulness and acceptance-based approaches such as acceptance and commitment therapy (ACT) (Hayes, et al., 1999). Cognitive therapists have vigorously disputed the notion that cognitive restructuring encourages the suppression and avoidance of negative thoughts and emphasize the contradiction between the negative depiction of cognitive restructuring by ACT proponents and the observation that cognitive therapy is "*the most clearly established effective psychotherapy that exists*" (Leahy, 2008, p. 149). Nevertheless, a cardinal feature of "third wave" approaches (Hayes, 2004) is their marked departure from traditional CBT approaches toward negative thoughts. Rather than directly challenging the *content* (e.g., accuracy) of negative thoughts, these methods emphasize changing the *function* of thoughts by encouraging patients to adopt a different awareness of and relationship to thoughts (Segal, et al., 2004).

ACT is a type of therapy that helps in changing the relationship with negative thoughts and feelings, so they can engage in meaningful actions that line up with their values (Hyde, 2018). Various "cognitive defusion" techniques teach patients to see the "*bad thought as a thought, no more, no less*" (Hayes et al., 1999, p. 20) and to refrain from trying to change thought content or responding to dysfunctional thoughts with experiential avoidance. This approach is designed to circumvent the struggle to more effectively regulate negative emotions by abandoning the agenda of emotion regulation itself (Eifert & Forsyth, 2005).

One of the many cognitive defusion techniques in ACT consists of having the patient rapidly speak a negative self-referential word (e.g. "fat") until the word appears to lose its literal meaning. Known as the "milk exercise," this technique was first

studied by experimental psychologists a century ago (Severance & Washburn, 1907) and was a frequent topic of investigation in the mid-1900s under the label "semantic satiation" (Amster, 1964; Esposito & Pelton, 1971 as cited by Deacon et al. 2011). Numerous studies demonstrated that continuous, fast verbal repetition of a word produced a temporary decrease or loss in the word's meaning (Lambert & Jakobovits, 1960 as cited by Deacon et al. 2011).

This study aims to determine the effectiveness of brief cognitive restructuring and cognitive defusion to cope with negative thoughts. Specifically, it sought to answer the following questions:

1. Is there a significant difference between the mean scores of the pre-test and post-test of the restructuring group?
2. Is there a significant difference between the mean scores of the pre-test and post-test of the defusion group?
3. Is there a significant difference between the mean scores of the pre-test of the restructuring group and defusion group?
4. Is there a significant difference between the mean scores of the post-test of the restructuring group and defusion group?

Theoretical Framework

An alternative to the cognitive restructuring model in CBT comes from acceptance and commitment therapy (Hayes, et al., 1999). ACT comes from the contextual wing of behavior analysis (Hayes, 2015) and is related to relational frame theory (RFT) (Hayes, et al., 2001); a behavioral account of language and cognition. This gives ACT an approach to cognition as a behavior among other behaviors, albeit one that can only be observed by the individual doing the thinking. Behavior cannot be said to cause behavior, but it may have a controlling effect on behaviors in certain contexts (Hayes & Brownstein, 1986). Thus, ACT strives to create a context, wherein the person can become

aware of his or her private verbal behavior (or cognition) itself. The process that makes one thus aware is called cognitive defusion or simply defusion. Defusion involves teaching individuals to view their thoughts as thoughts rather than considering them as having literal meaning (Healy et al., 2010). Therefore, while restructuring aims to challenge negative thoughts and find evidence against them (J. S. Beck & Beck, 2011), defusion does not attempt to control or change unwanted thoughts in form or frequency. Instead, it trains individuals to change their relationship to their thoughts, to view them without the need to dispute or challenge them to change overt behavior. The most common exercise used in defusion studies is the "word repetition technique," first developed by Titchener (1916). This involves repeating a word until its semantic meaning is no longer dominant. When "defused," the client will notice a lower attachment to the literal meaning of an unwanted thought, thereby making it less believable (Masuda, et al., 2004).

Cognitive Restructuring vs Cognitive Defusion

In the study of Clark (2013), cognitive restructuring is the core therapeutic ingredient of cognitive therapy that was first introduced to the psychotherapy community by A. T. Beck and colleagues. A critical review of the empirical research on its treatment efficacy is presented, as well as the evidence for cognitive mediation from component and mediation process research. It is concluded that cognitive restructuring is an effective treatment strategy for psychological disorders, especially anxiety and depression. However, superiority to other "less cognitive" interventions has not been demonstrated, even though the effectiveness of cognitive restructuring does occur by inducing cognitive change. Various research issues are raised that would advance a greater understanding of the mechanisms of change associated with cognitive restructuring. With greater knowledge of the change processes that characterize cognitive restructuring, clinicians will be better equipped to employ this powerful therapeutic intervention.

The study of Masuda, et al., (2010) shown that rapid vocal repetition of a one-word version of negative self-referential thought reduces the stimulus functions (e.g., emotional discomfort and believability) associated with that thought. The study compared the effects of defusion strategy with thought distraction and distraction-based experimental control tasks on a negative self-referential thought. Non-clinical undergraduates were randomly assigned to one of three protocols. The cognitive defusion condition reduced the emotional discomfort and believability of negative self-referential thoughts significantly greater than comparison conditions. Favorable results were also found for the defusion technique with participants with elevated depressive symptoms.

The study of Deacon, et al. (2011) emphasized that within traditional cognitive therapy, cognitive restructuring is often used to challenge the veracity of dysfunctional thoughts. In contrast, acceptance and commitment therapy (ACT) uses "cognitive defusion" techniques to change the function of negative thoughts rather than modify their content. Previous research has shown that a cognitive defusion technique known as the "milk exercise" (rapidly repeating a self-referential, one-word thought such as "fat") reduces the discomfort and believability associated with negative thoughts. The study sought to replicate and extend these findings by comparing the impact of cognitive defusion with that of cognitive restructuring in a sample of participants distressed by negative thoughts about their body shape. Results indicated that both cognitive techniques produced substantial improvements that generalized well beyond the specific thoughts targeted for treatment. Clear differences in treatment process and the course of improvement were evident.

Methodology

The study used quasi-experimental design to determine the effectiveness of using brief cognitive restructuring and cognitive

defusion techniques to cope with negative thoughts. It selected sixty (60) respondents from the first year BS Business Administration students of the Laguna State Polytechnic University, San Pablo City campus through random sampling technique. Thirty (30) respondents were assigned in group 1 who were treated using the cognitive restructuring and also thirty (30) respondents were assigned in group 2 who were treated using the cognitive defusion.

The study used the procedure set forth by Britt (2017). The respondents were grouped into two. The Group 1 used restructuring while Group 2 used defusion.

Group 1: Restructuring Group. The researcher sat with the subjects one by one and showed them the statements on one side of the page. Participants were told that these are things that some people sometimes say to themselves. A number was picked from 1 to 20 and rated the statements as to how uncomfortable statement would probably make someone feel if said to them. The participants had a little talk about how irrational the statements are. After the talk, the paper was turned over again and rated the sentences again from 1 to 20.

Group B: Defusion Group. The same step 1 from group A. However, after rating the statements on one side of the paper, the participants record themselves saying each statement one at a time into the voice changing app. Afterwards, the voice recording was changed to something funny which the participants listened to a couple times. The procedure is the same with all the other statements. The paper was turned over and rated again from 1 to 20.

At the end of the process, data were tabulated and treated with statistical techniques such as mean and t-test.

Results and Discussion

Table 1

Test of Difference between the Means of Restructuring Group

Variable	Mean	Difference	t-value	Critical value	Interpretation
Pre-test Vs Post-test	48.13 44.23	3.9	2.10	1.7	Significant

Table 1 shows the t-test result between the means of the pre-test and post-test of the restructuring group.

In the pre-test, the group gained a mean of 48.13 while the post-test has 44.23. The mean difference of 3.9 shows a change in the behavior of the respondents. With a t-value of 2.10 which is greater than the critical value of 1.7, the null hypothesis is rejected. This implies a significant difference between the means of the pre-test and post-test of the respondents who were treated with cognitive restructuring. The change in the behavior was due to the cognitive restructuring of the negative thoughts. Through the cognitive restructuring, the negatively distorted thoughts were modified and lessen. The result may be similar to the study of Ghamari Kivi, et al. (2015) which showed that the impact of cognitive restructuring method and study methods was significant in reducing the symptoms of test anxiety of students.

Table 2

Test of Difference between the Means of Defusion Group

Variable	Mean	Difference	t-value	Critical value	Interpretation
Pre-test Vs Post-test	49.67 31.37	18.3	10.66	1.7	Significant

Table 2 shows the t-test result between the means of the pre-test and post-test of the defusion group.

In the pre-test, the group gained a mean of 49.67 while the post-test showed 31.37. The mean difference of 18.3 shows a change in the behavior of the respondents. With a t-value of 10.66 which is greater than the critical value of 1.7, the null hypothesis was rejected. This implies a significant difference between the means of the pre-test and post-test of the respondents who were treated with cognitive defusion leading to the change in the behaviour. The results infer that the defusion technique reduced the functions of thoughts by altering the context. The voice recording of statements with negative thoughts then changing into some funny voice repeated for several times reduced the respondents' discomfort. Cognitive defusion diverts attention away from the *content* or meaning of words and sentences toward the *process* of forming words and stringing them into sentences by concentrating on their sound, pattern, rhythm, frequency, and individual letters or words. Defusion temporarily disrupts the usual meaning of thoughts or spoken/written words even though their form or content may stay the same (Blackledge JT, 2007). The results is similar to the study of Masuda, et al. (2009) that rapidly repeating a single-word version of a negative self-referential thought reduced the discomfort and the believability associated with that thought. The effects of rapid repetition on emotional discomfort bottomed out after 3 s to 10 s of rapid repetition, whereas the effects on believability did so after 20 s to 30 s of repetition. This study lends support to the cognitive defusion interpretation of the effect of word repetition, suggesting that emotional discomfort and believability may be distinctive functional aspects of cognitive events.

Table 3 shows the t-test result between the mean scores of the pre-test of the two groups. With a t-value of 0.46 which is less than the critical value of 1.7, the null hypothesis was accepted. Therefore, it is not significant. This implies that the respondents

on both groups have the same level of discomfort in the statements presented to them.

Table 3

Test of Difference between the Pre-test of the Two Groups

Variable	Mean	Difference	t-value	Critical value	Interpretation
Restructuring Vs Defusion	48.13 49.67	1.54	0.44	1.7	Not Significant

Table 4 shows the t-test result between the mean scores of the post-test of the two groups. With a t-value of 5.26 which is greater than the critical value of 1.7, the null hypothesis was rejected. Therefore, it is significant.

Table 4

Test of Difference between the Post-test of the Two Groups

Variable	Mean	Difference	t-value	Critical value	Interpretation
Restructuring Vs Defusion	44.23 31.37	12.86	5.26	1.7	Significant

Since the mean of the defusion group is lower than the mean of the restructuring group, the treatment using the cognitive defusion was more effective than the treatment using the cognitive restructuring in reducing the discomfort of the respondents on the negative thoughts. Defusion involves teaching individuals to view their thoughts as thoughts rather than considering them as having literal meaning (Healy et al., 2010). Therefore, while restructuring aims to challenge negative thoughts and find evidence against them (J. S. Beck & Beck, 2011), defusion does not attempt to control or change unwanted

thoughts in form or frequency. Instead, it trains individuals to change their relationship to their thoughts, to view them without the need to dispute or challenge them to change overt behavior. The result is similar to the study of Larsson, et al., (2016) that defusion lowered believability, increased comfort and willingness to have the target thought, and increased positive affect significantly more than cognitive restructuring. Negative thought frequency was reduced in the defusion group and maintained in the restructuring group.

Conclusion

Since the group that was treated with cognitive defusion technique had shown a greater reduction of discomfort, it can be concluded that this technique is more effective to use in coping with negative thoughts and may be used to reduce discomfort due to the negative thoughts.

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