

Sociodemographic, Posttraumatic Growth, And Emotional Intelligence Impact On Substance Abuse Resiliency Development Of Filipinos

Rose May B. Briones^{1,2}, Rosalia T. Caballero¹, and Johnny B. Decatoria¹

¹*The Graduate School, University of Santo Tomas, Philippines*

²*General Academics and Teacher Education, Bulacan State University, Sarmiento Campus, Philippines*

Abstract

The impact of drug addiction cannot be underestimated globally. It created havoc on communities, families, and human lives. Previous literature shows that out of the immense number of substance abusers, only a few have been able to fully recover from the misery of being a victim of addiction. Anchored on Posttraumatic Growth Theory, Emotional Intelligence Theory, and Resiliency Theory, this study specifically delves into three mitigating factors for sustaining drug abuse resiliency namely; socio-demographic, posttraumatic growth, and emotional intelligence among 202 Filipinos who had undergone rehabilitation in the National Capital Region (NCR) in the Philippines. Results of the structural equation modeling (SEM) revealed that emotional intelligence has no significant relationship with resiliency while post-traumatic growth has a positive significant relationship with resiliency. This then implies that post-traumatic is a predictor of resiliency but with a small effect. Moreover, participants who were older and stayed longer in the rehabilitation facility have lower resiliency levels while those participants who have more children show a higher level of resiliency. The findings from the dataset are essential as it provides useful information to help treatment rehabilitation centers have a sound basis in crafting programs that will rebuild and enhance the resiliency of substance abusers, thereby bringing them back to the fold.

Keywords: socio-demographic, emotional intelligence, posttraumatic growth, substance abuse, resiliency

I. INTRODUCTION

Substance abuse is a global problem that for several decades, many countries have been struggling to curb, especially in terms of illegal drug operations. More than a million drug-related crimes are reported annually (UNODC, 2019). Worse, substance user is indirectly and directly responsible for 11.8 million deaths each year as reported by Our World in Data (Richie & Roser, 2019). Consequently, the community where the drug abusers live will be adversely affected. Illicit drug activity increases crime such as homicide,

assault, robbery, kidnapping, sexual violence and exploitation, and brutality which poses threat to a peaceful society (Talcherkar, 2019).

In the Philippines, the number of substance users aged 10 to 69 years old is still increasing from 1.3 million in 2012 to 1.8 in 2015 (Gavilan, 2016). This alarming trend, made the former president, Rodrigo Roa Duterte declare war against drugs dubbed as ‘Oplan Tokhang’ or knocking the law enforcers on a suspected drug trafficker or drug addict's home to persuade him/her to surrender and stop engaging in

illegal activities. The said action intensifies the government agencies' efforts in fighting substance abuse and imposing programs that will focus on rehabilitating substance abusers, with the hope that this program will facilitate posttraumatic growth and rebuild their resilience, eventually bringing them back to the fold.

Consequently, previous researchers have identified three mitigating factors for sustaining drug abuse resiliency; drug abusers' sociodemographic profile, posttraumatic growth, and emotional intelligence. Salizar & Ludin (2018), on their part, found that gender and education were significantly related to Community Development Resilience level. In the recent report of the Dangerous Drug Board (2019) on the profile of drug users, most of them are residing in urban areas specifically the National Capital Region (NCR) with a mean age of 32 years old. Meanwhile, the ratio of gender distribution between males and females is 9:1. Most of the recorded abusers of substances are single and unemployed. It is also noted that most of the drug abusers are mono-drug use and the usual drug substances they take are Methamphetamine Hydrochloride (Shabu), Cannabis (Marijuana), and Contact Cement (Rugby). Most of them did not finish high school level and have been taking prohibited substances for almost or more than 6 years.

Perhaps one of the most transparent ways of knowing if a person has initially recovered from the trauma of substance abuse is its Post-Traumatic Growth (PTG). This refers to the self-improvement one undergoes after experiencing life challenges (Chowdhury, 2019). Here, growth is associated with positive changes that can be discerned by categorizing such into three general domains; changes in the perception of self, changes in the experience of relationships with others, and changes in one's general

philosophy of life (Tedeschi & Calhoun, 1995).

Further, one variable that needs to be considered in the substance abuse resiliency development of Filipinos is emotional intelligence (EI), as it is considered an antecedent of resilience. It addresses self-regulatory processes of emotions and motivations that allow people to adjust to achieve individual, group, and organizational goals (Magnano et al, 2016).

In addition, Emotional Intelligence is described as "the ability of an individual to identify and understand emotions within himself and others, and his ability to use that knowledge to control his behaviors and relationships" (Bradberry & Greaves, 2009; Eikenberry, 2016). Emotional Intelligence allows for variation in human actions and function, which cannot be explained by the cognitive ability of a person (Eikenberry, 2016). Sarrionandia and colleagues (2018) revealed that emotional intelligence functions as a negative predictor of perceived stress through the mediating variable resilience. Drug users' Emotional Intelligence may have a significant impact on their ability to successfully navigate the environment, especially during a particularly stressful and tumultuous time.

Subsequently, resilience is defined by psychologists as the process of adapting well in the face of adversity, trauma, tragedy, threats, or other significant sources of stress like family, workplace, and the like (APA, 2020). It is primarily described as successful adaptation and successful development despite external risks (Sikorska, 2014). Unlike PTG, resilience is a sort of 'miracle drug' personality trait that can heal all wounds and right all wrongs. It is the person's ability to bounce back. Essentially, when facing disappointments, defeat, and failure, instead of stumbling down, a person demonstrating resiliency will get back and

continue with his life (Ackerman, 2019). However, like building muscle, increasing resilience takes time and intentionality (APA, 2020). It needs to be developed as people gain better thinking, skills, knowledge, and self-control. The road to resilience lies in working through the emotions and effects of stress and painful events and changing how we think about these events (APA, 2020).

The conduct of a person is rarely the product of a single cause, and behavioral patterns such as drug abuse are likely to vary by individual. Researchers have thoroughly studied a number of causes of this behavior (e.g., Eikenberry, 2016). Emotional intelligence (Eikenberry, 2016), along with demographic, and posttraumatic growth are potential correlating factors that lead to the use and/or misuse of addictive substances by an individual.

II. SIGNIFICANCE OF THE STUDY

The substantial number of relapse cases, the absence of resiliency programs, and the increasing number of victims of drug abuse prompted the researchers to conduct this study. The findings of this study will contribute significantly to confirming the important role played by the socio-demographic profile, post-traumatic growth, and emotional intelligence in the resiliency development of substance-abused Filipinos which will help in framing better rehabilitation programs. In addition, the result of this study is essential in avoiding and lessening the severity of mental health and drug abuse problems. Substance abusers who are given resilience, coping skills, and protective actions will respond positively to change and challenges in their lives (Fenwick-Smith et al., 2018).

Consequently, the current research would be useful in bolstering the resilience of drug-abusing individuals, letting go of

their past experiences by expressing their feelings and opinions on what happened to them in the past, grasping the events that contributed to their drug use, and understanding the repercussions of their decisions in order to prevent repeating them. Findings will also improve the emotional intelligence of the respondents by making them realize the positive outcome of their resiliency. The study will also contribute to sustaining resiliency among respondents. Further, there is a need to ensure that rehabilitation centers in the country will continue their services even after the rehabilitation through appropriate resiliency courses that enable clients to surpass events or situations that will trigger them to return to their addiction. Through this study, rehabilitation centers will have a guiding path in planning proper actions on making resiliency programs for substance abusers.

III. RESEARCH FRAMEWORK AND HYPOTHESES

This study is mainly anchored on Posttraumatic Growth Theory (Tedeschi and Calhoun, 2004), Emotional Intelligence Theory (Goleman, 1995), and Seligman's 3Ps model for resilience (1990).

Posttraumatic Growth Theory (PTG).

This theory focuses on the experience of positive change that occurs as a result of the struggle with highly challenging life crises (Tedeschi & Calhoun, 2004) This positive change is manifested in different ways, such as an increased appreciation for life in general, more meaningful interpersonal relationships, an increased sense of personal strength, changed priorities, and a richer existential and spiritual life. According to this theory, PTG occurs when an individual attempts to come to terms with events and rebuild his/her assumptive

world. A negative reaction to highly stressful events is typical, but in PTG, the focus is on the positive aspects of the struggle with the trauma. This describes the experience of individuals whose development surpassed what he is before the struggle with the trauma happens.

Emotional Intelligence Theory. Daniel Goleman developed this theory in 1995. He recommended high levels of emotional intelligence to strengthen working relationships, help improve problem-solving skills, increase productivity and performance, and catalyze new strategies for growth. Instead of affecting test scores or writing papers, emotional intelligence affects how a person controls feelings and how he interacts with relationships. It was described by Goleman as "the ability to recognize, evaluate and regulate one's own emotions, the emotions of others and those of groups" (Goleman, 1995). The implication of Goleman's theory on the present research lies in the 5 areas of emotion: self-awareness, self-regulation, motivation, empathy, and social skills. Self-awareness is considered the cornerstone of the other aspects of emotional intelligence and having a good sense of self represents the first step in recovering from addiction.

Resilience Theory. This theory was posited by Martin Seligman (1990). This theory highlights three emotional reactions that we tend to have in facing adversity and are known as the three Ps – personalization, pervasiveness, and permanence. First, personalization happens when people internalized challenges or failures that they encounter which causes cognitive distortion. Second, pervasiveness involves accepting negative circumstances in life, and third, permanence which make people believe that bad experiences or events last forever, rather than being transient or one-off events. Permanence prevents us from

putting effort into improving our situation, often making us feel overwhelmed and as though we can't recover. In the context of this study, these three perspectives help us understand how our thoughts, mindsets, and beliefs affect our experiences. It puts importance on recognizing their role in our ability to adapt positively, thereby making us more resilient and learning to adapt and cope with life's challenges (Seligman, 1990 as cited by Moore, 2019).

The present study aims to investigate the correlation of demographic profile, post-traumatic growth (PTG), emotional intelligence, and individual resilience (IR) of rehabilitated Filipino substance abuse individuals.

As shown in the hypothesized model, the concept of the relationship among the three independent variables namely Socio-demographic Profile, Posttraumatic Growth, and Emotional Intelligence are the mitigating factors of the dependent variable Resiliency. The researcher produced an analysis of the impact of the independent variables on the substance abuse resiliency development of Filipinos. This was expedited through the use of a Structural Modelling Equation, with the hypothesized model shown in Figure 1. In accordance with Fig 1, the following hypotheses were undertaken in the current study:

Ha₁: There is a significant relationship between respondents'

demographic profile and resiliency.

Ha₂: There is a significant relationship between the respondents'

post-traumatic growth and resiliency

Ha₃: There is a significant relationship between the respondents'

emotional intelligence and resiliency.

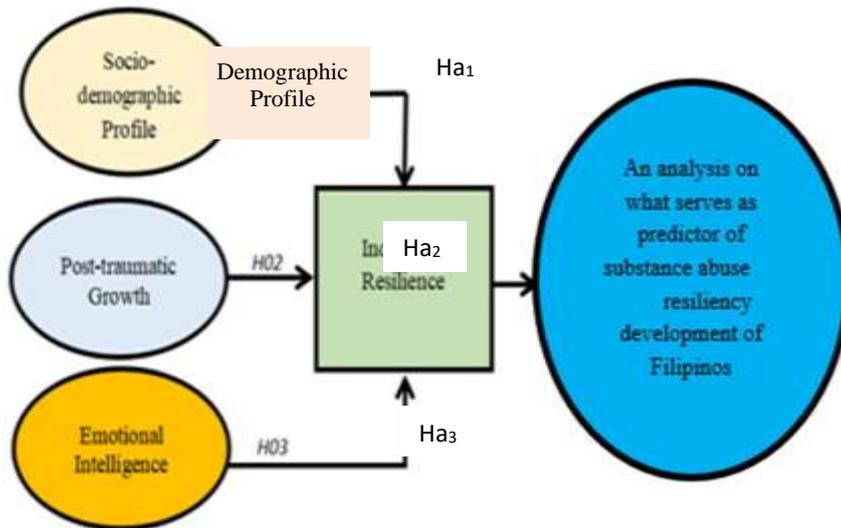


Figure 1 The Hypothesized Model

IV. METHODS

A. Design

To explore the significant relationship between respondents' demographic profile and resiliency, the respondents' posttraumatic growth and resiliency, and the respondents' emotional intelligence and resiliency, Structural Equation Modeling (SEM) was utilized in this study. Structural Equation Modeling (SEM) uses a set of statistical methods that allow multifaceted relationships between one or more independent variables and one or more dependent variables. It can also apply collectively to the combination of mediation and moderation tests as general indirect effects that rely on the moderator between the indicator and the result (Preacher et al., 2007, as cited by Sardeshmukh & Vandenberg, 2017). This study will utilize the PLS-SEM due to its ability to obtain meaningful solutions in almost any situation, particularly when small sample sizes are all that is possible, such as when the research focuses on complex theoretical models with a large number of indicators as well as numerous endogenous and exogenous constructs, or non-normal data distributions (Hair et al.,

2017). The statistical objective of PLS-SEM is to maximize the variance explained in the dependent variable(s) (Hair et al., 2012a). In this study, SEM investigated the relationships that exist between and among the dependent and independent variables. The first step was identifying the model specification in which the hypothesized relationships among the variables were identified. The hypothesized model shows the assumed relationship of the variables between and among themselves. The next phase is model identification, which involves determining if the model is over-identified, under-identified, or just-identified. Only the just-identified and over-identified models can have their model coefficients computed. The model was evaluated to measure its performance or fit, with quantitative indicators for overall goodness of fit computed. Lastly, validation was done to improve the reliability and stability of the model (Kline 2010; Hoyle 2011; Byrne 2013 as cited by Fan et al, 2016). Further, the SEM generates data in a visual format, which is part of its attractiveness. Even if the statistics are complex, SEM provides a neat visual depiction that is easy to understand (Devault, 2018).

A. Participants of the Study

The participants include 202 rehabilitated Filipino substance abuse individuals who came from the two of biggest rehabilitation centers in Metro Manila, otherwise known National Capital Region (NCR). The first rehabilitation center is the Quezon City Drug Treatment and Rehabilitation Center, which caters to clients from Caloocan City, Quezon City, and Navotas. The second rehabilitation center is the Treatment and Rehabilitation Center Camp Bagong Diwa located in Bicutan, Taguig City, which caters the substance abusers from Southern Part of NCR. As such, the population of drug addicts is large and widely distributed. According to Rith and colleagues (2020), in order to generalize results from sample observations to the target population, researchers must have a sample that is representative of the target population. Metro Manila is considered a thickly populated capital. Using the rules-of-thumb, 100-200 respondents are appropriate numerical pre-requisites for modeling structural equations (Wolf et al., 2013) and the researcher should strive for the highest sample size possible (Sideridis et al., 2004).

The inclusion criteria are set as follows: (a) age is 18 to 58 years old, (b) a Filipino citizen, (c) certified to have recovered from drug addiction by the rehab facilities, (d) participants in an after-care program and (e) those who experienced the trauma of any form and (f) a resident of Metro Manila. The inclusion criteria were determined after a thorough review of the literature and advice from the experts in the field. The gender of drug abuse victims was not among the data needed in the study because based on previous studies conducted, drug abuse is equally damaging to both men and women (National Institute on Drug Abuse, n.d.; Cotto et al., 2010). Though the disease of drug abuse affects them differently, studies have shown that males and females tend to be drawn to different drugs as found in the literature (The Recovery Village, n.d.). Those who are still in the process of rehabilitation, with no complete information, without informed consent, did not complete the 6 to 8 months period and decided to go out to the centers are excluded from this study. Table 1 shows the usage of respondents to common illegal drugs with addictive properties.

Table 1. Usage of Common Illegal Drugs with Addictive Properties

NO	DRUGS	Frequency				
		Seldom	4	3	2	1
1	Crack Cocaine (commonly known as crack rocks)	73	6	2	6	29
2	Crystal Meth (Methamphetamine, commonly known as Shabu) (Methamphetamine)	40	9	18	4	96
3	Cocaine (powder, commonly known as candy, snow, coke)	71	4	6	2	15
4	Cough Syrup (containing codeine, an opioid)	75	6	5	4	15
5	Ecstasy (also known as 'love drug'; happy drug)	66	9	5	5	13

6	Heroin (street names include dope, junk, horse, China white)	71	7	2	5	14
7	Inhalants (such as rugby, solvents, thinners)	74	3	1	3	18
8	Marijuana (commonly known as pot, weed, grass)	50	8	29	1	31
9	Nicotine (present in cigarettes and tobacco)	44	4	14	7	61

It shows above that respondent's most frequently used illegal drugs were crystal meth (commonly known as shabu) and nicotine. While seldom only on other

illegal drugs such as crack cocaine, cocaine, cough syrup, ecstasy, heroin and inhalants.

Table 2 shows the common reasons why respondents have taken drugs

Table 2. Common Reasons of Taking Drugs

NO	REASONS	Most Comm on	2	3	4	5	Leas t Com mon
1	Curiosity	48	2	1	1		
2	Peer	112	2	2			
3	Family member influence	21	6	6	6		79
4	Family-related problems (strict parents, frequent quarrelling among members, etc.)	32	1	1	1		
5	Teacher-related problems (negative treatment of teachers, showing favoritism)	16	3	7	1		52
6	Failing grades in the subjects enrolled	21	2	3	9		74
7	School-related situation (as in frequently bullied)	17	4	4	5		72
8	Parent/ Family Neglect or abandonment; maltreatment	19	1	9	6		73
9	Overcome shyness	23	1	1			
10	Trauma / critical incident	16	2	7	1		58
			5	6	8		71

11	Presence of drug addicts and pushers in the community	27	1 8	2 4	1 4	45
12	A way of forgetting and escaping personal problems	36	1 5	1 9		55
13	A way of spending free time	30	1 8	1 7	1 5	50
14	As medicine	32		1 6		57

It was shown above that the common reasons of respondents in taking drugs were because of peer and curiosity. It was with the affirmation of the respondents that they were able to take drugs because it was given by their friends and because they were curious about it.

B. Measures

To gather the needed data and essential information for this study, five sets of questionnaires/checklists were employed. These are (a) Participant's Survey Questionnaire/Checklist; (b) Assessing Emotions Scale; (c) Posttraumatic Growth Inventory; (d) Brief Resilience Scale; and (e) PCL 5 Checklists (Part 1-Events).

The Participant's Survey Questionnaire/Checklist. This is a two-part survey tool developed by the researcher. Part I covers the respondents' personal information, like gender, age, civil status, and educational attainment, socioeconomic status like number of children/siblings, and source of monetary resources. Meanwhile, Part II is the checklist for gathering data pertaining to the respondents' engagement in drug addiction based on the literature earlier presented, such as (a) illicit substances they frequently used prior to their admission in rehab facilities, (b) reasons for taking addicting substances, (c) the physiological and psychological effects of the addicting substances they felt, and (d) their length of stay in the rehabilitation facilities. The above-mentioned questionnaires were

validated by a license Psychologist and three Psychometricians.

The personality profile of the respondents was assessed using the standardized questionnaires that are explained next.

Assessing Emotions Scale. This scale was developed by Schutte and colleagues (2002) and based on Salovey and Mayer's (1990) original model of emotional intelligence. It consists of 33-item self-report inventory reflective of the four factors of typical emotional intelligence, namely: Perception of Emotion, Managing Own Emotion, Managing Others Emotion, and Utilization of Emotion. Its internal consistency for diverse samples, measured through Cronbach alpha, is .87. It has a two-week test-retest reliability of .78 for total scale scores. Its convergent validity was determined by correlating it with EQ-i, another emotional intelligence self-report measure and with MSCEIT, a performance test of emotional intelligence. The correlation coefficients of .43 and .18, respectively, revealed its significant relationship to the two; substantial with EQ-i and not so strong with MSCEIT (Bhullar, n.d.).

Posttraumatic Growth Inventory (PTGI). This instrument is used to measure the positive psychological changes that resulted from experiencing a traumatic event. It is developed by Tedeschi and Calhoun (1996) and consists of 21 statements with five discrete factors:

Factor I: Relating to others; Factor II: New Possibilities; Factor III: Personal Strength; Factor IV: Spiritual Change; and Factor V: Appreciation of Life. Its internal consistency is strong - Cronbach alpha of .87 and test-retest reliability of .71 (Tedeschi & Calhoun, 1996).

The Brief Resilience Scale (BRS). This is a reliable and widely used scale for assessing resilience as the ability to bounce back or recover from stress (Smith, et al., 2008). It is a six-item measure constructed by Smith et al (2008) to determine the individual's ability to bounce back or recover from stress. It has good internal consistency, as indicated in Cronbach's alpha ranging from .80 to .91, tested in the four sets of samples. Its convergent validity was determined by correlating it with other specific measures on personal characteristics, coping, and health outcomes. In zero-order correlation, it was positively correlated, at $p < .001$, with the resilience measures, optimism (.45 - .69) and purpose in life (.46 - .67) and negatively correlated with pessimism (-.32 to -.56) and alexithymia (-.44 to -.47). Moreover, it was positively correlated with social support (.28 - .40), active coping (.38 - .40), and positive re-framing (.38 - .40), but negatively correlated with negative interactions (-.25 to -.47), behavioral disengagement (-.39 to -.52), denial (-.32 to -.53), and self-blame (-.27 to -.57). Its predictive validity was tested by correlating it with Connor Davidson Resilience Scale (CD-RISC). The zero-order correlation, .59 at $p < .001$, revealed that the resilience measures were almost always related in the expected direction with the outcomes.

Posttraumatic Stress Disorder Checklist (PCL-5). This is a 20-item self-report measure that assesses the 20 DSM-5 symptoms of PTSD and It takes

approximately 5-10 minutes to complete. PCL-5 has a number of uses, including tracking changes in symptoms before and after treatment, screening people for PTSD, and providing an interim diagnosis of PTSD. In this study, PCL-5 is included to verify the existence of trauma of the respondents and identify their recovery.

C. Data Gathering Procedure

Approval from the UST authorities and the ethics review committee was secured prior to the administration of questionnaires and conduct of the interview. Coordination letters was then sent to Department of Health and to the rehabilitation facilities (Quezon City Drug Treatment and Rehabilitation and Treatment and Rehabilitation Center Camp Bagong Diwa located in Bicutan, Taguig City). After the proper endorsement of the authorities, the researcher was assisted by a licensed Psychologist in the administration of the questionnaire and in the conduct of the interview. She was supervised by her two advisers who are both licensed Psychologists and Registered Guidance Counselors and are experts in this field.

Considering that this study employed a large number of participants, the data was gathered in sequence and a schedule was arranged for the researchers' and the participants' convenience. A group of 15-20 respondents per day was targeted to answer the questionnaires. The data gathering lasted for three weeks with a total of 202 participants. After the administration of the questionnaires to the participants, the responses were scored and interpreted based on each guideline. Using descriptive statistics, the data gathered was summarized and organized according to the categorical variables treated. Inferential statistics was likewise employed to test the hypotheses. Finally, data was organized for the necessary SEM analysis.

V. RESULTS AND DISCUSSION

Part 1. Demographic Profile of the Respondents

Table 3 shows the demographic profile of the respondents in terms of age, sex, civil status, educational background, number of children (if married), and years spent in the rehabilitation facility.

Table 3. Demographic Profile of the Respondents

Profile		Frequency	Percent
Age	18 – 20	7	3.5
	21 – 25	32	15.8
	26 – 30	26	12.9
	31 – 35	31	15.3
	36 – 40	38	18.8
	41 – 45	29	14.4
	46 – 50	15	7.4
	51 – 55	12	5.9
	56 – 59	12	5.9
	Total	202	100.0
	Mean Age		
Sex	Female	47	23.3
	Male	155	76.7
	Total	202	100.0
Civil Status	Married	126	62.4
	Single	76	37.6
	Total	202	100.0
Educational Background	College Graduate	16	7.9
	College Level	37	18.3
	Elementary Graduate	9	4.5
	Elementary Level	17	8.4
	High School Graduate	58	28.7
	High School Level	62	30.7
	Master's Level	1	.5
	Never gone to school	1	.5
	Post-Graduate	1	.5
Total	202	100.0	
Number of Children	None	47	23.3
	1-2	44	21.8
	3-4	32	15.8
	5-6	18	8.9
	7-8	7	3.5
	9+	2	1.0
	Not Applicable	52	25.7
Total	202	100.0	
Years Spent in the Rehab Facility	0 – 6 months	15	7.4
	6 months to 1 year	131	64.9
	1 year and 6 months	24	11.9

2 years	12	5.9
2 years and 6 months	7	3.5
3 years	6	3.0
over 3 years	7	3.5
Total	202	100.0

It can be gleaned from the table above that majority of the respondents were at the age of 36 – 40, male, married and were not able to finish high school level. As to number of children, most of the respondents answered ‘not applicable’ but there were more of

them who don’t have a child and having only 1-2 number of children, respondent that majority of the respondents stayed in the rehab facility for six (6) months to one (1) year.

Part 2. Personality Profile of the Respondents in terms of Emotional Intelligence

Table 4.1 shows the personality profile of the respondents in terms of emotional intelligence

Table 4.1 Personality Profile of the Respondents in terms of Emotional Intelligence

NO		Mean	SD	Description
1	I know when to speak about my personal problems to others.	3.71	1.385	Somewhat Agree
2	When I am faced with obstacles, I remember times I faced similar obstacles and overcame them.	3.83	1.358	Somewhat Agree
3	I expect that I will do well on most things I try.	4.07	1.26	Somewhat Agree
4	Other people find it easy to confide in me.	3.71	1.303	Somewhat Agree
5	I find it hard to understand the non-verbal messages of other people.	2.76	1.31	Neutral
6	Some of the major events of my life have led me to re-evaluate what is important and not important.	4.09	1.266	Somewhat Agree
7	When my mood changes, I see new possibilities.	3.87	1.347	Somewhat Agree
8	Emotions are one of the things that make my life worth living.	3.77	1.389	Somewhat Agree
9	I am aware of my emotions as I experience them.	3.82	1.281	Somewhat Agree
10	I expect good things to happen.	4.32	1.172	Strongly Agree
11	I like to share my emotions with others.	3.84	1.213	Somewhat Agree
12	When I experience a positive emotion, I know how to make it last.	3.83	1.215	Somewhat Agree
13	I arrange events others enjoy.	4.03	1.201	Somewhat Agree

14	I seek out activities that make me happy.	4.18	1.213	Agree	Somewhat
15	I am aware of the non-verbal messages I send to others.	3.59	1.317	Agree	Somewhat
16	I present myself in a way that makes a good impression on others.	3.97	1.289	Agree	Somewhat
17	When I am in a positive mood, solving problems is easy for me.	4.00	1.264	Agree	Somewhat
18	By looking at their facial expressions, I recognize the emotions people are experiencing.	3.72	1.252	Agree	Somewhat
19	I know why my emotions change.	3.89	1.27	Agree	Somewhat
20	When I am in a positive mood, I am able to come up with new ideas.	4.18	1.214	Agree	Somewhat
21	I have control over my emotions.	4.09	1.231	Agree	Somewhat
22	I easily recognize my emotions as I experience them.	4.00	1.203	Agree	Somewhat
23	I motivate myself by imagining a good outcome to tasks I take on.	4.18	1.221	Agree	Somewhat
24	I compliment others when they have done something well.	4.22	1.228	Agree	Strongly
25	I am aware of the non-verbal messages other people send	3.67	1.235	Agree	Somewhat
26	When another person tells me about an important event in his or her life, I almost feel as though I experienced this event myself.	3.78	1.268	Agree	Somewhat
27	When I feel a change in emotions, I tend to come up with new ideas.	3.95	1.243	Agree	Somewhat
28	When I am faced with a challenge, I give up because I believe I will fail.	2.34	1.485	Disagree	Somewhat
29	I know what other people are feeling just by looking at them.	3.42	1.187	Agree	Somewhat
30	I help other people feel better when they are down.	4.06	1.21	Agree	Somewhat
31	I use good moods to help myself keep trying in the face of obstacles.	4.28	1.227	Agree	Strongly
32	I can tell how people are feeling by listening to the tone of their voice.	3.78	1.206	Agree	Somewhat
33	It is difficult for me to understand why people feel the way they do	2.97	1.394	Neutral	Somewhat
	Overall Mean	3.82	1.268	Agree	Somewhat

Legend: 1 – 1.79 = Strongly Disagree; 1.80 – 2.59 = Somewhat Disagree; 2.60 – 3.39 = Neutral; 3.40 – 4.19 = Somewhat Agree; 4.20 – 5.00 = Strongly Agree

It can be observed from the table above that respondents were strongly agree as to expecting good things to happen, complimenting others when they have done something, using good moods to help themselves keep trying in the face of obstacles well.

However, somewhat agree as to knowing when to speak about personal problems to others, overcame obstacles which is similar to what have been faced before, expecting to do well on most things they tried, other people find it easy to confide in them, some of the major events of their life have led them to re-evaluate what is important and not. When mood changes, they see new possibilities, emotions are one of the things that make their life worth living, aware of their emotions as they experience them, sharing emotions with others, making last of the positive emotions, arranging events others will enjoy, seeking out activities that makes them happy, aware of the non-verbal messages they have sent, making a good impression by presenting themselves, solving problems is easy when they are in a positive mood, can recognize emotions people are experiencing by just looking at their facial expressions, understand why emotions change, by imagining a good outcome they are able to motivate themselves, easily recognizing emotions, able to control emotions, cope up new ideas

when in a positive mood, able to help others feel better when they are down, and lastly, can tell how people are feeling by listening to the tone of their voice.

Lastly, neutral on finding difficult for to understand why people feel the way they do and hard to understand the non-verbal messages of other people.

Vedic., et.al (2017) believed that individuals with emotional intelligence could properly comprehend important matters and channel their emotions and energy. Individuals who can detect and manage emotions affect their ability to thrive when under pressure (Bambang & Suharto, 2017). Tziner et al. (2020) suggested that emotional intelligence was related to justice and personal motivation levels.

From the study of Salovey, Detweiler-Bedell, Detweiler, Bedell, & Mayer (2010), People with higher emotional intelligence are better at handling problems and successfully adjusting to external demands, changes, and challenges.

Table 4.2 shows the personality profile of the respondents in terms of posttraumatic growth

Table 4.2 Personality Profile of the Respondents in terms of Posttraumatic Growth

NO	Possible Areas of Growth and Change	Mean	SD	Description
1	I changed my priorities about what is important in life.	5.13	1.374	Great Degree
2	I have a greater appreciation for the value of my own life.	5.38	1.123	Very Great
3	I developed new interests.	5.21	1.221	Very Great
4	I have a greater feeling of self-reliance.	5.36	1.143	Very Great
5	I have a better understanding of spiritual matters	5.16	1.256	Great Degree

6	I more clearly see that I can count on people in times of trouble.	5.21	1.238	Very Great
7	I established a new path for my life.	5.35	1.185	Very Great
8	I have a greater sense of closeness with others.	5.05	1.288	Great Degree
9	I am more willing to express my emotions.	4.90	1.432	Great Degree
10	I know better that I can handle difficulties.	5.33	1.177	Very Great
11	I am able to do better things with my life.	5.40	1.138	Very Great
12	I am better able to accept the way things work out.	5.27	1.155	Very Great
13	I can better appreciate each day.	5.43	1.127	Very Great
14	New opportunities are available which wouldn't have been otherwise	4.53	1.562	Great Degree
15	I have more compassion for others	5.00	1.205	Great Degree
16	I put more effort into my relationships.	5.24	1.240	Very Great
17	I am more likely to try to change things which need changing.	5.53	0.988	Very Great
18	I have a stronger religious faith.	5.45	1.065	Very Great
19	I discovered that I'm stronger than I thought I was.	5.29	1.132	Very Great
20	I learned a great deal about how wonderful people are.	5.10	1.236	Great Degree
21	I better accept needing others.	5.33	1.090	Very Great
	Overall Mean	5.22	1.208	Very Great

Legend: 1.00 – 1.83=None; 1.84 – 2.67= Very Small; 2.68 – 3.51 = Small; 3.52 – 4.35 = Moderate; 4.36 – 5.19 = Great Degree; 5.20 – 6.00 = Very Great

Table above shows the degree to which a change occurred in the life of the respondents as a result of their drug addiction recovery.

It shows that it has a very great degree on appreciating the value of their own life, developed new interests, greater feelings of self-reliance, more clearly see that they can count on people in times of trouble, established a new path for their life, knowing better that they can handle difficulties, able to do better things with their life and accept the way things work out, better appreciation of each day, putting more effort into their relationships, trying

to change things which need changing, having a stronger religious faith, discovered that they are stronger than they thought and accepting the needs of others.

On the other hand, great degree on realizing how wonderful people are, feeling of having more compassion for others, new opportunities are available which wouldn't have been otherwise, more willing to express my emotions, greater sense of closeness with others, better understanding of spiritual matters, and lastly, changed priorities about what is important in life.

Some survivors of trauma report positive outcomes from their experience. In

the research literature this idea has become known as posttraumatic growth. Specifically, posttraumatic growth is defined as the "...positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (Tedeschi & Calhoun, 2004). Thus, it is a concept that represents

positive development following a potentially traumatic event. For people to experience posttraumatic growth, they must have their respective worldviews jeopardized (Janoff-Bulman, 1992; Steger & Park, 2012; Tedeschi, Calhoun, & Groleau, 2015).

Table 4.3 shows the personality profile of the respondents in terms of resiliency level

Table 4.3 Personality Profile of the Respondents in terms of Resiliency Level

NO		Mean	SD	Description	Remarks
BRS 1	I tend to bounce back quickly after hard times.	4.49	0.968	Strongly Agree	High Resilience
BRS 2	I have a hard time making it through stressful events.	2.9	1.34	Neutral	Low Resilience
BRS 3	It does not take me long to recover from a stressful event.	3.9	1.06	Agree	Normal Resilience
BRS 4	It is hard for me to snap back when something bad happens.	2.77	1.42	Neutral	Low Resilience
BRS 5	I usually come through difficult times with little trouble.	4	1.095	Agree	Normal Resilience
BRS 6	I tend to take a long time to get-over set-backs in my life	2.71	1.356	Neutral	Low Resilience
	Overall Mean	3.462	1.207	Agree	Normal Resilience

Legend: 1 – 1.80 = Strongly Disagree; 1.81 – 2.60 = Disagree; 2.61 – 3.40 = Neutral; 3.41 – 4.20 = Agree; 4.21 – 5.00 = Strongly Agree

It can be seen above that respondents have high resiliency when it comes to bouncing back after hard times. They are at normal resilience when it comes to recovering for not a long time after a stressful event. However, they show a low resilience on getting through a stressful events, snapping back when something bad happens, and getting over set-backs in life.

For Bonanno (2004), there are several ways for people to become more resilient, such as cognitive procedures for growing toughness or self-enhancement and emotion-focused techniques for

suppressing negative feeling or boosting positive emotion.

Futhermore, Masten and Reed's (2002) mentioned that when people acquire assets that serve as protective factors and when they minimize or avoid dangers, their resilience will rise. Assets are tools that people can employ to cope with stress, such as cognitive skills, self-control, or emotional stability. Assets improve adaptability in adverse or risky situations. Events that could result in harmful or dysfunctional experiences are referred to as risks.

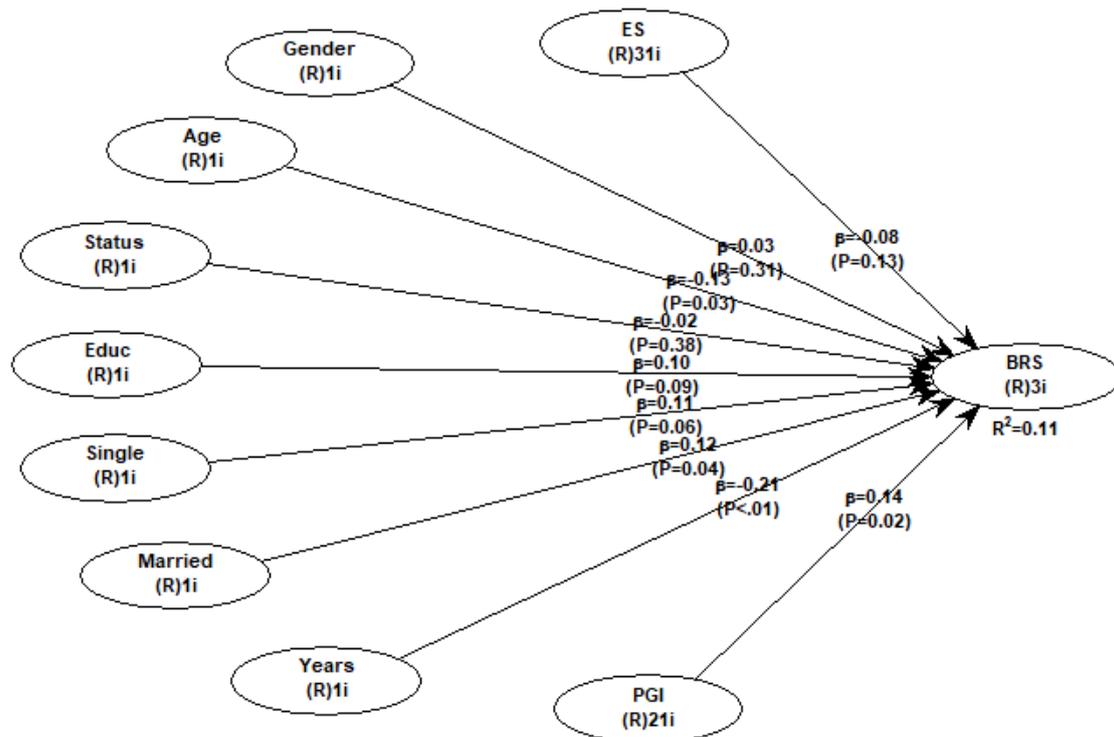


Figure 1. Organizational Creativity Model with Path Coefficients Estimates

Table 5. Path Coefficients of the OC Model

Resiliency	Path Coefficient	SE	p-value	Effect Size (f^2)
Age	-0.132	0.069	0.028	0.016
Gender	0.034	0.07	0.313	0.001
Status	-0.021	0.07	0.382	0.000
Educ	0.095	0.069	0.085	0.012
Single (Siblings)	0.105	0.069	0.064	0.012
Married (Children)	0.125	0.069	0.035	0.012
Years of Stay	-0.206	0.068	0.001	0.046
ES	-0.078	0.069	0.130	0.010
PGI	0.139	0.069	0.022	0.025

NOTE: f^2 is the Cohen's (1989) effect size: .02=small, .15=medium, .35=large.

It can be gleaned from the table above that as to the profile, age, number of children if married, and years of stay in rehab have significant relationship with resiliency.

The negative relationship between age and resiliency ($\beta = -0.132$, $p < 0.05$) indicates that younger participants have higher level of resiliency. On the other hand, there is a positive relationship between number of children of married

participants and resiliency ($\beta = 0.125$, $p < 0.05$) which then indicates that participants with more children have higher resiliency level. Lastly, the negative relationship between years of stay in rehab and resiliency ($\beta = -0.206$, $p < 0.05$) indicates that the longer stay resulted to lower resiliency level.

As to emotional intelligence, since it is negative, then the higher the emotional

intelligence of the participants, the lower their resiliency level. However, it shows that emotional intelligence has is no significant relationship with resiliency ($\beta = -0.078$, $p > 0.05$) (H_{a2} is not supported). On the other hand, post traumatic growth has significant positive relationship with resiliency ($\beta = 0.139$, $p < 0.05$) but with small effect (H_{a3} is supported).

This is supported from the study of Eikenberry (2016) which states demographic, and posttraumatic growth are potential correlating factors that lead to the use and/or misuse of addictive substances by an individual. However, in contrast with the same study which states that that emotional intelligence is a factor on the resiliency of the respondents.

Another study from Trigueros, et.al (2020) is in contrast to the result of this study which shows that emotional intelligence positively predicted resilience. Thus, emotional intelligence can contribute to the satisfactory adaptation to the different contingencies of life and to the development of a set of meta-qualities that can be practiced, learned, and applied to the capacity for recovery. In addition, a study carried out by Trapp (2001) with secondary school education teachers, showed that those who possessed high levels of emotional intelligence had high levels of resilience. Similarly, a study conducted with secondary school students showed that those students who possessed high levels of emotional repair and clarity were associated with high levels of resilience (Vaillant, 2000).

With respect to the relationship between resilience and posttraumatic growth, researchers have reported mixed results. These varied findings may be the result of resilience being defined in a number of different ways by researchers. According to Wong and Wong (2012), a resilient person is one who, after an experience of adversity, portrays an

adaptive use of one's available internal and environmental resources. Other researchers define resilience as maintaining a sense of well-being (Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014), or functioning at "normal" or routine levels (Bonanno & Mancini, 2012), after an adverse event. As a result of these various definitions of resilience, some researchers have found that resilience is significantly and positively correlated with posttraumatic growth (Aiena et al., 2013; Bensimon, 2012; Mo, Lau, Yu, & Gu, 2014; Roberts, 2013; Wilson, Morris, & Chambers, 2014; Wu, Zhang, Liu, Zhou, & Wei, 2016; Xiao, Xin-Chun, & Jie-Ling, 2015; Yu et al., 2014) and other researchers have found an inverse relationship (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009; Moore, Cerel, & Jobes, 2015; Westphal & Bonanno, 2007; Zerach et al., 2013). These various definitions of resilience may account for the conflicting studies on posttraumatic growth. While resilience is sometimes defined by a lack of posttraumatic stress symptoms, posttraumatic growth requires a threshold of stress to occur (Stasko & Ickovics, 2007). But the most resilience measures score one's perceived ability to cope with stressors well, not avoid it altogether. Perhaps by narrowing the definition of resilience to a lack of stress symptoms, some research overlooks how resilience helps to minimize stress in these more severe cases.

VI. MANAGEMENT IMPLICATIONS

This study has several implications. First, the lack of empirical work on the impact of the background, socio-demographic profile, posttraumatic growth, and emotional intelligence on substance abuse resiliency development of Filipinos will somehow to be addressed in the conduct of this study. It also attempts to contribute to theory building as it can be used as a

framework in crafting resiliency program for drug abuse victims to lessen the cases of relapses. Second, the participants will directly benefit from gaining comfort as experts like psychologist will also be involved in the process of data gathering, as such the participants will be evaluated and assessed; at the same time will serve in their eventual recovery. The interviews that will be done as part of this study will benefit the participants by providing an opportunity for them to express their concerns and the overwhelming emotions, they are experiencing within the rehabilitation facility. It will somehow significantly improve their resiliency and self-efficacy and develop their skills toward a restorative and transformative way of life. Third, the findings of this study are expected to be extremely beneficial to rehabilitation centers in a way that it will serve as a guide for them to improve their resiliency programs for their clients to be fully recovered and the case of lapses will be decreased if not totally eradicated. Similarly, the findings will serve as the foundation for the development of programs that will acclimatize and strengthen the resiliency of substance abusers, allowing them to return to the fold. Indirectly, the structural model which will be the output of this study will help rehabilitation centers to craft a resiliency program that will greatly benefit the participants in their recovery. Moreover, this research provides knowledge and understanding on substance use and its effect which will help enhanced family support and provides guidance in handing a substance abuser family member. Further, it will help the community to be educated about the drugs and substance use towards a more holistic understanding in order to combat stigma and discrimination thereby change the views towards substance abusers. Finally, it challenges the clinicians to revisit conventional approach to substance use and its health

implication and come up with a comprehensive program and services in the different phases of the continuum of care including assessment, counseling, family therapy, treatment and other care services.

VII. DIRECTIONS FOR FUTURE RESEARCH

A replication of the study may be conducted to a different study site with a larger sample. This is also to test the potential applicability of the results on other regions in the Philippines or in other countries. We speculate that cultural differences exists between person who undergone rehabilitation from different nationalities which is also a good subject for inquiry. Basing from the results of this study, an evident-based, efficient intervention and rehabilitative strategies can also be crafted to address relapses that will lead the rehabilitated individuals to eventual reintegration into their respective community as productive member.

Statements and Declarations

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Conflicts of interest/Competing interests: The authors have no conflicts of interest to declare relevant to the content of this article.

Availability of data and material: not applicable

Code availability: not applicable

Ethics approval: All procedures performed in the present study that involved human participants were per the ethical standards of the Ethics Board of the University of Santo Tomas Graduate School.

Consent to participate: Each participant in the current study gave informed consent before voluntary participation. In addition, participants were briefed on the nature of the study, were assured that all data collected would be kept confidential, and that participation was purely voluntary without remuneration.

Consent for publication: not applicable

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