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Development of a Strength-based Intervention Program for Teacher's Well-being

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Abstract

The study investigated the effects of Teacher's Well-being Intervention (TWIN) program on the well-being dimensions of senior high school teachers in the Division of Malaybalay, Malaybalay City, Bukidnon. The TWIN Program is researcher-made and was developed using a strength-based approach. It runs across four (4) weekly sessions and operated under the Positive Psychology lens. A baseline survey on the well-being indices among one hundred fifty (152) senior high school teachers in Malaybalay City, Bukidnon, Philippines initiated the preliminary part of the three-phase research which follows the sequential-explanatory design. The succeeding phase covered the implementation of the TWIN Program to thirty one (31) shs teachers in the division. The final stage of the research entailed in-depth interviews to five (5) TWIN participating teachers. The baseline survey demonstrated acceptable well-being scores of senior high school educators. However, the measures continued to significantly increase from pre-testing to immediate post-test period, following their participation in the TWIN program. At one month follow-up, results were suggestive of evident increases though not as pronounced as the previous measures. Teachers who participated in the Teacher's Well-being Intervention (TWIN) program exhibited indication of maintained well-being scores even after the program's implementation. TWIN participants perceived and responded to the intervention platform positively.

KEYWORDS:- *Well-being Positive psychology Character strengths Strength-based intervention*

INTRODUCTION

Public mental health has positioned its priorities in the classification and diagnosis of mental health problems over the years. A disease ideology was widely operating the field. However, in the recent years, a more positive approach to mental health has evolved, employing mental health promotion as an important new goal for public mental health. While traditional public mental health interventions are considered effective in alleviating mental illness, they do not essentially promote mental health (Flederrus, Bolmeijer, Smit & Westerhof, 2010).

While job provides income and sense of empowerment, occupant's mental health is confronted with threats to well-being. Teaching, considered to be one of the most noble professions is reported to be one of the most stressful and demanding occupations in the world (Stoeber & Rennert, 2008). Secondary school teachers in Nigeria were examined for the various sources of stress such as poor working conditions, poor relations with colleagues and late payment of salaries(Ekundayo & Kolawole, 2013). The significant amount of reported stress among teachers have been attributed to students' behavior, classroom

management, workload demands and deadlines, change of management and poor working conditions (Kyriacou, 2001).

In the Philippines, elementary teachers in Manila expressed concerns over numerous paperwork, oversized classes, further studies, non-teaching duties and incompetent superiors (Rabago-Mingoa,2017).Such factors may be antecedents for teaching professionals to experience low scores on well-being scales and relatively poor outcomes in mental health indices. Poor scores in the well-being measures will result to less productivity, poor decision making skills and frequency of absenteeism in the workplace (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2006). A review of evidence by Bricheno, Brown and Lubansky (2009) further highlighted socio-demographic variables such as gender, age and experience to play significantly in the well-being of teachers.

Filipino teachers further faced massive challenges with the reforms brought by the establishment of the K to 12 Basic Education Program. This further instigated the nationwide implementation of the senior high school program. Public senior high school (shs) teachers like any other public teacher take their share of challenge in the field. Worklife Support (2007), in a descriptive survey, found that primary teachers were likely to have better wellbeing than secondary teachers. A large percentage of teachers from nursery, primary and secondary schools in Belgium was surveyed and was concluded that wellbeing was highest among nursery teachers, followed by primary teachers and lowest for secondary teachers.

The researcher's interest for senior high school teachers stems from the limited studies concentrated to this population. Specifically, this interest for assessing shs teacher's mental well-being was initiated as a relative measure towards strengthening the latter's protective factors.

In the Philippines, mental health promotion in educational sectors and workplaces is supported with the enactment of the Mental Health Act (RA 11036) with provisions stipulated in Sections 25 and 26 of Chapter V of its Implementing Rules and Regulation. Hence, the Department of Education (DepEd) identifies the need of professional psychological services alongside a more strengthened support system for teachers (Mendez, 2018).

There have been limited interventions aiming to support teacher's mental well-being, with most focusing on teachers' competencies in the field. Several studies have investigated the prevalence and risk factors for teacher's mental health(Mahan, Mahan, Park, Shelton, Brown & Weaver , 2010) but inadequate studies utilize a multidimensional model of examining well-being particularly among public school teachers in the country.

The current study examined well-being among senior high school teachers alongside investigate on the applicability of a strength-based approach which is deemed relevant given the current deficit approach to mental health in the Philippines. While current researches suggest of its effectiveness, its applicability may help Filipino teachers in the pursuit of better and more meaningful lives.

Statement of the Problem

This paper aimed to measure the well-being among senior high school teachers. It further examined the effects of Teachers' Well-being Intervention (TWIN) Program on the well-

being dimensions of shs teachers. Specifically, the study sought to answer the following questions:

1.) What are the well-being measures of senior high school teachers in in the PERMA Profiler?

2.) What are the pre-test, post-test and follow up mean scores of senior high school teacher-participants of the TWIN Program Intervention in the Workplace PERMA Profiler when measured according to : Positive emotions , Engagement ,Relationships , Meaning , Accomplishment, Happiness and Overall well-being?

3.) Is there a significant difference between pre-test , post and follow up mean scores in the Workplace PERMA Profiler as indexed by Positive emotions , Engagement ,Relationships , Meaning , Accomplishment, Happiness and Overall well-being?

4.) What is the effect of the TWIN Program in the different dimensions as applied among senior high school teachers in Malaybalay City?

5.) How do senior high school teachers perceived the Teachers' Well-being Intervention (TWIN) Program?

RESULTS

Table 1. *The Mean Ranks of TWIN Participants for Pre-test, Post-test, and Follow-up Scores of the Workplace PERMA Profiler*

Dimension		N	Mean	sd	Mean rank	χ^2	df	P
Positive Emotion	Pretest	31	7.97	1.05	1.37	20.75	2	0.000
	Posttest	31	8.84	1.08	2.21			
	Follow up	31	9.11	.823	2.42			
Engagement	Pretest	31	6.87	1.54	1.71	4.47	2	0.107
	Posttest	31	7.82	1.13	2.08			
	Follow up	31	7.87	1.16	2.21			
Relationships	Pretest	31	7.95	0.98	1.45	16.05	2	0.000
	Posttest	31	8.86	0.83	2.34			
	Follow up	31	8.77	0.98	2.21			
Meaning	Pretest	31	8.74	0.97	1.60	10.62	2	0.000
	Posttest	31	9.19	0.95	2.11			
	Follow up	31	9.26	0.72	2.29			
Accomplishment	Pretest	31	8.19	1.02	1.52	13.41	2	0.001
	Posttest	31	8.82	0.77	2.13			
	Follow	31	8.93	0.66	2.35			

	up							
Happiness	Pretest	31	8.16	1.31	1.47	20.93	2	0.000
	Posttest	31	9.26	0.86	2.34			
	Follow up	31	9.16	1.00	2.19			
Overall Well-being	Pretest	31	7.95	0.76	1.23	28.90	2	0.000
	Posttest	31	8.67	0.70	2.26			
	Follow up	31	8.82	0.67	2.52			

**significant at 0.05 level of significance*

The Workplace PERMA Profiler was administered as a pretest and posttest measure following the 4-week Teacher's Well-being Intervention (TWIN). The Friedman test was employed to determine whether there was a difference in the PERMA pre-test, immediate post intervention and follow-up scores. Findings in Table 1 established significant differences (at 0.05 level) in all dimensions of well-being of Workplace PERMA Profiler for senior high school teacher participants of the TWIN Program. There was a significant difference in the scores of teachers who participated in the TWIN Program for the positive emotion dimension, x^2 (df=2, N=31)=20.75, p<.05. from pre-intervention , to immediate post intervention and one month after the TWIN Program was carried out.

Table 1 further outlines the statistical analysis results of engagement dimension from pre-intervention up to immediate and delayed post intervention periods. Results yielded no significant increases , x^2 (df=2, N=31)=4.47 , p>.05. for this PERMA scale. Though at post intervention, participants presented a rise in mean score for engagement, however, such change is held not statistically significant for this dimension.

The findings further underlined significant increases, x^2(df=2, N=31)=16.05, p<.05. for teachers' relationship index from pre, post until follow up assessment. The table above similarly identified significant differences on scores of meaning, x^2 (df=2, N=31)=10.62, p<.05 across the three periods of assessment respectively. Results comparing pretest marks, post and delayed post test scores on accomplishment measure demonstrated significant differences x^2 (df=2, N=31)=13.41, p<.05 respectively , across the three periods of assessment.

The results in the same way recognized that scores for happiness dimension x^2 (df=2, N=31)=20.93, p<.05 indicated significant differences from pretest marks to immediate post intervention assessment and after one month follow up. Table 7 illustrated teachers' scores in the Workplace PERMA Profiler for overall well-being index has significantly differed , x^2 (df=2, N=31)=28.90, p<.05. between periods of pre-intervention, immediate post intervention and after one month delayed post assessment.

Table 2. The Results of Wilcoxon Signed Rank Test for Pre-test Post-test and Follow-up scores of the Workplace PERMA Profiler of TWIN Participants

		N	Mean Rank	Sum of Ranks	z	P
pretest – posttest	Negative Ranks	25	18.26	456.50	-4.086	0.000
	Positive Ranks	6	6.58	39.50		
	Ties	0				
	Total	31				
posttest - follow_up	Negative Ranks	15	15.73	236.00	-0.235	0.814
	Positive Ranks	16	16.25	260.00		
	Ties	0				
	Total	31				
pretest - follow_up	Negative Ranks	23	17.83	410.00	-3.652	0.000
	Positive Ranks	7	7.86	55.00		
	Ties	1				
	Total	31				

The results yielded a significant difference between the pre-test, post-test and follow up scores of TWIN participants, z=-4.086, p< .05. Moreover, post-test and follow up scores of TWIN teachers resulted no significant differences , z=0.235, p > .814. The table further illustrated significant differences in the PERMA dimensions of teachers between periods of pre-testing and follow up (z= -3.652, p < .05).

Table 3. *The Results of Wilcoxon Signed Rank Test for Pre-test and Post-test scores of the Workplace PERMA Profiler of TWIN Participants*

		Pre test Post test			
Dimension		**N**	**Mean Rank**	**Z**	**P**
Positive Emotions	Negative Ranks	5[a]	10.90	-3.534	0.000
	Positive Ranks	24[b]	15.85		
	Ties	2[c]			
	Total	31			
Engagement	Negative Ranks	9[a]	8.50	-2.884	0.004
	Positive Ranks	19[b]	17.34		
	Ties	3[c]			
	Total	31			
Relationships	Negative Ranks	6[a]	5.42	-4.014	0.000
	Positive Ranks	23[b]	17.50		

	Ties	2[c]			
	Total	31			
Meaning	Negative Ranks	5[a]	9.40	-2.385	0.017
	Positive Ranks	16[b]	11.50		
	Ties	10[c]			
	Total	31			
Accomplishment	Negative Ranks	7[a]	9.00	-3.035	0.002
	Positive Ranks	20[b]	15.75		
	Ties	4[c]			
	Total	31			
Happiness	Negative Ranks	1[a]	6.00	-3.883	0.000
	Positive Ranks	20[b]	11.25		
	Ties	10[c]			
	Total	31			
Overall Well-being	Negative Ranks	3[a]	8.17	-4.382	0.000
	Positive Ranks	28[b]	16.84		
	Ties	0[c]			
	Total	31			

a. *Post test scores < pretest scores*
b. *Post test scores > pretest scores*
c. *Post test scores = pretest scores*

In order to determine the difference among the pretest, posttest and follow-up measures of TWIN participants in the different dimensions, a Wilcoxon Signed Rank test was used as a post-hoc procedure. Although the Friedman test revealed significant differences among pretest, posttest and follow-up scores of the PERMA dimensions, an analysis presenting significant differences of PERMA scores across time points is further presented .

Findings in Table 3 further established significant differences (at 0.05 level) in all dimensions of well-being of Workplace PERMA Profiler for senior high school teacher participants of the TWIN Program. Statistically significant increases were evident on PERMA scales between pretest and after TWIN intervention transpired. At post intervention, participants established significant changes in positive emotion scores *(z value = -3.5.34, p value = .000).* Engagement dimension also exhibited significant increase across the two periods *(z value = -2.884, P value = .004).* Likewise, findings underlined significant increase (z value = -4.014 , p value = .000) for teachers' relationship index from pre to post intervention. The table above also identifed an increase was significant through PERMA scores on meaning *(z value = -2.385, p value = .017)* and accomplishment *(z value = - 3.035, p value = .002)* dimensions respectively. The table similarly recognized that scores for happiness *(z value = -3.883, p value = 0.000* and overall well-being *(z value = -4.382, p value = .000)* dimensions at post intervention was significantly higher as compared to its pretest marks.

Table 4. *The Results of Wilcoxon Signed Rank Test for Post-test and Follow-up scores of the Workplace PERMA Profiler of TWIN Participants*

Posttest-Follow up					
Dimension		**N**	**Mean Rank**	**Z**	**P**
Positive Emotion	Negative Ranks	10[a]	10.95	-1.690	.091
	Positive Ranks	16[b]	15.09		
	Ties	5[c]			
	Total	31			
Engagement	Negative Ranks	12[a]	15.33	-.726	.468
	Positive Ranks	17[b]	14.76		
	Ties	2[c]			
	Total	31			
Relationship	Negative Ranks	13[a]	11.00	-.540	.589
	Positive Ranks	9[b]	12.22		
	Ties	9[c]			
	Total	31			
Meaning	Negative Ranks	9[a]	11.06	-0.882	0.378
	Positive Ranks	13[b]	11.81		
	Ties	9[c]			
	Total	31			
Accomplishment	Negative Ranks	10	12.05	-1.146	.252
	Positive Ranks	15[b]	13.63		
	Ties	6[c]			
	Total	31			
Happiness	Negative Ranks	9[a]	8.78	-.607	.544
	Positive Ranks	7[b]	8.14		
	Ties	15[c]			
	Total	31			
Overall Well-being	Negative Ranks	11[a]	16.00	-1.414	.157
	Positive Ranks	20[b]	16.00		
	Ties	0[c]			
	Total	31			

a. *Follow up scores < posttest scores*
b. *Follow up scores > post test scores*
c. *Follow up scores = post test scores*

Table 4 illustrated teachers' scores in the Workplace PERMA Profiler between immediate post intervention and follow up measure, one month after the intervention program. Findings described no statistical significant difference between post-test and follow up test scores in the different dimensions of the workplace PERMA Profiler. Statistical analysis with the follow-up data displayed insignificant difference (*z value = -1.690, P value = .091*) between post-test and follow-up scores in positive emotion among teacher participants. The findings also exhibited that shs teachers' well-being scores in engagement (*z value = .726, p value= .468*) and relationship (*z value = .540, p value = .589*) dimensions yielded no significant difference one month after the Teacher's Well-being Intervention Program was carried out.

Results after one month follow up also demonstrated no significant increase in the mean scores (*z value = 0.882, p value = .378*) for meaningfulness dimension. Results comparing follow up scores on accomplishment and happiness to post intervention measures resulted to insignificant differences (*z value = -1.146, p value = .252* and *z-value = .607, P value = .544*) respectively. Similarly, overall well-being scale score for follow up assessment was not seen significantly higher or lower than its previous measure in the post-test (*z value= -1.414, p value = .157*).

Table 5. The Results of Wilcoxon Signed Rank Test for Pre-test and Follow-up scores of the Workplace PERMA Profiler of TWIN Participants

Pretest-Follow up					
Dimension		**N**	**Mean Rank**	**Z**	**P**
Positive Emotions	Negative Ranks	4[a]	3.38	-4.325	0.000
	Positive Ranks	24[b]	16.35		
	Ties	3[c]			
	Total	31			
Engagement	Negative Ranks	10[a]	8.30	-2.737	0.006
	Positive Ranks	18[b]	17.94		
	Ties	2[c]			
	Total	31			
Relationship	Negative Ranks	6[a]	10.25	-3.382	0.001
	Positive Ranks	23[b]	16.24		
	Ties	2[c]			
	Total	31			
Meaning	Negative Ranks	5[a]	12.00	-2.576	0.010
	Positive Ranks	19[b]	12.63		
	Ties	7[c]			
	Total	31			
Accomplishment	Negative Ranks	5[a]	8.10	-3.580	0.000
	Positive Ranks	22[b]	15.34		
	Ties	4[c]			

	Total	31			
	Negative Ranks	3[a]	5.50	-3.360	0.001
Happiness	Positive Ranks	17[b]	11.38		
	Ties	11[c]			
	Total	31			
	Negative Ranks	4[a]	8.63	-4.185	0.000
Overall Well-being	Positive Ranks	27[b]	17.09		
	Ties	0[c]			
	Total	31			

a. *Follow up scores < pretest scores*
b. *Follow up scores > pre test scores*
c. *Follow up scores = pretest scores*

Table 5 displays the statistical analysis results for pre and follow up measures of the PERMA employing the Wilcoxon sin rank test. Statistically significant increases were evident on PERMA scales between pretest and after post delayed assessment. At one month follow up, participants established significant changes in positive emotion scores *(z value = -4.325, p value = .000).* Engagement dimension also exhibited significant increase across the two periods *(z value = -2.737, P value = .006).* Likewise, findings underlined significant increase (z value = -3.382 , p value = .001) for teachers' relationship index from pre to post intervention. The table above also identified an increase was significant through PERMA scores on meaning *(z value = -2.576, p value = .010)* and accomplishment *(z value = -3.580, p value = .000)* dimensions respectively. The table similarly recognized that scores for happiness *(z value = -3.360, p value = 0.001* and overall well-being *(z value = -4.185, p value = .000)* dimensions at one month follow up was significantly higher as compared to its pretest marks.

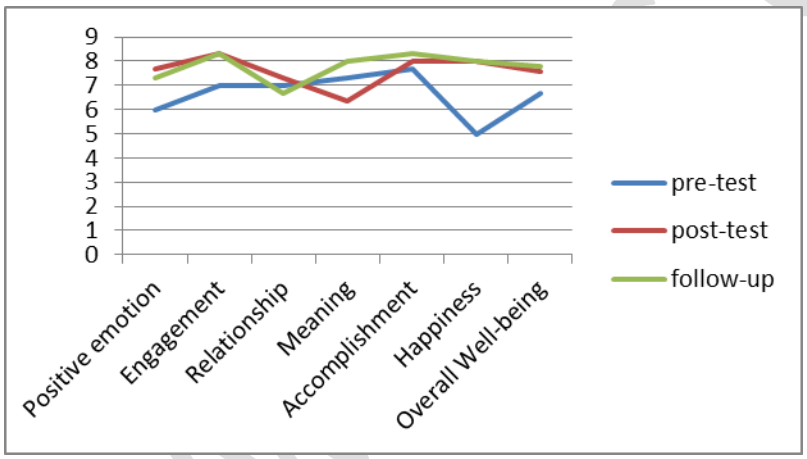
Table 6. *Effects of the TWIN Program on Well-being Dimensions*

Dimensions of Well-being	***Effect Sizes***	***Description***
Positive emotions	*.83*	*Large effect*
Engagement	.66	*Medium effect*
Relationship	.99	*Large effect*
Meaning	.43	*Small effect*
Accomplishment	.67	*Medium effect*
Happiness	.57	*Medium effect*
Overall well-being	1.01	*Large effect*

The findings presented in Table 6 demonstrated the increase was significant for positive emotion dimension from pretest to post-intervention periods with effect size almost close to large (*d* =.83) . The engagement index further yielded a *d =.66* effect size indicating a medium effect. The significant differences in the score of the relationship and meaning measures across pre and immediate post intervention were supported by large and small effects *(d's =.99 & .43*) correspondingly. Moreover, the effect sizes reflecting significant increase from baseline to post-intervention on dimensions of accomplishment and happiness were seen as having medium *(d=.65), (d= .94)* effect size respectively. In general, the significant change for overall well-being dimension from pre to post intervention relatively held a large effect *(d=1.06).* Interpretation of effect sizes were based from Cohens (1988).

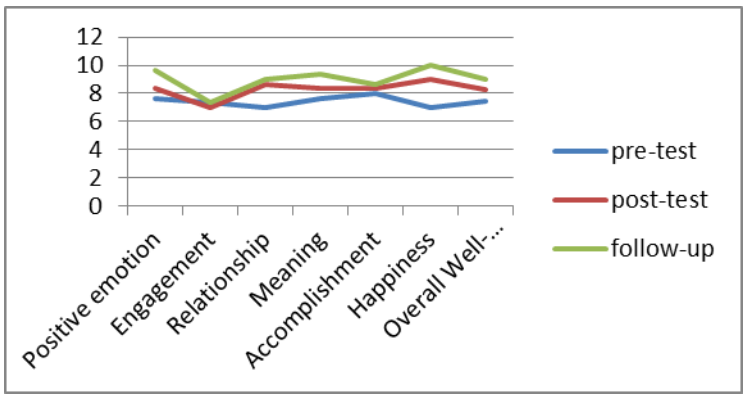
For purpose of determining effects of the Teacher's Well-being Intervention (TWIN) Program to well-being of individual senior high school teacher participants, three (3) teachers with low pre-intervention measures were highlighted. A discussion is provided reporting their scores across three (3) time points : pre-intervention, immediate post intervention and after one (1) month follow up assessment.

Figure 1. *Mean scores of Participant A across pre, post and follow up periods*



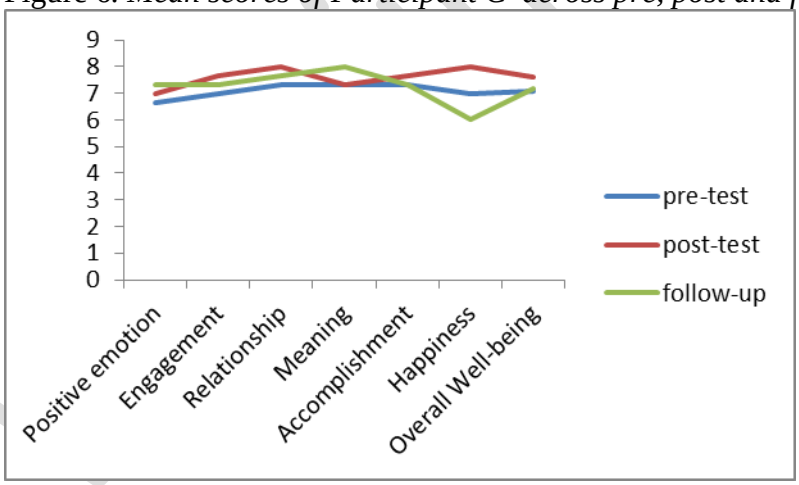
Results of mean scores of Participant A in the Workplace PERMA Profiler indicated improvements of all dimensions of the PERMA measures immediately after the culmination of the TWIN Program. Scores of Participant A prior the conduct of the intervention was relatively low particularly for happiness index. Over the course of the intervention, the mean scores for all measures considerably increased after participation in the TWIN Program. At one month follow-up , scores across meaning, accomplishment, happiness and overall well-being indices were consistently showing increases though decline for scores in the dimensions for positive emotion and relationship were evident in comparison to post-test measures. In general, the figure shows that participant 1 substantially improved on all dimensions of well-being over the course of the intervention and was able to maintain gains even after delayed post-assessment.

Figure 2. *Mean scores of Participant B across pre, post and follow up periods*



Participant B's mean scores for dimensions of the PERMA profiler were noted of increases across periods of pre-intervention and immediate post-intervention. Following four week sessions of the TWIN Program, participant B demonstrated an increase of scores of all indices except for engagement index which showed to have declined immediately after the program's implementation. Subsequent increases were reported for all measures of PERMA after one-month follow up. Prior TWIN program, participant B scored the lowest for happiness dimension, at one month post intervention follow up, happiness index was reported to have gained the highest mean score in immediate and delayed post assessment periods.

Figure 6. *Mean scores of Participant C across pre, post and follow up periods*



Participant C's mean scores prior engagement in the TWIN program is reported to be moderately high across all dimensions of well-being. The scores for all indices except for meaning dimension considerably went higher after participation in the intervention platform. However, after one (1) month follow up assessment, results indicated that Partcipant C gained increases in scores for positive emotion and meaning dimensions. Moreover, comparing to post-test measures, declines were evident for engagement, accomplishment and overall well-being. Happiness measure declined tremendously, its score was even lower even when compared to pre-intervention measure.

DISCUSSION

The study investigated the effects of the Teacher's Well-being Intervention (TWIN) program to the well-being dimensions of senior high school teachers in the Division of Malaybalay City. The findings recognized that scores for overall well-being dimension in the Workplace PERMA Profiler significantly differ before and after the conduct of the TWIN Program. This is suggestive of increase in the well-being dimensions of senior high school teachers following their participation in the Teacher's Well-being Intervention (TWIN) program. It appears that teachers responded positively to the four week session platform. The TWIN Program utilizes a four week Strength-based Intervention platform. Strength-based interventions are positive psychology interventions (PPI) which are found to have profound impact in school environments, particularly in the promotion and creation of resilient and effective educators (Gibbs and Miller, 2013).

Several studies which utilized strengths found that all types of strengths interventions had positive outcomes, which included well-being, work engagement, personal growth, and group/team benefits (Ghielen, Van Woerkom & Meyers, 2017.)Further research has established that knowledge of character strength and the utilization of signature strengths are associated with higher subjective well-being (SWB) and psychological wellbeing (PWB) (Govindji & Linley, 2007; Linley, Nielsen, Gillett, & Biswas-Diener, 2010). Similarly, a study by Mitchell, Vella-Brodrick, & Klein (2009) on the effects of utilizing strength-based interventions confirmed a significant well-being of participants as compared to the control groups.

The TWIN Program which employs the use of both signature strengths and bottom strengths may have delivered better outcomes of scores for teachers. Normally, studies on strengths use are often focused on the utilization of signature and top strengths alone, hence the TWIN Program which includes the use of both top and bottom strengths may have conveyed significant differences in the well-being scores.

The results of the TWIN teacher-participants in the Values-In-Action (VIA) Survey interestingly showed top five strengths of fairness, love, hope, leadership and teamwork and these are deemed significant to well-being. Kaufman (2015) cited that twenty four (24) character strengths were significantly linked to well-being. These strengths were tested across the five dimensions of well-being (PERMA). Findings highlighted many significant associations but zest and hope appeared to be highly linked to positive emotions whereas creativity and curiosity found its way best to engagement index. Strengths of love and kindness were seen to be significantly correlated to positive relationships while curiosity and perspective for meaningfulness dimension, respectively. Accomplishment also exhibited significant relationship with strengths on perspective and perseverance (Wagner et al., 2019).

Review of imperative researches exhibited links between character strengths and different aspects of well-being. Positive affect is seen to be related to strengths of curiosity, zest, hope while negative affect is apparently associated to honesty, forgiveness, humility. Meanwhile, purpose in life are seen to be significantly connected to self-regulation, perseverance, curiosity, zest, hope and positive relationships is most likely influenced by strengths of love, and social intelligence (Harzer, 2016).

The findings further particularly resulted to a significant increase in the positive emotion scores of teachers subsequent to their participation in the intervention program. This indicated an increase in the experience of feelings of joy, contentment and happiness among teacher participants following the culmination of the intervention program.

The TWIN program may be seen to have positive effects on positive emotions as intervention modules were specifically designed to have activities detailing on emotions. The activity's procedure which entails participants to share their outputs in the group may have been good outlets of pent up emotions. Participation in the program also led these educators to delve into their inner selves such as the conduct of the Values-In-Action survey which assesses their signature/top character strengths. This act of knowing themselves and their co-teachers better alongside increasing one's ability to deal with work challenges may have promoted good feelings on their end.

Chan (2009) found that strong predictors of positive affect among teachers are character strengths such as strengths of hope and zest which are included in the list of 24 character strengths. Among 31 TWIN participants, hope is ranked third (3^{rd}) in mean score on the VIA survey. The second week of the TWIN Program which places relevance on the application of top strength in the workplace may somehow have provided opportunities for application for teachers and may also be seen as influential in the build of positive affect of teacher participants.

Literature illustrated significant associations between character strengths and positive affect (Van Eeden et al., 2008; Littman-Ovadia and Lavy, 2012). In addition, a recent meta-analysis on the impact of interventions of signature strengths intervention was conducted. These interventions such as "Using-Signature-Strengths-In-A-New Way" have had significant impacts on measures of positive emotions, depression and satisfaction with life. It specified the potential contribution of strengths to different areas of life (Schutte and Malouff, 2018).

On the other hand, TWIN teachers' level of involvement reported significant differences on scores from pre to post-intervention or from baseline to delayed post assessment, however, such differences were not held significant across three time points. Teacher's increased engagement with school tasks can be clarified alongside the TWIN's program manual of protocol. All throughout the intervention program, assigned activities for subsequent sessions specified the application of strengths in the workplace which may have directly conveyed additional opportunities of involvement and excitement for teachers over school tasks. However, it was also seemingly observed that adherence to session activities was a challenge for some teachers. Some of these teachers are seen answering the activity sheets prior the formal start of the session. They indicated that tasks in the classrooms are overwhelming, hence, they do not have the time to always log in details. It was also observed that some teachers are called out to excuse by school heads momentarily from sessions. The supposed number of thirty five (35) participants was not retained since four of these teachers failed to complete the four TWIN sessions because of their involvement in important events of the school or of the division. These factors may have lessen teacher's score in the engagement index.

A survey by Gallup survey on teacher engagement established that 7 out of 10 teachers regarded themselves as "not engaged" or "actively disengaged" in work. Teachers report high level of emotional health and well-being alongside high levels of stress in their work.

Strengths use has been associated to lower levels of stress and is a primary predictor of workplace engagement.

Perceived organizational support for strengths use are positively associated with work engagement (Botha & Moster 2014). The character strengths linked with engagement pathway are zest, curiosity, hope, perseverance, and perspective (Peterson et al.,2007). Among these strengths, only one (1) strength is found similar with TWIN participants' top strengths, that is hope. Mphahlele et al (2018) also stated that perceived organizational support for strengths use are related to work engagement. Daily strengths use was positively related to daily positive affect and work engagement (Bakker et al., 2019).However, a controlled trial of a strengths intervention in the workplace found that strengths intervention showed only short-term increases in positive affect and no significant changes in engagement (Meyers & Van Woerkom, 2016).

TWIN teachers' scores for engagement were seen to have increased over time but such increases were not held statistically significant. Teachers appear to still lack in the display of deeper interest in work, even after their participation in the TWIN program. Engagement among teachers is imperative since engaged educators create learning environments that promote student motivation, collaboration, learning, and performance and, are the number one predictor of student engagement. In turn, student engagement is a predictor of student performance.

On the other hand, the results established evidence of the TWIN Program to have improved the quality of relationships of teacher participants in the workplace. This suggests the development of positive relationships immediately after the program completion. The TWIN program operates on a group activity. During group sessions, teacher participants may have built deeper understanding for their co-teachers by listening to their stories and experiences of strength use. This created a venue for teachers to connect with other teachers outside his/her circle. The final session of the intervention program centers on strength affirmation by a colleague, and is believed to have conveyed positive effect on the relationship dimension of the participants. The act of strength appreciation is relatively a good tool in promoting healthy relationships among the teachers. It deviated from the norms of normally quoting what is wrong and instead is founded on building what is strong, their strengths.

In addition, relationship with co-workers is not the only form of connection held vital for meeting this element of well-being. In a workplace study of participants, supervisor support and not merely colleague support of employee strengths use held a vital role (Lavy, Littman-Ovadia, & Boiman-Meshita, 2016). In the fourth session of the TWIN program, participants were affirmed by school head or the senior high coordinator, this act may have delivered good effects to teacher partcipants. Among teachers, the need to be recognized with one's work is vital, much more when the recognition comes from one in authority in school.

Since the TWIN approach operates mostly in the classroom, teacher's interactions of students may have improved over time. Turner, Barling, and Zacharatos (2002) concluded that teacher's well-being is also positively affected to students' interactions. Teacher's well-being increased if the latter is able to meet the latter's' basic needs for care and attention (Spilt et al., 2011).

Likewise, meaningfulness index assumes significant increases for teacher-participants scores following the four-week TWIN Program. Teachers are seen to have taken the TWIN sessions

as appropriate times for reflection over chosen profession. Some of the teachers have noticeably shared during presentation of outputs how has their love for their career developed over time. Their stories normally climaxed with students as end beneficiaries of strength use. The use of strengths in the workplace has unknowingly provided teachers with greater opportunities to discern on their profession and has paved wider opportunities to maximize oneself in the workplace.

A validation is the study of Cheavans, Feldman, Gum, Michael, and Snyder (2006) resulted to significant increases in purpose in life after the application of strengths in the workplace. Matuska and Christiansen (2008) posited that meaningful work is highly relevant for resilience under stressful conditions. Individuals more engaged in meaningful work are intrinsically more motivated than individuals that experience their jobs to be meaningless (Treadgold, 1999). It is even possible to construct meaning in repetitive work (Isaksen, 2000). Steger, Littman-Ovadia, Miller, Menger, and Rothmann (2013) found that meaningful work is a stronger predictor of work engagement than affective disposition.

Among individuals that found little meaning in their work, those that experience more positive affect were more likely to be engaged than those who experience negative affect. Fostering meaningful work and allowing the expression of their innate positive disposition may enhance the engagement of positive workers. Among workers with a negative disposition, focusing on meaningful work may be a pathway to positive work outcomes. Seligman (2002) stressed that the meaningful life is one that is lived by using one's skills, strengths and talents in the service of others and meaningful work pertains that one that is aligned with one's core values.

Character strengths most associated with the meaning route are religiousness, gratitude, hope, zest, and curiosity (Peterson et al., 2007). The display of such strengths support workers' sense of meaning at work and perceptions of work-as-a-career and as-a-calling (Littman-Ovadia&Lavy,2016). Interestingly, these strengths are included in the top ten strengths of the TWIN participants as measured by the VIA Survey. The teacher participants may have found the application of strength use as something worthwhile. For these participants, teaching can be a compelling reason why they do what they are doing. The time dedicated for strength identification and utilization may have been relevant periods for introspection and discernments among teacher participants.

Similarly, scores for accomplishment index indicated significant differences across time. Teacher's sense of achievement may have greatly benefited from utilizing strengths and occupying teaching role simultaneously. It implies that teachers gained higher scores in leading productive life after the completing the Teacher's Well-being Intervention Program. The completion of the four-week TWIN program itself, the compliance to its weekly session assignments may have one way or another increased participant's sense of accomplishment. According to Seligman and Csikszentmihalyi (2000), exerting and habituating one's character strengths allows people to experience a sense of fulfillment and results in a satisfying life.

Significant differences in happiness index was also apparent. The teachers have perceived the program to have positive influence on their level of happiness. The outcomes of the sessions centering on the five dimensions have increased positive emotions, heightened engagement, enhanced the relationships of teachers, increased their sense of meaning and

accomplishment and it may have relatively led to higher level of experienced happiness at work for teacher participants of the TWIN program.

A study by Seligman et al. (2005) discovered that significant increase in happiness was confirmed using strength-based intervention. Likewise, Mongrain and Anselmo-Matthews (2012) revealed a substantial increase in happiness up to 6 months by using Strengths-in-a-New-Way intervention. Although a relevant section in the results underlined no significant differences between post and follow up measures of the Workplace PERMA Profiler for senior high school teachers of Malaybalay City. It is interesting to note, that teachers' well-being scores in the different dimensions was significantly higher when follow up scores were compared to baseline measures. At follow-up, pre-tests scores of participants continued to demonstrate significant changes in well-being scores although not as pronounced as the measure in the post-test assessment which may be indication of stability of the Teacher's Well-being Intervention Program in maintaining gains across different dimensions of the PERMA Profiler even after one month follow up assessment.

Scientific evidence from PPI research studies have shown that character strengths can alter (Proyer, Ruch & Buschor, 2013) and demonstrate by far the most lasting and measurable visible results (Seligman et al., 2005). Similarly, the study of Peterson ,Park &Seligman (2005) revealed that using signature strengths intervention led directly to longer-lasting positive outcomes in overall well-being.

The significant increases in the well-being dimensions of teachers across pre and post intervention periods were supported by effect sizes from close to medium to large. This signifies that effects were relevant enough for each dimension when measured before and after the implementation of the Teacher's Well-being Intervention Program.Several studies have supported the medium to large effect sizes of strength-based interventions on well-being indices of participants.

Sin and Lyubomirsky (2009) in their meta-analysis of the effectiveness of Positive Psychology Interventions which includes strength-basedinterventions reported that the PPIs had a moderate effect on improving well-being and decreasing depression. For well-being, the meta-analysis revealed a significant medium effect size based on 49 studies. Bolier, Haverman, Westernhof, Riper, Smit, and Bohlmeijer (2013) reported much smaller effects than Sin and Lyubomirsky. Their meta-analysis revealed a significant small effect sizes for subjective well-being and psychological well-being .

This present study yielded medium to large effects which may be indications of effectiveness of the Teachers' Well-being Intervention (TWIN) program to well-being dimensions of the participating senior high school teachers. However, the presence of small sample size (n=31) may have endorsed some bias. Small sample size bias occurs when smaller studies report larger effects than larger studies (White, Uttl, & Holder, 2019). Regardless of these factors, it is imperative that the teachers' well-beingintervention program have improved significantly the well-being dimensions of the teacher-participants and it is remarkable to see its effectiveness across other teacher population.

CONCLUSION

1.) A significant boost in teachers' reported well-being scores from baseline, post-intervention to follow-up assessment which suggests evidence of effectiveness for the TWIN Program, although significant increases in the well-being indexes cannot be solely attributed to the TWIN Program. The maintained gains of measures between periods of post-intervention and one month follow-up indicates the presence of hold-over effect.

2.) Teachers of the Department of Education are receptive of intervention as shown by the significant increases of their well-being scores and positive perceptions following the latter's participation in the TWIN Program.

3.) The Teacher's Well-being Program is effective in increasing levels of well-being of teachers.

RECOMMENDATIONS

1.) Researches on strength-based approaches utilizing between groups design can be explored among teachers. The supposed original plan of employing a pure experimental design was not materialized in this study since it was constrained by several factors. Thus, the employment of a control group/ wait-list group may increase internal validity thereby providing heightened confirmation of the TWIN Program's effectiveness. It is also worthwhile to examine how the participants' results in the Values-In-action (VIA) differ before and after completion of intervention.

2.) Education bureaus may promote professional development programs apt to teacher's welfare. However, the employment of programs like the TWIN may be also be substantial to teacher's mental health. The agency may wish to include if not yet observed, soft skill elements relevant to increasing awareness, knowledge and skills about significant mental health issues. The employment of strength-based approaches in their teacher in-service workshops can be contextualized as schools may later educate students for flourishing and workplace success since teachers can be of best position to nurture students' strengths and enhance well-being.

3.) The practice of strength-based can relatively have ripple effects down to Deped's primary clientele, the students. The promotion of strength-based approach to teachers may eventually be conveyed in the promotion of positive education or the whole-person education. Training teachers on positive psychology may pave the way towards enriching student's mental health through the use of strengths.

4.) Policy makers may craft policies which leads to support and sustain programs like the TWIN program, as such clearly supports the enactment of the Mental Health Law, RA 10036 in school, institutions and workplaces.

5.) Policy makers can institute policies sensitive to the needs of the Filipino teachers. Law makers should conduct reviews on current educational curriculum aligned to the provision of quality education without neglecting teacher's welfare. Policy makers

should reflect, understand and nurture individual needs of teachers from a proactive, enabling position rather than a reactive response to the emerging or established problem/issues

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