

RESEARCH ARTICLE

The Development of the Filipino Coping Strategies Scale

John Robert C. Rilveria

University of the Philippines–Diliman

Contact: jcrilveria@up.edu.ph

Abstract: The development of the Filipino Coping Strategies scale was based on the qualitative data on the resilience of Filipinos and the ways by which they cope with stressful life experiences and the quantitative data on foreign measures of coping. Integration of both data led to the formulation of nine coping strategies: cognitive reappraisal (*pagsusuri*), social support (*paghingi ng tulong*), problem-solving (*pagtugon*), religiosity (*pagkarelihiyoso*), tolerance (*pagtitiis*), emotional release (*paglabas ng saloobin*), overactivity (*pagmamalabis*), relaxation/recreation (*paglilibang*), and substance use (*pagbibisyo*). Initially, the scale was composed of 45 items with five items under each domain. This was pilot tested to 627 male and female Filipinos aged 18 above. Reliability analysis revealed items that are internally consistent with each other resulting in the reduction of items to 37. Furthermore, construct validity was established via a) factor analysis through principal components analysis extraction method and varimax rotation method and b) test for convergent validity by correlating each domain of the Filipino Coping Strategies scale with the corresponding domains of Ways of Coping by Folkman and Lazarus and the COPE Inventory by Carver, Scheier, and Weintraub. Independent samples t-test revealed significant differences among males and females in each coping strategy which served as the basis for norm groups. The Filipino Coping Strategies scale is a four-point Likert scale which aims to measure the coping strategies of Filipinos towards stress and generates a coping dispositional profile which can be used to aid in the assessment of coping behaviors.

Keywords: coping strategies, reliability analysis, construct validity, factor analysis, coping dispositional profile

People experience stress throughout their lifespan. At home, in school, at work, or in any situation when dealing with people and with life in general, everyone has an everyday stressful encounter. Such experiences of stress can be physical or mental ranging from mundane to life-threatening effects on the body (immune-related diseases) and the mind (mental disorders). It is only through the process of “coping” that people can overcome the stress and prevent it from becoming worse. Different coping strategies are used;

some are preferred because these are what worked for them. These preferred coping strategies vary from one cultural group to another. Up to this date, there are still ongoing researches exploring and identifying ways of coping in different specific cultural settings.

In the Philippine context, Filipinos keep on receiving compliments about how resilient they are because they are all able to cope with very stressful situations such as calamity and poverty (Tan, 2006). The country was even ranked as the 20th happiest

country in the world according to the *Happy Planet Index* (Jeffrey, Wheatley, & Abdallah, 2016) despite socio-economic difficulties. With this in mind, it is very interesting to look at how third-world country citizens like Filipinos cope with stress and identify which coping strategies are dominantly used when dealing with and managing stressful life experiences.

The development of this scale revolved around the Filipinos' general ways of coping and specific coping behaviors. This research endeavor seeks to: 1) create a scale that would measure coping strategies of Filipinos toward stress and 2) generate a coping dispositional profile of Filipinos (relatively stable pattern of coping).

There is not much quantitative research on coping strategies in the local context. Most, if not all, written accounts are qualitative in nature (phenomenological approach) focusing on lived experiences of selected groups of Filipinos who were confronted with a particular stressful life event and research outputs would reveal themes on recovery, redemption, and coping. The quantitative study aimed to develop a scale which will identify prominent coping behaviors reflecting Filipino coping dispositions extracted from statistical and more empirical methods of analysis.

Moreover, previous attempts to measure coping strategies of Filipinos were just mere adaptations and translations of Western scales and concepts. There is not yet a scale for the coping dispositions of the Filipinos developed from the local population. The scale would not only be a locally-made test but would also incorporate identified coping behaviors from existing qualitative research that are unique to Filipinos. The respondents were given the freedom to list down and rate other coping strategies they specifically use that are not found on the scale so as to provide opportunity for added variables for analysis.

Lastly, this scale can serve as an assessment tool that would determine how an individual generally copes when facing a stressful or difficult situation. This can aid clinicians in finding out possible strengths and getting insights about behavioral tendencies and coping behaviors of the person.

Stress and Coping

Stress is defined as the physical or psychological effect of the stressor. Stressor, on the other hand, is

defined as the external or internal demand that causes the said stress. As a response to the stressor, the person experiences stress and “cope” with it. Coping refers to the conscious effort to minimize, tolerate, or master the stress (Krohne, 2002).

Folkman and Lazarus (1984) categorized all coping strategies into two general domains: problem-focused and emotion-focused coping. Problem-focused coping refers to a coping style that directly aims to change the source of stress (stressor). This can be done through planning, confrontation, and consequent problem-solving. Emotion-focused coping refers to change in the emotional load of stress through seeking support, venting out of emotions, or positive reappraisal of stressor.

Weiten et al. (2008) further divided the emotion-focused coping into two. Thinking that the new divisions are distinct from each other, they added a third and fourth type of coping: cognitive-focused and occupation-focused. Cognitive-focused coping refers to changing one's personal assumptions and perceptions toward the stressor. Cognitive-focused coping is done through optimistic thinking, goals, and values restructuring and meaning-making while the occupation-focused coping refers to changing one's activities or daily routine to avoid or distance oneself from the stressor.

Widely Used Coping Scales

There are a lot of measures of coping strategies, most of which are Western-made tests. However, such tests did not make use of the four broad types of coping mentioned above. The scales become more statistically and practically significant when they include more specific coping strategies as domains of the scale.

The Ways of Coping Questionnaire (Folkman & Lazarus, 1988) is a 66-item, 4-point scale that measures the extent to which the individual used a particular coping strategy in a stressful situation. It is composed of eight sub-scales namely, confrontative coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem-solving, and positive reappraisal.

Another popular measure of coping is the Jalowiec Coping Scale (Jalowiec, 1987). It seeks to assess situation-specific coping behaviors by measuring the

degree of use and the perceived effectiveness of 60 cognitive and behavioral coping strategies in a stressful situation selected by the researcher or clinician. The two parts, use (Part A) and effectiveness (Part B), are measured on a 4-point rating scale (scored from 0–3). The degree of use of each coping strategy is rated as: never used, seldom used, sometimes used, or often used. The perceived effectiveness of each coping strategy (that has been used) is rated as: not helpful (in coping with the designated stressor), slightly helpful, fairly helpful, or very helpful. It also yields eight sub-scales: confrontative, evasive, optimistic, fatalistic, emotive, palliative, supportant, and self-reliant. This American scale of coping has been used cross-culturally especially in Asia and has been translated in various languages like Arabic, Chinese, Taiwanese, Korean, Kanda/Tamil (Indian), and even Tagalog.

Another highly reliable and empirically validated scale is the COPE Inventory developed by Carver, Scheier, and Weintraub (1989). This scale has three known formats: a “dispositional” or trait-like version from which the respondents report the frequency of doing the things listed, when they are stressed; a time-limited version in which respondents indicate the degree to which they already used the list of coping strategies during a particular period in the past; and another time-limited version in which respondents indicate the degree to which they have been using the coping strategies in the past up to the present. It has 15 domains: positive reinterpretation and growth, mental disengagement, focus on and venting of emotions, use of instrumental social support, active coping, denial, religious coping, humor, behavioral disengagement, restraint, use of emotional social support, substance use, acceptance, suppression of competing activities, and planning.

Local Literature on Coping

The generalizability of these coping scales was tested in different cultural groups. For one, the COPE Inventory of Carver et al. (1989) was applied to the Philippine context to test the factorial validity of the scale. The “Filipino Adolescents’ Coping Strategies: A Confirmatory Factor Analysis” is a research study designed to examine the coping strategies of

266 selected Filipino college students from a high educational institution in the Philippines (De Leon & Balila, 2014). The results showed four dominant factors: utilization of instrumental and emotional support, use of substance, planning and action-taking, and use of humor. The other domains of the COPE Inventory did not yield any significant factor result. This goes to show that there are highlighted distinction between Filipino and foreign populations in terms of preferred ways of coping with stress.

There were also qualitative research studies done to explore the Filipino psyche of coping. The 2009 Philippine Star news article written by Dr. Nina Halili-Jao entitled, “Coping mechanisms of Pinoys” cited the book, *From Victims to Survivors* of Lourdes Ladrido-Ignacio and Antonio Perlas (1995) which identified some coping mechanisms that Filipinos engaged in when they experienced extreme difficulties. It is a combination of both healthy and unhealthy ways of adjusting. Spirituality is the most frequently observed coping style. Filipinos turn to religion and accept the reality. There are some utterances of *bahala na* or behaviors like *ipinapasa-Diyos* while there are other who stay positive that God will never leave them in these times of crisis. The *bayanihan* or *pakikipagkapwa* is also a well-observed coping behavior by which Filipinos empathize and help each other. Seeking emotional, physical, and financial support from family is also evident. There are also ways by which Filipinos lessen the emotional burden of their problems by engaging in activities that would relax them, make them happy, and feel at ease even if it is just temporary. Creativity and humor are said to be the strengths of Filipinos that facilitate life improvement after a stressful life event.

Dr. Michael Tan of the University of the Philippines–Diliman also wrote an article regarding his observations on how Filipinos cope with stress (2006). He agreed on the resilience of Filipinos but emphasized that the *saya* that Filipinos are doing when stressed is actually a form of externalized merriment—trying to be happy. People tend to smile, laugh, sing, dance or drink their problems away. Moreover, Filipinos would go on with their lives through *tiis* (tolerance) and *kimkim* (suppression) of the stress they are experiencing. Despite these, the camaraderie spirit of the Filipinos allows them to

survive these hardships by seeking support from their friends and family.

Sex Differences on Coping Strategies

Coping strategies may also draw the boundary between males and females. There are quantitative studies revealing significant differences between the two in terms of preferred and most frequently employed coping strategies. A lot of foreign researches have concluded that women tend to engage in emotional and avoidance coping styles while men have more emotional inhibition so they tend to engage in rational coping styles (Matud, 2004; Lawrence, Ashford, & Dent, 2006). Moreover, when the type of stressor is held constant, dominant patterns of coping dispositions are significantly different between men and women. Women are more likely to seek social support and utilize emotion-focused coping. Men, on the other hand, are more likely to use problem-focused type of coping (Ptacek, Smith, & Dodge, 1994).

Theoretical Caveat of the Scale

The trait-oriented approach to coping states that personality dimensions are associated with coping dispositions in ways by which differences in coping styles are tied to personality differences (Krohne, 2002). Because of this, people tend to adopt certain coping techniques as relatively stable behaviors. In line with this perspective are the generality and stability principles (Schwarzer & Schwarzer, 1996). These principles posit that when we measure coping with standardized instruments, we, therefore, imply that people can be characterized by some preferred ways of coping with adversity and that they continue to apply the same kind of strategies over time across situations.

These theoretical assumptions and principles laid the foundations for the development of the Filipino Coping Strategies Scale. Thus, the nature of the coping scale is trait-oriented and generalist in nature instead of situation-specific. The instruction of the scale would involve asking the respondents how they are likely to use the listed coping strategies whenever they are confronted with a stressful or difficult situation regardless of its specificity. Therefore, the scale would measure relatively stable patterns of coping.

Methods

Participants

Through purposive sampling, the scale was pilot tested to 627 male and female Filipinos living in Metro Manila who are at least 18 years old and they were given an informed consent before participating in the study. There are 506 test questionnaires administered through pen and paper at the University of the Philippines-Diliman while 121 questionnaires were given online via Google Docs. Other socio-demographic information such as educational attainment, socioeconomic status, and occupation were gathered for a descriptive analysis of data.

Format and Domains of the Scale

The scale was written in Filipino (Tagalog) with an English translation under each item to better provide an understanding of the content of the scale and observe sensitivity to the local Filipino context. As a dispositional type of scale, the verbs were in the present tense format. At the end of the scale, the respondents were given the opportunity to add and rate a particular coping strategy that they specifically use that are not found in the scale.

The domains of the Filipino Coping Strategies Scale were extracted from both quantitative foreign scales and qualitative local researches on coping. Table 1 shows the coping strategies across different foreign scales (from first to fifth column) and the resembling coping themes from local literature (in sixth and seventh column). Across the columns, there are overlapping and similar coping strategies. This became the basis to arrive at more integrated domains of coping which were used in the development of the Filipino Coping Strategies Scale. Reappraisal, reinterpretation, and optimism were merged into cognitive reappraisal (*pagsusuri*); instrumental and emotional social support, supportant, seeking support, bayanihan, and investing in family and friends were categorized into social support (*paghingi ng tulong*); planning, confrontative, active coping, and self-reliant were condensed into problem-solving (*pagtugon*); seeking spiritual support, religious coping, and spirituality were categorized under religiosity (*pagkarelihyoso*);

self-control, restraint, acceptance, fatalistic, passivity/dependency, and kimkim were combined into tolerance (*pagtitiis*); venting of emotions such as humor and anger were grouped under emotional release (*paglabas ng saloobin*); forms of distancing, avoiding, evading, denial, and mental and behavioral disengagement

were reclassified into three discrete coping strategies: overactivity (*pagmamalabis*), relaxation-recreation (*paglilibang*), and substance use (*pagbibisyo*)—all of which pertain to behaviors that temporarily detaches oneself from the problem and possibly reflect the weight of the problem.

Table 1

Comparison of Identified Coping Strategies Across Foreign Scales and Local Literature

Foreign Measures of Coping					Local Literature on Coping	
Ways of coping (Folkman & Lazarus, 1988)	COPE Inventory (Carver et al., 1989)	Jalowiec Coping Scale (Jalowiec, 1987)	Coping Strategy Indicator (Amirkhan, 1990)	Adolescent Coping Orientation (Patterson & McCubbin, 1987)	Coping Mechanism of Filipinos (Ignacio & Perlas, 1995)	Stress and the Filipino (Tan, 2006)
Confrontative	Active Coping	Confrontative	Problem-Solving			
Distancing	Mental Disengagement			Engaging in Demanding Activity, Relaxing	Overactivity, Relaxation, Creativity	Singing, Dancing
Self-Control	Restraint	Fatalistic				Tiis and Kimkim
Social Support	Instrumental and Emotional Social Support	Supportant	Seeking Support	Social Support, Investing in Close Friends and Family	Bayanihan, Family	Social Support from Family and Friends
Acceptance	Acceptance				Passivity/Dependency	
Escape-Avoidance	Denial, Behavioral Disengagement	Evasive	Avoidance	Seeking diversions	Denial	
Planning	Planning	Self-Reliant		Self Reliance		
Positive Reappraisal	Positive Reinterpretation	Optimistic		Optimism		
	Venting of Emotions, Humor	Emotive		Venting Feelings, Being Humorous	Humor, Anger	Saya
	Religious Coping			Seeking Spiritual Support	Spirituality	
	Substance Use	Paliative			Smoking, Drinking	Alcohol Drinking

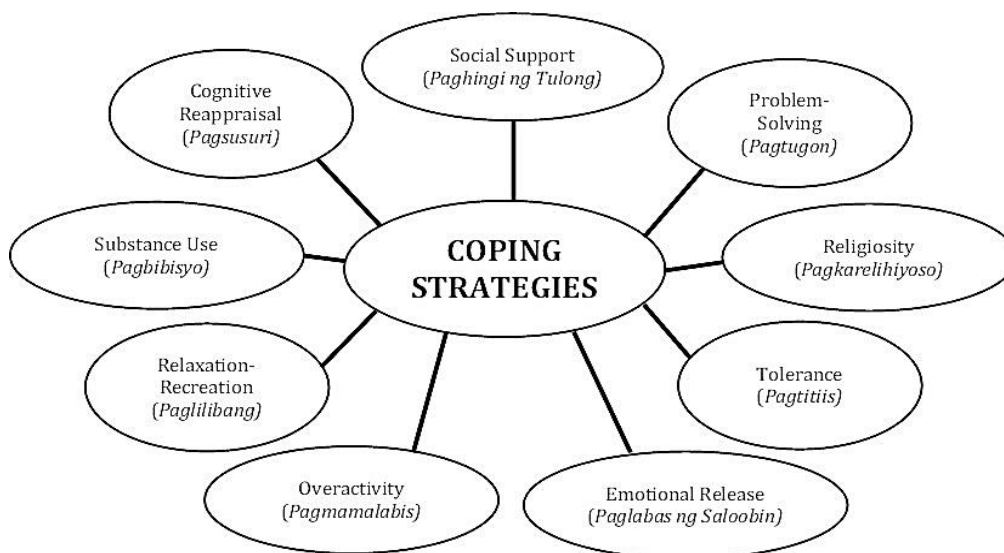


Figure 1. Nine domains of the Filipino Coping Strategies Scale.

Conceptually, the nine domains serve as the components of the coping dispositional profile of the respondents. Cognitive reappraisal (*pagsusuri*) refers to changing one's view or assumptions about the problem. This includes optimistic and hopeful thinking, alterations of goals and values, and meaning-making. Social support (*paghingi ng tulong*) refers to help-seeking behaviors, receiving advice or professional care, support from friends and family, and sharing of one's problems. Problem-solving (*pagtugon*) involves planning, taking action to confront the source of stress, and aims to eliminate the stressor. Religiosity (*pagkarelihyoso*) has its distinct domain because it involves some religious behaviors such as praying, leaving everything to God, believing in destiny and will of God. Tolerance (*pagtitiis*) would involve enduring the difficulty and stress without constant effort in confronting it. Emotional release (*paglabas ng saloobin*) would refer to venting out of emotions may it be through anger, humor, cry, and so forth. Overactivity (*pagmamalabis*) means overextension of work or overexertion of one's activity to distance oneself from the stress. Relaxation/recreation (*paglilibang*) involves engaging in activities that would make the person feel at ease and lessen the cognitive and emotional load of the stress. Substance use (*pagbibisyo*) would entail using drugs, drinking alcohol, smoking, or even

taking medicines to relieve some physical and mental manifestations of stress.

Items and Scoring

The Filipino Coping Strategies Scale was originally composed of 45 items but eight items were excluded from the item analysis, making it a 37-item scale. It is in a 4-point Likert format with 1 indicating Never or *Hindi* to 4 indicating Often or *Madalas*. Items #1, 8, 17, 23, and 30 comprise the cognitive reappraisal (*pagsusuri*) domain; items #9, 24, and 31 comprise the social support (*paghingi ng tulong*) domain; items #2, 10, 18, and 32 comprise the problem-solving (*pagtugon*) domain; items #3, 11, 19, and 33 comprise the religiosity (*pagkarelihyoso*) domain; items #12 and 25 comprise the tolerance (*pagtitiis*) domain; items #4, 13, 26, and 34 comprise the emotional release (*paglabas ng saloobin*) domain; items #5, 14, 20, 27, and 35 comprise the overactivity (*pagmamalabis*) domain; items #6, 15, 21, 28, and 36 comprise the relaxation/recreation (*paglilibang*) domain; and items #7, 16, 22, 37, and 39 comprise the substance use (*pagbibisyo*) domain (see Appendix A). The composite scores for each of the domains are computed by averaging the sum of the scores across the items of each domain (dividing the total raw score by the number of items in each domain). Therefore,

the minimum composite score for each domain is 1 and the maximum is 4.

Analysis

Through a statistical software (SPSS v 20), descriptive and inferential statistics were established. Sociodemographic characteristics of the participants were briefly identified in terms of frequency and percentage relative to the sample. To check for reliability, inter-item consistency of the variables was analyzed to see whether items designated for a specific domain correlate highly with one another and measure the same construct. To check for construct validity, confirmatory factor analysis through principal components analysis extraction method and varimax rotation method was conducted. Furthermore, convergent validity was established through correlation of each coping strategy/domain of the Filipino Coping Strategies Scale with corresponding domains of Ways of Coping by Folkman and Lazarus (1988) and the COPE Inventory by Carver et al. (1989).

Results

The age of the participants in the sample ranges from 18 to 58 years old ($M = 27.13$). There are more females ($n = 366$) than males ($n = 261$), mostly with average socioeconomic status ($n = 356$) followed by those with high socioeconomic status ($n = 224$) and those with low socioeconomic status ($n = 47$). Majority of the participants are educated—bachelor's degree holders ($n = 322$)—although the entire range of educational attainment was represented such as: those who are at least high school graduates, those who are still taking their bachelor's degree, those who are still taking their master's degree, those who are still taking their doctorate degree, and those who have already obtained their doctorate degree. In terms of occupation, majority of the participants are working in the administration and management field—human resource officers, managers, supervisors, and so forth ($n = 144$). Next are group of unemployed—students or job-seekers ($n = 122$); followed by medical and allied health professionals—doctors, nurses, occupational therapists, speech therapists, and so forth ($n = 121$); and those in the education and training field—teachers,

instructors, and so forth ($n = 66$). Other fields of work were also represented like in the field of arts and media, building and construction, hospitality and tourism, human services and social work, legal services and consultation, research and fieldwork, sales and marketing, science and engineering, and software and technology.

Furthermore, an overall descriptive statistics for each of the domains of the Filipino Coping Strategies Scale was established (see Table 2). Ninety-six to ninety-nine percent of the respondents completed the questionnaire. They generally scored high on most of the domains in the scale except on the substance use domain. This means that the participants are not more likely to engage in smoking, drinking alcohol, and drug-related activities in order to cope with stressful life experiences. The top four domains that the participants scored highly would be on the problem-solving, cognitive reappraisal, relaxation/recreation, and religiosity domains. The standard deviation of each domain ranges from .37 to 1.0, indicating low variability across the participants (most scores are clustered around the mean). Interestingly, most of the answers of the participants who responded to the free item of the Filipino Coping Strategies Scale were categorized under the relaxation/recreation domain. Examples of the responses they provided include: listening to music, watching movies, shopping, writing, reading books, dancing, playing sports or computer games, and so forth which were rated either “most of the time” (3) or “always” (4).

Reliability

Inter-item consistency refers to the degree of interrelatedness or homogeneity of items in a scale, thus, a high inter-item consistency presupposes high reliability because items in each domain represent the same coping strategy construct. This was established through reliability analysis using SPSS (see Table 3). The number of items retained for each domain was determined based on the highest possible internal consistency reliabilities for groups of items representing the domains. The coefficient alpha for each domain after item deletion ranges from .60 to .95 and the overall coefficient alpha for the Filipino Coping Strategies Scale is .716.

Table 2*Descriptive Statistics of Scores on Filipino Coping Strategies Scale Domains*

	n	Minimum Score	Maximum Score	Mean Score	Standard Deviation
Cognitive Reappraisal (<i>Pagsusuri</i>)	614	2.00	4.00	3.525	0.502
Social Support (<i>Paghingi ng Tulong</i>)	613	1.00	4.00	3.066	0.742
Problem-Solving (<i>Pagtugon</i>)	621	2.25	4.00	3.800	0.367
Religiosity (<i>Pagkarelihiyoso</i>)	617	1.00	4.00	3.185	1.003
Tolerance (<i>Pagtitiis</i>)	623	1.00	4.00	2.705	0.882
Emotional Release (<i>Paglabas ng Saloobin</i>)	618	1.00	4.00	2.626	0.749
Overactivity (<i>Pagmamalabis</i>)	605	1.40	4.00	3.136	0.928
Relaxation/Recreation (<i>Paglilibang</i>)	605	2.20	4.00	3.672	0.377
Substance Use (<i>Pagbibisyo</i>)	617	1.00	4.00	1.698	0.871

Table 3*Item Analysis with Internal Consistency Reliability (Coefficient Alpha) of the Filipino Coping Strategies Scale*

Filipino Coping Strategies Scale Domain	Number of items (Retained)	Cronbach's α	SD
Cognitive Reappraisal (<i>Pagsusuri</i>)	5	.705	2.511
Social Support (<i>Paghingi ng Tulong</i>)	3	.789	2.290
Problem-Solving (<i>Pagtugon</i>)	4	.755	1.473
Religiosity (<i>Pagkarelihiyoso</i>)	4	.950	3.983
Tolerance (<i>Pagtitiis</i>)	2	.648	1.758
Emotional Release (<i>Paglabas ng Saloobin</i>)	4	.683	3.010
Overactivity (<i>Pagmamalabis</i>)	5	.729	3.162
Relaxation/Recreation (<i>Paglilibang</i>)	5	.600	1.885
Substance Use (<i>Pagbibisyo</i>)	5	.861	4.313
TOTAL	37	.716	

Table 4*Rotated Component Loadings for 45 Items of the Filipino Coping Strategies Scale*

	Factor 1 Religiosity	Factor 2 Substance Use	Factor 3 Problem- Solving	Factor 4 Special Support	Factor 5 Tolerance & Emotion	Factor 6 &7 Overactivity & Relaxation/ Recreation	Factor 8 Cognitive Reappraisal	Factor 9 Tolerance & Relaxation	Community
#22	.902								.911
#4	.889								.850
#13	.886								.888
#40	.867								.826
#31	.829								.739
#27		.829							.772
#36		.786							.750
#45		.752							.727
#9		.737							.673
#18		.732							.637
#21			.744						.612
#39			.729						.657
#3			.725						.685
#37			.688						.520
#12			.558						.554
#19			.507						.504
#30			.470						.585
#35									.630
#11				.724					.628
#29				.711					.661
#33				.676					.628
#38				.666					.643
#2				.590					.569
#20									.449
#6									.475
#23					.683				.571
#41					.639				.521
#5					.609				.433
#15					.548				.494
#42					.536				.433
#26						.656			.635
#25						.655			.555
#7						.592			.578
#16									.567
#8							.638		.467
#34							.572		.590
#43							.561		.564
#44							.476		.535
#28							.730		.699
#1							.599		.604
#24							.504		.470
#10							.476		.468
#14								.751	.650
#32								.616	.670
#17								.484	.471

Validity

Construct validity was initially established via confirmatory factor analysis. The Kaiser-Meyer-Olkin (KMO) Index is .780 which indicates that the sample is adequate enough for the data to be suited for factor analysis and Bartlett's test of sphericity revealed significant value ($p < .05$) which indicates that there are items correlated with the others that can merit convergence into a specific factor. Principal components analysis was used as an extraction method to extract the underlying construct for specific groups of items and verify the existence of the proposed nine domains and Varimax rotation was used (see Table 4) because of assumed independence among the domains – “distinct sets of coping strategies.” Coefficient loadings less than .45 were suppressed in the model and the analysis yielded a 9-factor solution. All items representing the religiosity, substance use, problem-solving, and social support domains were confirmed (Factors 1 to 4). Three items in the Tolerance domain (#5, 23, and 41) loaded on factor 5 but interestingly, these were the actual items deleted in the item analysis,

thus leaving the two items in the emotional release domain (#15 and 42) which also loaded on factor 5. The domains of overactivity and relaxation/recreation were distributed across factors 6 and 7. Three items in the cognitive reappraisal domain loaded on factor 8. One item (#24—about the expression of humor) in the emotional release domain also loaded on the same factor, however, this is another item that was deleted in the item analysis. Lastly, two retained items in the tolerance domain (#14 and 32) and one item on relaxation/recreation domain (#17) loaded on factor 9.

Convergent validity was established through correlations of the items in each domain of the Filipino Coping Strategies Scale with corresponding items of similar or related domains of the Ways of Coping Questionnaire and the COPE Inventory. Pearson correlation revealed statistically significant associations among the domains of the three measures of coping (see Table 5). The positive correlations (ranging from low to high) support the validity of the domain constructs.

Table 5

Correlations Between Each Domain of Filipino Coping Strategies Scale and Domains of Ways of Coping Questionnaire and COPE Inventory

Filipino Coping Strategies Scale	Ways of Coping Questionnaire (Folkman & Lazarus, 1988)	COPE Inventory (Carver et al., 1989)
Cognitive Reappraisal (<i>Pagsusuri</i>)	.503**	.664***
Social Support (<i>Paghingi ng Tulong</i>)	.561**	.647**
Problem-Solving (<i>Pagtugon</i>)	.616**	.599**
Religiosity (<i>Pagkarelihiyoso</i>)	.793**	.877**
Tolerance (<i>Pagtitiis</i>)	.394**	.292*
Emotional Release (<i>Paglabas ng Saloobin</i>)	.426**	.428**
Overactivity (<i>Pagmamalabis</i>)	.358**	.522**
Relaxation/Recreation (<i>Paglilibang</i>)	—	.487**
Substance Use (<i>Pagbibisyo</i>)	.549**	.826**

* $p < .05$ ** $p < .01$

Note. There are no items in the Ways of Coping Questionnaire that correspond to the items in the Relaxation/Recreation domain of the Filipino Coping Strategies Scale.

Norms

Sex-based norms were established on the basis of significant differences between males and females in their scores in each of the domains of the Filipino Coping Strategies Scale (see Table 6). Across all the domains, the male and female participants in the pilot test sample are significantly different from each other in terms of their average composite scores.

As part of the procedure for norming, the Filipino Coping Strategies Scale was administered to two groups of participants different from the pilot test sample: males ($n = 107$) and females ($n = 113$).

As shown in Figure 2, male and female norm groups differ in their coping dispositional profile. Females have a higher likelihood of engaging in coping behaviors under social support, religiosity, tolerance, and emotional release domains than males. Males, on the other hand, are more likely to engage in coping behaviors under cognitive reappraisal, problem-solving and overactivity domains than females. Both norm groups, nonetheless, have high tendencies to engage in relaxation/recreation as their coping strategies and are least likely to engage in substance use (e.g., smoking, drinking, etc.) as coping strategies.

Table 6

Independent Samples t-test of Each Domain Score Between Males ($n = 261$) and Females ($n = 366$)

	Males		Females		<i>t</i> -test
	M	SD	M	SD	
Cognitive Reappraisal (<i>Pagsusuri</i>)	3.600	0.467	3.469	0.518	3.345**
Social Support (<i>Paghingi ng Tulong</i>)	2.621	0.654	3.044	0.583	8.493**
Problem-Solving (<i>Pagtugon</i>)	3.752	0.361	3.690	0.401	2.017*
Religiosity (<i>Pagkarelihiyoso</i>)	2.761	0.990	3.327	0.913	7.378**
Tolerance (<i>Pagtitiis</i>)	3.076	0.546	2.923	0.475	3.724**
Emotional Release (<i>Paglabas ng Saloobin</i>)	2.454	0.562	2.955	0.552	11.089**
Overactivity (<i>Pagmamalabis</i>)	3.303	0.641	3.016	0.591	5.788**
Relaxation/Recreation (<i>Paglilibang</i>)	3.718	0.353	3.638	0.390	2.694**
Substance Use (<i>Pagbibisyo</i>)	2.152	1.043	1.374	0.522	12.271**

Note. * $p < .05$

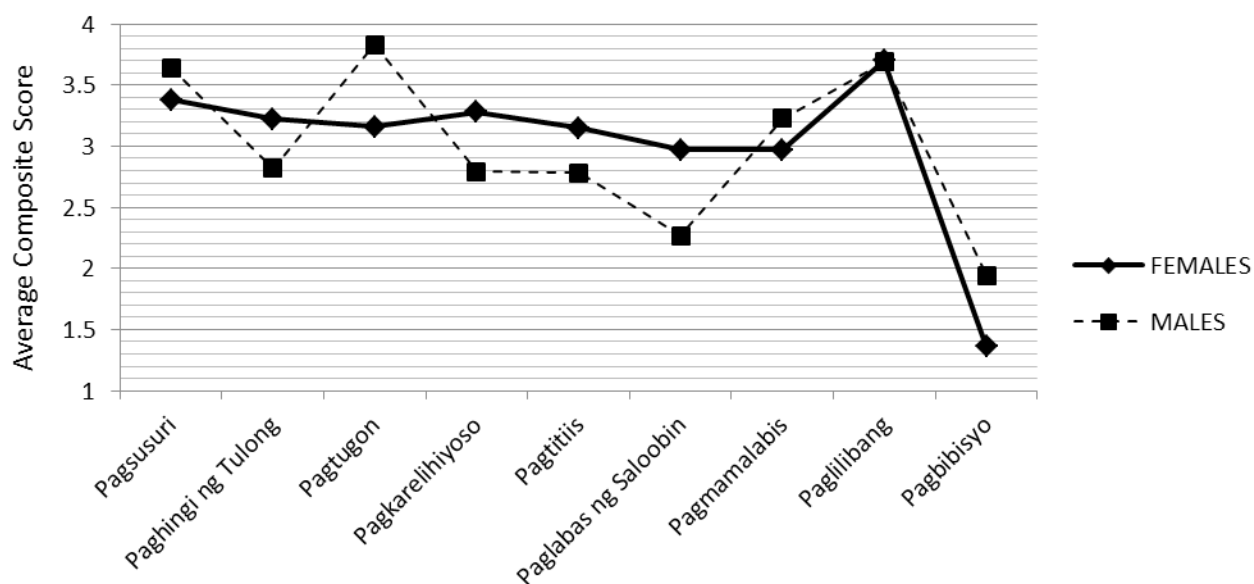


Figure 2. Coping dispositional profiles of male (n = 107) and female (n = 113) norm groups based on average.

Discussion

Results supported satisfactory psychometric properties of the Filipino Coping Strategies Scale. High inter-item consistencies in each domain were maintained after item deletion and convergent validity was established through significant correlations with resembling domains from established coping scales. Factor analysis also confirmed the proposed nine domains which were extracted from the integration of foreign measures of coping and local literature on coping and resilience. Very high significant factor loadings were revealed in domains of religiosity, substance use, problem-solving, and social support which were the evident coping strategies mentioned by Ladrado-Ignacio and Perlas (1995)—*bahala na mentality* or *ipinapasa-Diyos tendency*, *paninigarilyo o pangininginom*, and *bayanihan at pakikipagkapwa*—and Tan (2006)—*camaraderie* and seeking familial support. Likewise, the domains of social support, problem-solving, and substance use were the emergent domains which yielded significant factor loadings when the COPE Inventory was applied in the Philippine setting (De Leon & Balila, 2014). Another glaring result of the factor analysis was the convergence of both domains of overactivity and relaxation/recreation on

two factors. The mixing of these domains may be attributed to the broader type of coping strategy where they belong. Relaxation and recreation in the form of *saya* or externalized merriment as mentioned by Tan (2006) can be categorized into an avoidant, distancing, or mental disengagement form of coping strategy—a type of coping that focuses on redirecting oneself from the stressful experience or feeling by engaging in activities that lessen the emotional and cognitive load of the stress. Furthermore, the overactivity domain is also grouped in the same broad category from foreign measures of coping—Ways of Coping (Lazarus & Folkman, 1988) and COPE Inventory (Carver et al., 1989). The cognitive reappraisal domain that was present also in these measures yielded significant factor loadings in the Filipino Coping Strategy Scale. Lastly, the items comprising tolerance and emotional release domains that were also based from the foreign measures converged in the same factor which could be attributed to being categorized into an emotion-based coping strategy representing the opposite sides of the spectrum—tolerating the emotional burden vs venting out the emotions. The merging of such factors implies that broader types of coping are as important as more specific coping strategies especially that the profiles generated from the study revealed a pattern of

dominant coping strategies that can be grouped into broader types of coping.

The significant differences between Filipino men and women in their coping dispositional profiles supported the foreign researches on sex differences regarding coping (Matud, 2004; Lawrence et al., 2006; Ptacek et al., 1994) wherein women are more likely to engage in emotion-focused (tolerance and emotional release domains) and social support coping while men are more into problem-based or cognitive-focused coping (cognitive reappraisal and problem-solving domains). This implies that sex differences on how Filipino men and women generally deal with stress should not be neglected. Sex becomes an important variable to consider when studying coping strategies and how they relate to other psychological measures associated with sex.

Conclusion

The development of Filipino Coping Strategies Scale laid the foundations to extract dominant coping strategies unique to Filipinos and assess the frequency of each coping strategy to generate a coping dispositional profile. Coping strategies or dispositions unique to Filipinos are interesting to look at not only to provide a better understanding of how Filipinos respond to stress but also to be able to capture a general picture of their strengths in overcoming stress. Furthermore, at the quantitative level, a coping dispositional profile generated by the Filipino Coping Strategies Scale can be relevant to both counseling and research fields. In counseling/psychotherapy, being able to identify the dominant coping strategies of a client can aid in the formulation of a more comprehensive personality profile of the client and relate such results with client's strengths and weaknesses and distinguish between adaptive or maladaptive coping strategies. In research, the dispositional implication inherent to the scale minimizes the complexity of coping assessment. Nonetheless, future studies are recommended to further validate the existence of the nine domains, prove the stability of coping dispositions, measure effectiveness of coping through correlations with other psychological variables such as positive well-being,

resilience, anxiety, personality traits, and so forth and establish discriminant validity through associations with socio-demographic variables such as sex, age, socio-economic status, educational background, religion, and so forth.

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Appendix A

Filipino Coping Strategies Scale (After Item Analysis)

Name	Educational Attainment
Age	Occupation
Sex ○ Male ○ Female	Socioeconomic Status ○ Mababa (Low) monthly family income < P 15,000.00 ○ Katamtaman (Average) P 65,000 > monthly family income > P 15,000 ○ Mataas (High) monthly family income > P65,000

FILIPINO COPING STRATEGIES SCALE				
Gaano kadalas mong gawin ang mga sumusunod sa tuwing ikaw ay nakararanas ng matinding problema o stress? Lagyan ng marka ang nakalaang patlang. (How frequently do you perform the following when you experience a stressful event? Put a mark on the space provided.)				
	1 Hindi (Never)	2 Minsan (Sometimes)	3 Madalas (Most of the time)	4 Palagi (Always)
1. Nag-iisip ako ng positibo tungkol sa aking problema. (I think something positive about my problem)				
2. Nag-iisip ako ng paraan para masolusyunan ang aking problema. (I think of ways to solve my problem)				
3. Ipinagdarasal ko sa Diyos ang aking problema. (I pray my problems to God)				
4. Iniiyakan ko ang aking problema. (I cry my problems out)				
5. Pinapagod ko ang sarili sa isang partikular na gawain para mabawasan ang stress na aking dinadala. (I exhaust myself doing something to lessen the stress I have)				
6. Nililibang ko ang aking sarili (I entertain myself)				
7. Umiinom ako ng alak para mabawasan ang aking stress. (I drink alcohol to reduce my stress)				
8. Inaalang ko ang magandang dahilan kung bakit ako may ganitong klaseng problema. (I think of a good reason why I have this kind of problem)				
9. Humihingi ako ng payo mula sa aking mga kaibigan. (I solicit advice from my friends)				
10. Sinisikap kong malampasan ang mga bagay na nagbibigay sa akin ng stress. (I work hard to overcome my stress)				
11. Naniniwala ako na tutulungan ako ng Diyos sa aking problema. (I believe that God will help me in my problem)				
12. Tinatanggap ko na lang ang stress na aking nararamdaman hanggang sa ito ay mawala. (I tend to just accept the stressful feeling until it is gone)				
13. Naghahanap ako ng mapagbubuntunan ng galit dahil sa stress. (I find something to release my anger to because of my stress)				
14. Sinusubob ko ang sarili sa trabaho (I overwork)				
15. Pumupunta ako sa mga lugar kung saan makakapagpahinga ako. (I go to places where I can rest)				
16. Naninigarilyo ako upang mawala ang negatibong pakiramdam sa problema. (I smoke to ease my negative feeling)				
17. Iniisip kong kaya kong malagpasan ang aking problema. (I think I can overcome my problem)				

18. Gumagawa ako ng mga hakbang patungo sa pagkaya ng problema. (I make ways to solve my problem)				
19. Nananalangin ako sa Panginoon para mawala ang aking stress. (I pray to God in order to take my stress away)				
20. Kinakailangan kong mapagod sa paggawa ng ibang bagay. (I need to be tired doing other things)				
21. Gumagawa ako ng mga gawaing nakakapagpakalma sa akin. (I engage in activities that would make me calm)				
22. Umiinom ako ng gamot na makakatulong sa aking pakiramdam at pag-iisip tungkol sa problema. (I take medicine that would help me feel and think better)				
23. Tinitingnan ko ang magandang dulot ng aking stress. (I look at the good effect of this stress)				
24. Nangangailangan ako ng suporta mula sa ibang tao. (I need support from other people)				
25. Tinitii ko ang stress na aking nararanasan. (I endure the stress I am experiencing)				
26. Nilalabas ko ang aking hinanakit. (I release my emotional pain)				
27. Nagdadagdag ako ng marami pang gawain para maiba ang aking iniisip. (I burden myself with other things to do in order to redirect my thoughts)				
28. Ipinapahinga ko ang aking sarili. (I take time to rest)				
29. Gumagamit ako ng mga gamot na nakakapagpaginhawa ng aking pakiramdam. (I take medicine that provides relief)				
30. Sinisikap kong tingnan ang problema mula sa ibang perspektibo. (I take to view the problem in a different perspective)				
31. Nangangailangan ako ng pagkalinga at pag-intindi mula sa mga taong malapit sa akin. (I need care and understanding from the people who are close to me)				
32. Lahat ng posibleng solusyon ay ginagawa ko para lang mapagtagumapayan ang aking problema. (I consider all possible solutions just to overcome my problem)				
33. Naniniwala akong kagustuhan ng Diyos ang nararanasan ko ngayon. (I believe that what I am experiencing is God's will)				
34. Ipinapadama ko sa iba ang aking negatibong emosyon. (I let others feel my negative emotion)				
35. Kumakain ako nang marami at natutulog nang matagal upang panandaliang mabawasan ang stress. (I eat a lot and sleep longer hours to temporarily lessen the stress load.)				
36. Naghahanap ako ng mga gawaing nakakapagpahinga ng aking isipan. (I find activities that can relax my mind)				
37. Nagpapakalango ako sa alak para panandaliang makalimutan ang problema. (I drown myself with alcohol to ignore my problem for the meantime)				
Kung may iba ka pang mga ginagawa para makayanan mo ang iyong stress o problema, isulat ang mga ito at lagyan ng marka ang nakalaan patlang.				
(If there are other ways you cope with a stressful event which were not mentioned in the 37-item scale, you may write them down and rate them accordingly)				
	1 Hindi (Never)	2 Minsan (Sometimes)	3 Madalas (Most of the time)	4 Palagi (Always)