

Posttraumatic Growth Following the Loss of a Pet: A Cross-Cultural Comparison

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Abstract

The current study examined Posttraumatic Growth (PTG) experienced by bereaved pet owners in the United States, French-Canada, Japan, and Hong Kong following the death of their pet. Using qualitative methodology, we analyzed responses of participants who answered “yes” to a question about experiencing PTG and explored to what extent the cross-cultural responses mapped onto the five factors of the Posttraumatic Growth Inventory (PTGI). For the U.S. sample, 58% of responses mapped onto the PTGI. For French-Canada, 72% of responses mapped onto the PTGI. For Japan, 50% of responses mapped onto the PTGI and for Hong Kong, 39% of responses mapped onto the PTGI. We also explored

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emergent categories related to PTG for individuals who have lost a pet and discerned the unique aspects for PTG across cultures.

Keywords

posttraumatic growth, continuing bonds, pet loss, disenfranchised grief, cross-cultural

Introduction: Literature Review

Posttraumatic Growth (PTG) has been defined by Tedeschi and Calhoun (2004) as the positive changes that can occur due to struggles with highly challenging life crises. The way in which we experience PTG is shaped by sociocultural influences, conditions, and attitudes (Calhoun & Tedeschi, 2006). Recent cross-global experiences of terrorism, natural disasters, war, and increased globalization have propelled research to focus on a greater understanding of culture and meaning making (Weiss & Burger, 2010). In fact, studies of PTG from different parts of the world suggest that the experience of growth is not uniquely Western or exclusive to the United States (Weiss & Burger, 2010).

The Posttraumatic Growth Inventory (“PTGI”; Tedeschi & Calhoun, 1996) was created to measure the constructs most central to the paradigm of PTG. The five domains include: Relating to Others, New Possibilities, Personal Strength, Spiritual Change, and Appreciation of Life. Of note, much research into the grief process has failed to address the possibility of growth following the death of a loved one (Calhoun, Tedeschi, Cann, & Hanks, 2010). According to Calhoun et al. (2010), the death of a loved other disrupts one’s world view and assumptive beliefs about how the world is supposed to work, resulting in increased anguish and disruption related to higher levels of posttraumatic stress disorder and the potential for PTG.

PTG has been found to exist in bereaved individuals (Calhoun et al., 2010), and active coping strategies and social support has helped to facilitate growth (Michael & Cooper, 2013). Michael and Cooper (2013) also suggested connections between PTG and bereavement, such as positive personal transformation in self-concept, a reappraisal of life and priorities, and experience of less negative symptoms.

Continuing Bonds, Posttraumatic Growth, and Pet Bereavement

Research into the human-animal bond has consistently demonstrated that the loss of a pet can equal or exceed the psychological and social agony of the loss of a valued human relationship (Field, Orsini, Gavish, & Packman, 2009;

Packman, Field, Carmack, & Ronan, 2011). Within the pet bereavement literature, the concept of continuing bonds (CBs) has received increased attention (Packman et al., 2011, Packman, Bussolari, Katz, Carmack, & Field, 2016). Despite the permanence of physical separation, the bereaved can be emotionally sustained through a CB to the deceased (Field, Nichols, Holen, & Horowitz, 1999), for example, reminiscing about the loved one or looking at photos. Thus, a resolution of grief does not involve ending a relationship with the deceased, but rather a renegotiation and transformation of the meaning of the loss over time (Field, 2008; Klass, Silverman, & Nickman, 1996).

There are only a handful of studies examining PTG following the death of a beloved companion animal (Packman et al., 2011; Packman et al., 2016; Wong, Lau, Liu, Yuen, & Wing-Lok, 2015). Packman et al. (2011) found that there was an overall tendency for bereaved pet owners to find CB more comforting than distressing as well as a positive relationship between experiencing comfort from CB and PTG. Wong et al. (2015) found that although the loss of a pet was distressing, participants still achieved aspects of personal growth, such as improved family relationships.

Individual grief and its relation to PTG cannot be understood without considering a cultural context (Klass & Chow, 2011). For example, in the United States and French-Canada, disenfranchised grief is a common reaction to pet loss (Carlos, 2008; Doka, 2008; Packman et al., 2011), as griever often feel unsupported and invisible. This phenomenon is also observed in other cultures. For instance, in a recent qualitative study of bereaved pet owners in Hong Kong, Wong et al. (2015) found that several participants did not feel supported by their counselors and were reticent to seek out support. Additionally, a majority of participants also seemed to achieve some level of personal growth. In an earlier Japanese sample, Kimura, Kawabata, and Maezawa (2011) found that bereaved pet owners reported symptoms similar to normal grief reactions such as shock and numbness, with several participants indicating more significant responses, such as depression.

Rationale and Study Aims

The aim of the current cross-cultural study is to qualitatively investigate the construct of PTG in a sample of participants who have lost their companion animal. While there are an increasing number of studies looking at PTG from a cross-cultural perspective (see Weiss & Burger, 2010), this appears to be the first to look at PTG, grief, and pet loss across nations. We investigated aspects of PTG that are consistent across cultures, as well as aspects of PTG those that are unique. In an earlier manuscript (Packman et al., 2016), we noted how well the PTGI captured the responses of the U.S. bereaved pet owners; 58% of responses mapped onto the PTGI. Subsequently, we were interested to see how this compared with samples from French-Canada, Japan, and Hong Kong.

We were particularly interested in the commonalities and differences between the bereaved in Hong-Kong, Japan, and French-Canada, and the cultural variations in pet loss when compared with the U.S. findings. First, we explored the extent to which the cross-cultural responses of the participants mapped onto the five factors of the PTGI (Tedeschi & Calhoun, 1996). Second, we explored other emergent categories not captured by the PTGI. Third, we examined the unique aspects of PTG across cultures.

Methods

Participants and Procedure

Bereaved pet owners were recruited via requests posted online and personal solicitations to pet loss support groups. A cover letter explaining the goal of the study, the researchers' affiliations, and link to the Survey Monkey website was sent to potential participants. Eligible participants were required to be at least 18 years of age and must have lost a pet through death. The study was approved by the institutional review board at Palo Alto University.

Participants had the option of completing the pet loss survey on the internet or could request that hard copies be mailed to them. An informed consent page was at the beginning of the survey. Whether the participants completed the survey or not, they were given links to pet loss support services and resources. Participants completed a demographic questionnaire followed by a six objective measures. In addition to the objective measures, there were three open-ended questions. In this article, we focus on responses to the following question concerning PTG since the loss.

Despite the painful experience of losing your pet, people sometimes describe having found something of personal value in having had to face such a loss. For example, some people report having become more spiritual, having become closer to others, or having become stronger as a result of facing the loss. Have you discovered something of personal value that has come out of your experience of the loss of your pet? (please answer yes or no) If people answered yes, they were asked "please describe ways this is true for you."

At the time of data analysis, there were 3,804 total respondents to the survey for the U.S. sample. Using systematic sampling, 308 participants were included out of 1,956 who answered "yes" to the last open-ended question and 1,848 (50.2%) answered "no." From the French-Canadian sample, 30 participants answered "yes" (35% "yes"; 65% "no"); For the Japanese sample, 65 participants answered "yes" (80% "yes," 20% "no"); and finally, for the Hong-Kong sample, 340 answered "yes" (65% "yes," 35% "no"). Because of the smaller

number of participants for the international samples, all respondents who answered “yes” to the PTG question were included.

Research Design: Qualitative Analytic Procedure

We used directed content analysis, a qualitative method that is guided by theory or prior research (Hsieh & Shannon, 2005; Potter & Levine-Donnerstein, 1999), to analyze participants’ responses to the open-ended question about PTG following the loss of their pet. Directed content analysis is a more structured process than conventional content analysis (Hickey & Kipping, 1996). Investigators begin by identifying key concepts as initial coding categories (Potter & Levine-Donnerstein, 1999). Next, operational definitions for each coding category are determined based on theory. In the current investigation, PTG, bereavement, and CB theories (Field, 2008; Doka, 2008), as well as prior research on pet loss (Carmack, 2003; Orsini, 2005; Packman et al., 2011) and PTG (Packman et al., 2016) guided the development of initial coding categories.

The responses were first independently coded by WP, CB, and RK and then reviewed by all three together until consensus was reached. Our primary aim was to investigate the extent to which the bereaved pet owners’ responses mapped onto the PTGI (Tedeschi & Calhoun 1996), a 21-item scale that measures positive changes reported by individuals who have experienced traumatic events. The PTGI (Tedeschi & Calhoun, 1996) was created to provide a measure of PTG using the five factors that the researchers proposed were central to this construct: (a) Relating to Others, (b) New Possibilities, (c) Personal Strength, (d) Spiritual Change, and (e) Appreciation of Life. The authors also used findings from a previous study (Packman et al., 2016) to see how well the cross-cultural samples mapped onto the U.S. data. Data that did not map onto the PTGI were identified and analyzed to determine if they represented a new theme or a subcategory of an existing category. Thus, emerging themes were identified and categorized, and new codes developed as needed.

Data Analysis: Descriptive Statistics

Background characteristics, parameters of the loss, and self-reports of the strength of attachment (Pet Attachment Scale [PAS]) and grief (Inventory of Complicated Grief [ICG]) are detailed below.

Standardized measures. The PAS (Gosse, 1988) is an 11-item measure assessing the strength of attachment the participant has to his or her deceased pet. Each item is rated on a 5-point scale ranging from *almost never* to *almost always*. The scale has a demonstrated high level of internal consistency with Kerlinger (1986)

finding a Cronbach's alpha coefficient of .74 for the 11-item intimacy subscale. Gosse (1988) found a Cronbach's alpha coefficient of .74 and Jarolmen (1996) found a Cronbach's alpha coefficient of .77.

The ICG (Prigerson & Jacobs, 2001) is a 19-item self-report questionnaire that measures symptoms of grief. Respondents rate their feelings with respect to their deceased pet over the month regarding the symptoms described on a 5-point scale. The total score is a summation of the item scores and indicates the severity of grief symptoms. This study used 9 of the original 19 items of the ICG in order to create a shorter scale which did not include items that are more useful for describing CB with the deceased (Filanosky, 2003). Filanosky (2003) validated use of this instrument using only 9 of the original 19 items in his study on grief and CB in an adult sample of griever. The ICG is internally consistent (Cronbach's alpha = .95) and has an acceptable level of criterion-related validity (Prigerson & Jacobs, 2001).

Results

Quantitative Findings: Characteristics of the Sample

Participants and procedures. Demographic variables, contextual factors, and other aspects associated with the loss are detailed in Table 1 for all four samples (United States, French-Canada, Japan, and Hong Kong).

Pet attachment scale. The mean PAS scores (see Table 2) for the study samples were as follows: United States (3.49; $SD = 1.64$), French-Canada (4.21; $SD = .59$), Japan (3.56; $SD = .71$), and Hong Kong (4.29; $SD = .5$).

Inventory of complicated grief. The mean ICG scores (see Table 2) for the study samples were as follows: United States (2.98; $SD = 1.39$), French-Canada (2.72; $SD = .99$), Japan (1.69; $SD = .95$), and Hong Kong (2.41; $SD = .98$).

PTGI: Five domains. In an earlier manuscript (Packman et al., 2016), the authors noted the extent to which the PTGI captured the responses of the U.S. bereaved pet owners and found that 58% of responses mapped onto the PTGI. In the current analysis, the authors found that for the French-Canadian, Japanese, and Hong-Kong samples, 72%, 50%, and 39% of responses mapped onto the PTGI, respectively.

Qualitative Findings: Mapping Onto PTGI

Relating to Others. Relating to Others (19%) was the most prominent PTGI theme in the overall U.S. sample (Packman et al., 2016; see Table 3). This was the second most frequently coded category for both Japan (12%) and French-Canada

Table 1. Demographic and Background Information.

Characteristic	U.S. (N = 308/1,956) N (%)	French-Canada (N = 30/90) N (%)	Hong Kong (N = 340/537) N (%)	Japan (N = Yes 65/86) N (%)
Gender				
Male	57 (19)	3 (10)	36 (11)	11 (17)
Female	251 (81)	27 (90)	304 (89)	54 (83)
Relationship to deceased				
Best friend	225 (73)	7 (23)	39 (12)	20 (31)
Parental	95 (31)	4 (13)	131 (39)	58 (89)
Partner or significant other	75 (24)	13 (43)	66 (19)	7 (11)
Other	88 (29)	6 (20)	79 (23)	7 (11)
Marital status				
Single	83 (27)	12 (40)	144 (42)	38 (58.5)
Married or partnered	176 (57)	15 (50)	183 (54)	25 (38.5)
Divorced	38 (12)	2 (7)	10 (3)	0 (0)
Separated	8 (3)	1 (3)	3 (1)	2 (3)
Widow or widower	3 (1)	0	0	0 (0)
Cause of death				
Natural	54 (18)	5 (17)	80 (24)	23 (35)
Unexpected	71 (23)	6 (20)	64 (19)	8 (12)
Major disease	121 (39)	13 (43)	192 (57)	29 (45)
Other	62 (20)	6 (20)	4 (1)	5 (8)
Euthanasia				
Yes	213 (69)	20 (67)	215 (63)	63 (97)
No	95 (31)	10 (33)	125 (37)	2 (3)
Children				
Yes	120 (39)	8 (27)	333 (16)	48 (74)
No	188 (61)	22 (73)	287 (84)	17 (26)
Education				
Less than high school	3 (1)	1 (3)	2 (1)	2 (3)
High school	30 (10)	6 (20)	106 (31)	12 (19)
Vocational or trade	15 (5)	0	28 (8)	4 (6)
College	65 (21)	8 (27)	160 (47)	30 (46)
Graduate school	91 (30)	15 (50)	44 (13)	17 (26)
Spiritual Practice				
Yes	212 (69)	11 (37)	138 (41)	14 (21.5)
No	97 (31)	19 (63)	202 (59)	51 (77.5)

(continued)

Table 1. Continued

Characteristic	U.S. (N = 308/1,956)		French-Canada (N = 30/90)		Hong Kong (N = 340/537)		Japan (N = Yes 65/86)	
	N (%)		N (%)		N (%)		N (%)	
Other Data	Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)	
Age of owner (years)	42 (12)		39 (11)		35 (8)		36 (13)	
Age of pet (years)	11 (5)		10 (5)		10 (6)		12 (5)	
Time since death (days)	162 (1,228)		303 (463)		1,014 (1,182)		2,269 (2,324)	
	Min	Max	Min	Max	Min	Max	Min	Max
Time since death (days)	0	19,724	2	2,171	1	10,412	3	9,189

Table 2. Mean Scores of PAS and ICG.

	US Mean (SD)	FC Mean (SD)	HK Mean (SD)	J Mean (SD)
PAS	3.49 (1.64)	4.21 (.59)	4.29 (.5)	3.56 (.71)
ICG	2.98 (1.39)	2.72 (.99)	2.41 (.98)	1.69 (.95)

Note. PAS = Pet Attachment Scale; ICG = Inventory of Complicated Grief; US = United States; FC = France-Canada; HK = Hong Kong; J = Japan.

(15%), and the third for Hong Kong (13%). Similar to the findings within the U.S. sample (Packman et al., 2016), cross-cultural participants often described feeling closer to members of their nuclear family due to their profound shared loss experience. For example, *Our family grew closer (Hong Kong)*; *The experience brought me closer to my spouse (French-Canada)*; and *I realized that I have a great husband and family. I can truly find love and support from them and I feel lucky (Japan)*.

Personal Strength. Participants from Hong Kong acknowledged more feelings of self-reliance and strength after death, as Personal Strength was their most coded theme (20%). It was the second most coded theme in the United States (12%) and Japanese samples (12%), and the third most coded category for French-Canada (13%). Similar to the U.S. sample, participants described becoming stronger through the process of euthanasia. One participant from Hong Kong noted, *I have learned how to face the death of a loved one. It gave me great courage to face any adversity; I have to be strong in the face of illness.*

Appreciation of Life. Appreciation of Life was the most coded theme for Japan (22%), Hong Kong (34%), and French-Canada (30%), at least double the

Table 3. ResponseProfile of PTGI Among United States, Japan, Hong Kong, and French-Canada.

Factors	US		Japan		Hong Kong		French-Canada	
	n = 412	%	n = 59	%	n = 378	%	n = 27	%
I. Relating to Others	78	19	7	12	49	13	6	15
Count on people in times of trouble	3		0		1		0	
A sense of closeness with others	27		2		23		3	
A willingness to express my emotions	10		2		4		1	
Having compassion for others	27		2		8		0	
Putting effort into my relationships	5		1		10		2	
Learned about how wonderful people are	2		0		3		0	
Accept needing others	4		0		0		0	
II. New Possibilities	29	7	1	2	18	5	1	3
Developed new interests	0		0		0		0	
Established a new path for my life	7		1		0		0	
Able to do better things with my life	2		0		2		0	
New opportunities are available	6		0		12		1	
Likely to try to challenge things	13		0		4		0	
III. Personal Strength	51	12	7	12	74	20	5	13
A feeling of self-reliance	4		2		12		0	
Knowing I can handle difficulties	11		0		16		2	
Able to accept the way things work out	4		3		36		0	
Be stronger than I thought I was	32		2		10		3	
IV. Spiritual Change	32	8	2	2	2	0.5	3	11

(continued)

Table 3. Continued

Factors	US		Japan		Hong Kong		French-Canada	
	n = 412	%	n = 59	%	n = 378	%	n = 27	%
Understanding of spiritual matters	23		2		2		3	
Have a stronger religious faith	10		0		0		0	
V. Appreciation of Life	51	12	13	22	130	34	8	30
Priorities about what is important in life	25		7		46		4	
An appreciation for the value of own life	3		1		5		0	
Appreciating each day	23		5		79		4	
Additional responses								
Relating to animals	68	17	6	10	22	6	5	19
Attachment relationship	44		5		13		2	
Unconditional love	13		0		7		2	
Reciprocity	9		0		2		1	
Tenacity	2		1		0		0	
Continuing Bonds/Coping With Loss	60	15	8	14	26	7	7	26
Lessons learned	31		2		16		0	
Reunited	15		1		6		0	
Found memories	5		3		2		0	
Dreams	1		0		0		0	
Sense of presence	1		2		2		0	
Drawn to places	1		0		0		0	
Everyday decisions	1		0		0		0	
Afterlife	3		0		0		0	
Growth	24	6	0	0	4	1	0	0
Anticipatory growth	11		0		1		0	
Too early	6		0		1		0	
No personal growth or no value	7		0		2		0	

Note. PTGI = Posttraumatic Growth Inventory.

United States. Similar to the U.S. responses, participants experience life as quite precious and tenuous: *I recognized the pain of loss, the preciousness of an encounter, the importance of a pet, and sense of gratitude (Japan); Never waste a moment of the present time (Japan); Love human beings while they are alive*

(*French-Canada*); *Always live in the moment (Hong Kong)*; *You must give more love to people and animals (Hong Kong)*. Many responses from the Hong Kong sample specifically noted “cherish”ing others as a personal value. For example, *Losing things makes you learn to cherish (Hong Kong)*.

Spiritual Change. This was the third most coded theme for the U.S. (8%) and Japanese samples (2%), the fourth for French-Canada (11%), and the least for Hong Kong (5%). Within the cross-cultural samples overall, participants talked about *gaining spiritual value* or being in touch with a *spiritual dimension*, which was distinctly different than the U.S. sample, where participants explicitly talked about being spiritually connected with God. As stated by one U.S. participant, *God and I had not had a relationship until now*.

New Possibilities. This theme was the least coded for all samples, U.S. (7%), Japanese (2%), French-Canadian (3%), and Hong Kong (5%). Similar to the United States (Packman et al., 2016), animal rescue themes were prominent within this factor for Hong Kong. For example, two respondents from Hong Kong noted, *I am contributing more to helping animals in need*; and *I will continue to love my cat family now and also care for other stray cats*.

Emergent Cross-Cultural Growth Themes: Cross-Cultural Comparison

In addition to capturing the traditional PTGI themes for the U.S. sample, Packman et al. (2016) found that many participants’ responses could be coded within other areas: *Relating to Animals* and *Continuing Bonds/Coping with Loss*. For this article, we also asked whether the same categories could be applicable for Japan, Hong Kong, and French-Canada.

Relating to animals. Consistent with the U.S. sample (Packman et al., 2016), *Relating to Animals*, which includes *Attachment Relationship*, *Unconditional Love*, and *Reciprocity*, emerged as an important theme for all countries. The United States (17%) and French-Canada (19%) responses were coded almost twice as much as Japan (10%) and Hong Kong (6%). However, those that were coded were notable for the depth of their human-animal connections, similar to the U.S. sample. As an example from Hong Kong,

When Big Turtle left, I spent about a month to calm my emotions... When Big Turtle first passed, I really could not accept it... I would feel sad... it was the first time I understood what it feels to have someone close leave me.

The fewer number of responses from Japan and Hong Kong may reflect cultural differences in comfort level when disclosing intense emotions regarding human–animal relationships.

CBs/coping with loss. French-Canada (26%), the United States (15%), and Japan (14%) were coded more frequently than Hong Kong (7%) within this domain, which included *Lessons Learned*, *Reunited*, *Fond Memories*, *Dreams*, and *Sense of Presence*. Similar to the U.S. sample, *Lessons Learned* and *Reunited* were the most prominently coded items. One person from French-Canada responded

I believe that his soul and mine meet either in dreams or after death. I am sure that I will see again my dog when I leave Earth. I would even like that it comes back in another life, as my sister or my brother.

Hong Kong respondents noted, “My cat taught us how to be more loving towards animals as well as I learned how to love from my dog. In the past, I didn’t know how to love. I learned to become stronger from my dog, too.”

Unique Themes for Japan, Hong Kong, and French-Canada

Several growth themes emerged that were specific to French-Canada, Hong Kong, and Japan (see Table 4). These included: *Acknowledgement of Death as Part of Life*, *Being Strong During Bereavement*, and *New Learning*.

Acknowledgment of death as part of life. This was a noteworthy theme for Japan, Hong Kong, and French-Canada. Japanese responses (22%) were coded for this theme twice as much as Hong Kong (10%) and slightly more than French-Canada (15%). Some responses included “In the course of your life, you would continuously lose people and things dear to you.” Another respondent stated: “I learned every life dies. Being born, growing old, becoming sick and dying: the course of life must pass through these stages; There is a time for life and a time for death.”

Being strong after bereavement. This theme was coded equally for both the Japan and Hong Kong samples (2%), but not at all for French-Canada.

Table 4. Unique Cross-Cultural PTG Factors Not Captured by PTGI.

Unique PTG Factors	Japan		Hong Kong		French-Canada	
	<i>n</i> = 59	%	<i>n</i> = 378	%	<i>n</i> = 27	%
Acknowledgement of Death as Part of Life	13	22	36	10	4	15
Being Strong During Bereavement	2	2	6	2	0	0
New Learning	0	0	11	3	0	0

Note. PTGI = Posttraumatic Growth Inventory.

One respondent noted, “I learned to be strong in the face of death, learning to let go, and not keep it because you don’t want to let go,” and “I thought about how I should behave in order to make others smile.”

New learning. Only responses within the Hong Kong sample (3%) were coded and may reflect a desire to become more knowledgeable in response to the loss. For example, “Seize the opportunity to learn more about animal health” and “We can’t make the same mistakes again.” According to Ho and Bai (2010), the Chinese character for adversity conveys the idea that even under difficult conditions, one can potentially thrive.

Discussion

To our knowledge, this is the first study to investigate the PTG construct in a cross-cultural sample of participants who have lost their companion animal. The authors qualitatively analyzed responses of bereaved pet owners who answered “yes” to a question about experiencing PTG and explored to what extent the cross-cultural responses mapped onto the five factors of the PTGI (Tedeschi & Calhoun, 1996). In an earlier manuscript, we noted to what extent the PTGI captured the responses of the U.S. bereaved pet owners and found that 58% of responses mapped onto the PTGI (Packman et al., 2016). In this analysis, we found that for the French-Canadian, Japanese, and Hong-Kong samples, 72%, 50%, and 39% of responses mapped onto the PTGI, respectively. We also explored emergent categories related to PTG for individuals who have lost a pet and the unique aspect for PTG across cultures.

There were distinct differences and similarities within and between the cross-cultural samples. As Weiss and Burger note “The uniqueness of PTG in specific cultures was manifested in various ways” (2010, p. 191). While Relating to Others was the most prominent theme for the United States by a wide margin, it was coded less often for all other samples. In the United States, bereaved pet owners tended to reflect upon their connections with others when talking about personal value after death, and they were also more likely to express their compassion toward others (Calhoun et al., 2010). Taku (2010) noted that Japanese individuals who reported a relationship-related event, which pet loss can be considered, scored higher on Relating to Others. At the same time, “recognizing one’s solitude” can be seen as growth in the Japanese culture (Taku, 2010, p. 141). This is similar in China, as there is a cultural norm of not expressing emotions in front of others (Ho & Bai, 2010).

Personal Strength was the most coded theme for Hong Kong, although still well represented by the other samples. This is consistent with Ho and Cheung’s (2007) findings where they measured PTG in a sample of Chinese cancer survivors. Personal Strength was the second most endorsed category within the

Japanese sample, even though within the Japanese culture, an increase in the recognition of their weaknesses rather than strengths may also be considered growth (Taku, 2010).

Spirituality as a means for growth was coded more frequently in Western cultures, such as the United States and French-Canada. Spirituality in many Asian cultures, however, might be better understood from an existential perspective, and not anchored in one particular religion. Thus, spirituality may be represented in a manner not included within the PTGI. Notably, of the 46 countries included in the World Values Survey (1995–1997), Japan had the second most reported number of atheists (12%). At the same time, only 3% of Chinese respondents reported religion as important. In the United States, spirituality emerged as a separate construct. In other cultures, it may be infused within a general approach to life. In the view of one of our coauthors from Japan, a sense of cosmic called Gerotranscendence, or having a sense of the cosmic, occurs around the age of 60 years. While Western people are more aware of the connection between “God and me,” Japanese are more grounded toward the connection between “ancestors and me.”

As noted previously, *Appreciation of Life* was the most coded theme for Japan, Hong Kong, and French-Canada—at least double the U.S. percentage. Due to their Buddhist beliefs, some Japanese and Chinese people may see all life as “suffering,” and do not perceive growth as the result of trauma but rather, as a natural part of their day to day lives (Taku, 2010). In a sample of bereaved participants, Taku (2010) also found that *Appreciation of Life* was the most prominent growth factor.

New Possibilities was the least coded theme for all samples. When it was endorsed, United States and Hong Kong animal rescue themes were especially common. It is possible that the Japanese culture may reinforce a private stoicism as a response to crises and thus may not gravitate toward the external and observable behaviors that *New Possibilities* embodies (Taku, 2010).

We also coded additional categories not captured by the PTGI that reflect the concept of growth after pet loss. *Relating to Animals* and *Continuing Bonds* appear to be relevant themes for all groups. Research has shown that we similarly attach to both humans and animals (Nebbe, 2001; Rynearson, 1978), and the stronger the attachment, the higher the grief (Field et al., 2009). For our participants, PTG following pet loss is often expressed through experiences of unconditional love specifically with their animal. It is therefore not surprising that 17% of participants were coded for *Relating to Animals*. Another theme from all samples was *Continuing Bonds/Coping with Loss* (15%). Over time, participants were able to transform the meaning of the loss and cope through CB such as the expectation of being reunited with their pet and Lessons Learned.

Unique Themes

There were unique PTG growth themes within the Hong Kong, Japanese, and French-Canadian cultures. These include *Acknowledgement of Death as Part of Life*, *Being Strong After Bereavement*, and *New Learning*.

Acknowledgement of Death as Part of Life was a major theme for Hong Kong, French-Canada, and Japan. A coauthor from Hong Kong suggested that this finding may be partially due to the Taoist belief of “following the flow.” Another coauthor noted that within the French-Canadian culture, it is her experience that when one hears about a specific death,

the first thought that comes to us is ‘that’s life’. We are born and we die. It is inevitable and there is nothing that we can do about it. We recognize that we are helpless in front of death, so to be strong we say, that it is part of life.

For Japan, a coauthor underscored the prevalence of the Buddhist ideas for life and death, “Some believe in reincarnation, and some believe in the idea that to die is to go back to nature.”

Although *Being Strong After Bereavement* and *New Learning* are novel themes for Hong Kong and Japan, only a small percentage of comments fell within these domains. Taku (2010) notes that within the Japanese culture, there is an emphasis on self-discipline in reaction to trauma, which may reflect strength and resiliency. At the same time, Ho and Bai (2010) mentioned that when undergoing great duress, the Chinese may desire to work harder and gain more knowledge as a means of mastery.

Notably, 35% of the French-Canadian participants endorsed PTG and 65% did not. A coauthor states that in French-Canada, “We are not used to the expression ‘posttraumatic’. In the US, with your soldiers returning from wars, you are familiar with PTG. Here, posttrauma is something that we are beginning to recognize, to talk about.” It is important to note that our PTG question was endorsed as “yes” by a high percentage of participants in both Japan (80%) and Hong Kong (65%). This, in part, may be due to the longer length of time since death, which may impact the greater opportunities for meaning making. A coauthor from Hong Kong hypothesizes that the “Chinese like to have benefit finding as a way of making sense of the death.”

Future Research and Clinical Implications

Consistent with our previous research (Packman et al., 2016), PTG is prominent following pet loss in other cultures (e.g., French-Canada, Hong Kong, and Japan). Unique themes emerged within this cross-cultural sample, such as *Acknowledgement of Death as Part of Life*, *Being Strong During Bereavement*, and *New Learning*. Future research should further explore the

unique factors in bereavement not captured by the PTGI-42 (Baker, Kelly, Calhoun, Cann, & Tedeschi, 2008) and also pay close attention to the diverse cultural aspects of grief. At the same time, a quantitative measure of PTG, specifically following pet loss, should be validated to gather more structured data regarding our qualitative findings.

Within this study, meaning making is informed by a cultural context. In our previous study (Packman et al., 2016), many participants from the United States wrote that it was “too soon” to think about growth or positive learning. On the other hand, this was not reported by participants from Japan, Hong Kong, or French-Canada. It would be important to conduct a longitudinal study to assess meaning-making over time and growth following the death of a pet. As in our previous study (Packman et al., 2016), the question of time since death might affect experiences of PTG. Research in this area has been conflicting. Within the current study, time since death varies considerably and could account for differences in growth experiences (see Table 1). Future research should continue to examine time since death, meaning making, and grief across cultures.

This research also implicates clinical interventions following a pet loss. PTG varies considerably across cultures. For example, this is especially evident in the current study within the Spirituality Domain. A client’s spirituality, or lack thereof, should be assessed in relation to how they cope with traumatic events (Weiss & Burger, 2010). Clinicians should also not assume similar grief responses over time and across cultures, as bereavement and its psychological consequences can last much longer than typically expected in Western culture (Calhoun et al., 2010). Finally, it is important to convey to a client that PTG may or may not occur following the loss of a pet. For example, 65% of the French-Canadian participants noted that they had *not* found something of personal value following a loss. It also is important to note that growth and distress may occur at the same time (Weiss & Burger, 2010).

Strengths and Limitations

There are several limitations to the study and the findings should be interpreted cautiously. One limitation is that the information was obtained via an online survey and through self-selection. Therefore, the results cannot be generalized to those who do not have access to the internet or to those who prefer not to use the internet to share their feelings. Another limitation involves the study’s cross-sectional design which does not allow us to study PTG over time. Further, the coding of the data may not adequately capture the complex nature of PTG.

A notable strength of this study is that, to our knowledge, it is the first to assess PTG and pet loss among cross-cultural samples. Another strength is that it supplements previous research and provides further insight into how bereaved pet owners respond and cope with the loss of their pet.

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References

- Baker, J. M., Kelly, C., Calhoun, L. G., Cann, A., & Tedeschi, R. G. (2008). An examination of posttraumatic growth and posttraumatic depreciation. *Journal of Loss & Trauma, 13*, 450–465.
- Calhoun, L. G., & Tedeschi, R. G. (2006). The foundations of post traumatic growth: An expanded framework. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of post traumatic growth* (pp. 3–23). Mahwah, NJ: Erlbaum.
- Calhoun, L. G., Tedeschi, R. G., Cann, A., & Hanks, E. A. (2010). Positive outcomes following bereavement: Paths to posttraumatic growth. *Psychologica Belgica, 50*(1 & 2), 125–143.
- Carlos, F. (2008). *Deuil animalier*. Ottawa, Canada: Broquet Inc.
- Carmack, B. J. (2003). *Grieving the death of a pet*. Minneapolis, MN: Augsburg Books.
- Doka, K. J. (2008). Disenfranchised grief in historical and cultural perspective. In M. S. Stroebe, R. O. Hansson, H. Schut & W. Stroebe (Eds.), *Handbook of bereavement research and practice: Advances in theory and intervention* (pp. 223–240). Washington, DC: U.S. Psychological Association.
- Field, N. P. (2008). Whether to relinquish or maintain a bond with the deceased. In M. S. Stroebe, R. O. Hansson, H. Schut & W. Stroebe (Eds.), *Handbook of bereavement research and practice: Advances in theory and intervention* (pp. 113–132). Washington, DC: U.S. Psychological Association.
- Field, N. P., Nichols, C., Holen, A., & Horowitz, M. (1999). The relation of continuing attachment to adjustment in conjugal bereavement. *Journal of Consulting and Clinical Psychology, 67*, 212–218.
- Field, N. P., Orsini, L., Gavish, R., & Packman, W. (2009). Role of attachment in response to pet loss. *Death Studies, 33*(4), 332–355.
- Filanovsky, C. (2003). *The nature of continuing bonds with the deceased and their effect on bereavement outcome* (Doctoral dissertation). Pacific Graduate School of Psychology, Palo Alto, CA.
- Gosse, G. (1988). *Factors associated with the human grief experience as a result of the death of a pet* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (AAT No. 8825153).

- Hickey, G., & Kipping, C. (1996). Issues in research. A multi-stage approach to the coding of data from open-ended questions. *Nurse Researcher*, 4, 81–91.
- Ho, S. M., & Bai, Y. (2010). Posttraumatic growth in Chinese culture. In T. Weiss & R. Burger (Eds.), *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe* (pp. 147–156). Hoboken, NJ: John Wiley & Sons.
- Ho, S. M. Y., & Cheung, M. W. L. (2007). Using the combined etic-emic approach to develop a measurement of interpersonal subjective well-being in Chinese populations. In A. D. Ong & M. van Dulmen (Eds.), *Oxford Handbook of methods in positive psychology* (pp. 139–152). New York: Oxford University Press.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
- Jarolmen, J. (1996). *A comparison of the human grief reaction: Focusing on pet loss and bereavement* (Doctoral dissertation). Rutgers University, New Brunswick, NJ.
- Kerlinger, F. (1986). *Foundations of behavioral research*. Fort Worth, TX: Holt, Rinehart, & Winston, Inc.
- Kimura, Y., Kawabata, H., & Maezawa, M. (2011). Psychiatric investigation of 18 bereaved pet owners. *Journal of Veterinary Medical Science*, 73(8), 1083–1087.
- Klass, D., & Chow, A. (2011). Culture and ethnicity in experiencing, policing, and handling grief. In R. A. Neimeyer, D. L. Harris, H. R. Winokuer & G. F. Thornton (Eds.), *Grief and bereavement in contemporary society: Bridging research and practice* (pp. 341–354). New York, NY: Routledge.
- Klass, D., Silverman, P., & Nickman, S. L. (Eds.). (1996). *Continuing bonds—New understanding of grief*. Philadelphia, PA: Taylor & Francis.
- Michael, C., & Cooper, M. (2013). Post-traumatic growth following bereavement: A systematic review of the literature. *Counseling Psychology Review*, 28(4), 18–33.
- Nebbe, L. (2001). The elementary school counselor and the HCAB. In P. Salloto (Ed.), *Pet assisted therapy: A loving intervention and an emerging profession*. Norton, MA: D. J. Publications.
- Orsini, L. M. (2005). *Attachment styles and pet bereavement discussed in the context of attachment theory* (Doctoral dissertation). Pacific Graduate School of Psychology, Palo Alto, CA.
- Packman, W., Bussolari, C., Katz, R., Carmack, B. J., & Field, N. P. (2016). Post-traumatic growth following the loss of a pet. *Omega*, 1–23. doi:10.1177/0030222816663411
- Packman, W., Field, N. P., Carmack, B. J., & Ronen, R. (2011). Continuing bonds and psychosocial adjustment in pet loss. *Journal of Loss and Trauma*, 16(4), 341–357. doi:10.1080/15325024.2011.572046
- Potter, W. J., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, 27, 258–284.
- Prigerson, H. G., & Jacobs, S. C. (2001). Traumatic grief as a distinct disorder: A rationale, consensus criteria, and a preliminary empirical test. In M. S. Stroebe, R. O. Hansson, W. Stroebe & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping and care* (pp. 613–647). Washington, DC: U.S. Psychological Association.
- Rynearson, E. (1978). Humans and pet attachment. *Psychiatry*, 133, 550–555.
- Taku, K. (2010). Posttraumatic growth in Japan: A path toward a better understanding of culture-constant and culture-specific aspects. In T. Weiss & R. Burger (Eds.),

- Posttraumatic growth and culturally competent practice: Lessons learned from around the globe* (pp. 130–145). Hoboken, NJ: John Wiley & Sons.
- Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455–472.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1–18.
- Weiss, T., & Burger, R. (2010). Posttraumatic growth around the globe: Research findings and practice implications. In T. Weiss & R. Burger (Eds.), *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe* (pp. 189–195). Hoboken, NJ: John Wiley & Sons.
- Wong, P. W. C., Lau, K. C. T., Liu, L., Yuen, G. S. N., & Wing-Lok, P. (in press). Beyond recovery: Understanding the postbereavement growth from companion animal loss. *OMEGA. Journal of Death and Dying, 1–21*. doi:10.1177/0030222815612603.

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France Carlos, TRA, is a graduate therapist in *thérapeute en relation d'aide* from Centre de Relation d'aide de Montréal (1997). In her private practice, she has been helping people mourn the death of their pet since 2006. She also gives lectures and workshops to the staff of hospitals and veterinary clinics. She works as a specialist at DMV Center, a veterinary hospital. She is the author of the book *Deuil Animalier*.

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Hisao Osada, PhD, is a professor of psychology at J F Oberlin University Graduate School of Gerontology in Tokyo, Japan. He received an MA from Waseda University and a PhD from Medical School of Yamagata National University. His professional activities include practicing, researching, and teaching in the fields of clinical psychology, health psychology, and gerontological psychology from the perspective of lifespan developmental psychology. He is aiming to contribute not only to clients, who are subject to counseling and psychotherapy but also from a psychological standpoint to maintain and improve the mental health and quality of life of local residents.

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Betty J. Carmack, RN, EdD, professor emerita, University of San Francisco School of Nursing, has worked in the area of pet loss since 1982. She initiated and led the monthly pet loss support groups at the SF SPCA from 1982–2015. In addition to working with individuals grieving the death of their pets, she has worked with the staff of the humane societies, veterinary hospitals, and animal care organizations vis-à-vis their grief and stress issues as these relate to their work with and care of animals. She has authored articles, presented at numerous professional conferences, and engaged in research related to pet loss. She is the author of the book *Grieving the Death of a Pet*. She served on the Board of Trustees of Pets Unlimited and the Advisory Board of VET Street Outreach Services.

Nigel P. Field, PhD, was a professor of psychology at Palo Alto University from 1994 until his death in 2013. He is best known as one of the earliest and most sophisticated investigators of the continuing bond that the bereaved often maintain with their deceased loved ones, pioneering in methods for tracking variations in this sense of connection using self-report scales, time-sampling procedures over the course of the day and week, and novel recording and analysis of empty-chair monologues to a deceased spouse. In these and other studies of adaptation to the death of a spouse, pet loss, and cultural factors in grieving, Nigel Field left a substantial legacy of over 60 published papers that will continue to shape future scholarship and research in the study of grief and loss.

Wendy Packman, JD, PhD, is a professor of Psychology at the Palo Alto University. Dr. Packman has studied, presented and written extensively on sibling bereavement and continuing bonds, the impact of a child's death on parents, and the psychological sequelae of pet loss. She is the primary investigator of an international cross-cultural study examining the use of continuing bonds following a pet's death.