Negative Emotions in Mexican, Puerto Rican and Spanish Hospitals: A Multinational Assessment of Service Settings

STRUCTURED ABSTRACT

Keywords: negative emotions, service receiver, service provider, Mexico, Puerto Rico, Spain.

Paper type: Research paper

Purpose:
To assess negative emotions in Mexican, Puerto Rican and Spanish service settings in the hospital industry. To attempt to validate previous findings in existing theory and previous studies across three national samples. To describe the similarities and differences in negative emotions between Mexican, Puerto Rican and Spanish service settings.

Design/Methodology/approach:
The current study comprised Mexicans, Puerto Ricans and Spaniards who experienced a service failure (i.e. critical incident) in hospital settings within the last year. A descriptive research design was followed and a self-administered questionnaire was applied to gather the data from respondents.

Findings:
The three dimensional construct of negative emotions commonly identified in existing theory and previous studies of negative emotions turned out to be four in the current multinational study.

Research limitations/implications:
The four-dimensional construct of negative emotions thus revealed is relevant and valuable to research. A number of research limitations are provided, all of which provide opportunities for further research in assessing negative emotions in service settings.

Practical implications:
Service providers need to manage and deal with the negative emotions in service failures in an appropriate manner. It is necessary that the front line staff identify and understand the reasons behind service receiver’s negative emotions in service failures, and that they act accordingly in order to reduce the intensity of critical incidents and the overall negative consequences.

Originality/value:
The negative emotions assessed provide a fruitful contribution and do not only complement additional facets to existing theory and previous studies of negative emotions in service settings; they also fortify the notion that further research is required to gain an enhanced understanding and additional insights into them across countries and cultures, just as it is crucial to manage the occurrence of negative emotions in critical incidents accurately.
INTRODUCTION
Research indicates that negative emotions are the outcome of critical incidents and that they influence loyalty in service settings (e.g. Wong, 2004; Roos et al., 2009). Negative emotions in service settings also impact complaining behavior and word-of-mouth (e.g. Liljander and Strandvik, 1997; Bougie, Pieters, and Zeelenberg, 2003; White and Yu, 2005). Furthermore, negative emotions affect re-purchase intentions and attitudes in service settings (e.g. Davidow, 2003). In sum, negative emotions may cause undesired and severe outcomes in service settings.

Previous research in service settings has often been limited to comprising a few negative emotions, though recent research has been considering larger sets of negative emotions (e.g. Petzer et al., 2012; Svaeri et al., 2011). There is a necessity to assess this gap of negative emotions in critical service encounters and how they should be measured, and also the relationships between them (e.g. Bagozzi et al., 1999). Further research on negative emotions is required (Wong, 2004). Petzer et al. (2012) and Svaeri et al. (2011) both concluded that a construct of negative emotions consists of three dimensions, namely: (i) self, (ii) other and (iii) situation.

Studies on negative emotions are commonly based upon a specific service industry in one country (Svaeri et al., 2011) or, in rarer cases, two different industries in the same country (Petzer et al., 2012). There are to our knowledge no previous studies on negative emotions in service settings across and between countries. Subsequently, the current research focuses on negative emotions in the same service setting across three different, but similar, countries.

The first objective is to assess negative emotions in Mexican, Puerto Rican and Spanish service settings in the hospital industry. The second objective is to attempt to validate previous findings in existing theory and previous studies across three national samples. The third objective is to describe similarities and differences of negative emotions between Mexican, Puerto Rican and Spanish service settings. In sum, the current research focuses on common denominators of negative emotions on an international level that have so far not been considered in existing theory and previous studies. This article provides a relevant and complementary contribution to the quests in literature on additional aspects of research in terms of negative emotions (e.g. Bagozzi et al., 1999; Petzer et al., 2012; Svaeri et al., 2011).

The rest of the article is structured as follows: (i) existing theory and previous studies on negative emotions in service setting are described; (ii) methodology and empirical findings are presented; (iii) implications of negative emotions in service settings are addressed; and (iv) concluding thoughts, research limitations and research proposals for the future are provided.

FRAME OF REFERENCE
The outcome of critical incidents in service settings in terms of negative emotions varies between industries (Petzer et al., 2012). A core question is whether negative emotions are the same across the same service settings, but in different countries (i.e. different in one service setting to another)? Is it possible that the negative emotions that appear to be valid for a critical incident in one country will be the same as in another country? Previous studies have
identified a variety of negative emotions, but none have specifically assessed them across the same service setting, only across different countries.

A construct and its dimensions of negative emotions across countries may be valuable (Aggarwal et al., 2005) in assisting to identify causes and outcomes of critical incidents in service settings. If there is a difference between negative emotions in service settings across different countries, or a different dimensional construct of negative emotions revealed, this adds further to the challenge of managing and understanding service encounters accurately and appropriately (Hirschman, 1970; Singh, 1988). In addition, existing theory needs to be updated on negative emotions in service settings.

**Framing Emotions**

Emotions have for long been seen as consisting of different dimensions (e.g. Nowlis and Nowlis (1956). Petzer et al. (2012) and Svaeri et al. (2011) compile thorough reviews of studies on emotions (see Table 1). We have built our current cross-country study on their frame of reference. Svaeri et al. (2011) conclude that a frequent way of classifying emotions is by dividing them into positive and negative emotions (Chaudhuri, 1998). Emotions are also classified into reactive and goal-directed emotions (Bagozzi et al., 1995).

The dimensions of emotions used in existing theory and previous studies are in some cases based upon dichotomous constructs such as positive and negative emotions (e.g. Oliver, 1994; Phillips and Baumgartner, 2002). Others are based upon multi-dimensional constructs (Westbrook and Oliver, 1991; Oliver, 1993; Liljander and Strandvik, 1997).

Ellsworth (1985) and Dubé et al. (1996) classify negative emotions into two groups caused by: (i) oneself and (ii) others or other circumstances. A third category was introduced by Westbrook (1987) considering the service provider. Oliver (1993) relabeled them as; (i) external (i.e. mistakes caused by others); (ii) situational (i.e. mistakes caused by unfortunate events; and (iii) internal (i.e. mistakes caused by oneself). Svaeri et al. (2011) argue that the existing theory and previous studies support the foundation that there is a three-dimensional construct of emotions consisting of: (i) external, (ii) internal and (iii) situational factors.

The external dimension relates to those emotions derived from of wrongdoings generated by the service provider. The service receiver’s negative emotions are explained by an external source. The internal dimension relates to those emotions derived from wrongdoings by the service receiver himself or herself. The situational dimension relates to those emotions that are not derived from either the service provider or the service receiver. This three-dimensional construct has been tested successfully in recent studies by Petzer et al. (2012) and Svaeri et al. (2011) in different industries (i.e. tourism, airports and hospitals) with the broad selection of emotions that have been suggested in literature (e.g. Kampf et al., 2003; Phillips and Baumgartner, 2002; Mano et al., 1993).

<table>
<thead>
<tr>
<th>Existing Theory and Previous Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russel (1980)</td>
</tr>
<tr>
<td>(i) pleasure/displeasure and (ii) arousal/boredom.</td>
</tr>
<tr>
<td>Ellsworth (1985)</td>
</tr>
<tr>
<td>(i) self-other responsibility continuum, (ii) other (anger, disgust and contempt) and (iii) self (fear and sadness).</td>
</tr>
<tr>
<td>Westbrook (1987)</td>
</tr>
<tr>
<td>(i) positive emotions, (ii) those reflecting an underlying attribution of causal agency to the eliciting stimulus, (iii) those reflecting the situation, and (iv) those reflecting an underlying attribution of causal agency to him or herself.</td>
</tr>
<tr>
<td>Westbrook and Oliver (1991)</td>
</tr>
<tr>
<td>(i) happy/content, (ii) pleasant surprise, (iii) unemotional, (iv) unpleasant surprise, and (v) angry/upset.</td>
</tr>
<tr>
<td>Mano and Oliver (1993)</td>
</tr>
<tr>
<td>(i) fear, (iii) bad mood, (iv) arousal, (v) bored, (vi) calm, (vii) surprise, (viii) guilt, (ix) quite, and (x) pleasure.</td>
</tr>
<tr>
<td>Oliver (1993)</td>
</tr>
<tr>
<td>(i) positive affect, (ii) negative affect, (iii) external (mistakes made by provider/others), (iv) internal (consumer mistakes that are internally attributed), and (v) situational (unfortunate events that are situational attributed).</td>
</tr>
<tr>
<td>Oliver (1994)</td>
</tr>
<tr>
<td>(i) positive affect and (ii) negative affect.</td>
</tr>
<tr>
<td>Dubé and Trudeau (1996)</td>
</tr>
<tr>
<td>(i) attributed negative emotions, (ii) attributed positive emotions, and (iii) other attributed</td>
</tr>
</tbody>
</table>
emotions.

Liljander and Strandvik (1997) (i) positive affect, (ii) guilty / humiliation, (iii) anger/depression, (iv) positive emotions, and (v) negative emotions.

Edwardson (1998) (i) embarrassment, (ii) anger, (iii) frustration and (iv) irritation.


Zeelenberg and Pieters (1999) (i) regret and (ii) disappointment.

Dubé and Kalyani (2000) (i) valence (positive/negative), (ii) agency (non-differentiated, other attributed, situation-attributed), (iii) feeling state (joy, anger, sadness and guilt), (iv) expression (laughing, excited voice, frowning, rigid movement, drooping posture, slow voice, blush and apologetic), and (v) behavior (friendly, avoidance, antagonistic and assistance seeking).

Mattila and Enz (2002) (i) customers mood state, and (ii) displayed emotions

Phillips and Baumgartner (2002) (i) positive consumption emotions (active, calm, alive, peaceful, cheerful, warm-hearted, delighted, happy, joyous, relaxed, light-hearted, at rest, pleased, stimulated and excited) and (ii) negative consumption emotions (critical, depressed, disgusted, offended, skeptical, sad, upset and distressed).


Krampf et al. (2003) (i) anger/delight (angry, mad, disgusted, enraged, afraid, delighted, happy, fearful, discouraged, scared, joyful, downhearted, scornful, sad and contemptuous), (ii) surprise (amazed, astonished, surprised, alert and attentive), and (iii) shame (bashful, shy, guilty and blameworthy).

McCull-Kennedy and Sparks (2003) (i) customer feels angry, (ii) customer feels contented, (iii) customer feels delighted, based on customer’s statements.


Kim and Smith (2005) (i) angry, (ii) frustrated and (iii) irritated.

DeWitt, Nguyen and Marshall (2008) (i) positive emotions (employment, joy, pleasure and happiness) and (ii) negative emotions (enraged, incensed, furious, irate and distressed)

Schoefer and Diamantopoulos (2008) (i) positive emotions (of joyful, happy, proud, warm feelings and being valued) and (ii) negative emotions (angry, in bad mood, upset, sad and annoyed)


Varela-Neira, Vasques-Casielles & Iglesias (2010) Studied emotions including emotions, anger, humiliation and disappointment.

Svaeri, Svensson, Slaatten, and Edvardsson (2011) (i) self, (ii) other and (iii) situation

Petzer, de Meyer, Svaeri and Svensson (2012) (i) self, (ii) other and (iii) situation

Table 1: Framing Emotions – Adopted from Petzer et al. (2012) and Svaeri et al. (2011).

Framing Negative Emotions

<table>
<thead>
<tr>
<th>Self</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shame</td>
<td>Westbrook (1987); Westbrook and Oliver (1991); Oliver (1993); Svaeri et al. (2011); Petzer et al. (2012).</td>
</tr>
<tr>
<td>Guilt</td>
<td>Westbrook (1987); Westbrook and Oliver (1991); Oliver (1993); Oliver (1993); Liljander and Strandvik (1997); Dubé and Kalyani (2000); Krampf et al. (2003); White and Yu (2005); Svaeri et al. (2011); Petzer et al. (2012).</td>
</tr>
<tr>
<td>Regret</td>
<td>Zeelenberg and Pieters (1999); White and Yu (2005); Svaeri et al. (2011); Petzer et al. (2012).</td>
</tr>
<tr>
<td>Sadness</td>
<td>Ellsworth (1985); Westbrook and Oliver (1991); Mano, Haim and Oliver (2993); Oliver (1993); Oliver (1994); Dubé and Kalyani (2000); Phillips and Baumgartner (2002); Krampf et al. (2003); Chebat, Davidow, and Codjovi (2005); Schoefer and Diamantopoulos (2008); Svaeri et al. (2011); Petzer et al. (2012).</td>
</tr>
<tr>
<td>Loneliness</td>
<td>Dubé and Trudeau (1996); Smith and Reynolds (2009); Svaeri et al. (2011); Petzer et al. (2012).</td>
</tr>
</tbody>
</table>
Unhappy Mano, Haim and Oliver (1993).

Depression Dubé and Trudeau (1996); Liljander and Strandvik (1997); Phillips and Baumgartner (2002); White and Yu (2005); Svaeri et al. (2011); Petzer et al. (2012).

External

Anger Ellsworth (1985); Westbrook (1987); Westbrook and Oliver (1991); Oliver (1993); Liljander and Strandvik (1997); Edwardson (1998); Brown and Kirmani (1999); Dubé and Kalyani (2000); Bougie et al. (2003); Krampf et al. (2003); McColl-Kennedy and Sparks (2003); Chebat, Davidow and Codjovi (2005); Young and Smith (2005); Schoefer and Diamantopoulos (2008); Varela-Neira et al. (2010); Svaeri et al. (2011); Petzer et al. (2012).

Irritation Mano, Haim and Oliver (1993); Edwardson (1998); Mattila and Enz (2002); Young and Smith (2005); DeWitt, Nguyen and Marshall (2008); Svaeri et al. (2011); Petzer et al. (2012).

Rage Brown and Kirmani (1999); Krampf et al. (2003); DeWitt, Nguyen, and Marshall (2008); Svaeri et al. (2011); Petzer et al. (2012).

Discouragement Dubé and Trudeau (1996); Svaeri et al. (2011); Petzer et al. (2012).

Frustration Dubé and Trudeau (1996); Edwardson (1998); Young and Smith (2005); Svaeri et al. (2011); Petzer et al. (2012).

Discouragement Dubé and Trudeau (1996); Svaeri et al. (2011); Petzer et al. (2012).

Disempowerment Svaeri et al. (2011); Petzer et al. (2012).

Distress Westbrook (1987); Mano, Haim and Oliver (1993); Phillips and Baumgartner (2002); DeWitt, Nguyen, and Marshall (2008); Svaeri et al. (2011); Petzer et al. (2012).

Situational

Fear Ellsworth (1985); Westbrook (1987); Westbrook and Oliver (1991); Mano and Oliver (1993); Mano, Haim and Oliver (1993); Oliver (1993); Brown and Kirmani (1999); Krampf et al. (2003); Smith and Reynolds (2009); Svaeri et al. (2011); Petzer et al. (2012).

Worry Dubé and Trudeau (1996); Svaeri et al. (2011); Petzer et al. (2012).

Anxiety Mano, Haim and Oliver (1993); Dubé and Trudeau (1996); Chebat, Davidow and Codjovi (2005); Svaeri et al. (2011); Petzer et al. (2012).

Nervousness Mano, Haim and Oliver (1993); Oliver (1994); Brown and Kirmani (1999); Svaeri et al. (2011); Petzer et al. (2012).

Table 2: Framing Negative Emotions – Adopted from Petzer et al. (2012) and Svaeri et al. (2011).

There is a broad use of emotional dimensions in service settings in existing theory and previous studies (see Table 1). Nevertheless, Svaeri et al. (2011) and Petzer et al. (2012) compile the negative emotions revealed in literature into three dimensions (see Table 2). Petzer et al. (2012) conclude that there are no existing theory or previous studies on the dimensions of negative emotions across different service settings in the same study which they performed simultaneously in the airline and hospital industries. We must therefore conclude that there are no previous studies on the dimensions of negative emotions across different countries in the same study.

The previous studies listed in Table 1 show that different service settings in different countries have been assessed, but no comparisons across industries and countries have so far been performed. In line with the reviews and compilations of negative emotions by Petzer et al. (2012) and Svaeri et al. (2011), the current research in service settings of Mexican, Puerto Rican and Spanish hospitals applies the three-dimensional construct of negative emotions as in Table 1: (i) internal, (ii) external and (iii) situational.

**Healthcare Industry**

The healthcare industry is a significant one worldwide, and the consumer expenditure on hospitals reached $1.3 trillion in 2012 (Euromonitor, 2013). Many efforts are related to decrease operating costs while increase efficiency and productivity (Maniadakis, Hollingsworth and Thanassoulis, 1999), expand access and improve service quality (Marley,
Collier and Meyer, 2004), in order to ensure organizational survival. Since the mid 90’s, the emphasis in healthcare management is directed through the patient experience or “patient journey” of the service delivery process (Laing, 2002). As indicate Mercier and Fikes (1997), the concept of the patient as a “customer” goes beyond an individual who requires medical attention, but that is a customer with needs and expectations.

Much of the emphasis in recent research in assess quality perceptions have been undertaken in the hospital sector (Aagja & Garg, 2010; Akter, et. al, 2008; Baker and Taylor, 1997; Cengiz and Kirkbir, 2007, Friesner and Rosenman, 2005). However, these quality perceptions could be different across countries (Aagja & Garg, 2010). Many of studies have been done in developed countries (eg. Laing, 2002; Maniadakis, et al, 1999), with the exception of the Indian Health Care studies (e.g. Aagja & Garg, 2010; Chahal and Kumari, 2010), which cannot be generalized to the Iberoamerican context. Also, is had been contended that constructs of service quality that are developed in one culture might not be applicable in another culture.

This industry has a high inter-personal interaction during the service delivery and has the greatest effect on service quality perceptions (Chahal and Kumari, 2010) and a strong influence on patients’s satisfaction (Bellou and Thanopoulos, 2006). These interactions are the most crucial element in service quality in hospitals (Bigné, Moliner and Sanchez, 2003) and include patients, physicians, third-party payers, and staff of the hospital (Mercier and Fikes, 1997). Also, as the experience of visit a hospital is a highly emotional experience for most people (Dube and Menon, 1998), understand patient emotions is a critical success factor in the outcome of healthcare. Some researches about emotions in patients are related to the hospitalization process (Dube and Menon, 1998). Research has found that negative emotions experience by patients in a negative service encounter contribute to compliance behavior and satisfaction. Oliver (1994) suggests that negative emotions in a negative encounter may be detrimental to the patient satisfaction.

METHODOLOGY
The current study comprised Mexicans, Puerto Ricans and Spaniards who experienced a service failure (i.e. a critical incident) in hospital settings within the last year. A descriptive research design was followed and a self-administered questionnaire was applied to gather the data from respondents.

The researchers applied convenience sampling, and the pre-screening of respondents was included to verify that respondents were appropriate to participate in the study. The pre-screening of respondents guided the researchers in selecting respondents who have had experienced a negative incident in hospital settings within the last year.

The items included in the assessed critical incidents have been derived from existing theory and previous studies on negative emotions (see Table 1). Relative scales and a “not relevant” option were used (since it was most likely that a respondent would not have experienced all the negative emotions included).

The survey followed the process from negative incident to the emotional responses of the incident. A total number of 937 useable questionnaires was obtained in hospital settings across samples: (i) 250 in Mexico; (ii) 385 in Puerto Rico; and (iii) 302 in Spain. To keep track on missing values, pair-wise exclusion was applied. Table 2 shows that where none or
very few missing values on each item across the samples does provide satisfactory internal validity.

**EMPIRICAL FINDINGS**
The results of each item used in the questionnaire in Mexico, Puerto Rico and Spain are shown in Table 3. Respondents were asked to what degree on a seven-point Likert-scale - which was anchored at (7) strongly agree and (1) strongly disagree - they experienced each negative emotion (see items in Table 3) during the negative incident.
Exploratory Factor Analysis

To assess the underlying pattern of the items of negative emotions in hospital settings, exploratory factor analysis (Norusis, 1993 and 1994) was used. Principal component method was used for factor extraction. An orthogonal approach of the varimax method was used to rotate the initial factor solution. Table 4 shows the outcome of satisfactory summary statistics of performed factor analyses across Mexican, Puerto Rican and Spanish samples. In the process of performing and purifying exploratory factor analyses, four items (i.e. embarrassment, depression, discouragement and disempowerment) have been omitted in all three samples in the search for the common denominators of items across samples.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mexico</th>
<th>Puerto Rico</th>
<th>Spain</th>
<th>ANOVA-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard deviation</td>
<td>Mean</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>1) Fear</td>
<td>241 3.46</td>
<td>2.50</td>
<td>382 3.40</td>
<td>2.32</td>
</tr>
<tr>
<td>2) Worry</td>
<td>243 4.24</td>
<td>2.58</td>
<td>381 4.92</td>
<td>2.02</td>
</tr>
<tr>
<td>3) Anxiety</td>
<td>243 3.47</td>
<td>2.40</td>
<td>381 4.70</td>
<td>2.16</td>
</tr>
<tr>
<td>4) Nervousness</td>
<td>242 4.08</td>
<td>2.61</td>
<td>382 4.18</td>
<td>2.26</td>
</tr>
<tr>
<td>5) Anger</td>
<td>241 3.88</td>
<td>2.61</td>
<td>379 4.64</td>
<td>2.27</td>
</tr>
<tr>
<td>6) Irritation</td>
<td>240 3.85</td>
<td>2.53</td>
<td>383 4.86</td>
<td>2.12</td>
</tr>
<tr>
<td>7) Rage</td>
<td>241 3.75</td>
<td>2.59</td>
<td>383 4.84</td>
<td>2.23</td>
</tr>
<tr>
<td>8) Shame</td>
<td>243 2.46</td>
<td>2.16</td>
<td>381 2.55</td>
<td>2.06</td>
</tr>
<tr>
<td>9) Guilt</td>
<td>241 1.80</td>
<td>1.70</td>
<td>381 1.92</td>
<td>1.64</td>
</tr>
<tr>
<td>10) Regret</td>
<td>242 2.72</td>
<td>2.22</td>
<td>380 3.04</td>
<td>2.23</td>
</tr>
<tr>
<td>11) Embarrassment</td>
<td>242 3.51</td>
<td>2.50</td>
<td>381 2.80</td>
<td>2.14</td>
</tr>
<tr>
<td>12) Sadness</td>
<td>242 3.60</td>
<td>2.50</td>
<td>379 2.93</td>
<td>2.20</td>
</tr>
<tr>
<td>13) Loneliness</td>
<td>242 2.91</td>
<td>2.50</td>
<td>380 2.78</td>
<td>2.15</td>
</tr>
<tr>
<td>14) Unhappy</td>
<td>242 2.99</td>
<td>2.44</td>
<td>379 2.93</td>
<td>2.20</td>
</tr>
<tr>
<td>15) Depression</td>
<td>243 3.03</td>
<td>2.43</td>
<td>381 2.92</td>
<td>2.19</td>
</tr>
<tr>
<td>16) Discouragement</td>
<td>241 3.70</td>
<td>2.57</td>
<td>383 4.32</td>
<td>2.18</td>
</tr>
<tr>
<td>17) Frustration</td>
<td>241 3.88</td>
<td>2.56</td>
<td>381 4.81</td>
<td>2.16</td>
</tr>
<tr>
<td>18) Disempowerment</td>
<td>242 3.77</td>
<td>2.57</td>
<td>383 4.31</td>
<td>2.28</td>
</tr>
<tr>
<td>19) Distress</td>
<td>242 3.76</td>
<td>2.50</td>
<td>383 4.35</td>
<td>2.24</td>
</tr>
</tbody>
</table>

Table 3: Univariate and Comparative Analysis of Questionnaire Items.

An ANOVA of the means for each country was run. Results showed that exist significant differences in intensity of the emotions between countries in all the emotions, with the exception of shame, regret and depression. The other 16 emotions are significant at p<0.05: fear, (F=5.041), worry (F=12.514), anxiety (F=22.642), nervousness (F=19.822), anger (F=32.315), irritation (F=27.670), rage (F=27.670), guilt (F=3.175), embarrassment (F=70.819), sadness (F=14.617), loneliness (F=13.788), unhappy (31.080), discouragement (F=6.628), frustration (F=24.841), disempowerment (F=5.965) and distress (F=11.993). Post
hoc Duncan analyses showed that emotions as regret, shame, sadness, loneliness, unhappy, anger, frustration, distress, fear, anxiety and nervousness are significantly higher in Spain than Puerto Rico and Mexico.

As demonstrated by observing the means, worry, nervousness, irritation, rage and frustration are the highest in negative responses by the customers of the three countries. These situational and external emotions are deeply touched when a customer feels there hasn't been any justice in relation to the problem or situation he had (Tax, Brown, & Chandrashenkar, 1998). It is also important to note that Internal Reactions as shame and guilt received the lowest scores suggesting that customers understand that the fault in the service is not their fault.

As shown in Tables 5-7, the results from performed factor analyses were partially in relation to existing theory and previous studies regarding negative emotions in hospital settings in Mexico, Puerto Rico and Spain. An interesting deviation (i.e. falsification) from existing theory and previous research is that three factor solutions did not turn out across any of the Mexican, Puerto Rican and Spanish samples. A four-dimensional factor solution did however turn out across the samples. In addition, the item ‘distress’ did not load as expected in existing theory and previous studies (e.g. (Petzer et al., 2012; Svaeri et al., 2011). Possible explanations for these deviations are discussed in the section of implications that follow.

Four factors were identified across the Mexican, Puerto Rican and Spanish samples as shown in Tables 5-7. Factor 1 consisted of: (i) nervousness, (ii) worry, (iii) fear, (iv) anxiety and (v) distress. They fit well into existing theory and previous studies on negative emotions related to the situation and are therefore labeled as ‘Situational’ (Petzer et al., 2012; Svaeri et al., 2011; Dubé et al., 1996; Oliver, 1993; Westbrook, 1987). Factor 2 consisted of: (i) irritation, (ii) anger, (iii) frustration and (iv) rage. It is labeled ‘External’ (Petzer et al., 2012; Svaeri et al., 2011; Oliver, 1993; Westbrook, 1987). Factors 3 included: (i) loneliness, (ii) sadness and (iii) unhappiness. It is labeled ‘Gloominess’ since it reflected a sub-dimension of the emotions of previous research findings pertaining to the “self” or “internal” emotions (Petzer et al., 2012; Svaeri et al., 2011; Oliver, 1993; Westbrook, 1987). Factors 4 included: (i) guilt, (ii) shame and (iii) regret. It was labeled ‘Self-Reproach’ since it also reflected a sub-dimension of emotions of previous research findings pertaining to the “self” or “internal” emotions (Petzer et al., 2012; Svaeri et al., 2011; Oliver, 1993; Westbrook, 1987).

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Mexico</th>
<th>Puerto Rico</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMO – i.e. overall MSA</td>
<td>0.910</td>
<td>0.882</td>
<td>0.893</td>
</tr>
<tr>
<td>Bartlett’s Test – Chi-Square</td>
<td>2552.157</td>
<td>2688.013</td>
<td>2197.558</td>
</tr>
<tr>
<td>Degrees of Freedom Significance</td>
<td>105</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Range – Measures of Sampling Adequacy</td>
<td>0.70 – 0.96</td>
<td>0.79 – 0.94</td>
<td>1.68 – 0.94</td>
</tr>
</tbody>
</table>

Table 4: Summary Statistics – Factor Analyses.

As shown in Table 5-7, the results from performed factor analyses were partially in relation to existing theory and previous studies regarding negative emotions in hospital settings in Mexico, Puerto Rico and Spain. An interesting deviation (i.e. falsification) from existing theory and previous research is that three factor solutions did not turn out across any of the Mexican, Puerto Rican and Spanish samples. A four-dimensional factor solution turned out across samples. In addition, the item ‘distress’ did not load as expected in existing theory and
previous studies (e.g. (Petzer et al., 2012; Svaeri et al., 2011). Possible explanations for these deviations are discussed in the section of implications that follow.

Four factors were identified across the Mexican, Puerto Rican and Spanish samples as shown in Tables 5-7. Factor 1 consisted of the items: (i) nervousness, (ii) worry, (iii) fear, (iv) anxiety and (v) distress. They fit well into existing theory and previous studies on negative emotions related to the situation and is therefore labeled as ‘Situational’ (Petzer et al., 2012; Svaeri et al., 2011; Dubé et al., 1996; Oliver, 1993; Westbrook, 1987). Factor 2 consisted of the items: (i) irritation, (ii) anger, (iii) frustration and (iv) rage. It is labeled ‘External’ (Petzer et al., 2012; Svaeri et al., 2011; Oliver, 1993; Westbrook, 1987). Factors 3 included the items: (i) loneliness, (ii) sadness and (iii) unhappy. It is labeled ‘Gloominess’ since it reflected a sub-dimension of the emotions of previous research findings pertaining to the “self” or “internal” emotions (Petzer et al., 2012; Svaeri et al., 2011; Oliver, 1993; Westbrook, 1987). Factors 4 included the items: (i) guilt, (ii) shame and (iii) regret. It was labeled ‘Self-Reproach’ since it also reflected a sub-dimension of emotions of previous research findings pertaining to the “self” or “internal” emotions (Petzer et al., 2012; Svaeri et al., 2011; Oliver, 1993; Westbrook, 1987).
Table 5: Outcome of Factor Analysis – MEXICO.

The outcome of factor analysis for the Mexican sample was satisfactory (see Table 5): (i) the average factor loading for each dimension was above 0.7; (ii) the explained variance per factor ranged between 13-26% per factor; (iii) the total explained variance was almost 80%; (iv) the ranges of commonalities per item were between 0.64-0.85; and (v) the estimates of reliability per factor were between 88-92% except for factor 4 at 73%.
Table 6: Outcome of Factor Analysis – PUERTO RICO.

The outcome of factor analysis for the Puerto Rican sample was in part less satisfactory (see Table 6): (i) the average factor loading for each dimension was above 0.7 except for factor 4 which was slightly below due to one weak item (i.e. regret); (ii) the explained variance per factor ranged between 11-20% per factor; (iii) the total explained variance was almost 70%; (vi) the ranges of commonalities per items were between 0.60-0.83 except the item ‘regret’ in factor 4; and (v) the estimates of reliability per factor were between 79-86% except for factor 4 at 66%.

Table 7: Outcome of Factor Analysis – SPAIN.

The outcome of factor analysis for the Spanish sample was satisfactory (see Table 7): (i) the average factor loading for each dimension was above 0.7; (ii) the explained variance per factor ranged between 12-23% per factor; (iii) the total explained variance was almost 70%; (vi) the ranges of commonalities per items were between 0.54-0.84; and (v) the estimates of reliability per factor were between 80-88% except for factor 4 at 61%.

MANAGERIAL IMPLICATIONS AND IMPLICATIONS FOR RESEARCH

The current multinational study provides an assessment of dimensions regarding the construct of negative emotions that so far has not been considered in existing theory and previous studies. We argue that the four-dimensional construct of negative emotions is a relevant and valuable finding that generates a series of managerial implications and implications for research as well as theory.
The role of negative emotions in service settings has a direct impact on a service receiver’s immediate reaction and subsequent behavior (Oliver, 1997). Given the high level of human involvement in service settings in the hospital industry, the intensity of negative emotions is elevated in service failures and thus the role of negative emotions in a service encounter is a key aspect in a service receiver’s future reaction and behavior.

Hospitals need to manage and deal with the negative emotions in service failures in an appropriate manner. It is necessary that front line staff identify and understand the reasons behind a service receiver’s negative emotions in service failures, and act accordingly in order to reduce the intensity of critical incidents and the overall negative consequences for the hospital. A hospital may train its staff in identifying the signs that indicate what kind of negative emotions the service receiver experiences, and they may also receive guided response procedures depending upon the type of negative emotions that the service receiver experiences as a consequence of the service failure.

Then too a hospital may offer an apology to the service receiver regarding external negative emotions. Boshoff and Leong, (1998) suggest that apologies make service receivers feel that their experienced and perceived service failure is taken care of and that the service provider is paying attention to them. A hospital may proactively give an explanation of why the service failure occurred and try to make the service receiver understand the front line staff’s position regarding situational negative emotions (Gelbrich, 2010). Finally, a hospital may show empathy towards its patients by helping them reduce the feeling of their own mistake and consequently the negative emotions that followed from the critical incident regarding internal negative emotions.

The ability of front line staff to identify and understand the negative emotions involved in service failures is crucial. It is also crucial to elaborate guided responses to assist the front line staff. If these responses are in place it would help the staff to be faster and better in resolving the service failures, and would therefore reduce the undesirable consequences of negative emotions. Evidently the first step would be to accurately identify and assess the service receiver’s negative emotions.

The three dimensions commonly identified in existing theory and previous studies of negative emotions turned out to be four in our multinational study. More precisely, it was the Self-dimension that needed to be divided into two dimensions: (i) Self-1/’Gloominess’ and (ii) Self-2/’Self-Reproach’. Both dimensions share an internal focus on the perceived service failure. The main difference is based upon whether or not the service receiver blames him- or herself for the service failure: (i) Self-1 consists of loneliness, sadness, and unhappiness felt by the service receiver, all of which imply the service receiver’s feelings of melancholy and solitude. It is not a self-caused set of negative emotions, and has therefore been labeled ‘Gloominess’. (ii) Self-2 includes guilt, shame and regret felt by the client or customer, all of which imply the service receiver’s feelings of self-accusation and self-censure of the actions by holding him- or herself responsible for them; this has been labeled ‘Self-Reproach’. We interpret and believe that the dimension of ‘Self-Reproach’ generates a stronger intensity of negative emotions related to the service receiver’s own actions and perceived fault than does ‘Gloominess’. It is an important insight for service providers in their efforts to manage negative emotions caused by service failures in service encounters. Subsequently, we believe it is an interesting and important finding that the current multinational study has revealed two Self-dimensions rather than one.
We believe too that there are several possible reasons to our findings of a four-dimensional construct of negative emotions. For example, Mexico, Puerto Rico and Spain are all Spanish-speaking countries, and as such the Spanish language used in the questionnaire with respondents may have influenced the outcome. We have striven to proceed accurately in our translations and back-translations for each country. For example, the Spanish word used in each item has not been identical in all items and countries, but a couple of items had to be translated differently to match their original meaning in English.

We also found that the item ‘distress’ does not fit at all into the ‘external’ dimension of existing theory and previous studies (e.g. Petzer et al., 2012; Svaeri et al., 2011), but belongs to the ‘situational’ dimension across all assessed samples. A possible reason may be that this negative emotion connects more strongly with the ‘situational’ dimension in the Spanish language in the way it was felt and understood.

Aspects related to one’s health are high, and therefore it seems logical to place a distinction between feeling bad through one’s own errors and feeling guilty through the errors of others. When the error depends upon the service receiver who, although feeling guilty, does not feel ashamed, the shame and regret of his or her actions may generate different reactions and behaviors. It thus requires the service provider to respond differently.

We think that our four-dimensional construct of negative emotions generates a series of managerial implications and implications for research as well as for theory. The fact that the self-dimension is divided into two has important implications, since they each require different responses from the front line staff. One can probably estimate that the answer from the patient in each situation regarding the relationship to future reactions and behaviors towards the benefits offered by a hospital service will be different; thus, negative emotions based on the fault have perhaps a different impact on dissatisfaction or loyalty.

An important implication for research is that the common three-dimensional construct of negative emotions may not be universally applicable, but dependent on contextual factors surrounding the service settings and service encounters. It also indicates that, though there are insights in existing theory and previous studies, research still needs to dig in deeper to gain a thorough understanding of negative emotions caused by service failures.

**CONCLUDING THOUGHTS AND PROPOSITIONS FOR THE FUTURE**

One of the aims of this multinational study was to assess negative emotions in Mexican, Puerto Rican and Spanish service settings in the hospital industry. This we have done, and the empirical findings revealed some unexpected findings regarding the dimensional outcome. Another aim was to attempt to validate previous findings of a three-dimensional construct of negative emotions in existing theory and previous studies across three national samples. Unexpectedly, the three dimensional construct of negative emotions recently tested and validated (e.g. by Petzer et al., 2012; Svaeri et al., 2011) in previous studies across different industries (i.e. tourism, airline and hospital) and countries (i.e. Norway and South Africa) was falsified in Mexican, Puerto Rican and Spanish hospital service settings. A final aim was to describe the similarities and differences of negative emotions between Mexican, Puerto Rican and Spanish service settings; mostly this revealed similarities, but there were also several differences (see Table 3).
The current multinational study of negative emotions resulting from service failures constitutes a challenging area of research, since it may influence the reaction and behavior of a service receiver. After a service failure, a service receiver seeks out its causes and, depending on what is found, may experience different types of negative emotions that condition, determine and influence his or her reaction and behavior in line with the sequence ‘attribute-affect-behavior’ (Oliver, 1997). This relates to important aspects in service failures. For example, the service provider’s competitiveness and reputation can be seriously damaged by these negative emotions. The service provider’s ability to manage negative emotions suitably is crucial, where the first step should be to identify and assess such negative emotions. Identifying and understanding the negative emotions in critical incidents, and having guiding responses in place, would assist in resolving the service failure faster better and more quickly, and thereby reduce its negative consequences.

A principal contribution from the current multinational study in Mexico, Puerto Rico and Spain is that the empirical findings falsified the three-dimensional construct of negative emotions in existing theory and previous studies (Petzer et al., 2012; Svaeri et al., 2011). The empirical findings provide to some degree support for a four-dimensional construct. The construct consists of the following dimensions: (i) situational; (ii) external; (iii) gloominess; and (iv) self-reproach. We argue that it is an important finding that the Self-dimension in existing theory and previous studies of the construct of negative emotions may not be valid and reliable across countries and cultures.

Another contribution is that the current multinational study shows that the Spanish-speaking countries in focus (and possibly some others as well) show significant similarities in the perception and assessment of negative emotions in service encounters when critical incidents do occur. For example, distress falls into the situational emotions in Mexico, Puerto Rico and Spain; this aspect is unfortunate. In English-speaking countries it would be considered external, that is, caused by others.

Evidently, there are a number of research limitations in the current multinational study of negative emotions that need to be highlighted. These are: (i) factor solutions that generated a satisfactory level of explained variance as well as estimates of reliability, though not perfect throughout; (ii) one item in the Puerto Rican sample in the fourth factor (i.e. regret) was weak and loaded stronger to factor three, but this factor still contributed significantly (11%) to the explained variance of the data set; (iii) the research was carried out at a specific moment in time and employed self-reported measures; i.e. interviewees who responded about their own perceptions. Although this is a common approach, problems derived from causality and common method variance (Lacey, Suh y Morgan 2007) may occur; (iv) the interview procedure followed a retrospective nature implying that respondents had to recall a service failure and then answer questions concerning the negative emotions they felt; even though the situations and feelings were real, the problems associated with memory lapses, rationalization tendencies and consistency factors may have biased the empirical findings (Smith et al., 1999). Nevertheless, there is a satisfactory consistency across countries in the current study; and finally, (v) this study has examined only one service setting (i.e. hospitals); therefore, caution is recommended in generalizing these findings to other service settings.

The contributions and research limitations from the current multinational study provide opportunities for further research in assessing negative emotions in service settings. For example, further in-depth assessment of the dimensions of negative emotions across service settings (e.g. industries and service encounters), and national as well as cultural contexts, may
validate or falsify the current empirical findings. It would be interesting and valuable to carry out a longitudinal study. We recommend the employment of interviewing techniques where the information is gathered at the very moment the critical incident occurs. At last, replicating this study in other scenarios and service settings would be a valuable complement to the current study, and help to generalize the empirical findings.

Finally, we conclude that the negative emotions assessed provide a fruitful contribution not only in complementing additional facets to existing theory and previous studies of negative emotions in service settings; they also for fortify the notion that further research is required to gain an enhanced understanding and additional insights about them across countries and cultures, as it is crucial to manage the occurrence of negative emotions in critical incidents accurately.

REFERENCES


