

# Worry and its correlates onboard cruise ships

Katharina Wolff<sup>1</sup>, Svein Larsen<sup>1, 2</sup>, Einar Marnburg<sup>2</sup>, Torvald Øgaard<sup>2</sup>

<sup>1</sup>University of Bergen, School of Psychology, Department of Psychosocial Science, Norway

<sup>2</sup>University of Stavanger, Norwegian School of Hotel Management, Norway

## ABSTRACT

*The present study examined job-specific worry, as well as possible predictors of such worry, namely job-specific self-efficacy and supervisor dispositionism. 133 non-supervising crew members at different departments onboard upmarket cruise ships filled in a questionnaire during one of their journeys. Findings show that employees report moderate amounts of job-specific worry and the galley crew reports significantly greater amounts of worry than the other departments. Results also indicate that cruise ship crews worry somewhat more than workers in the land based service sector. Furthermore it was found that supervisor dispositionism, i.e. supervisors with fixed mindsets, was related to greater amounts of worry among the crew. Surprisingly, job-specific self-efficacy was unrelated to job-specific worry.*

(Int Marit Health 2013; 64, 2: 95–100)

**Key words:** cruise ship, working conditions, job-specific worry, supervisor dispositionism, job-specific self-efficacy

## INTRODUCTION

The cruise sector has been the fastest growing segment of the international tourism industry for at least two decades [1, 2]. In 2012 an estimated 17.2 million passengers were traveling onboard a cruise ship [3] and several hundred thousand people work onboard cruise ships every year. Still the cruise sector, and especially the living and working conditions of the crew have received relatively little research attention [4, 5].

It is well known that working conditions onboard cruise ships are very different from those in land based jobs within the service industry. The vast majority of cruise ship employees operate on up to 12 month contracts, working for 10 month, followed by a 2 month vacation. This means they are cut off from friends and family as well as recreational opportunities for long periods. Many times contract renewal is uncertain, and workers depend on the goodwill of their supervisors. Working hours are long. Typically employees work for 10 to 12 h a day, 7 days a week. Salaries are often sub-standard and living conditions are cramped, with up to 6 people sharing a small cabin. Workers are hired from all over the world, with diverse cultural and ethnic backgrounds [6]. National background and the division of labour are

often related, with the lowest ranking members of the crew (e.g. waiters and cabin stewards) coming from developing countries; middle-ranking staff (such as supervisors and head waiters) being Eastern or Western European; while the highest echelon (officers, hotel managers, cruise directors, and pursers), usually originates from wealthy countries [7]. The organisation of the crew is also influenced by the fact that they are working onboard a ship with a maritime control and command structure with a strong formal hierarchy [8]. Additional claims on security have probably strengthened the formality of the hierarchy.

Even though the living and working conditions of non-officers onboard a cruise ship might be characterised as demanding and often uncertain regarding contract renewal, there is little systematic research focus on this matter. The present paper aims to shed some light on the issue. Specifically it investigates the extent of job-specific worry among the non-supervising crew of different departments onboard cruise ships. At the same time it also examines possible predictors of job-specific worry by looking at the effect of one individual difference variable, i.e. self-efficacy and one supervisor characteristic, i.e. the supervisor's implicit person theory.

✉ Katharina Wolff, University of Bergen, School of Psychology, Department of Psychosocial Science, Norway, e-mail: katharina.wolff@psysp.uib.no

According to the DSM-IV [9], worry is a key component of anxiety, and is characterised by a tendency to view ambiguous or uncertain situations as threatening [10]. It is also often related to depression [e.g. 11]. Worry can be defined as negative affect and relatively uncontrollable chains of thought caused by the uncertainty of possible future events. Such thoughts are viewed as representing the individuals' attempts at mental problem solving on issues where the outcome is uncertain and possibly negative [12, 13]. While everybody worries about something from time to time, extensive ruminations can be considered a risk factor for both anxiety and depression.

The present study does not measure generalised or pathological worry which might be more common in clinical populations, but instead assesses the degree to which the crew working onboard upmarket cruise ships worries about the accomplishment of their work related tasks, that is job-specific worry [14]. Furthermore it assesses whether crew members' self-efficacy and supervisors' dispositionism are related to such worries.

Self-efficacy is defined as an individual's belief in her capability to muster the cognitive, motivational and behavioural resources required to produce given attainments [15]. According to Bandura [15], self-efficacy is a situation-specific, contextualised, and state-like belief in one's competence which is based on personal experience with the behaviour. Specific self-efficacy has been found to predict a wide range of behaviours including health behaviours such as smoking, physical exercise, dieting, and condom use [16], as well as academic achievement [17]. Research has also shown that self-efficacy is related to job performance [18] and job satisfaction [19].

The present investigation aims at testing whether self-efficacy also influences job-specific worry. More precisely, it was hypothesized that someone's belief in their capability to master their work affects the degree to which they worry about exactly that; mastering their work.

Finally the paper addresses the question of how characteristics of leadership might influence the amount of worry among non-supervising members of the crew. Specifically the current study assesses whether job-specific worry is related to supervisor dispositionism.

Lay dispositionism refers to the tendency to use stable dispositions like personality traits or intelligence to explain and predict social behaviours or outcomes [20]. According to Dweck [21–23] people differ in the extent to which they adhere to such dispositionism. She claims that individuals hold implicit person theories, which are assumptions regarding the rigidity or malleability of personal attributes like abilities, intelligence or personality. These implicit theories are assumed to fall along a continuum that ranges from prototypical *fixed mindsets* (also called *entity implicit theories*) where people assume that personal attributes are

largely stable over time, on the one end of the continuum, to *incremental implicit theories*, where people assume that personal attributes are relatively malleable, on the other end of the continuum. Research has shown that individuals with fixed mindsets quickly form strong impressions of others that they resist revising, even in light of contradictory information. Individuals with an incremental theory on the other hand tend to view others behaviour as the result of malleable characteristics such as their effort or strategy [24], and they also pay more attention to information that is inconsistent with their expectations [25].

The ability to accurately evaluate the performance of employees is probably one of the most important prerequisites of a good leader or supervisor. Research has shown that managers with fixed mindsets tend to inadequately recognize performance changes in employees and they are reluctant to instructing employees on how to improve their performance instead of punishing them [26]. Employees also perceive leaders with fixed mindsets to provide less coaching than leaders with incremental mindsets [27].

Larsen et al. [28] showed that perceived supervisor respect and fairness influenced the crew's job satisfaction. Given Larsen et al. [28] findings that perceived supervisor fairness influenced job satisfaction, it was hypothesized that supervisors with fixed mindsets, who are prone to *not* adequately observe and evaluate employee performance and to provide coaching when needed, might lead to more job-specific worries among the crew than incremental supervisors.

Summing up, the present paper investigates the extent of job-specific worry among the non-supervising crew of different departments onboard a cruise ship. It also investigates whether job-specific worry is related to low job-specific self-efficacy in crew members and high degrees of dispositionism (fixed mindsets) in supervisors.

## METHODS

### PROCEDURE AND PARTICIPANTS

Data collection was undertaken in 2 steps. Initially 2 focus group interviews were conducted among predominantly non-supervising crew within the current fleet in order to elicit descriptions of everyday work experiences, job satisfaction and challenges concerning the psychological work setting onboard. The gained information was then used as a basis to construct some of the questionnaire items which were used in the second step of the data collection.

The entire crew of an upmarket cruise line was then invited to fill in a questionnaire during one of their journeys. Of the 495 people working onboard during the week of the data collection, 216 completed the questionnaire, constituting a response rate of 44%. 133 of those reported to be ordinary crew without any supervisory tasks. Only these data are be-

**Table 1.** Job-specific worry questionnaire

Item	Item-total correlation	M	SD
1 I worry about mistakes that I make.*	0.52	5.11	1.72
2 I worry that my colleagues may complain about me.*	0.75	4.21	1.97
3 I always worry that something may go wrong.*	0.77	4.24	2.02
4 I worry that the guests may complain about me.*	0.76	4.13	2.10
5 I worry that my supervisors may complain about me.*	0.83	4.07	2.13
6 Actually, I worry a great deal at work.*	0.71	3.58	1.93
7 I worry that I will not get a new contract if I speak my opinion.	0.68	3.31	2.14
8 I worry that my supervisors do not like me.	0.74	3.06	2.08
9 I worry about being criticized for mistakes that I do.	0.75	3.44	2.05
10 I worry about not passing the medical before a new contract.	0.52	2.97	2.36

All items were rated on a scale from 1 (disagree completely) to 7 (agree completely); \*Items adapted from [14]

ing reported here. The respondents represent 30 different nationalities, with Philippine workers being the largest group ( $n = 73$ ), followed by South Africans ( $n = 29$ ) and Germans ( $n = 10$ ). All departments are represented (Restaurant/Bar:  $n = 48$ ; Housekeeping:  $n = 47$ ; Galley:  $n = 30$ ; Deck:  $n = 24$ ; Entertainment:  $n = 16$ ; Concession:  $n = 14$ ; Pursers:  $n = 12$ ; Engine:  $n = 10$ ; Other:  $n = 9$ ). The mean age of the participants was  $33.01 \pm 9.04$  years and 67.8% were male.

## MEASURES

Job-specific worry was measured by a scale adapted from Larsen et al. [14]. Negatively phrased items were omitted from the scale in order to avoid confusing language. Four items were added to represent possible worries which are specific for the present working environment. The employed measure displayed good internal consistency,  $\alpha = 0.92$ . Means, standard deviations and item-total correlations for all 10 items are displayed in Table 1.

Job-specific self-efficacy was measured with 5 items. These were generated based on the focus group interviews described above, as well as standard literature on how to construct self-efficacy scales [29]. Sample items include: *When I lack information about what or how I am supposed to do things, I always manage to sort it out myself.* / *When I meet our guests, I am always capable of doing an excellent job for them.* All items were rated on 7-point scales anchored by 1 – Completely disagree to 7 – Completely agree. The measure displayed good internal consistency:  $\alpha = 0.78$ .

The supervisors' dispositionism, i.e. their implicit person theory was assessed indirectly by having participants rate their own beliefs about their supervisor's implicit person theory. Items are adopted from Chiu et al. [30]: (1) *My supervisor thinks that the kind of person someone is something basic about them and it can't easily be changed.* (2) *My supervisor thinks that people can do things differently, but the important parts of who they are can't really be changed.*

(3) *My supervisor thinks that everyone is a certain kind of person and there is not much that can be done to really change that.* All items were rated on 7 point scales ranging from 1 – Disagree completely to 7 – Agree completely. The measure displayed good internal consistency ( $\alpha = 0.87$ ). High scores indicate fixed mindsets, low scores indicate incremental mindsets.

## RESULTS

Participants reported moderate to high job-specific worry, with the concession crew reporting the least worry ( $M = 3.06$ ,  $SD = 1.16$ ) and the galley crew reporting the most ( $M = 4.89$ ,  $SD = 1.36$ ) (Fig. 1). One-way ANOVA revealed that the galley crew reported significantly greater worry than all other departments with exception of the engine crew ( $F [8,198] = 2.99$ ;  $p < 0.05$ ).

Block-wise regression analysis (method: enter) was performed in order to examine which factors would predict job-specific worry. Initial data inspection revealed that Philippine crew members tended to score higher on a number of measures compared to the rest of the crew. In order to control for this, Philippine nationality was entered into the first block of the regression analysis, together with other demographic variables. In the second block the departments with the highest reported job-specific worry, i.e. galley and engine were added, and in the final model the measures of job-specific self-efficacy and the supervisors' implicit person theory were entered. The final model explained 21% of the variance in job-specific worry, with Philippine nationality, working in the galley and the supervisor implicit person theory being significant predictors. Results are displayed in Table 2.

## DISCUSSION

Findings show that the non-supervising crew onboard the present cruise ship report relatively great amounts

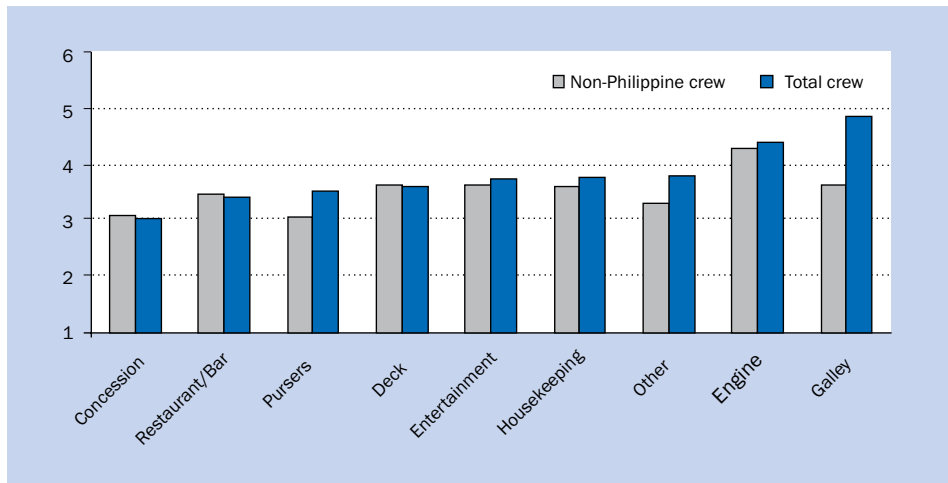


Figure 1. Mean values for job-specific worry for different departments

Table 2. Multiple regression analysis (method: enter) predicting job-specific worries among crew members

	B	SEB	β	R <sup>2</sup>	ΔR <sup>2</sup>	ΔF
<b>Model 1</b>				0.10***	0.12	5.25***
Age	0.01	0.02	0.04			
Male gender	-0.03	0.27	-0.01			
Experience	-0.02	0.02	-0.06			
Philippine nationality	1.07	0.28	0.34***			
<b>Model 2</b>				0.16***	0.04	3.60*
Age	0.00	0.02	0.01			
Male gender	-0.15	0.27	-0.04			
Experience	-0.01	0.02	-0.04			
Philippine nationality	1.01	0.278	0.32***			
Galley	0.92	0.34	0.21**			
Engine	0.16	0.57	0.02			
<b>Model 3</b>				0.21***	0.06	5.36**
Age	0.01	0.02	0.04			
Male gender	-0.15	0.27	-0.05			
Experience	-0.01	0.02	-0.03			
Philippine nationality	0.76	0.28	0.24**			
Galley	0.87	0.33	0.20*			
Engine	0.12	0.56	0.02			
Self-efficacy	-0.08	0.14	-0.04			
Implicit person theory	0.28	0.09	0.25**			

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

of worry. Except for the concession crew, all departments report job-specific worry at or above the midpoint of the scale. These numbers are considerably higher than scores reported by Larsen et al. [14] who investigated job-specific worry in fast food restaurant managers in Norway using a similar version of the same measurement scale. One can only

speculate why the cruise ship crews report greater amounts of worry. Possibly the demanding working conditions onboard a cruise ship described earlier are one explanation. Especially one might wonder whether the uncertainty regarding contract renewal might lead workers to worry more about their jobs than employees with secure positions in a wealthy country.

Another explanation might be that Larsen et al. [14] studied supervisors, while the current study looks at workers with no supervising responsibilities, i.e. workers on the bottom of the professional hierarchy. As research has shown [31], underlings are more prone to a range of different diseases, including heart disease, some cancers, gastrointestinal disease and also depression, which is linked to worry [11].

It is also possible that scores are somewhat elevated due to the fact that people with different cultural backgrounds might have different response sets when filling in a questionnaire. There is for example a trend in the data for Philippine employees to score higher than the rest of the crew. However it seems unlikely that this is the entire explanation since worry is also elevated in the rest of the crew compared to Larsen et al. [14] data.

A final possible factor which might have contributed to the increased worry scores among the cruise ship crew is the removal of negatively phrased items from the measurement scale, which was done in order to avoid confusing language. However an inspection of individual items reveals that cruise ship employees score higher on all comparable items. Therefore it seems unlikely that the increase of worry scores among the crew is due to differences in item wording.

Findings also show that the engine crew and the galley crew report somewhat more worry than the other departments. After controlling for demographic variables and Philippine nationality the findings hold true for the galley crew. Again one can only speculate why this is the case. One explanation that comes to mind is that working in the galley might be particularly stressful, hectic and demanding. These employees are often forced to work under considerable time pressure and also have relatively great amounts of responsibility in that mistakes in food preparation are easily discovered and might be complained about by the guests. Such mistakes might even have serious health threatening consequences for thousands of people onboard the ship, as exemplified by the numerous food-related scandals in the cruise industry. Two recent examples include the Ruby Princess incident and the norovirus outbreak on the Vision of the seas in March 2013 [32, 33]. Also the galley is very hierarchically organised, and since we only studied crew members without any supervising responsibilities, the studied galley crew is probably at the bottom of an extra-long hierarchy, which, as discussed earlier, is an increased risk factor for depression and possibly worrying [31].

The present investigation also aimed at testing whether an individual difference measure, namely job-specific self-efficacy would be related to job-specific worry. It was expected that higher self-efficacy, i.e. an individual's belief in her capability to master her job, would be related to lower job-

-specific worry. This hypothesis was not supported by the data. Surprisingly there was no relation between job-specific self-efficacy and job-specific worry.

Finally the paper also aimed at testing whether characteristics of leadership, namely supervisor dispositionism might influence the amount of worry among non-supervising crew. Results support the initial hypothesis and show that crew members who report that their leaders have fixed mindsets also report higher degrees of job-specific worry. This might indicate that supervisors who do not adequately recognize employees performance, and who possibly have a tendency to discipline mistakes instead of providing help or guidance have subordinates who worry more at work than supervisors with lower dispositionism, i.e. incremental mindsets.

Findings are in line with others who have showed the importance of leader characteristics for employee satisfaction on cruise ships. Larsen et al. [28] have shown that perceived leader fairness affected the crew's job satisfaction. Testa [34, 35] demonstrated that in the multicultural work environment onboard a cruise ship national congruence in leaders' and subordinates' dyads resulted in a higher trust and satisfaction with leaders, and leaders displayed more considerate leadership behaviour.

The present study is explorative in nature and has some limitations. Future research will have to replicate that non-supervising members of the crew onboard a cruise ship have greater job-specific worries than other workers in the service industry. It will also be important to test some of the suggested reasons for this, such as being at the bottom of the professional hierarchy or the extra demanding working conditions for the cruise ship crew.

Our data are also correlational, which limits the sort of conclusion one can draw from them. It is for example impossible to know whether greater leader dispositionism leads to more job-specific worry, or whether greater worries cause employees to perceive their leaders as more fixed minded. Future research will have to investigate this question.

## CONCLUSIONS

Cruise workers report moderate to large degrees of job-specific worry. Findings indicate that these worries are greater than for other workers in the land based service sector. The galley crew reports significantly greater worries than subordinates in the other departments, with the exception of the engine crew. Suggested explanations for these two findings are especially demanding working conditions and ranking lowest in a strict hierarchy onboard the ship and in the galley. Surprisingly, no relationship between job-specific self-efficacy and job-specific worry was observed. However results indicate that job-specific worries are greater among crew members with dispositionist supervisors, i.e.



supervisors with fixed mindsets. It is interesting to note that job-specific worry was not explained by individual difference variables but exclusively by variables, that relate to the working environment, like the department someone works in or the leadership style of someone's supervisor.

## REFERENCES

- Gibson P. *Cruise Operations Management*. Butterworth-Heinemann, Elsevier Burlington, MA 2006.
- Hung K, Petrick JF. Developing a measurement scale for constraints to cruising. *Ann Tourism Res* 2010; 31: 206–208.
- Cruise Lines International Association (CLIA). North America cruise industry update February 2013. Retrieved April 2013 from: [http://www.cruising.org/regulatory/news/press\\_releases](http://www.cruising.org/regulatory/news/press_releases).
- Hosany S, Witham M. Dimensions of cruisers' experiences, satisfaction, and intention to recommend. *J Travel Res* 2010; 49: 351–364.
- Lee-Ross D. Cruise tourism and organizational culture: the case for occupational communities. In: Dowling RK (ed.). *Cruise ship tourism*. CABl, Wallingford, UK 2006: 41–50.
- Klein RA. *Paradise lost at sea – rethinking cruise vacations*. Winnipeg: Fernwood Publishing, Halifax 2008.
- Weaver A. Interactive service work and performative metaphors: the case of the cruise industry. *Tourist Studies* 2005; 5: 5–27.
- Larsen S. Communication in a Multinational Service Organization. In: Teare R, Olsen MD, Gummesson E (eds). *Service Quality in Hospitality Organizations* 1996: 48–65.
- American Psychiatric Association. *Diagnostic and statistical manual of mental health disorders* (4<sup>th</sup> Ed). Author, Washington, DC 1994.
- Butler G, Matthews A. Anticipatory anxiety and risk perception. *Cognitive Therapy and Res* 1987; 11: 551–565.
- Muris P, Roelofs J, Rassin E, Franken I, Mayer B. Mediating effects of rumination and worry on the links between neuroticism, anxiety and depression. *Personality Individual Differences* 2005; 39: 1105–1111.
- Borkovec TD. The nature, functions, and origins of worry. In: Davey G, Tallis F (eds.). *Worrying. Perspectives on theory, assessment and treatment*. John Wiley & Sons, Chichester 1994: 5–33.
- Borkovec T D, Robinson E, Pruzinsky T, DePree JA. Preliminary exploration of worry: some characteristics and processes. *Behav Res Therapy* 1983; 21: 9–16.
- Larsen S, Øgaard T, Marnburg E. Worries in restaurant managers. *Scandinavian J Psychology* 2005; 46: 91–96.
- Bandura A. *Self-efficacy: the exercise of control*. Freeman & Co., New York 1997.
- Conner M, Norman P (eds.). *Predicting health behaviour* (2<sup>nd</sup> Ed. rev.). Open University Press, Buckingham, England 2005.
- Bandura A, Barbaranelli C, Caprara, G, Pastorelli C. Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development* 1996; 67: 1206–1222.
- Bandura A, Locke EA. Negative self-efficacy and goal effects revisited. *J Applied Psychology* 2003; 88: 87–99.
- Caprara GV, Barbaranelli C, Steca P, Malone PS. Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: a study at the school level. *J School Psychology* 2006; 44: 473–490.
- Ross L, Nisbett RE. *The person and the situation: perspectives of social psychology*. McGraw Hill, NY 1991.
- Dweck CS. Motivational processes affecting learning. *American Psychologist* 1986; 41: 1040–1048.
- Dweck CS. *Self-theories: their role in motivation, personality, and development*. Psychology Press, Philadelphia 1999.
- Dweck CS. *Mindset: the new psychology of success*. Random House, New York 2006.
- Heyman GD, Dweck CS. Children's thinking about traits: Implications for judgments of the self and others. *Child Development* 1998; 69: 391–403.
- Plaks JE, Stroessner SJ, Dweck CS, Sherman JW. Person theories and attention allocation: Preferences for stereotypic versus counterstereotypic information. *J Personality Social Psychology*, 2001; 80: 876–893.
- Heslin PA, VandeWalle D. Managers' implicit assumptions about personnel. *Curr Directions Psychology Science* 2008; 17: 219–223.
- Heslin PA, VandeWalle D, Latham GP. Keen to help? Managers' IPTs and their subsequent employee coaching. *Personnel Psychology*, 2006; 59: 871–902.
- Larsen S, Marnburg E, Øgaard T. Working onboard – job perception, organizational commitment and job satisfaction in the cruise sector. *Tourism Management* 2012; 33: 592–597.
- Bandura A. Guide for constructing self-efficacy scales. In: Pajares F, Urdan T (eds.). *Adolescence and education. Self-efficacy beliefs of adolescents*. Information Age, Greenwich, CT 2006; 5: 307–337.
- Chiu C, Dweck CS, Tong JY, Fu JH. Implicit theories and conceptions of morality. *J Personality Social Psychology* 1997; 73: 923–940.
- Marmot M, Brunner E. Cohort profile: the Whitehall II study. *Inter J Epidemiol* 2005; 34: 251–256.
- Larsen L. Retrieved from: [http://foodpoisoningbulletin.com/2013/stomach-illness-outbreak-on-ruby-princess-cruise-ship/\(2013, March, 12\)](http://foodpoisoningbulletin.com/2013/stomach-illness-outbreak-on-ruby-princess-cruise-ship/(2013, March, 12)).
- Larsen L. Royal Caribbean Vision of the Seas has norovirus outbreak. *Food Poisoning Bulletin*. Retrieved from: [http://foodpoisoningbulletin.com/2013/royal-caribbean-vision-of-the-sea-has-norovirus-outbreak/\(2013, March, 9\)](http://foodpoisoningbulletin.com/2013/royal-caribbean-vision-of-the-sea-has-norovirus-outbreak/(2013, March, 9)).
- Testa MR. Leadership dyads in the cruise industry: the impact of cultural congruency. *Inter J Hospitality Manag* 2002; 21: 425–441.
- Testa MR. National culture, leadership and citizenship: Implications for cross-cultural management. *Inter J Hospitality Manag* 2009; 28: 78–85.