

## WORKING IN A SPACE HOTEL. IDYLIC FANTASY OR A NON-REALITY?

Paul Strickland  
*La Trobe University*

Follow this and additional works at: <https://scholarworks.umass.edu/ttra>

---

Strickland, Paul, "WORKING IN A SPACE HOTEL. IDYLIC FANTASY OR A NON-REALITY?" (2016). *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 72.  
<https://scholarworks.umass.edu/ttra/2011/Visual/72>

This is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Travel and Tourism Research Association: Advancing Tourism Research Globally by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact [scholarworks@library.umass.edu](mailto:scholarworks@library.umass.edu).

## **WORKING IN A SPACE HOTEL. IDYLIC FANTASY OR A NON-REALITY?**

Mr Paul Strickland  
La Trobe University  
Bundoora, Australia  
[p.strickland@latrobe.edu.au](mailto:p.strickland@latrobe.edu.au)

### **Abstract**

Although not yet a reality, space hotels will become another product offered by the tourism and hospitality industry in the future. It is therefore appropriate to start exploring this fast growing phenomenon and ascertain if the most likely employees will be people formally trained in the tourism and/or hospitality fields. The aim of this study is to identify the motivations (if any) of current tourism and hospitality (T & H) students willingness to work in a space hotel based on motivational research conducted by Kim, Guo, Wang and Agrusa (2007). The findings suggest that many students would be willing to work in a space hotel based on current expectations and industry attractiveness, job opportunities, salary and sense of adventure. However, the participants were less likely to work in a space hotel if they were married, had children and if space hotel employment would negatively impact on their personal health.

### **Introduction**

Space tourism will become a reality in the near future creating a need for space hotels (Smith, 1999; Excell, 2009). Shimla (2010) agrees quoting Sir Richard Branson, (a space travel advocate, entrepreneur and owner of Virgin Galactic that will take the first paying customers into zero-gravity in 2011), whom states that space travel will become affordable for many people in the next decade. Freeland (2005) predicts there will be over 100 orbital hotels and 5 million annually space tourists by 2030. Although space tourism is exceptionally new (Laing & Crouch, 2004), the last 100 years has referred to space travel as something that was inevitable through various literature and cinema depictions (Berinstein, 2002). This investigative study examines the motivations of current tourism and hospitality students' willingness to work in a space hotel and the impact of health concerns both before and after being presented with limited but factual health information associated with space travel. Trying to predict motivational behaviour regarding space employment is unexplored, therefore it is appropriate to compare Kim et al.'s (2007) research and modify it for space hotels. Research in this field is limited therefore studies such as this attempts to expand on current literature.

### **What are the predicted motivations for employees to work in space?**

There is a small body of literature as to why the private sector would like to invest in space businesses which include money, businesses opportunities, advancement of technology, decreasing costs, feasibility (without government backing or monopolization) (Berinstein, 2002; Laing & Crouch, 2004). However, there has been no exploration into potential space hotel employees just speculation (van Pelt, 2005). It has been suggested that space hotel employees will be frontier travelers expressing "achievement motivated behaviour" (Liang, 2006, pg18). Other authors such as Atkinson (1957) suggest that risk taking is also linked to motivational behaviour. Space travel can be viewed as 'high risk' as examples such as the Challenger Shuttle explosion in 1986 killing seven people have demonstrated (Goodrich, 1987). These risks are common to both the paying tourist and the space hotel employee.

The overall desire to work in a space hotel may be greater than the perceived risks as the employee may indicate goal associated behaviour (Ryan, Sheldon, Kasser and Deci, 1996; Sirgy, 2010). This may include the feeling of adventure, excitement or the unknown (Pearce, 1988). It may also be based on personal experiences, salary and status (van Pelt, 2005; Pearce & Caltabiano, 1983). Katzell and Thompson (1990) recognize that employees need to adapt to the changing workforce and this is one area that will experience employment growth. Other authors suggest other motivational factors may include arousal and intension theory that spark interest in work challenges that may be also motivate potential space hotel staff (Moscardo & Pearce). Although there are perceived negative risks regarding working in a space hotel such as limited space, lighting, overtime and negative health implications, it is accepted that these roles will still need to be filled (Latham and Pinder, 2004; Beckers, van der Linden, Smulders, Kompier, van Veldhoven and Yperen, 2004). The question is will it be by current T & H students?

## **Methodology**

Following Kim et al.'s (2007) studies students undertaking undergraduate studies in tourism and hospitality at La Trobe University were administered a questionnaire. The questionnaire comprised items to measure basic demographics and also a 25 item scale designed to measure motivations related to working in a space hotel. The items spanned the domains of Job Opportunities, Interest in Practical Aspects, Apparent Attraction, Family Concerns and Medical Concerns. Responses to the items in the scale were measured on a 7-point Likert scale where '1 = *strongly disagree*,' '4 = *neutral*,' and '7 = *strongly agree*.' (Matell & Jacoby, 1977).

The questionnaires was administered by the first named author after obtaining ethical clearance from institution. The number of completed questionnaires was ninety-four. The responses were loaded into an SPSS data file for analysis after a pilot test was conducted. A standard procedure was used to factor analyse the items in the interests and motivations scale. The method of Principal Components was used to extract the factors and an obliminal rotation was used to resolve the final factor structure. Following Kaiser's (1974), criterion only factors with an eigenvalue greater than 1.0 and communalities greater than 0.4 were included in the final factor structure.

The first questionnaire contained twenty five questions under the five previous mentioned motivational domain headings with approximately five questions in each domain. Additional information such as gender, nationality and age was also gathered and immediately coded to keep the participants' anonymity. After fifteen minutes, students were given a second questionnaire that highlighted two paragraphs of potential medical concerns associated with space travel identified by Berinstein (2002) and Laing and Crouch (2004). The participants were then asked to complete the five identical questions under the medical concerns domain again. Participants did not have the benefit of referring to the first questionnaire which were similarly collected and coded to make sure both questionnaires referred to the same participant. Smith, Evans and Westerbeek (2005) suggest this time lapse technique allows focus regarding the new information and not foremost trying to recollect their previous responses. This was to ascertain if additional negative medical information impacts the participants' responses. As negative health concerns are known, it was appropriate to only use this section for the second questionnaire as the participant's opinion was unlikely to change for the same questions under the other domains and is considered a major barrier for space travel (Laing and Crouch (2004). The responses were inputted into SPSS for interpretation.

## Results

The representation of females was 66% with all participants ages falling between 18 and 26 and mean age being 22 years. The participants were all students studying tourism and hospitality and have all had practical experience in an operational hotel on Earth. Fourteen nationalities participated with the Chinese being the largest representation. The majority of the sample indicated that space travel for tourists will be possible in the future and agree that space hotels will also become a reality in the next decade. The results also indicate that the participants believe workers in a space hotel will have similar job descriptions as hotel workers on Earth however, their salaries will be much higher in a space hotel due to the travel risks involved. The older the female participant, the more likely she would not to work in a space hotel whereas there is no evidence that males would do the same with age.

Six factors were extracted which is the aggregate explained 81.89% of the variance. Of the six factors extracted the first three are dominant explaining 54% of the variance. It does appear that for this cohort the key drivers for space hotel employment include Job Opportunities, Interest in Practical Aspects and Apparent Attraction. The sample was split on sex and the means compared on each of the factors. Table 3 shows the descriptive statistics and the associated p values associated with the comparison of the means.

**Table 1: Group Statistics**

	Gender	N	Mean	Std. Deviation	P
Attraction	female	48	6.5195	.29466	0.20
	male	46	6.1964	.91231	
Job opportunities	female	48	5.9394	1.15536	0.78
	male	46	5.8333	.78174	
Interest in Practical Aspects	female	48	6.2424	.49645	0.40
	male	46	6.0000	.84327	

Family Concerns was a major issue for the majority of females as they were less likely to work in a space hotel as they aged, married and had kids. There was little evidence to support that men held the same perception

### Medical Concerns (Part One)

Participants were given part one of the survey involving four medical concern questions with no additional information therefore answering with only their own acquired knowledge. 100% of responses agreed that they would only work in a space hotel if they were in good health but were neutral when questioned if they were concerned about any medical or health issues arising as a result of working in a space hotel. 99% of females would not lie of a medical examination questionnaire to work in a space hotel whereas 25% of non Asian background males would to have the experience.

### Medical Concerns (Part Two)

Participants were given part two of the survey involving the exact same four medical concern questions which included information on known health risks associated with space travel or long

periods of zero gravity, as suggested by Berinstein (2002) and Laing and Crouch (2004). Again, 100% of responses agreed that they would only work in a space hotel if they were in good health however nearly all the participants (98%) would not lie on a medical examination questionnaire to work in a space hotel after being provided with some health and medical concerns associated with space travel. Being informed regarding medical concerns has a large impact on motivation to work in a space hotel as the majority of participants changed their responses after giving limited information on known health issues associated with space travel.

## **Conclusion**

It appears that students regardless of their nationality studying tourism and hospitality related subjects would consider working in a space hotel in the future as it is viewed as a new and growing sector of the industry. This positive images from the cinema among others aides this decision. The participants believe that the job descriptions will be similar to Earth hotels however a higher salary would be expected but not a major motivating factor to work in a space hotel. The students also suggested that working in a space hotel would give job satisfaction and if nothing goes wrong, would have an expected positive outcome. As Kim et al.'s (2007) research indicated that students would leave their home country for employment in the T & H field it appears the majority of students would do the same, except it would be a space hotel. However, it became clear that aging, having a partner and/or children would strongly influence any employment choices depending on the safety risks and health concerns associated with space travel. This is particular true for female respondents but not necessarily the same for males. This information is significant to the industry as tourism and hospitality students may not be the most ideal candidates to work in a space hotel. The current perception of a space hotel is similar to an Earth hotel which may not be the case in the future. Known health and safety concerns negatively impact the expected desire and motivation to work in a space hotel. It is recommended that future studies identify the most likely candidates for working in a space hotel to start creating specialized programs that meet the future requirements of working in space hotels.

## **References**

- Atkinson, C. (1957). "Motivational Determinates of Risk-Taking Behaviour." *Psychological Review* 64(6): 359-372.
- Beckers, D., D. v. d. Linden, et al. (2004). "Working Overtime Hours: Relations with Fatigue, Work Motivation, and the Qulaity of Work." *Journal of Occupational and Environmental Medicine* 46(12): 1282-1289.
- Berinstein, P. (2002). *Making Space Happen*. Medford. New Jersey, Plexus Publishing.
- Excell, J. (2009). *Space Tourism: Open Space*. The Engineer: 18.
- Freeland, S. (2005). "Up Up and...Back: The immergence of Space Tourism and the impact of International Law of outer Space." *Chicargo Journal of International Law*(1): 1-23.
- Goodrich, J. N. (1987). "Touristic Travel to Outer Space: Profile and Barriers to Entry." *Journal of Travel Research* 26: 40-43.
- Katzell, R. and D. Thompson (1990). "Work Motivation. Theory and Practice." *American Psychologist* 45(2): 144-153.

Kim, S. S., Guo, Y., Wang, K.-C., & Agrusa, J. (2007). The study motivations and study preferences of student groups from Asian nations majoring in hospitality and tourism management programs. *Tourism Management*(28), 140-151.

Laing, J. (2006). *Extraordinary Journeys: Motivations Behind Frontier Travel Experiences and Implications for Tourism Marketing*. School of Business. Bundoora, Australia, La Trobe University. Doctor of Philosophy: 498.

Laing, J. and G. Crouch (2004). *Vacationing in Space: Tourism Seeks 'New Skies'*. New Horizons in Tourism. Strange Experience and Stranger Practices. T. Singh. Wallingford, UK, Cabi Publishing.

Latham, G. and C. Pinder (2005). "Work Motivation Theory and Research at the Dawn of the Twenty-First Century." *Annual Reviews of Psychology* 56: 485-516.

Matell, M. S., & Jacoby, J. (1977). Is There an Optimal Number of Alternatives for Likert Scale Items? Study I: Reliability and Validity. *Educational and Psychological Measurement*, 31, 657.

Moscato, G. M. and P. L. Pearce (1986). "Historical Theme Parks: An Australian Experience in Authenticity." *Annals of Tourism Research* 13(3): 467-79.

Pearce, P. L. (1988). *The Ulysses Factor: Evaluating Visitors in Tourist Settings*. New York, Springer-Verlag.

Pearce, P. L. and M. L. Caltabiano (1983). "Inferring Travel Motivations from Travelers' Experiences." *Journal of Travel Research* 22(2): 16-20.

van Pelt, M. (2005). *Space Tourism. Adventures in Earth Orbit and Beyond*. New York, Copernicus Books.

Ryan R M, Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals are not created equal: An organismic perspective on the nature of goals and their regulation. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behaviour* (pp. 7-26). New York: Guilford.

Shimla (2010). Tourism firms give stiff competition to Virgin Galactic with cheaper space rides. Spain, Instablogs. 2010.

Sirgy, M. J. (2010). Toward a Quality-of-Life Theory of Leisure Travel Satisfaction. *Journal of Travel Research*, 49, 246-260.

Smith, V. L. (1999). Space Tourism. *Annals of Tourism Research*, 28(1), 238-240.

Smith, Evans, & Westerbeek (2005). The Examination of Change Management Using Qualitative Methods: A Case Industry Approach. *The Qualitative Report* 10(1), 96-121.