Alternative outcome variables and measures in tourism: Emerging issues

Muzzo (Muzaffer) Uysal, PhD
Professor and Chair
HTM - Isenberg School of Management
University of Massachusetts – Amherst
Email: muysal@Isenberg.umass.edu
I. Setting the stage and some general trends

II. Examples of ‘team’ studies with alternative outcome variables

III. Emerging themes and research – business implication
The paradigm of product – service continuum is on a journey of creating value.
Observations – Scanning the research environment

1) We have come a long way – a tremendous maturity of tourism research over the past seven decades, sophistication.

2) A major shift away from Product Dominant Logic to Service Dominant Logic (Vargo & Lutsch, 2008).

3) We see a shift towards intangible aspects of consumption - more active, engaging, innovative & co-created experiences, appealing to high-order needs of participants.
Observations – Scanning the research environment

4) The scope of issues examined is wide, and varies depending on place, goal, and target of the study.

5) Better equipped to deal with different types of data – cross sectional, time series, longitudinal, and large data pools due to available software and tools.

6) Using one depending variable to explain management & personal outcomes, but in reality we have more dependent variables affecting outcome variables.
7) And, we still make inferences based on averages, but the business does not maintain average scores for its benchmark & performance measurements. So, we will see more research focusing on different points of distributions, 25%, 75% etc. Outliers will also matter.

8) Mostly generate data at one point in time rather than at several points in time in order to see structural & behavioral changes over time. But, now, we also have large data pools that are being generated at different points in time and in real time.
9) Crises of all sorts, including The COVID-19 pandemic have the potential to disrupt consumption, which then places pressure on demand and supply matters.

10) We will continue to see more research at the intersection of crisis/health/safety/risk and wellbeing of stakeholders.
So…

- We need more research that connects the value of what we produce to performance and efficiency measures – based on context, target and goal, and need a resilient and innovative business model to respond.

- Conventional outcome variables need to be augmented by other possible measures.

- Conventional research approach (linear) is fine, but it may not be sufficient enough to provide comprehensive and integrated info about the market conditions & structure given the fast accumulation & generation of large data pools (non-linear).

- Studies mostly focus on either demand or supply side. When and if possible, it would be useful to examine some issues simultaneously.
Two sets of variables: Simultaneous examination

- Example 1 – Push and pull framework of motivation – creating overlap segments – product bundles (Baloglu, & Uysal, 1996; Li, Meng, Uysal, & Mihalik, 2013)

- Example 2 - Organic assessment (based on objective measures) of image and augmented image - (perception of objective measures) (Formica & Uysal, 2017)

### Ultimate depending variable(s) –
What is it that we are trying to measure? So far?

<table>
<thead>
<tr>
<th>Outcome variables with cross-sectional data</th>
<th>Outcome variables with time series – longitudinal data</th>
</tr>
</thead>
<tbody>
<tr>
<td>✧ Satisfaction with product/experience</td>
<td>✧ Arrivals, Expenditure per visit</td>
</tr>
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<td>✧ Effects of antecedent variables (e.g., motivation, involvement, information search) on behavior or attitude</td>
<td>✧ Length of stay</td>
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<td>✧ Intention – repurchase</td>
<td>✧ Satisfaction with life domains</td>
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<td>✧ Loyalty</td>
<td>✧ Performance measures</td>
</tr>
<tr>
<td>✧ Willingness to pay</td>
<td>✧ Occupancy - ADR, RevPAR, etc.</td>
</tr>
<tr>
<td>✧ Impact elements</td>
<td>✧ Return on investment</td>
</tr>
<tr>
<td>✧ Support for development via perception</td>
<td>✧ Economic value of outcome variables</td>
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<td></td>
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Outcome variables with cross-sectional data include:
- Satisfaction with product/experience
- Effects of antecedent variables (e.g., motivation, involvement, information search) on behavior or attitude
- Intention – repurchase
- Loyalty
- Willingness to pay
- Impact elements
- Support for development via perception
- Satisfaction with life domains

Outcome variables with time series – longitudinal data include:
- Arrivals, Expenditure per visit
- Length of stay
- Satisfaction with life domains
- Performance measures
- Occupancy - ADR, RevPAR, etc.
- Return on investment
- Economic value of outcome variables
## What is it that we are trying to measure? Conventional and Alternative Outcome Variables (Uysal, 2019, TR)

<table>
<thead>
<tr>
<th>Conventional Outcome variables with cross-sectional data</th>
<th>Conventional Outcome variables with time series – longitudinal data</th>
<th>Moderating/ mediating / context-based factors</th>
<th>Other possible outcome variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with product/experience</td>
<td>Arrivals, Expenditure per visit – proxies</td>
<td>Intervening opportunities</td>
<td>Wellbeing of stakeholders</td>
</tr>
<tr>
<td>Effects of antecedent variables</td>
<td>Length of stay</td>
<td>Competitiveness power</td>
<td>Quality life of providers &amp;</td>
</tr>
<tr>
<td>(e.g., motivation, involvement, information search) on behavior or attitude</td>
<td>Satisfaction with life domains</td>
<td>Level of development &amp; sustainability</td>
<td>residents</td>
</tr>
<tr>
<td>Intention – repurchase</td>
<td>Performance measures</td>
<td>The setting in which production &amp; consumption take place – facilitators</td>
<td>Quality of work life and life satisfaction</td>
</tr>
<tr>
<td>Loyalty</td>
<td>Occupancy - ADR, RevPAR, etc.</td>
<td>Use of IT devices and digital communication</td>
<td>Links to management &amp; financial performance measures</td>
</tr>
<tr>
<td>Willingness to pay</td>
<td>Return on investment</td>
<td>Some demographics</td>
<td>Interchange of dependent and independent variables (non-recursive models)</td>
</tr>
<tr>
<td>Impact elements</td>
<td>Economic value of outcome variables</td>
<td></td>
<td>Linking safety and security measures in place to outcome variables</td>
</tr>
<tr>
<td>Support for development via perception</td>
<td>Generation indices</td>
<td></td>
<td>Corporate citizenship</td>
</tr>
<tr>
<td>Satisfaction with life domains</td>
<td></td>
<td></td>
<td>Destination responsiveness and responsible destination</td>
</tr>
<tr>
<td>Place/product attachment</td>
<td></td>
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</tbody>
</table>

Notes: Regardless of types of variables, they make incremental contributions. Conventional variables are also well grounded in theory and theory based frameworks. Other non-conventional outcome variables will emerge as changes happen in the years to come.
## Relevant side info: Conventional research vs Large data analytics

<table>
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<tr>
<th>Conventional research for business (linear)</th>
<th>Large data analytics for business (non linear)</th>
</tr>
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<tr>
<td>✴️ Problem – hypothesis</td>
<td>✴️ Proceeding without a priori set of conditions on the content of data</td>
</tr>
<tr>
<td>✴️ Theory &amp; good argument</td>
<td>✴️ Reveal patterns &amp; structures that may be reflective of the industry &amp; market structure</td>
</tr>
<tr>
<td>✴️ Design – data collection</td>
<td>✴️ Restructure &amp; position business activities</td>
</tr>
<tr>
<td>✴️ Analysis &amp; testing hypotheses</td>
<td></td>
</tr>
<tr>
<td>✴️ Making inferences &amp; providing implications</td>
<td></td>
</tr>
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</table>
Examples of studies with alternative outcome variables

- Unit of analysis – individual – both personal and management outcomes as conventional dependent variables
- Unit of analysis - community or an entity – organization
Side info: To understand and predict travel behavior – what is this model?

Consumption life cycle

The theory of planned behavior is a theory about the link between attitudes – beliefs (subjective and objective norms) and behavior. It was proposed by Icek Ajzen (later Fishbein & Ajzen) as an extension of the theory of reasoned action. It is a predictive theory.
On demand side – General Example – Conventional

(Prebensen, Woo, Uysal (2013), CI in T)

Figure 1. The proposed hypothetical model. Involvement to PVTE is not supported.

Figure 2. Results of testing hypothetical model. Notes: M1 = relaxation, M2 = socialization, In2 = self-identify, Kno1 = knowledge sources, Kno2 = knowledge process, P1 = functional value, P3 = sense of well-being/epistemic value, S1 = satisfying, S2 = great time, S3 = likeness, L1 = revisita intention, L2 = recommandation, * = t-value . 1.96, P . 0.001.

Title: Experience value: antecedents and consequences

Fig. 1. The proposed hypothetical model. Involvement to PVTE is not supported.
Example I – With a different outcome variable (SWB)

The Effects of Co-Creation & Satisfaction on Subjective Well-Being (Mathis, Kim, Uysal & Sirgy, 2015, *Annals*).

**Figure 1:** Theoretical model and the hypotheses

Note: p < .001**

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**Co-creation study 2013**
Example II – with a different outcome variable – The senior/elderly market (SWB) (Kim, Woo & Uysal, 2015, TM)

Figure 1: A Model of elderly tourist behavior
Note: **p<.001, * p<.05
Example III: Tourism and Hospitality Employees (Kara, Kim, & Uysal, M. 2018; Current Issues in Tourism) – Mobbing - QOL from the perspectives of employees

Manager Mobbing Behavior

- Communicate adequately
- Maintain social contact
- Maintain his/her personal reputation
- Occupational situation
- Physical health

Employees' Quality of Working Life

- Health safety needs
- Economic & Family needs
- Esteem needs
- Actualization needs
- Knowledge needs
- Aesthetics needs

Employees' Overall Quality of Life

- Maintain his/her personal reputation
- Physical health

Hypotheses:

H1: \(-0.19^{**}\)

H2: \(-0.23^{**}\)

H3: \(0.47^{**}\)

Overall QoL1: 0.581

Overall QoL2: 0.527

Overall QoL3: 0.674

Factors:

- Health safety needs
- Economic & Family needs
- Esteem needs
- Actualization needs
- Knowledge needs
- Aesthetics needs

Correlations:

- Health safety needs: 0.771
- Economic & Family needs: 0.731
- Esteem needs: 0.845
- Actualization needs: 0.732
- Knowledge needs: 0.702
- Aesthetics needs: 0.640
Example IIIc: Tourism and Hospitality Employees (Kim, Yinyoung, Uysal, & Kwon, 2017; IJCHM) – CSR - QOL from the perspectives of employees

- Legal CSR
- Ethical CSR
- Philanthropic CSR
- Economic CSR

Quality of Work Life (QWL) → Job satisfaction → Overall Quality of Life (QoL)

H1, H2, H3, H4, H5, H6, H7
So, you may wonder - Bottom-up Spillover Theory (Global measure)

- Tourism well-being forms part of the bottom-up spillover theory (Sirgy, Kruger, Lee & Yu, 2009; Andrews & Withey, 1976; Campbell, Converse, & Rodgers, 1976).

- Life satisfaction can be explained and predicted from satisfaction with experiences within different life domains (Sirgy, 2012).

- For example, people may feel satisfied with their life overall as a direct result of their satisfaction with their job, family, friends, and material possessions (Nawijn, 2010 and 2011; Lee, Sirgy, Larsen & Wright, 2002).

Figure 1: The hierarchy model of Life Satisfaction (Bottom-up Spillover Theory) (Source: Neal, Sirgy, and Uysal, 1999:155)
Host Community Life Cycle

This is an integrated model reflective of current and future research in the effect of tourism on the QOL of residents and other stakeholders. Uysal et al. 2012
Example I: A model depicting the connection between life satisfaction and impacts of tourism

(Kim, Uysal, Sirgy, 2013, and Uysal, et al., 2015, TM)
A model of the connection between QOL & Tourism Impact

Tourism development cycle:
Beginning, Growth, Maturity, Decline

Economic
H5

Material well-being domain
H13

Social
H6

Community well-being domain
H14

Cultural
H7

Emotional well-being domain
H15

Environmental
H8

Health & Safety well-being domain
H16

Life satisfaction

Figure 1: General Conceptual Model of the Study

Perceived value of Tourism Development
Non-material life domain Satisfaction
Material life domain Satisfaction
Overall Quality of Life
Support for further Tourism Development
Example III–The Impacts of Tourism Development on Stakeholders’ Quality of Life

(Woo, Uysal, Sirgy, 2016, *JHTR*)

**Constructs and Measures,**

Perception of Tourism Impacts in Life Domains

- **Perspectives of Different Stakeholders**
  - H3
  - H4

- **Perception of Material Life**
- **Perception of Non-Material Life**

Satisfaction with Life Domains

- **Material life Satisfaction**
  - H1
- **Non-material life satisfaction**
  - H2

Overall Quality of Life

- Community Life domain
- Emotional Life domain
- Health/safety Life domain

Perspectives of different stakeholders affect the perception of material and non-material life, leading to satisfaction with life domains and overall quality of life.
Some observations and Future research areas

- But, we have less empirical work that can link the creation of value & importance of exp. value to wellbeing of stakeholders, & profitability or performance measures.

- How much do we know about the process of value creation itself? There needs to be more attention paid to the process by both business providers and other stakeholders.

- What is the best methodological or business approach to shed some light on the process?

- How would destinations, hotels, and restaurants, as the tourism enterprise, facilitate the process of creation of value for both virtual and on ground / onsite consumption?

- What would be the new normal consummation process after COVID 19?

- Would there be more demand for digital assets of destination product offerings?
Unhappy stakeholders – residents & providers cannot provide quality experience. Unhappy employees could not deliver quality services.

The challenge is to link “non-economic value” of what we produce to performance measures (ADR, RevPAR, Productivity ratios, etc.) and appropriate sustainable indicators.

Development of performance measures linked to personal and management outcome indicators would be effective in monitoring activities and creating efficiency.

Non-economic value of tourism could have the long term potential to contribute to the image of the tourism & hospitality enterprise, thus, to its intangible assets & share price.
Thank You!