

Prioritizing Extension Resources Using Perceived Importance and Satisfaction: An Underutilized Approach¹

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Importance-performance analysis can reveal whether Extension clients are satisfied with the elements of programs they consider most important. This document was developed for Extension professionals and it may also be useful to a broad range of practitioners who plan and evaluate programs. This is the first EDIS document in a series of three on using importance-performance analysis to prioritize Extension resources. The other articles in the series can be found at

https://edis.ifas.ufl.edu/entity/topic/series_importance-performance_analysis.

Overview

Importance-performance analysis, or IPA, is a way to measure how people feel about certain characteristics of a place, issue, or program (Martilla & James, 1977). This technique can be used to understand the quality of service provided to clientele (Sinischalchi et al., 2008). Extension professionals can use IPA to make decisions and prioritize resources by understanding how clients rate the importance of and satisfaction with specific attributes of a program or facility.

IPA has been used widely in recreation, tourism, and hospitality professions for years (Blešić et al., 2014), but there is a great opportunity to apply it to both Extension program planning and evaluation. The rationale for using this type of approach is that 1) an Extension professional cannot meet every possible need of a target audience and 2) resources are best spent on meeting the needs clients feel are most important (Reed & Brown, 2003). Therefore, IPA is a valuable approach when deciding how to allocate limited resources.

When using IPA, *importance* is defined as the perceived value or significance felt by a clientele for an attribute of interest (Sinischalchi et al., 2008). *Performance* is defined as the judgement made by a clientele about the extent to which that attribute of interest is successful (Levenburn & Magal, 2005). Operationally, *satisfaction* with an attribute of interest is used to define performance. One important advantage of IPA is that it allows Extension professionals to focus both on which attributes the clientele rate as important and how satisfied the clientele is with those

attributes. We can then rank order the gaps between satisfaction and importance.

The following are key principles of IPA:

- IPA is used to measure clients' perceptions about specific program or site characteristics, features, or management issues;
- IPA is based on the principle that clients make choices based on two criteria: the relative importance of an element and an assessment of how well these elements are performing;
- IPA results in a measured importance value and a corresponding satisfaction value for each attribute of interest, which allows characteristics to be plotted on a graph with four quadrants;
- Each quadrant (see Figure 1) is then interpreted so that attributes may be prioritized; and
- The ultimate goal is to raise clientele satisfaction on areas where importance is high (Gill et al., 2010; Martilla & James, 1977).

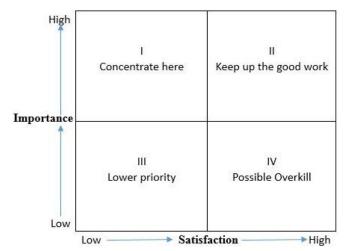


Figure 1. Importance-Performance Matrix. Credit: Martilla & James, 1977, p. 78

Examples of IPA Application

IPA has been used in numerous applications, such as

• to examine perceived quality of life attributes among communities surrounding a national forest, such as

- campground and picnic areas, wilderness, and accessibility for the disabled (Reed & Brown, 2003);
- to gain an understanding of the service quality perceived by spa visitors on attributes such as food, amenities, and entertainment; wellness; and recreation facilities (Blešić et al., 2014);
- to evaluate cultural elements of a weekend-long festival (Hugo & Lacher, 2014);
- to evaluate e-business strategies among small firms (Levenburn & Magal, 2005);
- to identify ways to improve the allocation of organizational resources (Graf et al., 1992; Slack, 1994); and
- to evaluate trainings in order to improve instructor performance and guide the revision of curriculum (Sinischalchi et al., 2008).

Using IPA to Identify Needs and Evaluate Programs

IPA can be useful to Extension professionals in two major ways. First, it can be used to inform the program planning process by identifying needs for a physical place, such as a teaching garden or something less tangible, like the need for communication. Second, it can be used to evaluate programs by identifying areas where the audience's needs were successfully met and those areas that need improvement. Regardless of the application, resources should be prioritized where importance is highest. Efforts should

- be directed to areas where importance is higher and satisfaction is lower;
- focus on maintaining characteristics that receive high importance and high satisfaction; and
- lessen emphasis on characteristics that are rated with low importance, regardless of audience satisfaction with those characteristics.

In the context of needs assessment, IPA can be used to identify the characteristics of an Extension facility or issue that should be given the highest priority. This can be done through gap analysis by calculating where there is a gap between the client's satisfaction with and indicated importance of an Extension facility or issue. Subsequently, areas with the highest gaps are given the highest priority. In the context of needs assessment, the goal for Extension is to raise the level of satisfaction to match how important clients find a given area. To assess communication needs, IPA has been used to identify the way a target Extension audience prefers to receive communications about water (Warner et al., 2016).

As an evaluation tool, IPA can be used to measure how well a program performed in comparison with the audience's needs. Extension professionals should consider those items with low satisfaction and high importance as areas that did not perform to clients' expectations. IPA allows an

Extension professional to draw maps (https://edis.ifas.ufl.edu/publication/wc251) and calculate gaps

(https://edis.ifas.ufl.edu/publication/wc252) in order to compare elements and make a decision on the success or failure of a program. In an evaluation of a weekend-long festival using IPA, Hugo and Lacher (2014) found that while attendees considered culinary aspects of the festival such as the *price of food* to be more important, they were less satisfied with the *price of food*. When it came to cultural aspects of the festival, such as the *showcasing of culture by the food*, attendees found this aspect both less important and less satisfactory. It makes more sense to focus on increasing the satisfaction of important characteristics when satisfaction is low than it does to focus on less important characteristics. Thus, Hugo and Lacher (2014) recommended that culinary aspects of the festival be given more attention based on these IPA results.

Conclusion

IPA is a valuable methodology that Extension educators can use in their Extension programming in order to prioritize their efforts or efficiently allocate their available resources. A needs assessment conducted with IPA can help Extension educators to make decisions about whether to emphasize or de-emphasize their efforts on various elements of a program or issue. The next two publications in this series describe how to collect IPA data and then how to use that data to either generate maps (https://edis.ifas.ufl.edu/publication/wc251) or identify gaps (https://edis.ifas.ufl.edu/publication/wc252) in order to prioritize use of Extension resources. Although IPA has many strengths, it has not been widely used in Extension (Warner et al., 2016), and we encourage Extension educators to consider using this methodology more often. Extension educators are encouraged to read the complete series on IPA to gain a practical understanding of how they can apply this methodology to their regular programming efforts like conducting a needs assessment or evaluating their services.

References

- Blešić, I., Popov-Raljić, J., Uravić, L., Stankov, U., Đeri, L., Pantelić, M., & Armenski, T. (2014). An importance-performance analysis of service quality in spa hotels. *Economic Research-Ekonomska Istraživanja*, *27*(1), 483–495. https://doi.org/10.1080/1331677X.2014.967537
- Gill, J. K., Bowker, J. M., Bergstrom, J. C., & Zarnoch, S. J. (2010). Accounting for trip frequency in importance-performance analysis. *Journal of Park and Recreation Administration*, 28(1), 16–35. https://www.fs.usda.gov/treesearch/pubs/34749

- Graf, L. A., Hemmasi, M., & Nielsen, W. (1992). Importance-satisfaction analysis: A diagnostic tool for organizational change. *Leadership and Organization Development Journal*, *13*(6), 8–12. https://doi.org/10.1108/01437739210021857
- Hugo, N. C., & Lacher, R. G. (2014). Understanding the role of culture and heritage in community festivals: An importance-performance analysis. *Journal of Extension 52*(5), Article 28. https://tigerprints.clemson.edu/joe/vol52/iss5/28
- Levenburg, N. M., & Magal, S. R. (2005). Applying importance-performance analysis to evaluate ebusiness strategies among small firms. *e-Service Journal*, *3*(3), 29–48. https://doi.org/10.2979/esj.2004.3.3.29
- Martilla, J. A., & James, J. C. (1977). Importanceperformance analysis. *Journal of Marketing*, *10*(1), 13–22. https://doi.org/10.2307/1250495
- Reed, P., & Brown, G. (2003). Public land management and quality of life in neighboring communities—the Chugach National Forest planning experience. Forest Science, 49(4), 479–498. https://doi.org/10.1093/forestscience/49.4.479. https://academic.oup.com/forestscience/article/49/4/479/4617496. Accessed February 15, 2023.

- Siniscalchi, J. M., Beale, E. K., Fortuna, A. (2008). Using importance-performance analysis to evaluate training. *Performance Improvement*, *47*(10), 30–35. https://doi.org/10.1002/pfi.20037
- Slack, N. (1994). The importance-performance matrix as a determinant of improvement priority.

 International Journal of Operations & Production Management, 14(5), 59–75.

 https://doi.org/10.1108/01443579410056803
- Warner, L. A., Kumar Chaudhary, A., & Lamm, A. J. (2016).
 Using importance-performance analysis to guide
 Extension needs assessment. *Journal of Extension*,
 54(6), Article 21.
 https://tigerprints.clemson.edu/joe/vol54/iss6/2

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