PANEL DISCUSSION
PUBLISHING AHP/ANP PAPERS

Panelists

Fabio De Felice, Birsen Karpak, Enrique Mu, Leandro Pecchia, Antonella Petrillo and Luis Vargas

Rozann Saaty (Chairperson)

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Introduction

Rozann Saaty
Managing Editor, IJAHP
rozann@creativedeclarations.net
PANEL DISCUSSION
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The purpose of this panel is to offer some helpful suggestions on the art of writing and publishing AHP/ANP papers. The members of the panel are all senior AHP practitioners who have published many papers on AHP.

Each member of the panel will speak for a few minutes on a topic of particular interest to them, then we will open the discussion to the floor for the remaining time.
Rozann Saaty - Chairperson

Rozann is Vice President of the Creative Decisions Foundation. She developed the SuperDecisions software for the AHP/ANP, manages RWS Publications, which publishes books on the AHP by Thomas L. Saaty and others, and is the managing editor of the IJAHP online journal. She is the wife of Thomas L. Saaty.

Enrique Mu

Dr. Enrique Mu is the co-founder and editor-in-chief of the International Journal of the Analytic Hierarchy Process, an online journal which focuses on the promotion and dissemination of AHP/ANP knowledge. He will share his experience as editor from the past five years.

He is also the winner of the best paper award at this conference, and he will be presenting it again in a special session just before lunch today from 12:30 to 1:00.
The Panelists

Antonella Petrillo
Antonella has a PHD degree in Mechanical Engineering and is now a researcher at the University of Cassino (Italy) where she conducts research on multicriteria decision analysis and industrial plants. She is a member of the International and Local committee of the 2011 ISAHP meeting in Sorrento, Italy, and associate editor of the online IJAHP journal which focuses on AHP articles.

Fabio De Felice
Fabio is a Professor at the University of Cassino (Italy). He is a board member of several international organizations and is responsible for scientific research in an industrial plant. Co-chair of the 2011 ISAHP meeting in Sorrento, Italy, and member of the editorial board of the IJAHP, he has more than 100 published papers to his credit. In addition he is the founder of the AHP Academy – The International Association for the promotion of multicriteria decision making methods.
The Panelists

Birsen Karpak
Birsen Karpak, Ph.D. in Business Administration, Professor of Management, Youngstown State University, associate editor, IJAHP, directed an International ASI on Multiple Criteria Decision Making and Risk Analysis. Dr. Karpak received numerous awards in research and service including the Distinguished Professorship Award in Scholarship, two times, and another one in Teaching. She published articles on AHP/ANP Applications mainly on business problems.

Leandro Pecchia
Leandro Pecchia, from University “Federico II” of Napoli, in Italy, is currently on special assignment as a Lecturer of biomedical engineering at the University of Nottingham, UK. His research interest is in applying AHP in healthcare and medical decision making, especially eliciting user needs in medicine to help in designing more effective healthcare technologies and medical devices. He was appointed treasurer of the Health Technology Assessment (HTA) of the prestigious International Federation of Medical and Biomedical Engineering in 2012.
Luis Vargas
Professor at the Joseph M. Katz Graduate School of Business. In 1984 he chaired ISAHP1991, held in Pittsburgh, USA. Luis has focused his research on decision theory, practical applications of the Analytic Hierarchy Process (AHP), measurement of resource utilization, group decision making, Bayesian networks, and forecasting among other interests. He serves on the editorial board of a number of journals, is senior editor of the IJAHP online journal, and has edited several special journal issues on AHP.

NOTE – Dr. Luis Vargas panel discussion was verbal and without the use of PowerPoint slides. For this reason there are no slides corresponding to his panel participation.
PANEL DISCUSSION
PUBLISHING AHP/ANP PAPERS

What constitutes a publishable AHP/ANP Application Paper?

Enrique Mu
Editor-in-Chief, IJAHP
editor-in-chief@ijahp.org
International Journal of the Analytic Hierarchy Process

http: www.ijahp.org
Ideally, an application should address a problem that is:

- Worldwide relevant (even if the particular case is local)
- Current
- Totally or partially unsolved

Your literature review should contextualize your research problem to demonstrate the above
• Methodology does not need to be original but needs to be:
  – Rigorous (e.g. where do criteria come from? Literature?)
  – Participant Transparent (e.g. who entered the judgments?)
  – Understandable (i.e. follow reporting standards)
Results: The Model

- The most important contributions of an AHP/ANP application paper are the answers to the following questions:
  - Does the model have external validity? (Can it be used – even if only as basis- by someone else?)
  - Do conclusions are consistent with the analysis and useful?
  - Have we learned anything new about the topic and its analysis? Sometimes there is not a final solution
  - Important – AHP/ANP analyses have limitations too!
END
PANEL DISCUSSION
PUBLISHING AHP/ANP PAPERS

Statistical Data on AHP Papers

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Statistical Data on AHP Papers

Years 2002-2012

This chart shows the total number of documents for this query by Year.

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Statistical Data on AHP Papers

Source Title

23-26 June 2013, Hotel Istana, Kuala Lumpur

IJAH Vol.5 Issue 1 2013 - ISSN 1936-6744
Statistical Data on AHP Papers

Source Title

Advanced Materials Research

Applied Mechanics and Materials

Expert Systems with Applications

European Journal of Operational Research

Scopus

Springer

Publishing editor: Thomas Wohlbier, TTP USA

Elsevier
Statistical Data on AHP Papers

Country

This chart shows the total number of documents for this query by Country.

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There are a maximum of 15 countries you can add to the graph.
Statistical Data on AHP Papers

Document type

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This chart shows the total number of documents for this query by Document Type.
Statistical Data on AHP Papers

Subject area

- Engineering: 28.6%
- Computer Science: 21.6%
- Business, Management and Accounting: 7.6%
- Decision Sciences: 6.6%
- Mathematics: 6.1%
- Social Sciences: 5.7%
- Agricultural and Biological Sciences: 2.8%
- Earth and Planetary Sciences: 3.1%
- Energy: 3.3%
- Environmental Sciences: 5.3%
- Other: 9.0%

Subject Areas

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<tr>
<td>Medicine</td>
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<tr>
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<tr>
<td>Physics and Astronomy</td>
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What is AHP?

The Analytic Hierarchy Process (AHP) is a structured method for helping people deal with complex decisions. It provides a comprehensive and rational framework for structuring a problem, for representing and quantifying its elements, for relating those elements to overall goals, and for evaluating alternative solutions. Rather than prescribing a “correct” decision, AHP offers a way to systematically and rationally deal with the uncertainties and complexities inherent in making decisions. The process is designed to be flexible and widely applicable to diverse decision environments.

www.ahpacademy.com
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Journals That Publish AHP/ANP Papers

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General Comments

• Don’t format the manuscript according to the journal standards for your 1st submission.
• Don’t add the name of your supervisor to the paper if s/he has not substantively contributed (In some countries it might not be possible though).
• Don’t complain about the referee reports, if your paper gets rejected.
• Don’t throw the paper away if it gets trashed by the referees. There is a suitable journal for most of the papers.
General Comments

• Don’t ignore the referee reports if your paper gets rejected.

• Don’t do everything the referees ask for if your paper gets an r&r. Sometimes you might get conflicting comments.

• Don’t forget to write a detailed ‘letter to the editor’ to explain your revisions and justify your decision not to do what the referees want if you get an r&r. Don’t forget to address every point.
General Comments

• Be the reviewer for journals that publish AHP/ANP papers

• Be a good one. Journals grade the reviewers.

• Ask the editor if s/he can share with you the final decision and the other reviewers’ comments. (You can judge if you have done a good job and learn from other reviewers)
• Don’t take anything exactly from existing published article even if it is of your own (You can quote)
• Never submit the same article for another journal when it has already been published in or accepted by a first journal even if you make some improvements. I know at least one paper that was rejected because a very similar article was already published in another journal. (It is unethical, in the US you may be fired from your university. Now it is very easy to catch.)
Journals That Publish AHP/ANP Papers

- European Journal Of Operational Research (EJOR)
- International Journal of Production Economics (IJPE)
- International Journal of Production Research (IJPR)
- Decision Support Systems
- Expert Systems with Applications
- OMEGA
- Transportation
Journals That Publish AHP/ANP Papers

- Journal of Purchasing and Supply Management
- Journal of Supply Chain Management
- Journal of Cleaner Production
- Computers in Industry
- Computers & Operations Research
- Computers & Industrial Engineering
- Transportation Research Part E: Logistic and transportation
Journals That Publish AHP/ANP Papers

- Journal of Multi-Criteria Decision Analysis (Wiley)
- Mathematical and Computer Modeling
- Information Sciences (Elsevier)
- Applied Mathematical Modeling (Elsevier) (Quite probably it disappeared, just learned from Luis Vargas)
- Safety Science (Elsevier)
Journals That Publish AHP/ANP Papers

• Benchmarking: An International Journal
  – Indexed in
    • Emerald Management Reviews
    • Cabell's Dictionary of Publishing Opportunities in Management and Marketing
    • INSPEC
    • Scopus
• Journal of Manufacturing Technology Management
  – Is indexed and abstracted in:
    • ABI/INFORM
    • Cabell's Dictionary of Publishing Opportunities in Management and Marketing
    • Compendex
    • Emerald Management Reviews
    • Ergonomic Abstracts
    • INSPEC
    • Materials Business File
    • METADEX
    • Scopus
Journals That Publish AHP/ANP Papers

- Journal of Systems Science and Systems Engineering (By Springer Verlag)
- International Journal of Management and Decision Making (Inderscience)
- International Journal of Productivity and Quality Management (Inderscience)
- International Journal of Multicriteria Decision Making (Inderscience)
Journals That Publish AHP/ANP Papers

• International Journal of Services Sciences (Inderscience)
• International Journal of Operational Research (Inderscience)
• International Journal of Services Technology and Management (Inderscience)
• International Journal of Services and Operations Management (Inderscience)
Journals That Publish AHP/ANP Papers

• Int. J. Logistics Systems and Management (Inderscience)
• Journal of Applied Business Research
• Journal of Aeronautics and Space Technologies
Management Decision

- is indexed and abstracted in:
  - ABI Inform
  - Business Periodicals Index
  - Business Source Elite
  - Business Source Premier
  - Cabell's Directory of Publishing Opportunities in Management & Marketing
  - Emerald Management Reviews
  - Scopus
  - Social Science Citation Index (ISI)
  - And others
Journals That Publish AHP/ANP Papers

• International Journal of Business & Management
• Forest Ecology and Management
• Journal of Quality in Maintenance Engineering
• South Asian Journal of Management
  – And quite probably some others
• AHP/ANP, being a decision theory, has been applied in many fields, and those fields often have special journals that are receptive to AHP/ANP decision making papers.

• Introduce the methodology to these audience. Be very clear. AHP/ANP explanation depends on the journal you are publishing.
Thoughts for AHP/ANP Applied papers

- Don’t forget IJAHP!
- Read IJAHP, cite it
Thoughts for AHP/ANP Applied papers

• You can still publish ANP papers with an illustrative validating example.
• Find a virgin area that ANP not yet applied (Sustainable Supply Chains is one of them. There are some applications but not many)
• For AHP papers you need real decision makers
• Do very good literature search in the area you are planning to apply AHP/ANP
• Publishing articles is like playing tennis:
  – you don’t learn it by reading a book or attending a course. You need to practice
• Academic journals reject almost all papers. In the leading journals only about 10 percent of the submitted manuscripts get accepted.
• Editors reject an increasing number of submissions without sending them out for review.
• Don’t be afraid of rejection letters.
• Don’t start too low on the journal ladder.
• Don’t submit the manuscript to more than one journal at a time.
• Don’t submit unfinished / unpolished manuscripts to get comments from the reviewers.
• Make the English as good as you can. Spell-check and grammar-check the paper with the tools Word for Windows provides (most AHP/ANP papers are written in Word, though some journals want LaTex)

• Submit the paper as the journal asks you to. Sometimes journals want the names of the authors stripped from the paper and the meta-data that is hidden in the paper. Make sure it is hidden. Sometimes it is very easy to guess the author though s/he has stripped (but not properly) from the paper.
Thoughts for AHP/ANP Applied papers

• Instead of saying “there is no article in this area” say “to the best knowledge of the authors, there is no article in this area”

• Give theoretical base the criteria you are using. Just saying that “experts selected this criteria is not sufficient”

• We have the advantage of considering the number of factors and interrelationships among these factors that most of the other models cannot explicitly addresses.
Thoughts for AHP/ANP Applied papers

• Give as much detail as possible about the actual problem
  – Who are the decision makers
  – What are the criteria, sub-criteria
  – Who were the parties creating the structure?

• AHP/ANP papers should always be specific about who the decision is for. Who will implement the outcome? Was it implemented or likely to be implemented (If not implemented why? It is much easier to publish an article if the study is implemented we can learn from our mistakes too.)
Thoughts for AHP/ANP Applied papers

• Who gave the judgments, how many were involved, and how was it done. Questionnaire? Group meeting?
• What did you learn from this study?
• What are the strengths of the research?
• What are possible improvements?
• What can be done in future?
The application of the AHP/ANP approach should not only be concerned with a ‘final’ solution to the problem, but it also should be applied as a learning tool for decision makers and managers to help understand the various linkages among the various components, clusters, and elements.
• Provide three names of possible referees for your paper (include their educational institution or affiliation). They should be people familiar with the field in which you applied AHP. If the journal asks so.

• Be prompt in responding to correspondence from the journal and in getting your paper back with the editors' suggested corrections or improvements.

• It is better to give institutional e-mail address.
END
PANEL DISCUSSION
PUBLISHING AHP/ANP PAPERS

Articles describing application of AHP in healthcare

Leandro Pecchia
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leandro.pecchia@nottingham.ac.uk
1. There is a growing number of study focusing on application of AHP in healthcare.

2. These applications span from:
   - Medical decision making
   - Health Technology Assessment
   - Identification of the best treatment for a patient or a specific population of
   - User need elicitation and human centered design
   - Selection of health technologies
   - Identify the best candidate for a treatment (i.e. candidate for organ donation)

3. This is a very promising and challenging field, but few considerations have to be done before writing a paper.

4. This is mainly because healthcare researches present some peculiarities:
   - The final user of a technology is not a technologist
   - The main stakeholder is not expert of the field
   - Safety and ethical issues are paramount important

5. Thus, it is useful to discuss some issues regarding paper on AHP in healthcare.
This is the section that needs to be better structured

- Focus only on the specific problem you are trying to solve
- Support your goal with references (why you did your study?)
- Present in few words the state of the art (...put all the references here!!!!)
- Clarify clearly what your study added/is adding/is going to add/will add
- State clearly the goal of this paper (which may be different from all the study)
Method

1. Describe in details only your relevant contributions:
   • Was AHP used in a peculiar way?
   • Was it a new target of responders?
   • ...

2. Spend less words on other methodological bits, remanding the readers to the references for the well established parts

3. I would suggest not to describe the basic method of AHP, unless your paper is the first one describing AHP for the journal your are submitting your work.

4. Please minimize the numbers in this section...

5. Try to write this section in an understandable way for readers not familiar with AHP (or with other mathematical staff), but do not repeat well known thinks

6. Some references in this section are normally due (i.e. Saaty fundamental scale)

7. Critical data pooling: readers are use to see a mean value and a variance...

8. In healthcare there are some methodological requirements:
   • minimum sample size estimation (this is essential to start the study)
   • generality of your results (given with statistical tests and p-value)
   • mention your ethical approval
   • Opinion study are the base of pyramid of evidence...
Results and Discussion

1. Put here **all the numbers**, tables, diagrams
2. **Report the results achieved in your study**
3. **Report **ONLY** the results achieved in your study**
4. Use graphs and plots to describe the main results (do not repeat all, just the main)
5. **No new references** here: cite all the studies you need in the introduction...
6. **Discuss your results against existing literature:**
   - “differently from Dr X, we proved that…”
   - “we confirm the results of Dr X with an independent method…”
   - This may happen. It is the frequent case of a secondary outcome...
7. If there is no previous studies to compare your work... search better and better!
Conclusion

1. Describe in few lines the contribution of your paper
2. Describe in few words the learned lesson
3. Try to describe the impact of your work
4. Highlight possible future directions
5. State clearly the limits of your study
Thank you for your time!

P.s.: please do not blame me, this is only the lesson I learned by writing 28 papers in 2012/13. I would have published much better if somebody had told me these few thinks...

Leandro Pecchia
University of Nottingham (UK)
leandro.pecchia@nottingham.ac.uk
L.pecchia@warwick.ac.uk (from next September)
PANEL END