



## Data Mining and Exploratory Data Analysis for the Evaluation of Job Satisfaction

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### Author(s)

Rosaria Lombardo, Ermelinda Della Valle

### ABSTRACT

In this paper we face off the relationship value management which is a theme in the relationship marketing literature gaining increasing attention in the last decade. The main aim of this study is to evaluate job quality and in particular employees' satisfaction of non-profit enterprises by using, among different exploratory data analysis tools, ordered multiple correspondence analysis which is a part of corporate data mining. We focus attention on Ordered Multiple Correspondence Analysis (OMCA), recently proposed in statistical literature, to monitor (dis)satisfaction in different times or spaces. In particular we present a new strategy based on OMCA which allows to deal with ordered variables (Likert items) taking into account other qualitative information of job (kind of job contract, type of incentives, etc.) affecting the overall satisfaction of employees.

### KEYWORDS

Customer Relationship Management, Relationship Value Management, Job Satisfaction, Social Enterprise, Data Mining, Ordered Multiple Correspondence Analysis

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### References

- [1] A. Payne, S. Holt and P. Frow, " Integrating Employee, Customer and Shareholder Value through an Enterprise Performance Model: An Opportunity for Financial Service," International Journal of Bank Marketing, Vol. 18, No. 6, 2000, pp. 258-273. doi:10.1108/02652320010358689
- [2] A. Payne, S. Holt and P. Frow, " Relationship Value Management: Exploring the Integration of Employee, Customer and Shareholder Value and Enterprise Performance Models," Journal of Marketing Management, Vol. 17, No. 7-8, 2001, pp. 785-817. doi:10.1362/026725701323366827
- [3] M. Manisera, " Un' analisi Esplorativa Della Qualità del Lavoro Nelle Cooperative Sociali," In: M. Carpita, Ed., La qualità del lavoro nelle cooperative sociali. Misure e Modelli Statistici, Franco Angeli, Milano, 2009, pp. 37- 72.
- [4] E. Brentari and S. Golia, " Misure Oggettive Della Qualità del lavoro Soggettiva Nelle Cooperative Sociali," In: M. Carpita, Ed., La qualità del lavoro nelle cooperative sociali. Misure e Modelli Statistici, Franco Angeli, Milano, 2009, pp. 95-125.
- [5] A. Thomas, " The Rise of Social Cooperatives in Italy, *Voluntas*," International Journal of Voluntary and Non-profit Organizations, Vol. 15, No. 3, 2004, pp. 243-263. doi:10.1023/B:VOLU.0000046280.06580.d8
- [6] A. Codini, " Le Cooperative Sociali—Assetti di Governance e Aspetti di Gestione," Franco Angeli, Milano, 2007.
- [7] P. Venturi and F. Zandonai, " La Nuova Normativa: Una rivoluzione Mancata?" In: C. Borzagha and F. Zandonai, Eds., Impresa sociale in Italia, Donzelli Editore, Roma, 2009, pp. 9-18.

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- [8] C. Travaglini, "Cooperativa Sociale Come Azienda Col-laborativa Multistakeholder," *Impresa Sociale*, Vol. 31, No. 1, 1997, pp. 1-15.
- [9] A. Lionzo, "La Cooperativa Sociale," Franco Angeli, Milano, 2001.
- [10] M. Carpita, "La Qualità del Lavoro Nelle Cooperative So-ciali. Misure e Modelli Statistici," Franco Angeli, Milano, 2009.
- [11] C. Borzaga and A. Ianes, "L' economia Della Solidarietà Storia e Prospettive Della Cooperazione Sociale," Donzelli Editore, Roma, 2006.
- [12] S. Depedri, "Motivazioni ed Incentivi," In: M. Demozzi and F. Zandonai, Eds., *Impresa sociale di comunità. Strumenti per la creazione e la gestione*, Trento, 2007, pp. 236-248.
- [13] J. A. Kerlin, "Social Enterprise in the United States and Europe: Understanding and Learning from the Differ- ences," *Voluntas*, Vol. 17, No. 3, 2006, pp. 247-263. doi:10.1007/s11266-006-9016-2
- [14] P. F. Drucker, "They're Not Employees, They're Peo- ple," *Harvard Business Review*, Vol. 80, No. 2, 2002, pp. 70-77.
- [15] R. E. Freeman, A. C. Wicks and B. Parmar, "Stakeholder Theory and the Corporate Objective Revisited," *Organization Science*, Vol. 15, No. 3, 2004, pp. 364-369. doi:10.1287/orsc.1040.0066
- [16] E. C. Tortia, "Worker Well-Being and Perceived Fairness: Survey-Based Findings from Italy," *The Journal of Socio-Economics*, Vol. 37, No. 5, 2008, pp. 2080-2094. doi:10.1016/j.socec.2007.10.005
- [17] C. Argyris, "Understanding Organizational Behavior," Dorsey Press, Homewood, 1960.
- [18] D. M. Rousseau, "The Problem of the Psychological Con- tract Considered," *Journal of Organizational Behavior*, Vol. 19, No. S1, 1998, pp. 665-672. doi:10.1002/(SICI)1099-1379(1998)19:1+<665::AID-JOB972>3.0.CO;2-X
- [19] N. Anderson and R. Schalk, "The Psychological Contract in Retrospect and Prospect," *Journal of Organizational Behavior*, Vol. 19, No. S1, 1998, pp. 637-647. doi:10.1002/(SICI)1099-1379(1998)19:1+<637::AID-JOB986>3.0.CO;2-H
- [20] D. M. Rousseau, "Promises in Action: Psychological Contracts in Organizations," Sage, Newbury Park, 1995.
- [21] M. Greenacre, "Theory and Applications of Correspondence Analysis," Academic Press, London, 1984.
- [22] R. Lombardo and J. Meulman, "Multiple Correspondence Analysis via Polynomial Transformations of Ordered Categorical Variables," *Journal of Classification*, Vol. 27, No. 2, 2010, pp. 191-216. doi:10.1007/s00357-010-9056-6
- [23] R. Lombardo and E. J. Beh, "Simple and Multiple Corre-spondence Analysis Using Orthogonal Polynomials," *Journal of Applied Statistics*, Vol. 37, No. 12, 2010, pp. 2101-2116. doi:10.1080/02664760903247692
- [24] S. Lessman and S. Vob, "A Reference Model for Cus-tomer Centric Data Mining with Support Vector Ma-chines," *European Journal of Operational Research*, Vol. 199, No. 2, 2009, pp. 520-530. doi:10.1016/j.ejor.2008.12.017
- [25] E. Della Valle, "L' analisi Multidimensionale dei dati: la qualità Del Lavoro Nelle Cooperative Sociali," Thesis in Statistics, Unpublished Work, Facoltà di Economia della Seconda Università degli Studi di Napoli, February 2010.
- [26] Y. Stryjan, "The Practice of Social Entrepreneurship: Notes towards a Resource Perspective," In: C. Steyaert, and D. Hjorth, Eds., *Entrepreneurship as Social Change: a Third Movements in Entrepreneurship Book*, Edward Elgar Publishing, Cheltenham, 2004, pp. 35-56.
- [27] C. Borzaga and J. Defourny, "The Emergence of Social Enterprise," Routledge, London, 2001.
- [28] H. Anheier and A. Ben Ner, "The Study of the Nonprofit Enterprise: Theories and Approaches," Kluwer Academic/Plenum Publishers, New York, 2003.
- [29] L. M. Salamon and H. K. Anheier, "WP of the Johns Hopkins Comparative Nonprofit Sector Project," Baltimore, 1997.

- [30] M. Nyseen, " Social Enterprise," Routledge, London, 2006.
- [31] A. Payne and S. Holt, " Diagnosing Customer Value: Integrating the Value Process and Relationship Marketing," British Journal of Management, Vol. 12, No. 2, 2001, pp. 159-182. doi:10.1111/1467-8551.00192
- [32] M. Carpita and E. Poli, " Statistica per l' impresa sociale di qualità," Rivista di economia e statistica per il territorio, Vol. 3, 2007, pp. 91-108.
- [33] M. Bertrand and S. Mullainathan, " Do People Mean What They Say? Implications for Subjective Survey Data," American Economic Review, Papers and Proceedings, Vol. 91, No. 2, 2001, pp. 67-72. doi:10.1257/aer.91.2.67
- [34] C. D. Fisher, " Why Do Lay People Believe That Satisfaction and Performance Are Correlated? Possible sources of a commonsense theory," Journal of Organizational Behavior, Vol. 24, No. 6, 2003, pp. 753-777. doi:10.1002/job.219
- [35] D. J. Schleicher, J. D. Watt and G. J. Greguras, " Reexamining the Job Satisfaction-Performance Relationship: The Complexity of Attitudes," Journal of Applied Psychology, Vol. 89, No. 1, 2004, pp. 165-177. doi:10.1037/0021-9010.89.1.165
- [36] S. Highhouse and A. S. Becker, " Facet Measures and Global Job Satisfaction," Journal of Business and Psychology, Vol. 8, No. 1, 1993, pp. 117-127. doi:10.1007/BF02230397
- [37] E. J. Beh, " Simple Correspondence Analysis of Ordinal Cross-Classifications Using Orthogonal Polynomials," Biometrical Journal, Vol. 39, No. 5, 1997, pp. 589-613. doi:10.1002/bimj.4710390507