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Short communication

What's familiar is excellent: The impact of exposure effect on perceived journal quality

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ABSTRACT

The purpose of this study is to test the existence of the exposure effect in journal ranking decisions. The exposure effect emerges when participants of journal ranking surveys assign higher scores to some journals merely because they are more familiar with them rather than on their objective assessment of the overall journal's contribution to the field. Analysis of the journal ranking data from a survey of 233 active researchers in the field of knowledge management and intellectual capital confirmed the existence of the exposure effect. Specifically, it was found that: (1) those who previously published in a particular journal rated it higher than those who did not; (2) those who previously served as a reviewer or editor for a particular journal also rated it higher than those who did not; and (3) a very strong correlation was found between the respondents' perceptions of overall contribution of a journal and the degree of their familiarity with this outlet. This investigation confirmed a major limitation of the stated preference journal ranking approach that should be taken into consideration in future research and results interpretation.

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1. Introduction and purpose of the study

The purpose of this study is to test the existence of the exposure effect in journal ranking decisions. There are two major methods to assess the quality of scholarly journals: stated preference and revealed preference (Lowry, Humphreys, Malwitz, & Nix, 2007; Serenko, 2010). Based on the revealed preference technique, the ranking is constructed according to the citation impact of each outlet. For this, data are usually obtained from Thomson Reuter's Journal Citation Reports, Scopus, or Google Scholar (e.g., see Moussa & Touzani, 2010). According to the stated preference approach, the ranking is based on the results of a survey of a representative group of field researchers who rank each outlet based on several factors, for example, overall quality, impact on practice and contribution to theory. Both methods have several advantages. The revealed preference technique is beneficial because the ranking is based on relatively objective measures reflecting the journal's citation impact. At the same time, it suffers of various drawbacks. For example, self-citations may inflate the results, editors or reviewers may put pressure on the authors to reference particular journals, negative citations critiquing but not using the work still contribute to the overall citation count, and some authors may cite papers without even reading them (Bonev, 2009; Bontis & Serenko, 2009).

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The key advantage of the stated preference approach is that the ranking is based on the opinion of the intended audience of the journal, such as its readers and contributors. However, those rankings are purely subjective in nature. New journals are usually excluded from the lists presented to the respondents (Truex, Cuellar, & Takeda, 2009). Journals that have been longer in-print and publish more issues per year are more widely read and, therefore, are assigned higher scores. Internal or external politics may affect ranking decisions (Adler & Harzing, 2009). Most importantly, journals, with which respondents are more familiar, may be potentially perceived of higher quality and impact. However, familiarity and quality are two entirely different concepts. At the same time, it is possible that the former influences the perception of the latter resulting in biased results. Therefore, this study proposes and answers the following research question:

In journal ranking surveys, what is the impact of familiarity with a peer-reviewed journal on the respondents' perceptions of its contribution to the field?

The exposure effect, also referred to as the mere exposure effect, familiarity effect and familiarity principle, is a psychological phenomenon according to which individuals tend to develop positive affect to objects or individuals only because they are more familiar to them (Bornstein, 1989). The notion that people tend to express more positive emotions towards familiar objects and individuals is over a century old (Titchener, 1910). This topic has attracted the attention of the scientific community after Zajonc (1968) published his seminal work that clearly demonstrated and explained this phenomenon. After that, hundreds of experiments have been conducted in various settings. According to Google Scholar, Zajonc's work was cited over 2000 times as of June 2010.

When individuals make decisions, they are often unaware of the stimuli or factors that influenced their response (Nisbett & Wilson, 1977a, 1977b). Subconsciously, they tend to minimize their cognitive load when making complex decisions that involve extensive learning processes (Adler, 1985). The exposure to a previously unknown object makes this object more likable when prior knowledge reduces the load on cognitive processes that take place during the decision making process (Dechêne, Stahl, Hansen, & Wänke, 2009). In other words, familiarity reduces the complexity of mental processing, and positive cognitive feeling of making an easier decision is misattributed to the object being rated. Completing a journal ranking survey is a complex decision that places a heavy burden on the respondent. First, this is a very unusual task for most participants; a scholar may complete only a few such surveys over the entire academic career. Second, many respondents may believe that the obtained journal ranking may be of parsimonious importance to the entire research community and have an impact on the future of the entire scholarly domain. By trying to assign an accurate score to each outlet, the respondents engage in a complex decision making process. At the same time, they may subconsciously minimize their cognitive load by expressing more positive feelings towards more familiar outlets, especially, in which they published their articles, or served as reviewers or editors. As such, more familiar journal titles, in contrast to less familiar ones, make individuals develop a set of favourable cognitive and affective associations which they take into considerations when making ranking decisions. As a result, more familiar outlets would enjoy higher scores, and the obtained ranking would reflect the mere familiarity with the journal rather than its theoretical or practical contribution to the field.

The presence of the exposure effect has been observed in virtually all types of decision making processes. For example, familiarity may have an effect on corporate reputation (Brooks & Highhouse, 2006). Brand awareness has an effect on product purchasing (Hoyer & Brown, 1990). It also positively influences perceptions of the quality of products offered by online retailers (Griffith & Gray, 2002). Many stock traders exhibit a home country bias by investing in securities of domestic companies because of mere familiarity even though they believe that international equity markets may offer the same or even better returns (Huberman, 2001; Tourani-Rad & Kirkby, 2005). The present study contributes to the literature by demonstrating the presence of the exposure effect during journal ranking surveys.

2. Methodology and results

In this study, the dataset collected by Serenko and Bontis (2009) was utilized. This data was obtained through a survey of 233 active researchers in the field of knowledge management and intellectual capital (KM/IC), which is a relatively new management discipline (Serenko et al., 2010). The purpose was to develop a ranking of 20 KM/IC academic journals. In that project, the investigators randomly selected names of up to 50 contributors to each of 20 KM/IC outlets for the period from 2003 to 2007. The identified individuals were approached through an email invitation, followed by two reminders, and the response rate of almost 30% was reached. In order to eliminate order bias, 20 different survey versions were utilized with journals appearing in random order. In the present investigation, data pertaining to five questionnaire items were used: (1) what is your degree of overall familiarity with this journal? (seven point Likert-type scale ranging from 'totally unfamiliar—never heard of it' to 'very well familiar'); (2) what is the journal's degree of contribution to theory of KM/IC? (seven point Likert-type scale ranging from 'none' to 'outstanding'); (3) what is the journal's degree of contribution to practice of KM/IC? (seven point Likert-type scale ranging from 'none' to 'outstanding'); (4) have you previously published articles in this journal? ('yes/no'); and (5) have you served as a reviewer/editor for this journal? ('yes/no').

In order to answer the study's research question, two analyses were done. The purpose of the first analysis was to test differences in the perception of an outlet's contribution depending on whether a respondent previously published in this journal or served as a reviewer/editor. For each outlet, an overall journal's contribution score was formed by calculating the average of items 2 (i.e., theoretical contribution of the journal) and 3 (i.e., practical contribution of the journal). For each journal, an independent *t*-test was done to compare the contribution score means of those who previously published in this

Table 1
Results.

	Contribution <i>t</i> -value (published/did not publish)	Mean – overall contribution – published	Mean – overall contribution – did not publish	Contribution <i>t</i> -value (reviewed/did not review)	Mean – overall contribution – reviewed or served as editor	Mean – overall contribution – did not review or serve as editor	Overall contribution–familiarity correlation
Avg	7.797 (<i>p</i> < 0.00)	5.27	2.19	4.199 (<i>p</i> < 0.00)	5.26	2.36	0.87 (<i>p</i> < 0.00)
Max	12.720 (<i>p</i> < 0.00)	5.99	3.95	6.197 (<i>p</i> < 0.00)	6.18	4.32	0.91 (<i>p</i> < 0.00)
Min	4.351 (<i>p</i> < 0.00)	4.14	1.26	2.521 (<i>p</i> < 0.05)	4.00	1.39	0.81 (<i>p</i> < 0.00)

journal with those who did not. The same test was done with respect to those who previously served as a reviewer/editor with those who did not. The goal of the second test was to test a correlation between the degree of familiarity with a journal and its overall contribution. Table 1 outlines the results.

First, it was observed that those who previously published in a particular journal also rated it higher than those who did not. The same relationship was found with respect to an exposure to a journal by means of engaging in editorial work or peer-review processes. Second, a very strong correlation was found between an overall contribution of a journal and the degree of a respondent's familiarity with this outlet. Third, those who previously published in a journal ranked it same way as those who did reviews or served on editorial boards. This demonstrates the lack of an ego bias. In other words, researchers do not try to overstate the reputation of a journal only because they published in it; it is the exposure effect that enhances their journal quality perceptions.

3. Implications and conclusions

The purpose of this study was to test whether familiarity with a peer-reviewed journal has an effect on the respondents' perceptions of this journal's contribution to the scholarly domain. For this, data from 233 active researchers from the field of knowledge management and intellectual capital were collected and subjected to quantitative data analysis techniques. The results ultimately confirmed the presence of the exposure effect.

It is concluded that in journal ranking surveys, the respondents' perceptions of the journal's quality are affected by their prior exposure to this outlet. Specifically, those respondents, who previously published in it or served as a reviewer or an editor, rank this outlet higher than those who did not. The magnitude of this discrepancy is shocking; on average, the difference is more than two-fold. The score reflecting the degree of familiarity with the outlet also correlates very strongly with its perceived contribution to the state of theory and practice, with the average correlation of 0.87 ($p < 0.01$). As such, familiarity explains 75% of the variance in the journal's ranking. Prior exposure to the journal as a contributor (i.e., author) or reviewer/editor generates the familiarity bias to the same extent. This shows that individuals do not try to over-rate the outlets in which they previously published to artificially inflate the ranking for the sake of personal benefits (i.e., to demonstrate that they published in highly ranked journals), their decisions are simply affected by a subconscious stimuli which reduces the cognitive load during the ranking process.

At the same time, this study does not suggest that journal ranking lists based on expert surveys should be disregarded. This investigation simply confirmed a major limitation of the stated preference journal ranking approach that should be taken into consideration in future research and during results interpretation. There is a great value in the development of journal ranking lists based on valid methods.

In conclusion, it is recommended that the developers of journal rankings and their users (i.e., academics, professionals, tenure and promotion committee members, chairpersons of academic departments) fully appreciate the significance of the exposure effect on the respondents' perceptions of journal quality. It is for this reason that a multi-faceted approach be taken when assessing journal quality. Ranking data should be collected from multiple sources using both the revealed and stated preference methods. It is far too dangerous and unwise to evaluate academic performance by merely using a single journal ranking table. When promoting their publication outlet to the potential readers, subscribers and authors, journal publishers should communicate as much information about the journal as possible rather than report a single ranking position from a single resource.

References

- Adler, M. (1985). Stardom and talent. *American Economic Review*, 75(1), 208–212.
- Adler, N., & Harzing, A.-W. (2009). When knowledge wins: Transcending the sense and nonsense of academic rankings. *Academy of Management Learning & Education*, 8(1), 72–95.
- Bonev, I. (2009). Should we take Journal Impact Factors seriously? *ParalleMIC*. Available online at <http://www.parallemic.org/Reviews/Review016.html>.
- Bontis, N., & Serenko, A. (2009). A follow-up ranking of academic journals. *Journal of Knowledge Management*, 13(1), 16–26.
- Bornstein, R. F. (1989). Exposure and affect: Overview and meta-analysis of research, 1968–1987. *Psychological Bulletin*, 106(2), 265–289.
- Brooks, M. E., & Highhouse, S. (2006). Familiarity breeds ambivalence. *Corporate Reputation Review*, 9(2), 105–113.
- Dechêne, A., Stahl, C., Hansen, J., & Wänke, M. (2009). Mix me a list: Context moderates the truth effect and the mere-exposure effect. *Journal of Experimental Social Psychology*, 45(5), 1117–1122.
- Griffith, D. A., & Gray, C. C. (2002). The fallacy of the level playing field: The effect of brand familiarity and web site vividness on online consumer response. *Journal of Marketing Channels*, 9(3/4), 87–102.
- Hoyer, W. D., & Brown, S. P. (1990). Effects of brand awareness on choice for a common, repeat-purchase product. *Journal of Consumer Research*, 17(2), 141–148.
- Huberman, G. (2001). Familiarity breeds investment. *Review of Financial Studies*, 14(3), 659–680.
- Lowry, P. B., Humphreys, S., Malwitz, J., & Nix, J. (2007). A scientometric study of the perceived quality of business and technical communication journals. *IEEE Transactions on Professional Communication*, 50(4), 352–378.
- Moussa, S., & Touzani, M. (2010). Ranking marketing journals using the Google Scholar-based hg-index. *Journal of Informetrics*, 4(1), 107–117.
- Nisbett, R. E., & Wilson, T. D. (1977a). The halo effect: Evidence for unconscious alteration of judgments. *Journal of Personality and Social Psychology*, 35(4), 250–256.
- Nisbett, R. E., & Wilson, T. D. (1977b). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84(3), 231–259.
- Serenko, A. (2010). The development of an AI journal ranking based on the revealed preference approach. *Journal of Informetrics*, 4(4), 447–459.
- Serenko, A., Bontis, N., Booker, L., Sadeddin, K., & Hardie, T. (2010). A scientometric analysis of knowledge management and intellectual capital academic literature (1994–2008). *Journal of Knowledge Management*, 14(1), 3–23.

- Serenko, A., & Bontis, N. (2009). Global ranking of knowledge management and intellectual capital academic journals. *Journal of Knowledge Management*, 13(1), 4–15.
- Titchener, E. B. (1910). *A textbook of psychology*. New York: Macmillan.
- Tourani-Rad, A., & Kirkby, S. (2005). Investigation of investors' overconfidence, familiarity and socialization. *Accounting & Finance*, 45(2), 283–300.
- Truex, D., Cuellar, M., & Takeda, H. (2009). Assessing scholarly influence: Using the Hirsch indices to reframe the discourse. *Journal of the Association for Information Systems*, 10(7), 560–594.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9(2), 1–27.