

Sustaining impactful multidisciplinary contributions over five decades

An interview with Professor Ramadhar Singh, Distinguished University Professor, Amrut Mody School of Management, Ahmedabad University

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KEYWORDS

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Citations;
Colloquia;
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Fairness;
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In-group;
Inspiration;
Research

Abstract A professor avows, declares, or professes knowledge of a field. The challenge for most professors lies in continuing to generate relevant knowledge. Of those continuing research, most make impact on their respective disciplines. Ramadhar Singh—an experimental social psychologist and currently, Distinguished University Professor, Amrut Mody School of Management, Ahmedabad University—has been steadily contributing to the advancement of knowledge in psychology and producing multidisciplinary impact over his 49-year career.

By tracing the trajectory of Singh's vast and varied experience, attitude and approach to research, and scholarly output in international publications that have advanced knowledge and found applications from management to biological and social sciences, this interview offer pathways to research scholars for sustained multidisciplinary and impactful research in their careers.

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Author's Note

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Context note

School, professor, and research

A school or university, according to the *Oxford Learner's Dictionary*, is an institution where courses leading to a degree (bachelor's, master's, and/or doctoral) are offered and research is done. Further, a professor is a faculty member of the highest academic rank who avows, declares, or professes knowledge of a field. Consistent with this

conception, the University Grants Commission,¹ the Indian Institutes of Technology,² and the All India Council for Technical Education³ require a person of the full professor rank to be an eminent scholar (i.e., one who has been successful, well-known, and respected in her or his field of specialisation).

In 2011, however, the then Environment Minister of India made not-so-encouraging comments about faculty members of our institutions of national importance, including the Indian Institutes of Management (IIMs) and the Indian Institutes of Technology (IITs).⁴ More recently, Mishra (2014) also expressed similar concern about the research environment in our institutions:

Indian institutions ... are not able to build a culture that can provide a world-class research environment and produce best of researchers. ... our educational institutions ... have to give priority to build a culture where the basic human instinct of "questioning" is given primacy, where there is ample space for [re]creation of knowledge with changing time (pp. 1787–1788).

As of February 28, 2015, there were about 3000 schools of management in India. Over the last five years, however, only 32 of those schools had appeared in the ranking lists of top performers by *Outlook*, *Business World*, and/or *Careers360* (Sahoo, Singh, Mishra, & Sankaran, 2017). Of the 1416 faculty members of those 32 schools, only 55.37% had a journal publication captured by one of the three publication databases of the National University of Singapore (NUS), the Association of Business Schools (ABS), and Elsevier's *Scopus*. It was found that even with a score of 0.09 along the productivity scale of 0 (*not at all productive*) to 1 (*most productive*), a faculty member could find a place among top 5% of most productive researchers of India (Sahoo et al., 2017).

As per the recent and the first ever ranking of management schools in India under the auspices of National Institutional Ranking Framework (NIRF), Ministry of Human Resource Development, Government of India, among 609 management schools, the Indian Institute of Management Bangalore (IIMB) is at the first position, with a weighted average overall score of 93.04 along a scale of 0 (*lowest*) to 100 (*highest*), followed by the Indian Institute of Management Ahmadabad (IIMA) and the Indian Institute of Management Calcutta (IIMC).⁵ The IIMB is also the leading management school with regard to research, with a total score of 94.06/100. Of the total points allocated to (a) journal publications and (b) citations of those papers by peers, the respective percentages for IIMB faculty members were 98.57 and 99.93. However, when we compare the performance of Indian management scholars with peers abroad, a not-very-rosy scenario emerges. Drawing from the database of Scimago Country Rankings for the period 1996–2013, especially in the business, management

and accounting (miscellaneous), and other management subject categories, Balooni (2014) found Indian management scholars at the seventh rank in the world when it came to creating citable documents after the US, the UK, China, and Germany. That is, the difference between Indian and other scholars was not as noticeable in terms of number of documents created as in the recognition of those documents among the peers and citations by them. With regard to citations, Indian management scholars collectively lagged behind their counterparts from these nations. Whereas Indian management scholars had 4.14 citations per citable document, those in the US, the UK, Germany, and China had 16.96, 13.97, 6.43, and 5.28 citations per citable document, respectively. Relative to our baseline of 4.14 citations, however, there are some highly productive scholars in the Indian management schools as exemplified by the case of Ramadhar Singh. Therefore, the central purpose of this interview is to draw insights from the research and experience of Distinguished Professor Singh in order to offer pathways for sustained multidisciplinary and impactful research contribution during one's career.

Ramadhar Singh: an experimental social psychologist

Education, experience, and style

Singh started his career as an experimental psychologist (1965–70). Later on, he specialised as an experimental social psychologist under the tutelage of Donn Byrne.⁶ Given his employments in various academic departments such as Department of Psychology at Patna University and the National University of Singapore (NUS), Department of Humanities and Social Sciences at the Indian Institute of Technology, Kanpur (IITK), and Organisational Behaviour Area of IIMA and IIMB, it could safely be concluded that he successfully applied his experimental skills to the issues in management, psychology, and the social sciences.

Table 1 presents a brief curriculum vitae of Singh. While selecting the information from two websites⁷ for Table 1, only those pieces were chosen that were of direct relevance to his sustained contributions to management and psychology. As can be seen in Table 1, his publications in the journals listed, the Fellow status in the six professional associations of psychology, and invited colloquia at institutions of higher learning across the globe are testimonies to his unusual and outstanding contributions to the psychological sciences.

Management teachers are, as per current thinking, supposed to help their students not only "discover who they are" but also "both discern and grow into whom they might become" (Khurana & Snook, 2011, p. 360). This outlook has long been part of Singh's practice.

For example, an NUS alumnus, who had published two papers with Singh and nominated him for the Inspiring Mentor Award in 2009, wrote:

¹ <http://www.ugcfrp.ac.in/advertisements.asp?links=ugc6>.

² For example, http://www.aicte-india.org/downloads/clarification_2016.pdf#toolbar=0.

³ <http://www.iitb.ac.in/sites/default/files/Infosheet11Sep2014.pdf>.

⁴ <http://www.ndtv.com/india-news/iit-iim-faculty-not-world-class-jairam-ramesh-456533>.

⁵ http://mhrd.gov.in/sites/upload_files/mhrd/files/nirf_booklet_FINAL_02_04_16_01-00PM.pdf.

⁶ <http://www.psychologicalscience.org/index.php/publications/observer/2014/december-14/remembering-donn-byrne.html>.

⁷ <http://ramadharsingh.wordpress.com>; <https://vidwan.inflibnet.ac.in/profile/56256>.

Table 1 A Brief Curriculum Vitae of Ramadhar Singh.**Ramadhar Singh**

Born: May 16, 1945

Webpage: <https://ahduni.edu.in/amsom/faculty/ramadhar-singh>; <http://ramadharsingh.wordpress.com>;
<https://vidwan.inflibnet.ac.in/profile/56256>

Education

M.S. (1972) and Ph.D. (1973) in Social Psychology, Purdue University, USA

B.A. Hons. (1965) and M. A. (1968) in Experimental Psychology, Bihar University, India

Employment

Distinguished University Professor, Amrut Mody School of Management, Ahmedabad University, 2016 onwards—

Distinguished Professor of Management: Indian Institute of Management Bangalore (2010–16); Professor of Psychology (1997–2010), Associate Professor of Social Work and Psychology (1990–97), Senior Fellow in Social Work and Psychology (1988–90): National University of Singapore; Professor of Organisational Behavior: Indian Institute of Management, Ahmedabad (1979–90); Assistant Professor of Psychology: Indian Institute of Technology, Kanpur (1973–79); and Lecturer in Psychology, Patna University, Patna (1968–73).

Visiting Positions

Professor, Purdue University, USA (2008); Professor, Indian Institute of Management, Lucknow (2006, 2007–08); Faculty, Mudra Institute of Communications, Ahmedabad (2005–06); Scholar, University of Oxford, UK (2004); Professor, University of Rochester, USA (2003–04); Visitor, University of California, San Diego, USA (1984).

Publications**Management Journals**

Applied Psychology: An International Review; *IIMB Management Review*; *Journal of Applied Psychology*; *Journal of Behavioral Decision Making*; *Omega: The International Journal of Management Science*; *Organizational Behavior and Human Performance*; and *Organizational Behavior and Human Decision Processes*.

Psychology Journals**Developmental**

Child Development; *Cognitive Development*; *Developmental Psychology*; *Journal of Experimental Child Psychology*; and *Journal of Genetic Psychology*.

General

American Psychologist; *Asian Journal of Psychology*; *Bulletin of the Psychonomic Society*; *International Journal of Psychology*; *Learning and Motivation*; *Psychonomic Science*; *Psychologia*, and *Singapore Psychologist*.

Personality

Journal of Research in Personality; *Personality and Social Psychology Bulletin*; and *Personality and Social Psychology Compass*.

Social Psychology

Asian Journal of Social Psychology; *Basic and Applied Social Psychology*; *British Journal of Social Psychology*; *European Journal of Social Psychology*; *Journal of Experimental Social Psychology*; *Journal of Personality and Social Psychology*; *Journal of Social Psychology*; *Journal of Social and Personal Relationships*, *Personal Relationships*, *Representative Research in Social Psychology*.

Invited Colloquia at Universities and Institutes

Europe: University of Birmingham (2004); Catholic University of Leuven, Belgium (2004); University of Kent, Canterbury (2004); and Oxford University (2004).

East and Southeast Asia: Beijing Normal University (1998); Chinese Academy of Sciences, Beijing (1998); Chulalongkorn University, Bangkok (2003); Chinese University of Hong Kong (1996); University of Indonesia, Depok (1999); Inha University, Incheon, Korea (1997); Institute of Psychology, Hanoi (1999); Islamic University of Malaysia, Kuala Lumpur (2005); NUS (1988, 2005, 2009), Nanyang Technological University, Singapore (1995); Peking University (1998); and University of Tokyo (1997)

India: Central Universities at Allahabad (1976, 1979, 1982, 1987, 2001, 2002, 2005, 2015), Patna (2012), Delhi (1983, 1986, 1998), and Varanasi (1985).

State Universities at Baroda (1983, 1987), Bombay (1980, 1984), Gujarat (1981), Jodhpur (1983), Meerut (1978), Osmania (1985), Punjab (1985), Rajasthan (1979), Sardar Patel (1980, 1983), Saurashtra (1984), Tirupati (1986), and Utkal (1979).

Private Universities at Ahmedabad (2007, 2008, 2009), Christ, Bangalore (2011), BIT, Ranchi (1983, 1984), Narsee Monjee, Mumbai (2013), Nirma, Ahmedabad (2005), and Xavier, Bhubaneswar (2012).

Indian Institutes of Technology at Bombay (2013, 2015, 2017), Guwahati (2014), Kanpur (2013), and Madras (2016).

Indian Institutes of Management at Ahmedabad (1978, 1994), Bangalore (2001, 2009), Lucknow (2005, 2006, 2007, 2008, 2009, 2012), Indore (2001, 2010, 2016), and Kozhikode (2012).

North America: Ball State (1996); California State (1993); Colorado State (2004); Connecticut (1984; 2003); Illinois (2004); Indiana (2008); MCLA, North Adams (2002, 2004); Northern Illinois (1993); Michigan (1993); Ohio State (2008); Purdue (1996, 2008); Rochester (2002, 2003, 2004); SUNY at Albany (1984); Western Ontario (2003); and Wisconsin (2004).

Research Supervision

Doctoral dissertations = 11; Master's theses = 15; and Honours theses = 51.

Fellow Status in Psychological Associations

National Academy of Psychology (NAoP) India (2008–); American Psychological Association (APA) (1993–); Association of Psychological Science (APS) (1993–); Society for Personality and Social Psychology (SPSP) (1992–); Singapore Psychological Society (SPS) (1992–); and British Psychological Society (BPS) (1992–).

Listed in

2015 *Top Thinkers on Mind, Brain, and Behavior: Spreading the Cognitive Science*

<https://cognobytes.wordpress.com/2015/06/07/ramadhar-singh/>

2015 *Legends of HRD in the Business Manager* (July 2015), 18, 40–43.

2013 *APS Faces and Minds of Psychological Science*:

<http://www.psychologicalscience.org/index.php/members/psychological-scientists#singh>

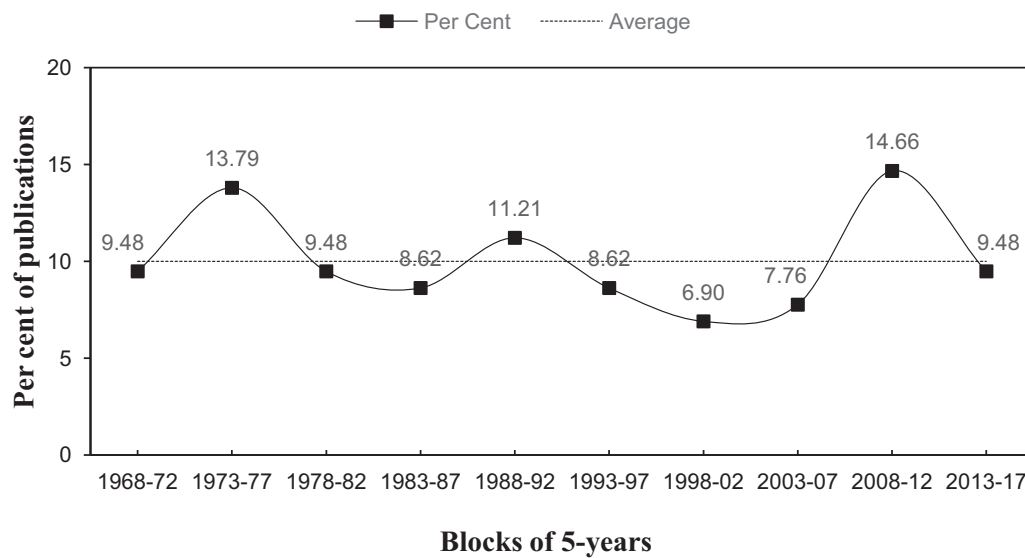


Figure 1 Per cent of total publications ($N = 116$) over an academic career of 49 years in blocks of five years.

Prof. Singh is very committed to developing his students' interest in research, especially in social psychology, and he has inspired his students to take up psychology as a profession. Apart from teaching, Prof. Singh has been like a friend and mentor who is always there for his students in times of need. He is able to lend his support and provide sound advice to his students. He also treats his students like family members and sincerely cares for them. Even after our graduation, he continues to keep in touch with us to find out how we are doing.

Jennifer B. P. Teoh

Inspiring Mentor Awards from NUS, July 27, 2009

In her comments on Singh's mentoring style on the *Cognobyte* site,⁸ Ya Yan Tay, another NUS alumnus and the second author of a forthcoming article on trust (DOI: 10.1177/0265407516656826), wrote as follows:

Working under Prof. Singh for two research projects during my university days was an important experience which greatly enlightened me and piqued my interest in academic research. He is passionate, immensely knowledgeable (exciting and scary at times to a relatively fresh undergraduate), but also extremely nurturing as a mentor. I learned so much from Prof. Singh on what it takes to undertake academic research and how to do it well. His commitment to his work and patience as a mentor left a lasting impression on me. Even today, I am very thankful for the opportunity to have Prof. Singh as my mentor.

Sustained publications

The first publication by Singh was in 1968 when he completed his master's degree from Bihar University (Roy & Singh,

1968). In 2017, exactly 49 years later, he has one article already published in *Omega: The International Journal of Management Science*, three *in press* articles on interpersonal relationships in different international journals, and three accepted articles (two in journals of management and one in a journal of philosophy) in India.

Fig. 1 displays per cent of Singh's publications ($N = 116$) arranged in blocks of five years since 1968. As can be seen, per cent of his publications across the 10 blocks of five years ranged between 6.89 and 14.66. Notably, he was most productive after his doctoral degree in 1973, after joining NUS (1988-92), and during the transition from NUS to IIMB. Nearly 10% of his total publications were during his last three years at IIMB.

Fig. 2 presents the same data as the cumulative per cent of Singh's publications across 10 blocks of five years. What stands out is that his productivity has steadily been increasing over the years, and Singh remains as creative and productive as he was during the start of his academic career.

Orders of authorship in journal publications

Any publication in a top-tier journal with one or more international authors can be attributed to mere research assistance in collecting the Indian data for the research of well-known international scholars, genuine scholarship that requires international collaboration by Indian scholars, and/or both (Sahoo et al., 2017). An analysis of Singh's orders of authorship across 116 publications was made. Fig. 3 exhibits per cent of Singh's publications authored solely and as the first, second, third, fourth, and fifth author.

Singh has been the sole author (32.62%) and the first author (43.97%) in 76.59% of his 116 publications. The papers in which he was listed as the second author were usually those that were based on research by his students or collaborators in India or Singapore. Among his international collaborators, he is sometimes the third author (e.g., Tetlock, Self, & Singh,

⁸ <https://cognobytes.wordpress.com/2015/06/07/ramadhar-singh/>.

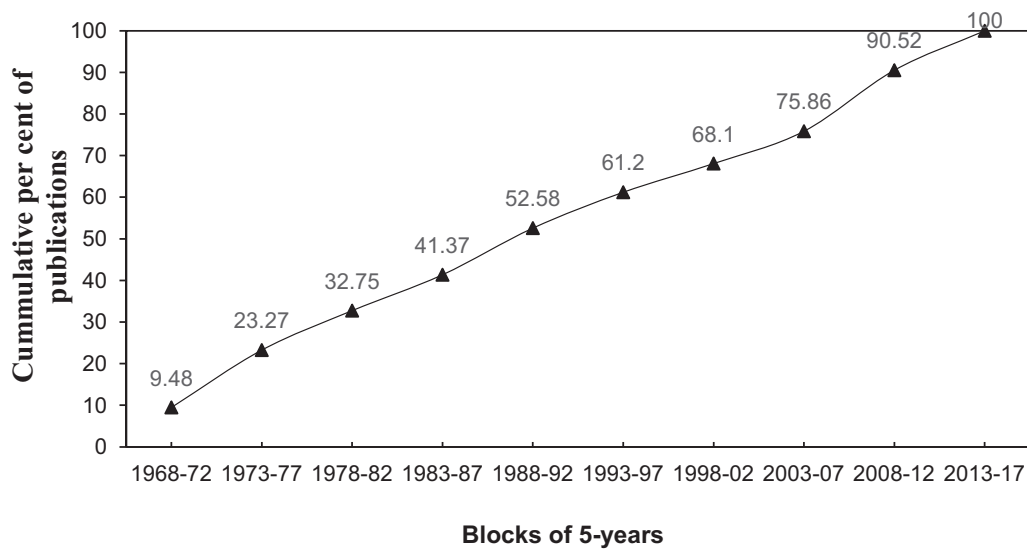


Figure 2 Cumulative per cent of total publications ($N = 116$) over an academic career of 49 years in blocks of 5 years.

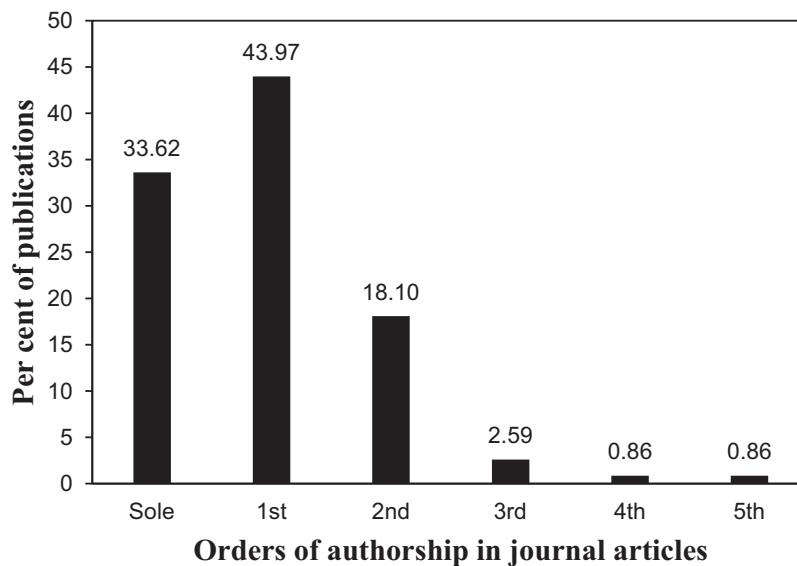


Figure 3 Orders of authorship across 116 publications.

2010; Tetlock et al., 2007) and other times the first author (e.g., Singh, Ramasamy, Self, Simons, & Lin, 2013; Singh et al., 2012a, 2012b), playing a central role in research and/or publishing the results from Asian studies in international journals.

International outlets such as *Journal of Applied Psychology*, *Organizational Behavior and Human Performance*, and *Organizational Behavior and Human Decision Processes* are usually regarded as top-notch journals in most well-known schools of management. Five publications in these journals were exclusively based on the Indian data and authored solely by Singh. He is the second author of an article in (Sahoo et al., 2017) where his co-authors are Indian. In addition to these journals of management, Singh was equally successful in publishing his findings in prime international journals of developmental, general, personality, and social psychology as indicated in Table 1.

According to Hamermesh's (2013) thought-provoking analysis of publications in top-notch journals of economics, 80% of the articles in the last decade were multi-authored. By contrast, 80% of the articles in the very same journals were single-authored in the 1960s. Until 1997, Singh had written several single-authored articles. Since 2007, however, he also has mostly multi-authored articles. In my opinion, the continuing success of Singh in international publications may have been also because of his tapping of international collaboration in producing superior recent research through better teamwork.

Citations in journals

One may publish an article in an international journal to decorate her/his vita (Sinha, 1981), get promotion, tenure, and/

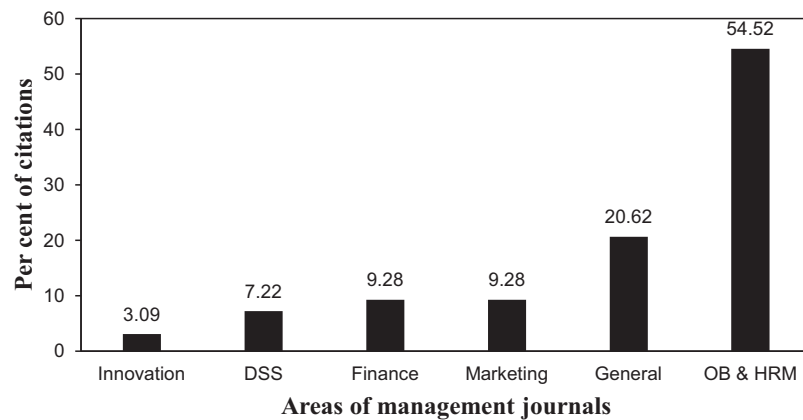


Figure 4 Per cent of total citations ($N = 97$) across different areas of management. DSS = Decision Support Systems; OB & HRM: Organisational Behaviour and Human Resource Management.

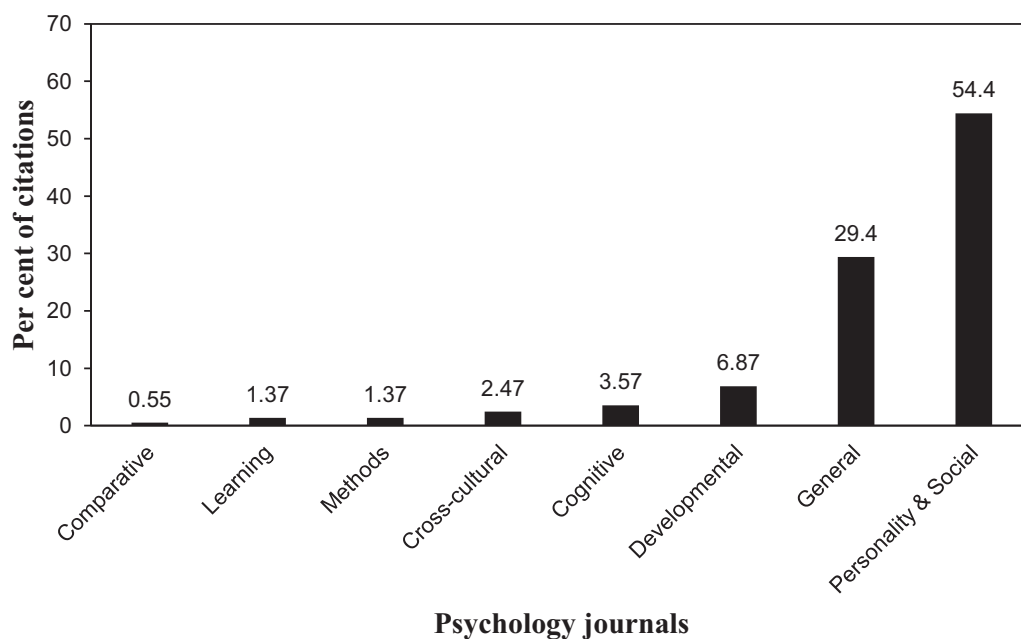


Figure 5 Per cent of total citations ($N = 364$) across different areas of psychology.

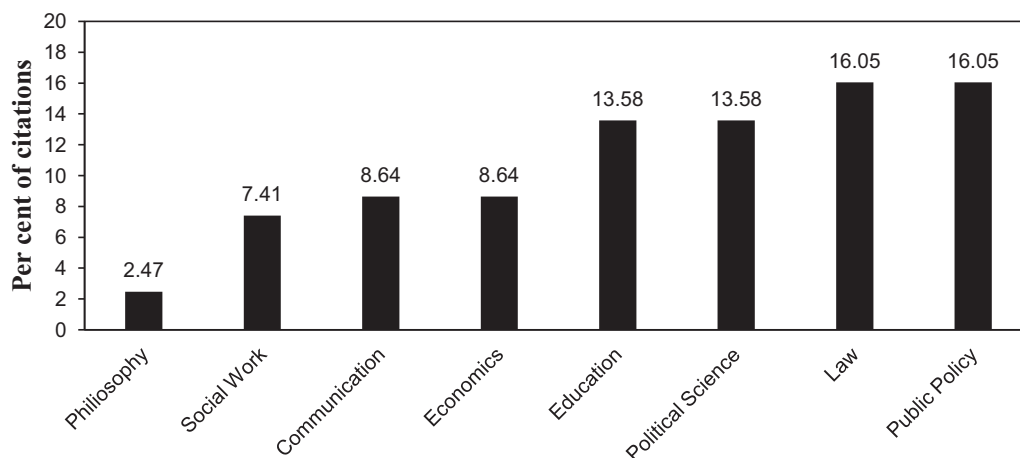
or financial incentives,⁹ or make lasting contributions to one's field (Sahoo et al., 2017; Singh, 1981a). For the last goal, the real test is that an article should be cited by others. As of May 29, 2016, there were 570 citations of Singh's writings in 426 journal articles by other scholars. Those articles belonged to management (17.02%), psychology (63.86%), humanities and social sciences (14.21%), and miscellaneous disciplines (4.91%). Per cent of citations across different areas of a discipline or the disciplines included within each category was separately calculated to determine Singh's multidisciplinary impact.

Fig. 4 exhibits per cent of Singh's total citations ($N = 97$) across five areas of management. Given his appointments in the organisational behaviour and human resource (OB/HR)

management at IIMA and IIMB, it follows that his writings had a greater impact on research in this area rather than other areas. His impact on OB/HR is indeed the highest. Importantly, his articles were also referred to and cited in articles published in journals of areas such as general management, marketing, finance, decision support systems, and innovation.

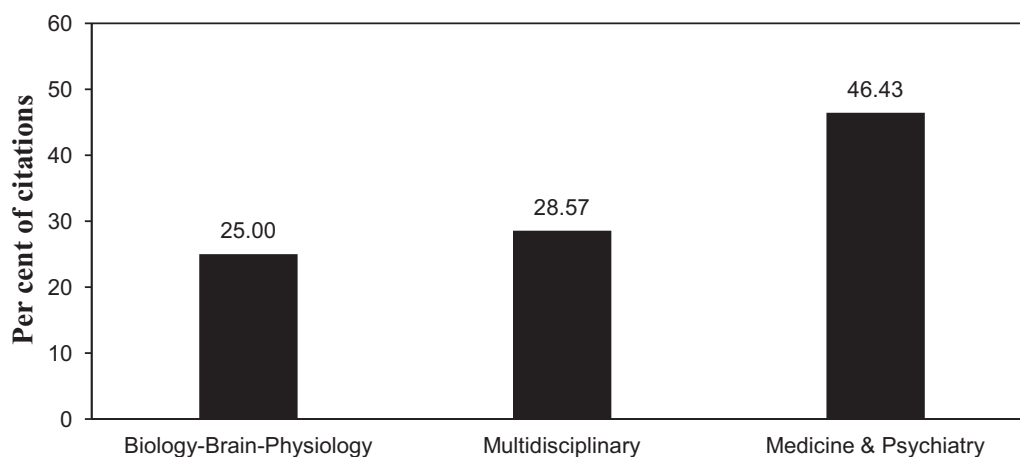
Fig. 5 displays per cent of Singh's total citations ($N = 364$) across eight branches of psychology. Given his training as an experimental social psychologist, his writings were most influential in this field. His citations by general and developmental psychologists are also notable. Furthermore, his impact ranges from comparative (i.e., animal psychology) to cognitive psychology. It is unsurprising, therefore, that Norman H. Anderson, who advanced information integration theory (Anderson, 1981, 1982), described Singh's (1991) chapter on imputations about missing information in decision making as "... a tour de force in cognitive psychology" (p. 142).

⁹ http://articles.economicstimes.indiatimes.com/2012-07-03/news/32523925_1_iim-calcutta-iim-a-alumni-association-iim-bangalore.



Humanities and Social Sciences journals

Figure 6 Per cent of total citations ($N = 81$) across humanities and social sciences.



Miscellaneous disciplines of journals

Figure 7 Per cent of total citations ($N = 28$) across biological, multidisciplinary, and medical sciences.

Fig. 6 shows per cent of Singh's total citations ($N = 81$) across nine disciplines of humanities and social sciences. Evidently, his impact on social sciences varied widely. He had maximum impact on law and public policy, followed by education and political science, and finally on communication, economics, and social work. His impact on philosophy is also emerging.

There were 28 citations in miscellaneous disciplines. Fig. 7 displays per cent of those citations across three categories of disciplines. About 50% of these citations were in medicine and psychiatry journals. The remaining 50% were equally divided between biology-brain-physiology and multidisciplinary journals. Evidently, Singh's writings influenced some other disciplines and practices in addition to management, psychology, and social sciences.

In sum, Singh's research influenced psychological literature maximally as it should in fact have. Moreover, his writings were useful for research in management, humanities and social sciences, and other diverse disciplines ranging from the

non-empirical discipline of philosophy on the one hand to the empirical disciplines of biology, physiology, and psychiatry on the other hand.

Citations in textbooks

A basic contribution is always cited in introductory textbooks of a discipline. Even on this stringent criterion, Singh has been successful. His findings have so far been cited in 92 American, Australian, and European introductory textbooks. Fig. 8 shows per cent of those textbooks of personality, management, organisational behaviour, psychology, and social psychology which had cited some of his findings.

Seventy-two per cent of the textbooks citing Singh's findings belonged to the discipline of psychology. As an experimental social psychologist, he has more citations in textbooks of social psychology than textbooks of either introductory or personality psychology. Also, there are citations of his findings

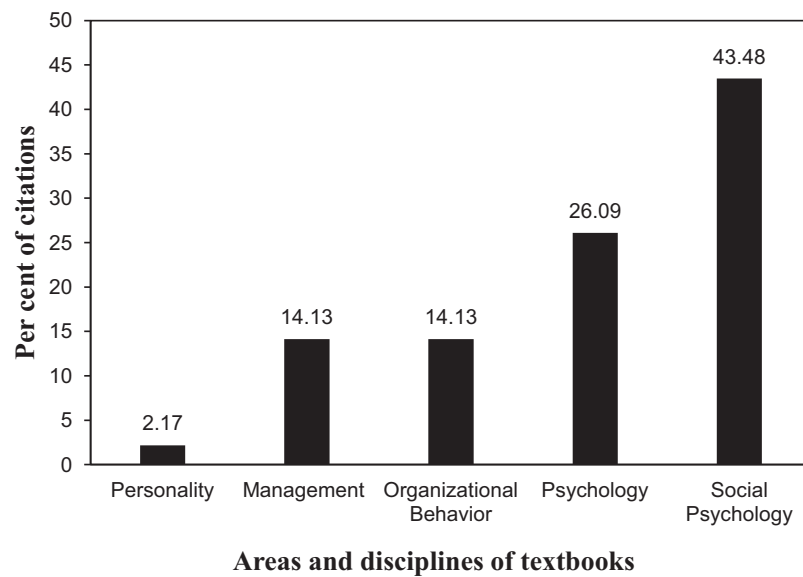


Figure 8 Per cent of total citations ($N = 92$) in introductory textbooks.

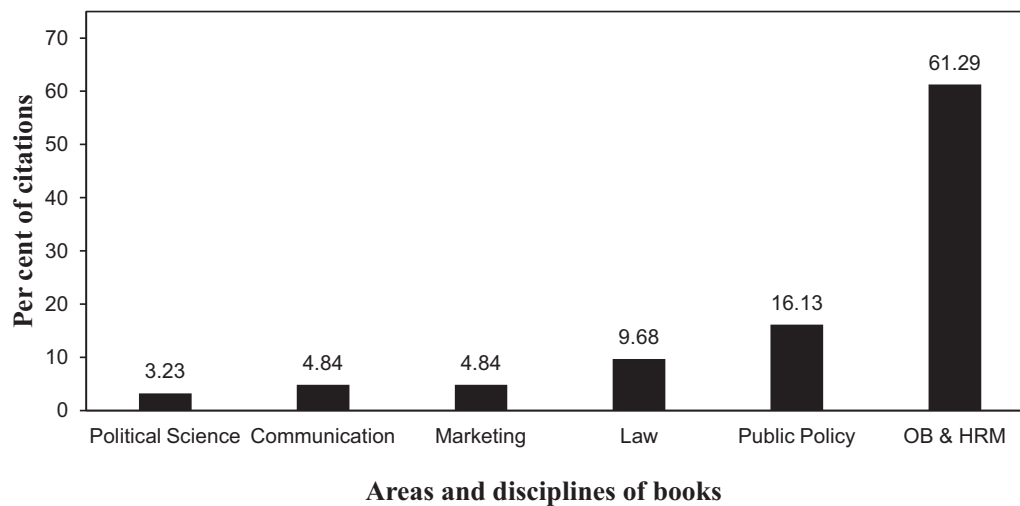


Figure 9 Per cent of total citations ($N = 62$) in management and social science books.

in textbooks of introductory management (14.13%) and organisational behaviour (14.13%). Notably, articles based on programmatic research from Asia can be published in international journals and also cited in American textbooks (Singh, 2014).

Citations in books

There are citations of Singh's findings in 136 books. These books are handbooks, edited volumes, annual reviews, and thematic treatises. Of those, 62 books were from management and social sciences and 74 books from psychology. Fig. 9 displays per cent of books of political science, communication, marketing, law, public policy, and organisational behaviour and human resource management. Again, Singh's impact is greater on organisational behaviour and human resource management than on other social sciences.

Fig. 10 shows per cent of 74 psychology books across four fields of psychology. Consistent with the previous trend in his impact, exactly 50% of books belong to the field of social psychology. The remaining 50% of books are of experimental, developmental, and research methods, suggesting further that Singh's writings have been influential across diverse fields of psychology.

Comments

It follows that Singh's dedication to psychological sciences and persistence in publishing his findings in international journals have been extraordinary. He has had an enormous influence on management thought and practice. More important, his multidisciplinary influence is likely to grow even more over the coming years. By the end of this interview, I aver that

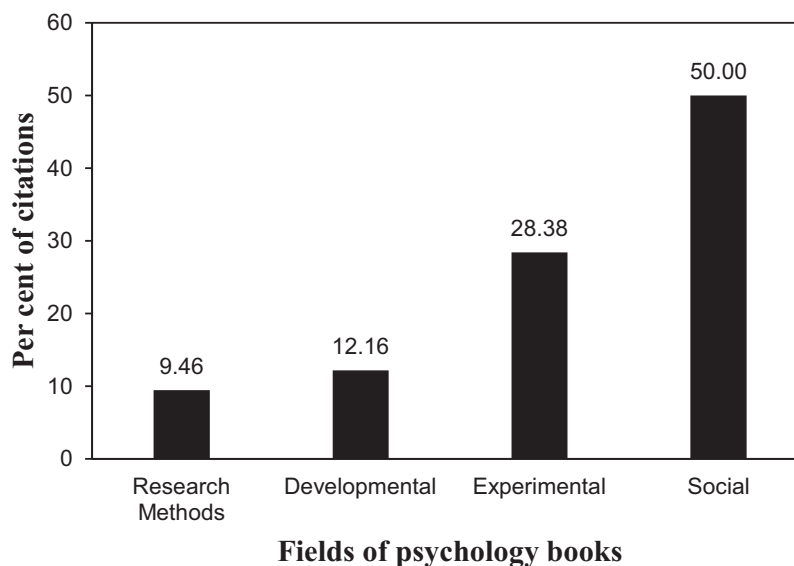


Figure 10 Per cent of total citations ($N = 74$) in psychology books.

most of us, and younger faculty members in management and social sciences in particular, will find Singh to be an inspiration.

Interview with Ramadhar Singh, Distinguished University Professor, Amrut Mody School of Management, Ahmedabad University

Kulbhushan Balooni (KB): Professor Singh, I was honoured by the invitation of Professor Nagasimha B. Kanagal, Editor-in-Chief, *IIMB Management Review*, to interview you about your sustained contributions. Going through your records to prepare the aforementioned context note was a daunting task. Nonetheless, I was pleased with the convergence between your international reputation as a scientist and your academic accomplishments. I am indeed delighted to have this opportunity to ask a few questions about your journey as a psychological scientist and your sustained impact over the last five decades.

KB: How did your employments at universities, IITK, and IIMs at Ahmedabad and Bangalore influence you and your research?

Ramadhar Singh (RS): I spent 27 years at universities and 22 years at professional institutes. The former teach students *how to live and contribute to the society*; the latter, in contrast, teach them *how to make a living*. Such orientation affects attitudes and behaviours of both students and faculty members. To me, teaching means helping students know themselves and grow as human beings. I am glad that you also highlighted the importance of this mentoring style for schools of management (Khurana & Snook, 2011).

At universities, we pursue research of our own interests. At professional institutes, we undertake problem-driven research. Because I had opportunities to spend a good number of years in both settings, I did both theory- and problem-driven research. My studies of *attraction, confidence, impression formation, intergroup relations, and models of humans* (i.e., prosecutors, politicians, scientists, and theologians) belong to the first category of theory-driven research. By contrast, my studies of *disciplinary judgements, justice and fairness, happiness, job satisfaction, leadership, and prediction of gift size and performance* belong to the second category of problem-driven research. Regardless of which category of research I carried out at a point of time, I always gave equal importance to rigour and relevance. No research can be relevant without rigour.

KB: You have today all the accolades that an academician can aspire to in India or any part of the world. Why do you still do research and publish?

RS: For me, research has been play rather than work. Whenever I read a paper or come across a contemporary issue that seems open to alternative interpretation, experimentation, or analysis, I spontaneously pick it up and persist with it until I find a convincing answer. In some cases, I persisted for 7 to 15 years to resolve the issue. The chapters on *imputations about missing information* (Singh, 1991, 2011), the *trust* paper (Singh et al., 2015), and the paper on *validation of one's attitudes and opinions* (Singh et al., 2017) are examples of multi-year programmatic research.

Throughout my career, I have been enjoying the thrill of coming up with a new perspective on the existing knowledge in management as well as applied, developmental, personality, and social psychology. Put simply, I always enjoy questioning the status quo and offering a better alternative. To me, the data from Asian settings can confirm, modify, or challenge Western social knowledge, and understanding of social processes such as fairness, leadership, and relationship formation cannot be fully understood without including participants of different ages and cultures. Because of such cross-cultural and developmental studies, I gave a social explanation for the widely popular cognitive capacity explanation in developmental psychology (Gupta & Singh, 1981; Singh et al., 2013; Singh & Singh, 1994; Srivastava & Singh, 1988).

I gratefully acknowledge the external facilitation to my research ideas. As you can see in Fig. 11, I always had external or internal grants for my research. The institutions IITK, IIMA, NUS, and IIMB all provided me with the necessary facilities, grants, and dedicated students to produce quality research. Further, encouragement from editors and reviewers of various journals, who saw merit in what I have been doing from Asia over the years, has been another external facilitator.

KB: You have been cited in 13 textbooks of management and 13 textbooks of organisational behaviour. What was your finding that could draw such attention?

RS: In Fiedler's (1967) contingency theory of leadership, one determinant of leadership effectiveness is *situational favourableness*: ... the degree to which the situation provides the leaders with potential power and influence over group behaviour. Situational favourableness depends upon group atmosphere (GA), task structure (TS), and position power (PP). Further, GA, TS, and PP are supposed to take on the relative importance (weights) of 4, 2, and 1, respectively. Thus, factorial combinations of the low versus high levels of these three factors generate eight levels of situational favourableness (i.e., octants) for the leader.

Leadership style is measured by asking the leader to describe the personality of a least preferred co-worker (LPC). Leaders who describe an LPC positively are viewed as relationship-oriented; those who describe an LPC negatively are, in contrast, regarded as task-oriented. Further, a task-oriented leader is predicted to be effective in situations that are either high or low in favourableness but a relation-oriented leader is predicted to be effective in situations that are intermediate in favourableness. The index of leadership effectiveness is the correlation between the leader's response to the LPC measure and the leader's performance measured in numerous ways. The magnitude and sign of correlation in a given situation indicates the effectiveness of a task-oriented versus a relation-oriented leader.

While teaching this contingency theory in an undergraduate social psychology course at IITK, I noted the inadequacy of the theory. Consequently, I initiated one series of four experiments on scaling of situational favourableness based on GA, TS, and PP (Singh, Bohra, & Dalal, 1979) and another series of four experiments on reward allocation by the so-called task-versus relation-oriented leaders (Singh, 1983). When we placed the octants according to their new scale values from our study, the fit of Fiedler's own data was much better than that of his original octant system (i.e., his octant system was poor). Worse still, Fiedler's measure of task-versus relation-orientation was found to lack construct validity across four separate experiments. The foregoing two publications, coupled with those of others, rendered the contingency model of leadership effectiveness obsolete in the literature. The textbooks of management and organisational behaviour cited Singh (1983) and books of group processes cited Singh et al. (1979).

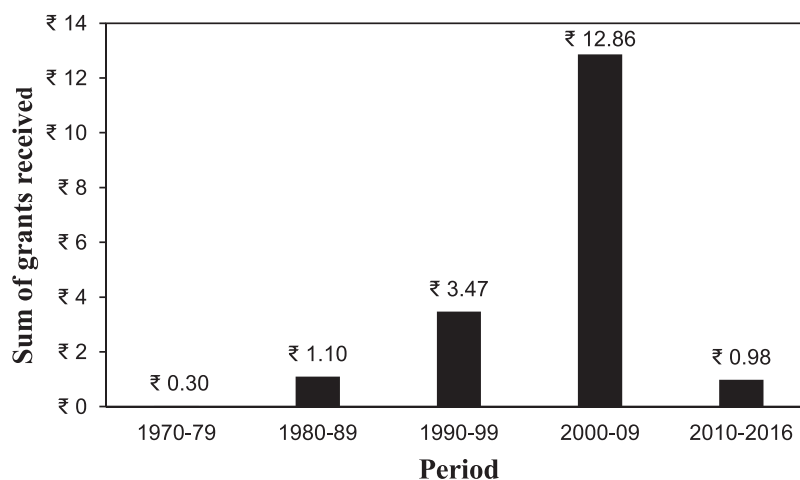


Figure 11 Sum of research grants in Indian rupees in million over five blocks of years.

KB: In 2013, the Association of Psychological Science (APS), Washington, DC included you in its website on *Faces and Minds of Psychological Science* from India. This site includes William James—the father of American psychology—and Daniel Kahneman, a psychologist who won the 2002 Nobel Memorial Prize in Economic Sciences. Could you please describe your research that led to your inclusion in this prestigious website?

RS: While studying prediction of performance from information about motivation and ability (e.g., Gupta & Singh, 1981; Singh & Bhargava, 1986; Singh, Gupta, & Dalal, 1979), we used two kinds of persons. Some were described by information about both motivation and ability; others were described by information about either motivation or ability. To answer how motivation and ability of a person are believed to determine her or his performance, two steps were required. First, plot the means from the compound information and perform analysis of variance (ANOVA). If the factorial plot of the data exhibits a *pattern of parallelism*, there will be only the two main effects. The pattern of parallelism would imply either an adding or averaging rule. Second, also plot the means from information presented alone and do another ANOVA. If the pattern is still parallel with only two main effects, then the rule is adding. However, if the pattern of parallelism is violated by inclusion of the means from information presented alone and the interaction effect is significant in ANOVA, then the rule is averaging. The rationale was simple: Averaging of ability information with motivation information would dilute their respective effects. Thus, the slope of curves based on both motivation and ability information should be shallower than the slope of the curve based on either the motivation or ability information.

Multiplication of the motivation and ability information would produce a *linear fan pattern* (i.e., a greater divergence between curves at the higher than the lower level of a factor), and an interaction effect in the first ANOVA. A linear fan pattern is also possible if the rule used is averaging with lower compared to higher valued levels taking on greater weights. Thus, the multiplying and averaging rules were again distinguishable by the slope of the curve for information presented alone. According to the multiplying rule, the curves based on any single piece of information alone should still form part of the linear fan pattern. According to the differential-weight averaging rule, by contrast, the curves based on any single piece of information should violate the linear fan pattern.

People usually know something about a person and infer other attributes such as motivation, ability, and sincerity. Information available for these inferences is hardly complete. To make a judgement, therefore, people may *impute* values to missing information from the given information. If so, the widely popular crossover test at that time cannot always distinguish the adding rule from the averaging rule or the multiplying rule from the averaging rule if imputations were allowed. However, if the integration rule itself is established in some other ways, the patterns of imputations about the missing information can be ascertained.

I tested the foregoing possibility in prediction of (a) performance from information about motivation and ability and (b) gift size from information about generosity and income. Prediction of performance entails achievement judgements, but prediction of gift size entails moral judgements. In both judgements, however, motivation and generosity are energising factors; ability and income are, by contrast, capability factors. Thus, we first demonstrated that prediction of performance can best be represented by the averaging rule (Singh & Bhargava, 1986; Singh et al., 1979) and that prediction of gift size can best be represented by the multiplying rule (Singh, 1991). Given such evidence for the rule, we then demonstrated that the imputed value to the missing motivation or generosity information can be regarded as a constant value (usually around the nominal neutral point) but the imputed value to the missing ability or income information can be viewed as increasing with the increasing value of the given motivation or generosity information.

The importance of the foregoing phenomenon of imputing value to the missing information in management and social sciences that rely on experimentation as their method of research is yet to be fully appreciated! In most experiments, the control condition hides the information that is given in the experimental condition. The difference between the control and experimental conditions is thus attributed to the manipulated information. Such interpretation erroneously assumes that people do not go beyond the information given in the control condition. When consumers infer quality and price of a product from its country of make, quality from price, and vice versa (Steenkamp, 1989), for example, how can one ignore imputations about missing cues from the given information. To me, being mindful of the possibility of imputations about missing information of the control condition could alter the direction of many experimental research programmes (Singh, 1981b, 2010, 2011; Singh & Ho, 2000; Singh & Teoh, 2000).

At the applied level, evidence of asymmetrical imputations about missing capability and motivation is important for public policy. Ability is believed to be modifiable by effort, an egalitarian belief that people can improve upon their lot by trying. At the same time, we cannot be sure of effort or opportunity utilisation by people with varying capability.

KB: Could you tell us how Indian managers distribute rewards and resources? Is there any difference between allocations by Easterners and Westerners?

RS: An allocation is widely viewed as “fair” if the outcome is proportional to one’s input. Likewise, justice is supposed to have been done if punishment is proportional to the severity of a crime. In research on justice and fairness, it has routinely been assumed that overt responses of decision makers are true expressions of their covert responses of fairness. In other words, the subjective responses are expressed along the overt response measure in a linear way. Given the foregoing evidence for imputations about missing information, however, I reasoned that decision makers are cognitive affluent, and that they might bring in considerations other than merit in allocation of rewards and resources. If so, there might not be one-to-one correspondence (i.e., linear relationship) between covert and overt responses.

When I assumed that overt allocations of pay, incentives, or workload to be at best ordinal (i.e., rankings of claimants) and used MONANOVA, an analytic tool that supposedly rescales ranks into interval values (Kruskal & Carmone, 1969), the allocation rule best supported was subtraction (Singh, 1985). That is, an outcome is considered as “fair” as long as the relative position (i.e., rank) of that outcome in the distribution of outcomes is the same as the relative position (i.e., rank) of the input in the distribution of inputs (Singh, 1995, 1996). In practical terms, managers simply rank the merit of their subordinates while allocating power, position, or resources.

In developmental psychology also, the *no, moderate* and *large differences* between shares of outcome allocated to the high and low performers are viewed as reflecting on the uses of the rules of *equality, ordinal equity, and proportional equity*, respectively. Furthermore, the ability to employ the proportional rule was believed to develop around the age of 13 years (Hook & Cook, 1979). In cross-cultural research, however, Asian adults made less distinction between the outcome allocated to the high and low performers (Leung & Bond, 1984).

Given the aforementioned evidence for the subtractive rule and distortions in over allocations, we resolved this inconsistency between cultural and developmental literature. By using both ANOVA and MONANOVA with the same set of allocation responses, we showed that the perception of merit does become more precise with age in both Asia and America. However, the American age-trend in outcome allocation is reversed in Asia (Singh, Chong, Leow, & Tan, 2002) primarily because Asians distort their overt responses to preserve harmony between the claimants of rewards and resources (Bond, Leung, & Wan, 1982). By instructing Indian managers to pursue the goals of dividing outcome fairly *versus* minimising conflict between the claimants, I experimentally demonstrated that these goals do influence response distortions more than rule usage (Singh, 1985, 1995, 1996, 1997). Apparently, cultures differ in articulation of subjective “fair” responses, not in the use of the proportional equity rule as was erroneously believed. Findings from the foregoing papers were cited in journals of economics and finance.

KB: Which of your findings were cited in finance journals?

RS: When we ask people first to choose between two options (e. g., invest in Infosys or Wipro) and then indicate their confidence (50% = neither unsure nor sure; 100% = almost sure) in correctness of the option chosen, the level of confidence is usually higher among Asians (i.e., Chinese, Indians, Japanese, and Singaporeans) than Americans (Lee et al., 1995). This cross-cultural difference in overconfidence has been useful to finance scholars. Our demonstrations of the negative pieces of information (dissimilar attitudes, character defects, news, etc.) taking on greater weight than those of positive information in attention and behaviour (e.g., Jia & Singh, 2009; Singh & Ho, 2000; Singh & Tan, 1992; Singh & Teoh, 2000; Tan & Singh, 1995) have also captured the attention of scholars in communication, finance, political science, and public policy.

KB: Your studies enjoyed quite an impact in law and public policy also. Could you enlighten us about your principal findings in this domain?

RS: For smooth functioning of any collective (e.g., group, organisation, nation), there are norms and laws. They are essentially accountability procedures: *Who should report to whom and under what circumstances?* Contingent upon one’s role vis-à-vis the accountability procedure, the same person can seemingly act as politicians, prosecutors, and theologians. For example, while responding to the accountability demands, people act as if they were flexible politicians (i.e., they present themselves positively to serve the self). While placing accountability demands on others, people act as if they were harsh prosecutors (i.e., punishment must be given for shirking the responsibility or disturbing social order). While defending the accountability procedures, people act as if they were rigid theologians (i.e., encroachment of sacred values by secular ones is unacceptable).

Research in such models of humans was initiated in early 2000s in collaboration with Philip Tetlock (currently professor at the University of Pennsylvania). Our joint publications (Singh, Kaur, Junid, & Self, 2011; Singh et al., 2012a, 2012b; Tetlock et al., 2007, 2010) led to a reinterpretation of the so-called *fundamental attribution error* (i.e., a tendency to explain behaviour by person when situation can be an equally potent explanation) as the *prudent prosecution*. Similarly, the so-called *severity bias* (i.e., a tendency to punish a perpetrator according to severity of consequence of a crime) is now viewed as serving the punishment goal of deterrent rather than retribution (Singh & Lin, 2011) and as an improved understanding of unsafe social order rather than of importance of intention in harms over ages (Singh et al., 2013). These findings have been useful for law and public policy.

KB: I am very inquisitive about your contributions to social psychology particularly when I came to know that they were cited in as many as 64 textbooks of psychology and 198 books of personality and social psychology?

RS: It is well known that birds of a feather flock together. Also, the greater the similarity between attitudes of two persons, the greater is the attraction between them (Byrne, 1971).

According to the repulsion hypothesis (Rosenbaum, 1986), however, only dissimilar attitudes lead to repulsion. At NUS, my students and I responded to the challenge to the well-known similarity-attraction hypothesis both methodologically and conceptually. Methodologically, we created a *control condition of no-attitude information* and showed that both similar and dissimilar attitudes affect attraction. However, the *similarity-attraction effect* (Similarity effect–Control) is weaker than the *dissimilarity-repulsion effect* (Control–Dissimilarity effect), a new phenomenon of the *similarity-dissimilarity asymmetry* (Singh & Tan, 1992).

Application of the foregoing method led to a new view on developmental differences in attraction: Attraction responses of children below 11 years support the repulsion hypothesis but those of 15 years and adults support the similarity-dissimilarity asymmetry hypothesis. We explained such age-trends in attraction by the *person positivity bias* that serves as anchor for the relative effects of similar and dissimilar attitudes (Tan & Singh, 1995).

Later on, we developed another method to unpack the *similarity-dissimilarity asymmetry* effects into person positivity bias (Singh & Teoh, 1999) and information weighting (Anderson, 1981). By crossing the dissimilar *versus* similar levels in one attitude survey with those in another, we demonstrated that the asymmetry occurs in weighting of dissimilar and similar attitudes. Specifically, dissimilar attitudes take on greater weights than similar attitudes in fostering attraction (Singh & Ho, 2000). Using Stroop's (1935) colour-naming task, Jia and Singh (2009) further demonstrated that such asymmetry in weights occurs at the level of attention to dissimilar and similar attitudes. Besides, such default asymmetry can be turned into equal attention by freeing cognitive resources. These studies (Singh & Ho, 2000; Singh & Tan, 1992; Tan & Singh, 1995) led to resolution of several issues in the attraction paradigm and have been cited widely across relevant textbooks.

In my doctoral research (Singh, 1974), I had demonstrated that stimuli varying in reinforcing potential (i.e., personal evaluations, attitude similarity, and personality similarity) moderate the strength of the similarity-attraction link, and that such moderation is possibly mediated by the underlying affect states induced by those stimuli. Given the sole reliance on ANOVA as the data analytic tool at that time, there was limited conceptual clarity about mediation.

Later on, my NUS students and I took the issues in mediation more thoroughly: Why do similar attitudes determine attraction? Since 2007, there have been several series of experiments, indicating that the attitude similarity-attraction link is possibly mediated by multiple sequential processes of *validation*, *inferred attraction*, *respect*, *affect*, and *trust*. More important, validation and trust seem to be the distal and proximal mediators, respectively, in building attraction from similar attitudes (Singh, Chen, & Wegener, 2014; Singh et al., 2015). The centrality of trust in acquaintance process has been catching the attention of scholars of organisational and social psychologists.

KB: What were your findings in intergroup relations?

RS: Over the years, there has been a phenomenal increase in participation by the traditionally unrepresented sections of the society in the workforce. As a result, people within organisations and in teams nowadays differ markedly in visible attributes such as age, nationality, race, and sex. Such a demographic diversity has a bearing on performance of organisations.

However, people automatically categorise others as "us" (or in-group) *versus* "them" (or out-group) based on such social categories, and favour the in-group (i.e., *in-group bias*) and discriminate against the out-group (*out-group denigration*). I found that most of the published studies had used a single measure of the in-group bias, and that those which had used more than one measure highlighted the bias in one measure but dismissed the evidence against no bias in another measure.

Given the evidence for similarity-dissimilarity asymmetry in attraction and the concern for fairness in most democratic societies of the modern world, my NUS students and I first took up the issue of out-group denigration *versus* in-group bias in intergroup perception. By using our method from attitudes-and-attraction research and taking the measures of both competence and attraction, we found that participants show bias in competence to claim superiority of the in-group but no bias in attraction to make a positive self-presentation as a fair-minded person. When we created a control condition of no information about the social category of the target person and contrasted it with two other experimental conditions of out-group and in-group by race, there was an overwhelming support for out-group denigration. Further, the discrimination was in competence ratings, not in attraction ones. Collectively, these results portrayed people as pragmatic politicians who claim superiority of their in-group in one aspect (in-group bias) but equate it with others in another aspect (fair-mindedness) (Singh, Choo, & Poh, 1998).

In a collateral research in which the setting changed from within nation comparisons to international competition, the inconsistency between responses disappeared. More important, and contrary to the common belief, crossing of out-group *versus* in-group by race with out-group *versus* in-group by nationality aggravated rather than reduced the discrimination. So, we questioned the utility of cross-categorisation of groups as a means of bias reduction (Singh, Yeoh, Lim, & Lim, 1997).

Both of the foregoing articles have been cited in many books of intergroup relations, and have been also utilised in the research in public policy, finance, and decision support systems.

KB: If people are repelled by dissimilar attitudes or out-group categorisations in everyday life, there must be some ways to control these negative responses? Have you done any research to deal with such biases?

RS: In any democratic society, people should have freedom to hold their own attitudes and opinions. However, people also seek validation of their views and feel bad if they are invalidated. Given that attraction and repulsion stem from the respective similar and dissimilar attitudes and that trust is a mediator proximal to attraction, Singh, Tay, and Sankaran (2017) provided participants with information about attitudes of the partner at Time 1 and about trustworthiness of the same partner at Time 2. As expected, perceived trust mediated attitude similarity effect on initial attraction. However, information about trustworthiness eliminated attitude similarity effect on the subsequent attraction. This finding is of great practical interest: When people trust a person, they do not care whether that person has similar or different views.

Democratic norms also require that we should be fair to all regardless of their gender, nationality, race, or religion. However, we found both in-group bias and out-group denigration. Thus, Singh, Bhullar, and Sankaran (2017) first demonstrated both biases in organisational settings, and then eliminated them by manipulating fairness of the leader. That is, discrimination arising due to social categorisation of team members can be eliminated by the reputation of the organisational leader as a "fair" person. We expect these positive findings to influence public policies and practices in societies and organisations.

KB: What advice would you give to younger faculty members and IIMs to have sustained advancement of management knowledge from India?

RS: I would like to see professionalism in management at the same level as there is in China, Japan, Korea, and Singapore. One's doctoral training has a life-cycle of 6 to 8 years. Subsequent contributions depend upon how one engages oneself in self-renewal activities through novel research projects, opting for sabbaticals, supervising research projects by students, and encouraging them to publish in key journals. I played with different toys of ANOVA, MONANOVA, REGRESSION, structural equation modelling (SEM), and PROCESS in data analysis and with conceptual and methodological issues in attraction, fairness, impression formation, intergroup relations, leadership, models of humans, and job satisfaction at the different points of my career. Further, I regularly supervised undergraduate individual research projects to doctoral dissertations contingent upon opportunities available at my organisations.

Younger management professionals nowadays have to live up to global standards. For doing so, they have to be extra careful in choosing the institution, the supervisor and the committee members, and the topic of their research. If the supervisor has a research programme, young management professionals should be part of it in extending or amending it. If the supervisor does not have a research programme, consider developing a research programme of your own and initiating it with your doctoral dissertation itself.

KB: As an academician, do you think you have anything left to accomplish?

RS: Thanks for asking this question. I am currently working on two books, one on *research methods in management and social sciences* and another on *psychological perspectives on public policy*. I am going to share my knowledge and experiences in research and my views on how psychological facts and principles might be used to influence formulation and implementation of public policies in India.

I also need to write a third book on relationship formation: How does awareness of similarity between attitudes of two persons draw them together? As I reported earlier, there are a set of complex sequential cognitive and emotional processes that transmit the effect of attitude similarity to attraction or repulsion.

I still have desire to guide research by doctoral students. When a student comes to me with an issue, I usually take the original articles, study them, and then advise how to test that issue. Frankly, such occasions keep me as young and mentally alert as those young scholars.

KB: To my understanding most of the models of psychology that are invoked today draw inspiration from Western psychologists. In India we have a long tradition of understanding psychological processes. The Buddhist philosophers like Nagarjuna have detailed expositions on human psychology. Do you have any advice for budding scholars who would like to study their contributions in the light of modern advances?

RS: Yes, India has known for centuries what Sigmund Freud popularised in Europe that repressed desires are more corruptive than those expressed freely and openly. Similarly, understanding of diverse psychological processes by Ayurveda, Buddhism, Jainism, and Yoga, to mention a few, has been widely popular. There are some colleagues who are arguing for Indian psychology. However, they have not empirically tested those ideas and shown them as phenomena. Thus, Indian psychology as it stands today is actually Indian philosophy. In contrast, Western psychologists rely on empirical approach. The experimental method developed by them is being adopted in economics and marketing. My advice to budding scholars in India is that they ought to test various Indian ideas experimentally and publish their findings in major international journals of psychology.

KB: Thanks for your interesting and informative interview. I wish you happy and productive years and look forward to having more and more inspiration from you.

RS: Kulbhushan, I am grateful to you for going through my profile and asking different questions. I hope my answers will be of interest to at least younger generations of management scholars in India.

References

- Anderson, N. H. (1981). *Foundations of information integration theory*. New York: Academic Press.
- Anderson, N. H. (1982). *Methods of information integration theory*. New York: Academic Press.
- Balooni, K. (2014). Management knowledge creation: The role of Indian management institutions. Keynote address presented at the 2nd Pan-IIM World Management Conference, IIM Kozhikode, November 5–8, 2014.
- Bond, M. H., Leung, K., & Wan, C. K. (1982). How does cultural collectivism operate? The impact of task and maintenance contributions on reward distribution. *Journal of Cross-Cultural Psychology*, 13, 33–56.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Fiedler, F. E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.
- Gupta, M., & Singh, R. (1981). An integration-theoretical analysis of cultural and developmental differences in attribution of performance. *Developmental Psychology*, 17, 816–825.
- Hamermesh, D. S. (2013). Six decades of top economics publishing: Who and how? *Journal of Economic Literature*, 51, 162–172.
- Hook, J., & Cook, T. D. (1979). Equity theory and the cognitive ability of children. *Psychological Bulletin*, 86, 429–445.
- Jia, L., & Singh, R. (2009). Asymmetrical attention allocation to similar and dissimilar attitudes. *Journal of Experimental Social Psychology*, 45, 1259–1265. doi:10.1016/j.jesp.2009.07.012.

- Khurana, R., & Snook, S. (2011). Commentary on "A scholar's quest"—Identity work in business schools: From Don Quixote, to dons and divas. *Journal of Management Inquiry*, 20, 358–361. doi:10.1177/1056492611420929.
- Kruskal, J. B., & Carmone, F. L. (1969). MONANOVA: A FORTRAN IV program for monotone analysis of variance. *Behavioral Science*, 14, 165–166.
- Lee, J. W., Yates, J. F., Shinotsuka, H., Yen, N. S., Singh, R., Onglatco, M. L. U., et al. (1995). Cross-national differences in overconfidence. *Asian Journal of Social Psychology*, 1, 63–69.
- Leung, K., & Bond, M. H. (1984). The impact of cultural collectivism on reward allocation. *Journal of Personality and Social Psychology*, 47, 793–804.
- Mishra, S. N. (2014). Reflections on science in service of a symbiotic society. *Current Science*, 107, 1787–1789. <<http://www.currentscience.ac.in/Volumes/107/11/1787.pdf>>.
- Rosenbaum, M. E. (1986). The repulsion hypothesis: On the nondevelopment of relationships. *Journal of Personality and Social Psychology*, 51, 1156–1166.
- Roy, B. P., & Singh, R. (1968). Learning and retention of paired-associates as a function of nature of stimulus item. *Indian Journal of Experimental Psychology*, 2, 45–49.
- Sahoo, B. K., Singh, R., Mishra, B., & Sankaran, K. (2017). Research productivity in management schools of India during 1968–2015: A directional benefit-of-doubt model analysis. *Omega*, 66, 118–139. doi:10.1016/j.omega.2016.02.004.
- Singh, R. (1974). Reinforcement and attraction: Specifying the effects of affective states. *Journal of Research in Personality*, 8, 294–305.
- Singh, R. (1981a). Experimental social psychology is real and scientific: A reply to Durganand Sinha. In J. Pandey (Ed.), *Perspectives on experimental social psychology in India* (pp. 229–239). New Delhi: Concept Learning.
- Singh, R. (1981b). Prediction of performance from motivation and ability: An appraisal of the cultural difference hypothesis. In J. Pandey (Ed.), *Perspectives on experimental social psychology in India* (pp. 21–53). New Delhi: Concept Learning.
- Singh, R. (1983). Leadership style and reward allocation: Does least preferred co-worker scale measure task and relation orientation? *Organizational Behavior and Human Performance*, 32, 178–197.
- Singh, R. (1985). A test of the relative ratio model of reward division with students and managers in India. *Genetic, Social, and General Psychology Monographs*, 111, 363–384.
- Singh, R. (1991). Two problems in cognitive algebra: Imputations and averaging-versus-multiplying. In N. H. Anderson (Ed.), *Contributions to information integration theory* (Vol. II, pp. 143–180). Social. Hillsdale, NJ: Erlbaum.
- Singh, R. (1995). "Fair" allocations of pay and workload: Tests of a subtractive model with nonlinear judgment function. *Organizational Behavior and Human Decision Processes*, 62, 70–78.
- Singh, R. (1996). Subtractive versus ratio model of "fair" allocation: Can group level analyses be misleading? *Organizational Behavior and Human Decision Processes*, 68, 123–144.
- Singh, R. (1997). Group harmony and interpersonal fairness in reward allocation: On the loci of the moderation effect. *Organizational Behavior and Human Decision Processes*, 72, 158–183.
- Singh, R. (2010). Imputing values to missing information in social judgment. In R. M. Arkin (Ed.), *Most underappreciated: Fifty prominent social psychologists talk about hidden gems*. New York: Oxford University Press. in press.
- Singh, R. (2011). Information integration as a basic cognitive process. In G. Mishra (Ed.), *Handbook of psychology in India* (pp. 73–98). New Delhi: Oxford University Press.
- Singh, R. (2014). Sloppy research versus disinterest in Indian data as a difficulty factor in international publications. Workshop at the Pan IIM World Management Conference, IIMK, November 5, 2014. <http://www.iiimb.ernet.in/webpage/ramadhar-singh>.
- Singh, R., & Bhargava, S. (1986). Constant-weight versus relative-weight averaging in the prediction of exam performance. *Journal of Experimental Social Psychology*, 22, 547–566.
- Singh, R., Bhullar, N., & Sankaran, K. (2017). Leader-versus-member and fair-versus-biased categorisations as safeguards against negative effects of demographic diversity on group attraction. *Management Review*, doi:10.2139/ssrn.2520348; in press.
- Singh, R., Bohra, K. A., & Dalal, A. K. (1979). Favourableness of leadership situations studied with information integration theory. *European Journal of Social Psychology*, 9, 253–264.
- Singh, R., Chen, F., & Wegener, D. T. (2014). The similarity-attraction link: Sequential versus parallel multiple-mediator models involving inferred attraction, respect, and positive affect. *Basic and Applied Social Psychology*, 36, 281–298. doi:10.1080/01973533.2014.912583.
- Singh, R., Chong, S. S. K., Leow, H. C., & Tan, R. C. H. (2002). Cognitive and social effects in allocation behaviour: A new view on loci of developmental differences. *Asian Journal of Social Psychology*, 5, 21–47. doi:10.1111/1467-839X.00092.
- Singh, R., Choo, W. M., & Poh, L. L. (1998). In-group bias and fair-mindedness as strategies of self-presentation in intergroup perception. *Personality and Social Psychology Bulletin*, 24, 147–162. doi:10.1177/0146167298242004.
- Singh, R., Gupta, M., & Dalal, A. K. (1979). Cultural difference in attribution of performance: An integration-theoretical analysis. *Journal of Personality and Social Psychology*, 37, 1342–1351.
- Singh, R., & Ho, S. Y. (2000). Attitudes and attraction: A new test of the attraction, repulsion, and similarity-dissimilarity asymmetry hypotheses. *The British Journal of Social Psychology*, 39, 197–211. doi:10.1348/014466600164426.
- Singh, R., Kaur, S., Junid, Z. B., & Self, W. T. (2011). Reacting to headline news: Circumstances leading to causal explanations versus implicational concerns. *International Journal of Psychology : Journal International de Psychologie*, 46, 63–70. doi:10.1080/00207594.2010.516829.
- Singh, R., & Lin, X. (2011). The severity effect on the compensation and imprisonment recommendations: Deterrence as a mediator in Singapore. *Asian Journal of Social Psychology*, 14, 36–49. doi:10.1111/j.1467-839X.2010.01324.x.
- Singh, R., Ramasamy, M. A., Self, W. T., Simons, J. J. P., & Lin, P. K. F. (2013). Age-moderated effects of consequence and intent information on punishment: An intuitive prosecutorial interpretation. *The Journal of Genetic Psychology*, 174, 1–24. doi:10.1080/00221325.2011.635913.
- Singh, R., Simons, J. J. P., Self, W. T., Tetlock, P. E., Bell, P. A., May, J., et al. (2012a). From wrongdoing to imprisonment: Test of a causal-moral model. *Management Review*, 24, 73–78. doi:10.1016/j.iimb.2012.02.001.
- Singh, R., Simons, J. J. P., Self, W. T., Tetlock, P. E., Zemba, Y., Yamaguchi, S., et al. (2012b). Association, culture, and collective imprisonment: Tests of a causal-moral model. *Basic and Applied Social Psychology*, 34, 269–277. doi:10.1080/01973533.2012.674763.
- Singh, R., & Singh, P. (1994). Prediction of performance using motivation and ability information: New light on integrational capacity and weighing strategies. *Cognitive Development*, 9, 455–496. doi:10.1016/0885-2014(94)90015-9.
- Singh, R., & Tan, L. S. C. (1992). Attitudes and attraction: A test of the similarity-attraction and dissimilarity-repulsion hypotheses. *The British Journal of Social Psychology*, 31, 227–238. doi:10.1111/j.2044-8309.1992.tb00967.x.
- Singh, R., Tay, Y. Y., & Sankaran, K. (2017). Causal role of trust in interpersonal attraction from attitude similarity. *Journal of Social and Personal Relationships*, doi:10.1177/0265407516656826; in press.
- Singh, R., & Teoh, J. B. P. (1999). Attitudes and attraction: A test of two hypotheses about the similarity-dissimilarity asymmetry.

- The British Journal of Social Psychology*, 38, 427–443. doi:10.1348/014466699164257.
- Singh, R., & Teoh, J. B. P. (2000). Impression formation from intellectual and social traits: Evidence for behavioral adaptation and cognitive processing. *The British Journal of Social Psychology*, 39, 537–554. doi:10.1348/014466600164624.
- Singh, R., Wegener, D. T., Sankaran, K., Bhullar, N., Ang, K. Q. P., Chia, P. J. L., et al. (2017). Attitude similarity and attraction: Validation, positive affect, and trust as sequential mediators. *Personal Relationships*, doi:10.1111/per.1278; in press.
- Singh, R., Wegener, D. T., Sankaran, K., Singh, S., Lin, P. K. F., Seow, M. X., et al. (2015). On the importance of trust in interpersonal attraction from attitude similarity. *Journal of Social and Personal Relationships*, 32, 829–850. doi:10.1177/0265407515576993.
- Singh, R., Yeoh, B. S. E., Lim, D. I., & Lim, K. K. (1997). Cross categorization effects in intergroup discrimination: Adding versus averaging. *The British Journal of Social Psychology*, 36, 121–138. doi:10.1111/j.2044-8309.1997.tb01123.x.
- Sinha, D. (1981). Experimental social psychology: Verbal or real? In J. Pandey (Ed.), *Perspectives on experimental social psychology in India* (pp. 217–228). New Delhi: Concept Learning.
- Srivastava, P., & Singh, R. (1988). Age and task differences in prediction of performance from motivation and ability information. *Child Development*, 59, 769–781.
- Steenkamp, J. E. M. (1989). *Product quality: An investigation into how it is perceived by customers*. Assen/Maastricht. The Netherlands: Van Gorcum.
- Stroop, J. R. (1935). Studies of interference in serial verbal reactions. *Journal of Experimental Psychology*, 18, 643–662.
- Tan, D. T. Y., & Singh, R. (1995). Attitudes and attraction: A developmental study of the similarity-attraction and dissimilarity-repulsion hypotheses. *Personality and Social Psychology Bulletin*, 21, 975–986. doi:10.1177/0146167295219011.
- Tetlock, P. E., Self, W. T., & Singh, R. (2010). The punitiveness paradox: When is external pressure exculpatory- and when a signal just to spread blame? *Journal of Experimental Social Psychology*, 46, 388–395. doi:10.1016/j.jesp.2009.11.013.
- Tetlock, P. E., Visser, P., Singh, R., Polifroni, M., Scott, A., Elson, B., et al. (2007). People as intuitive prosecutors: The impact of social-control goals on punitiveness and attributions of responsibility. *Journal of Experimental Social Psychology*, 43, 195–209. doi:10.1016/j.jesp.2006.02.009.