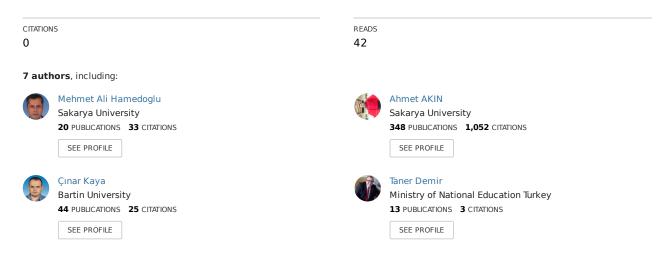
See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/257997671

The Turkish Version of the Career Futures Inventory-Revised: The Validity and Reliability Study

Conference Paper · December 2012



Some of the authors of this publication are also working on these related projects:

Project mustafa ercengiz View project

Educational psychology View project

All content following this page was uploaded by Cinar Kaya on 13 April 2016.

Springer Proceedings in Complexity

Santo Banerjee Şefika Şule Erçetin *Editors*

Chaos, Complexity and Leadership 2012



Springer Proceedings in Complexity

For further volumes: http://www.springer.com/series/11637

Santo Banerjee • Şefika Şule Erçetin Editors

Chaos, Complexity and Leadership 2012



Editors Santo Banerjee Institute for Mathematical Research University Putra Malaysia Malaysia

International Science Association Ankara Turkey Şefika Şule Erçetin Hacettepe University Ankara Turkey

International Science Association Ankara Turkey

ISSN 2213-8684 ISSN 2213-8692 (electronic) ISBN 978-94-007-7361-5 ISBN 978-94-007-7362-2 (eBook) DOI 10.1007/978-94-007-7362-2 Springer Dordrecht Heidelberg New York London

© Springer Science+Business Media Dordrecht 2014

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher's location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

SB: To my sister Santa Mukherjee and my little MAMU Sumadrish

SSE: In memory of my parents Mübeccel Erçetin and Yusuf Kenan Erçetin

Preface

Leadership in all sense has been centre of debates since humankind has its own society. From simple understanding of leadership to complex leadership theories, it is both mystical and scientific issue. Literally, leadership means that "the office or position of leader" and second explanation is "capacity to lead". It is obvious that perception and definition of leadership have been transformed and kindly evolved.

Unfortunately, the first attempt of describing of leadership in scientific way did not go back to ancient times however, there were lots of epitaph, myths and some poets, which described "leaders of their society in different names such as king, emperor and etc." More modern times, we have much remarkable books such as The Prince of Machiavelli. It was more than description of their leaders; it was also giving analysis of how good leaders (prince) should be. Even The Prince can be considered as a handbook of leaders.

Then, we can see books, which also criticized system and leaders especially during French revolution and its age. We can say that, scientific accumulation on leadership started from generally in the beginning of nineteenth century such as types of leadership were emerged. More alternative works have risen up in 40s and 50s. From poets on Rome's Ceaser to twenty-first century, there are new concepts are quite popular such as global leadership reveal that an intensive and long journey of leadership.

In light of this historical picture of how sources of leadership evolved show us that term of leadership is highly complex, dependent and also interdependent scientifically. In other words, notion of leadership has mutual relationship with history, geography, culture, national identity, psychology, philosophy, politics and list goes on.

This complexity makes its' field as a unique. Our symposium represents a new feature and dynamical perspective on leadership. We bring chaos and complexity, which are mainly notion of physics and mathematics to field of leadership. It has been studied that the nonlinear tools are very effective to investigate the modern leadership ability and to control the complex/chaotic situations. The subject is much more enhanced with the nonlinear techniques and chaos theory.

Preface

Not only physics but also, we shared many distinct, unique and fruitful ideas and workings from almost 20 different countries. That's why, we are glad to represent the book of Chaos, Complexity and Leadership symposium. Through the book, you will read numerous fantastic symposium paper which enlighten "leadership" as a phenomenon.

We are very much grateful to our invited speakers for their superlative lectures.

Finally we would like to thank all the participants, guests and members associated with ICCLS2012, to make the symposium successful.

Ankara, Turkey Ankara, Turkey Şefika Şule Erçetin Santo Banerjee

viii

Contents

1	Great Illusion in Twenty-First Century-Chaos Knocking Door Şuay Nilhan Açıkalın and Şefika Şule Erçetin	1
2	Chaotic Time Delay Systems and Field Programmable Gate Array Realization D. Valli, S. Banerjee, K. Ganesan, B. Muthuswamy, and C.K. Subramaniam	9
3	An Adaptive Neuro-Fuzzy Inference System-Based Approach to Forecast Time Series of Chaotic Systems Utku Köse and Ahmet Arslan	17
4	Design and Development of a Chaos-Based Image Encryption System Utku Köse and Ahmet Arslan	23
5	Comparison of Principal Component Analysis Biplots Based on Different Robust Covariance Matrix Estimates B. Barış Alkan and Cemal Atakan	29
6	Complexity and the Relationship of the State with Islam Kamilla Sheryazdanova	35
7	Anadolu Agency and the New Media Order Kemal Öztürk	43
8	The Role and Place of Migration and Diaspora's Policy in Bilateral Relations Between Kazakhstan and Germany Kamilla Sheryazdanova	47
9	Complex Adaptive Leadership for Performance: A Theoretical Framework Füsun Bulutlar and Rıfat Kamaşak	59

10	Chaos According to Teachers Attending PhD Programs and the Chaos Management in School Elif Gamze Özcan and Hilal Zehra Uzun	67
11	Chaos Approach in Educational Administration Hilal Zehra Uzun and Elif Gamze Özcan	73
12	Uncertainty, Complexity and Fuzzy Logic İbrahim Özkan and I. Burhan Türkşen	79
13	Primary School Principals' Crisis Management Skills İlknur Çalışkan Maya	95
14	Evaluation of Post-Graduate Students' Perceptions of Transformational Leadership According to Some Variables Fırat Kıyas Birel and Meltem Yalın Uçar	103
15	Evaluating Market Basket Data with Formal Concept Analysis Alp Üstündağ and Mert Bal	113
16	Managing on the Edge of Chaos Ali Balcı	119
17	Controlling Chaotic Behavior of the Stepper Motor Using Genetic Algorithms	131
18	Robust Chaos Synchronization for Chua's Circuits viaActive Sliding Mode ControlOlfa Boubaker and Rachid Dhifaoui	141
19	A Modeling Approach Based on Fuzzy Least Squares Method for Multi-Response Experiments with Replicated Measures Özlem Türkşen and Ayşen Apaydın	153
20	Chaos, Complexity and Police Leadership Ramazan Terkeşli	159
21	Ideas on Municipalities, Chaos Theory and Transformational Leadership Recep Bozlağan	165
22	IDEAS The Modelling Technique Based on Neuro-Fuzzy Structure for Chaotic Rossler System Remzi Tuntaş	177
23	Leading Diversified Workforce to Improve Organizational Network Effectiveness Pınar Büyükbalcı, Yasemin Bal, Esin Ertemsir, and Sevgin Batuk Turan	183

х

24	Charismatic Leadership, Ethics and Effectiveness in Political Science	193
25	GARCH Type Volatility Models Augmented with News Intensity Data	199
26	A General Outlook to the Transformational Leadership Practices of School Administrators in Turkey in the Light of Present Research Findings Tuğba Turabik	209
27	Avoidance Behaviors of School Managers in Uncertain and Chaotic Environments Nilay Neyişci and Nihan Potas	219
28	New Leadership Paradigms in the Complexity Science Nilay Neyişci and Nihan Potas	229
29	Chaotic Conditions That Postgraduate Students Came Across and Solution Suggestions Nedim Özdemir, Selçuk Turan, and Ahmet Yirmibeş	235
30	Survival of the Fittest: Intelligent Organizations as Intelligent Complex Adaptive Systems Esen Arzu Kayman and Şefika Şule Erçetin	241
31	How to Be a Quantum Leader in an Intelligent Organization? Şefika Şule Erçetin and Esen Arzu Kayman	247
32	Forming Educational Leadership Standards in Turkey and Educational Leadership Policy Standards: ISLLC 2008 Tuncay Akçadağ and Melek Kaymaz Mert	253
33	The Importance of School Administrators' CulturalLeadership in Chaos AtmosphereMehmet Teyfur and Esin Acar	259
34	Is Arab Spring a Complex Utopia? K. Gediz Akdeniz	267
35	Compulsory and Discontinuous Education as a New Model: 4+4+4 Is It Chaotic? Kenan İli	271
36	A Simulation Study Goodness-of-Fit Tests for the Skewed Normal Distribution Emre E. Sarısoy, Nihan Potas, and Mahmut Kara	277
37	A Chaotic Fact: 2011 Van Earthquake-Evalutation of Pedegogs Mehmet Menteşe	285

xi

xii	C	Contents
38	Searching for New Model in Education Systems: Sample of Turkey	. 289
39	Sustainability of Economic System in the Chaos Anna Firsova, Olga Balash, and Vladimir Nosov	. 299
40	Economic Systems: From Chaos to Order	. 305
41	The Development of the Local Economic System in the Conditions of Predominant Power Economy Elena Ogurtsova	. 315
42	Would the Organizational Commitment and Occupational Burnout Perceptions of Firm Owner's with 10–49 Employees Be High at the Same Time? Why Not? (Example of Ankara)	. 327
43	Ethics and Leadership Nursel Yardibi	. 333
44	Situational Leadership in Change Management for Different Generations Buket Aksu	. 339
45	Chaos Against Leadership in the Seljuks Era: The Case of Isfahan Nurullah Yazar	. 355
46	The Contribution of Religious Teachingto the Development of Leadership SkillsTuğrul Yürük	. 361
47	Atmospheric Tracers and the Monsoon System: Lessons Learnt from the 1991 Kuwait Oil Well Fires Peter Carl	. 371
48	Fuzzy Generalized Fractal Dimensions for Chaotic Waveforms R. Uthayakumar and D. Easwaramoorthy	. 411
49	Nonlinear Forced Convective Hydromagnetic Flow of Unsteady Biomagnetic Fluid Over a Wedge with Convective Surface Condition M.M. Rahman and M.A. Sattar	. 423
50	Advancements on Authentication Methods for Transfer of Stream Data via Chaos Synchronization Techniques M.R.K. Ariffin and Z. Mahad	. 453

Contents

51	Efficient Implementation Baptista Type Chaotic Cryptosystem with Encoding Scheme	461
52	Measuring Perceptual Reflections of Employees for Their Executives Intellectual Traits That Effecting Quality of Work Life of Employees and Organizational Change Seyfi Top, Ercan Öge, Serkan Dilek, and Özlem Atan	471
53	Relationship Between the Attitudes of Undergraduate Students Towards Complex Numbers and Misconceptions Vildan Keçeli and Necla Turanlı	487
54	Turkish Version of the Career Adapt-Abilities Scale(CAAS): The Validity and Reliability StudyAhmet Akın, Çınar Kaya, Serhat Arslan, Taner Demir,Hakan Sarıçam, and Recep Uysal	499
55	Reflections of Syrian Chaos to Turkey: A Geopolitical Analysis Nurettin Özgen	507
56	Leaders, Followers and Their Personalities Burcu Erentuğ and Mehmet Ali Hamedoğlu	519
57	Determination of Leadership Behaviors of Mayors Who Have Been Elected with Local Election According to the Opinions of Employees Fuat Uzun	533
58	Dystopian Future View as a Narrative of Inherent Entropy of Organizations Ulaş Çakar and Ozan Nadir Alakavuklar	539
59	The Turkish Version of the Career Futures Inventory-Revised: The Validity and Reliability Study Mehmet Ali Hamedoğlu, Ahmet Akin, Serhat Arslan, Çınar Kaya, Taner Demir, Recep Uysal, and Hakan Sarıçam	545
60	The Importance of Building Leadership Skills with the Contemporary Youth Kadisha Shalgynbayeva	551
61	Chaotic Politics, Chaotic Relationships Mina Abbasiyannejad and Rosli Talif	557
62	Dynamical Motion Capture System Involving via Neural Networks Eva Volná, Robert Jarušek, Martin Kotyrba, and Daniel Rucký	563

xiii

Chapter 59 The Turkish Version of the Career Futures Inventory-Revised: The Validity and Reliability Study

Mehmet Ali Hamedoğlu, Ahmet Akin, Serhat Arslan, Çınar Kaya, Taner Demir, Recep Uysal, and Hakan Sarıçam

59.1 Introduction

A career is getting together and sequence of roles played by an individual during the course of a lifetime (Super 1980) and the process by which individuals make less their life choices as a way to create and find the self (Gottfredson 2002). Nowadays it is an important phenomenon for individuals to make best decision and career choice between educational, vocational, and job options (Vianen et al. 2009). In general, it is not easy to make the best choice and to use rational strategies when making career decisions for most people (Anderson 2003). Depending on making wrong career choices individuals sometimes unhappy with their decisions once they are made. So, many career theories emphasize the importance of conscious decision making for healthy career development (Vianen et al. 2009).

Career develops over a lifetime and all individuals must meet the social norms, and a central construct in career preparation and an important variable in career development is career adaptability which is derived from Super's original term "career maturity" (Super and Kansel 1981) Career adaptability forms an idea about how individuals adjust the changes or new things in work life (Super and Kidd 1979), an important structure for healthy career decision making (Rottinghaus et al. 2012), should be thought as a remarkable construct in career theory and includes three major components; conscious planning attitudes, exploration of self and environment, and informed decision making (Vianen et al. 2009). Because of changing world of work that require rapid adaptation of knowledge and skills career

M.A. Hamedoğlu (\boxtimes) • A. Akin • S. Arslan • Ç. Kaya • T. Demir • R. Uysal Educational Sciences Department, Sakarya University, Sakarya 54300, Turkey e-mail: mhamed@sakarya.edu.tr

H. Sarıçam Educational Sciences Department, Dumlupınar University, Sakarya 43100, Turkey

S. Banerjee and Ş.Ş. Erçetin (eds.), *Chaos, Complexity and Leadership 2012*, Springer Proceedings in Complexity, DOI 10.1007/978-94-007-7362-2_59, © Springer Science+Business Media Dordrecht 2014

adaptability is getting a necessity and traditional linear careers are becoming less effectual (DeFillippi and Arthur 1994) and it is a key competence in career success (O'Connell et al. 2008).

Savickas (1997) first defined career adaptability as "the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and work conditions" (p. 254) and later (Savickas 2005), "a psychosocial construct that denotes an individual's readiness and resources for coping with current and imminent vocational development tasks, occupational transitions, and personal traumas" (p. 51). According to Rottinghaus et al. (2005) career adaptability is a tendency which effects the way an individual views his or her capacity to plan and adjust to changing career plans and work responsibilities, especially when he or she met with an unexpected event.

Savickas (2002, 2005) proposed four main aspects of adaptability: concern, control, curiosity, and confidence. According to him to have a successful career adaptation, firstly, people must have concern about the future of their occupational path to have a meaningful career planning. Secondly they must have more control and autonomy of their occupational path by decision-making interventions and assertiveness training. Thirdly, they must be curious about the future to have an open view of career possibilities and must think where they see themselves in their work lives in future and finally, they must increase their confidence, self-belief to reach their aims. These four major aspects involve the entire career development of an individual (Magruder 2012).

Previous studies have shown that there is a strong relationship between career adaptability that accepted as a useful construct for examining what it is that career counselors do, and what they will need to do in the future (Swanson and Parcover 1998) and leadership (Rottinghaus et al. 2005). Leaders must encourage their employees "to become more career-resilient and engage in career development activities to deal with changes in required knowledge, skills, and abilities, and to facilitate their mobility" and participation in decision making process and autonomy, along with supervisory career support (information, advice, and encouragement), enhance employee's career adaptability (Ito and Brotheridge 2005, p. 5). Similarly, changing, dynamic environments are crucial in today's organizations, so they need for adaptive workers (Edwards and Morrison 1994) and supervision/leadership is one of the major component of adaptive job performance (Campbell 1999; Campbell et al. 1993).

Rottinghaus et al. (2012) developed the Career Future Inventory-Revised (CFI-R) to assess aspects of career adaptability, including positive career planning attitudes, general outcome expectations, and components of Parsons' tripartite model and Bandura's personal agency. CFI-R is composed of 28-items and career agency (Factor 1), negative career outlook (Factor 2), occupational awareness (Factor 3), support (Factor 4) and work–life balance (Factor 5) were found to be the two main factors in the exploratory factor analysis (EFA); all factors had high internal consistency (Alphas for Factors were, .88, .77, .80, .77 and .75 respectively). Respondents indicated on a 5-point Likert scale (1 = strongly disagree to

5 = strongly agree) how often they felt as described in each item. The overall pattern highlights numerous examples supporting the validity of the CFI-R scales. Career Agency demonstrated a pattern reflecting more adaptive coping methods, including .28 and .30 correlations with problem-focused and avoidant coping, respectively. Negative Career Outlook was significantly correlated with Life Orientation Test–Revised .37 and demonstrated moderate correlations with the CDP subscales, decidedness .41, comfort .49, and reasons .56 career agency related positively to decidedness .38, comfort .46, and reasons .47. Occupational Awareness showed moderate relationships with comfort .34 and reasons .39 (Rottinghaus et al. 2012). The aim of this research is to adapt the CFI-R to Turkish and to examine its psychometric properties.

59.2 Method

59.2.1 Participants

Participants were 587 university students (350 female and 237 male) who were from different programs of Education Faculty of Sakarya.

59.2.2 Procedure

Primarily the CFI-R was translated into Turkish by five academicians. After that the Turkish form was back-translated into English and examined the consistency between the Turkish and English forms. Turkish form has reviewed by six academicians from educational sciences department. Finally they discussed the Turkish form and along with some corrections this scale was prepared for validity and reliability analyses. In this study confirmatory factor analysis was executed to confirm the original scale's structure in Turkish culture. Data were analyzed by LISREL 8.54 and SPSS 13.0.

59.3 Results

59.3.1 Construct Validity

The results of confirmatory factor analysis indicated that the model was well fit ($x^2 = 800.01$, df = 335, RMSEA = .049, NFI = .88, NNFI = .92, CFI = .92, RFI = .86, GFI = .91, AGFI = .89, and SRMR = .040). Factor loadings are presented in Fig. 59.1.

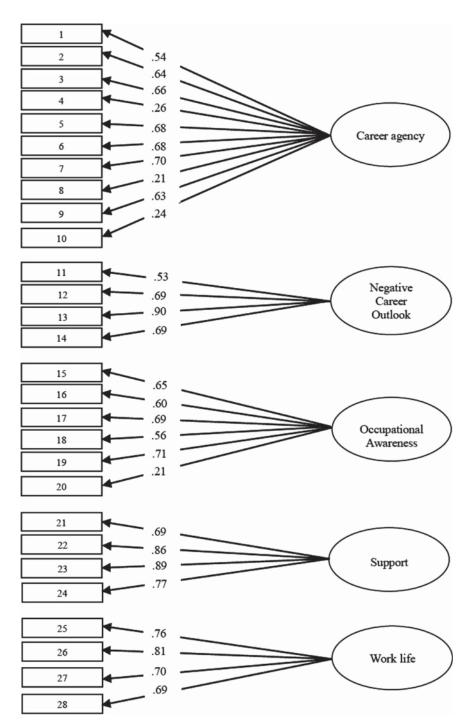


Fig. 59.1 Factor loading and path diagram for the CFI-R

548

59.3.2 Reliability

The internal consistency coefficients of five subscales; career agency was .58, occupational awareness was.81, support was.70, work–life balance was .88, and negative career outlook was .83. The corrected item-total correlations of CFI-R ranged from .55 to .86.

59.4 Discussion

The purpose of this study was to translate the CFI-R into Turkish and examine its psychometric properties. Confirmatory factor analysis demonstrated that the factor structure was harmonized with the factor structure of the original scale. Thus, it can be said that the structural model of the CFI-R which consists of five factors was well fit to the Turkish culture (Bentler and Bonett 1980; Hu and Bentler 1999; Schermelleh-Engel and Moosbrugger 2003). The internal consistency reliability coefficients of the scale were high (Büyüköztürk 2010; Kline 2000). Overall findings demonstrated that this scale had high validity and reliability scores and that it may be used as a valid and reliable instrument in order to measure the dimensions of career future. Nevertheless, further studies that will use CFI-R are important for its measurement force.

References

- Anderson CJ (2003) The psychology of doing nothing: forms of decision avoidance result from reason and emotion. Psychol Bull 129:139–166
- Bentler PM, Bonet DG (1980) Significance tests and goodness of fit in the analysis of covariance structures. Psychol Bull 88:588–606
- Büyüköztürk Ş (2010) Sosyal bilimler için veri analizi el kitabı. Pegem Akademi Yayınları, Ankara
- Campbell JP (1999) The definition and measurement of performance in the new age. In: Ilgen DR, Pulakos ED (eds) The changing nature of performance: implications for staffing, motivation, and development. Jossey-Bass, San Francisco, pp 399–430
- Campbell JP, McCloy RA, Oppler SH, Sager CE (1993) A theory of performance. In: Schmitt N, Borman WC (eds) Employee selection. Jossey-Bass, New York
- DeFillippi RJ, Arthur MB (1994) The boundaryless career: a competency-based perspective. J Organ Behav 15:307–324
- Edwards JE, Morrison RF (1994) Selecting and classifying future naval officers: the paradox of greater specialization in broader areas. In: Rumsey MG, Walker CB, Harris JH (eds) Personnel selection and classification. Erlbaum, HiUsdale, pp 69–84
- Gottfredson LS (2002) Gottfredson's theory of circumscription, compromise, and self-creation. In: D. Brown & Associates (ed) Career choice and development. Jossey-Bass, San Francisco, pp 85–148
- Hu LT, Bentler PM (1999) Cutoff criteria for fit indexes in covariance structural analysis: conventional criteria versus new alternatives. Struct Equation Model 6:1–55

Ito JK, Brotheridge CM (2005) Does supporting employees' career adaptability lead to commitment, turnover, or both? Hum Resour Manage 44(1):5–19

Kline P (2000) Handbook of psychological testing. Routledge, London

- Magruder JA (2012) Psychological birth order and career adaptability in an at-risk college population. Unpublished Ph.D. dissertation, Department of Leadership and Counselor Education, University of Mississippi
- O'Connell DJ, McNeely E, Hall DT (2008) Unpacking personal adaptability at work. J Leadersh Organ Stud 14:248–259
- Rottinghaus PJ, Day SX, Borgen FH (2005) The career futures inventory: a measure of careerrelated adaptability and optimism. J Career Assessment 13:3–24
- Rottinghaus PJ, Buelow KL, Matyja A, Schneider MR (2012) The career futures inventory-revised. Measuring dimensions of career adaptability. J Career Assessment 20(2):123–139
- Savickas M (1997) Career adaptability: an integrative construct for life-span, life-space theory. Career Dev Q 45:247–259
- Savickas M (2002) Career construction: a developmental theory of vocational behavior. In: Brown D (ed) Career choice and development. Wiley, San Francisco, pp 149–205
- Savickas M (2005) The theory and practice of career construction. In: Brown SD, Lent RW (eds) Career development and counseling: putting theory and research to work. Wiley, Hoboken, pp 42–70
- Schermelleh-Engel K, Moosbrugger H (2003) Evaluating the fit of structural equation models: tests of significance and descriptive goodness-of-fit measures. Meth Psychol Res Online 8(2):23–74
- Super DE (1980) A life-span, life-space approach to career development. J Vocat Behav 16: 282–298
- Super DE, Kidd JM (1979) Vocational maturity in adulthood: toward turning a model into a measure. J Vocat Behav 14:255–270
- Super D, Knasel EG (1981) Career development in adulthood: some theoretical problems and a possible solution. Brit J Guid Couns 9(2):194–201
- Swanson JL, Parcover JA (1998) Annual review: practice and research in career counseling and development–1997. Career Dev Q 47:98–134
- Van Vianen AEM, De Pater IE, Preenan PTY (2009) Adaptable careers: maximizing less and exploring more. Career Dev Q 57:298–309