

**THE MEDIATION AND MODERATION EFFECTS OF
STRESS AND SOCIAL SUPPORT ON LEADERSHIP-
ORGANIZATIONAL CITIZENSHIP BEHAVIOR
RELATIONSHIP: A STUDY AMONG BANK
EMPLOYEES IN MALAYSIA**

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By

SOO HOOI SIN

**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
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in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**

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ABSTRACT

This study proposed a mediated-moderation model to examine the relationship between leadership and organizational citizenship behavior (OCB) because the mechanism of how leadership influence employee OCB is not sufficiently clear. Besides examining the direct relationship between leadership and OCB among 474 bank employees from a total of 60 bank branches in Penang, the study also investigated the indirect relationship with the inclusion of stress as a mediator and social support as a moderator in the relationship between leadership and OCB. Finally the examination of the mediated-moderation effects of leadership, stress and social support and its influence on OCB was also undertaken. A survey was conducted using a questionnaire through self-administered approach and the data were obtained from employee's self-ratings. Multiple regression analysis and hierarchical multiple regression analysis were used to analyze the data. The results indicated that stress mediates the relationship between leadership and OCB, and that social support moderates the relationship between leadership and stress. Finally, an ANOVA was undertaken to examine the mediated-moderation effect and the results indicated that employees with higher social support have lower stress experience from the leader and this leads to higher OCB. The findings of this study suggest that different types of leader behaviors can influence different symptoms of stress among employees. However this effect can be mitigated by adequate social support. The implication of this research is that managers need to be aware that their leadership style should not unduly induce stress among their employees as this can have a deleterious effect on OCB. Further management must develop a supportive social environment through social network as this has been shown to buffer stress among employees.

Keywords: Transformational leadership, Transactional leadership, Organizational citizenship behavior, Stress, Social support

ABSTRAK

Kajian ini mencadangkan model pengantara-penyederhana dalam hubungan antara kepimpinan dan perlakuan kewarganegaraan organisasi (OCB) disebabkan mekanisme bagaimana kepimpinan mempengaruhi OCB masih tidak jelas. Selain pemeriksaan hubungan langsung antara kepimpinan dan OCB dalam kalangan 474 kakitangan bank di 60 cawangan bank di Penang, kajian ini juga menyiasat hubungan tidak langsung dengan mengambil kira stres sebagai pengantara dan sokongan sosial sebagai penyederhana dalam hubungan antara kepimpinan dan OCB. Seterusnya, penelitian tentang kesan pengantara-penyederhana kepimpinan, stres, sokongan sosial terhadap OCB juga dilakukan. Tinjauan dikendalikan dengan mengagihkan soal selidik dan data diperolehi daripada penilaian pekerja sendiri. Analisis regresi berbilang dan analisis regresi hierarki berbilang digunakan untuk menganalisa data. Keputusan menunjukkan bahawa stres mengantara hubungan antara kepimpinan dan OCB, dan sokongan sosial menyederhana hubungan antara kepimpinan dan stres. Akhirnya, analisis ANOVA digunakan untuk mengkaji kesan pengantara-penyederhana dan keputusan menunjukkan bahawa pekerja yang mendapat sokongan sosial yang tinggi akan mengalami stres yang rendah apabila bekerja dengan pemimpin, dan ini boleh meningkatkan OCB. Dapatan kajian ini menunjukkan bahawa perlakuan kepimpinan yang berbeza boleh mempengaruhi gejala stres yang berbeza di kalangan pekerja. Bagaimanapun, kesan ini boleh dikurangkan jikalau pekerja mempunyai sokongan sosial yang mencukupi. Implikasi kajian ini menyeru pengurus supaya menyedar diri bahawa gaya kepimpinan mereka tidak sepatutnya menyebabkan stres dalam kalangan pekerja kerana ini boleh memberi kesan buruk terhadap OCB. Di samping itu, pihak pengurusan perlu membentuk persekitaran sosial yang menyokong melalui jaringan sosial kerana ini ditunjukkan dapat mengurangkan stres pekerja.

Kata kunci: Kepimpinan transformasi, Kepimpinan transaksi, Perlakuan kewarganegaraan organisasi, Stres, Sokongan sosial

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LIST OF ABBREVIATIONS

ANOVA	Analysis Of Variance
CP	Contextual Performance
ERB	Extra-Role Behavior
GDP	Gross Domestic Product
LMX	Leader-Member Exchange
M-b-E	Management-by-Exception
MLQ	Multifactor Leadership Questionnaire
NIOSH	National Institute of Occupational Safety and Health
OCB	Organizational Citizenship Behavior
OCB-I	Organizational Citizenship Behavior towards Individual
OCB-O	Organizational Citizenship Behavior towards Organization
OCB-S	Organizational Citizenship Behavior towards Students
OS	Organizational Spontaneity
POB	Prosocial Organizational Behavior
PO fit	Person-Organizational fit
POP	Perceived Organizational Politics
POS	Perceived Organizational Support
TMX	Team-Member Exchange
WHO	World Health Organizations
WTO	World Trade Organization

CHAPTER ONE

BACKGROUND OF THE RESEARCH

1.1 Introduction

Organizational citizenship behavior (OCB) is considered as employee's positive behavior in organization that would help the organization to sustain long-term profitability by increasing the organizational functioning. According to Graham (1991), OCB is a positive workplace behavior because the elements of OCB includes all positive behaviors which can contribute to organization. However, OCB is non-mandated behaviors from organizations and their demonstration depends on the willingness of the employees. In the other words, the employees have a choice of whether or not to perform OCB. If the employees choose not to perform OCB or are not willing to contribute their extra effort towards the organization, they will not be punished or discriminated against by the organization (Greenberg & Baron, 1997; Moorman & Blakely, 1995; Organ, 1988). Providing help to others, being cooperative with others, being politely and courteously, showing initiative when performing a task, being optimistic and open-minded when facing challenges, demonstrating self-discipline and contributing ideas and suggestions to improve the organization are examples of positive behaviors that are beyond job requirements (Bateman & Organ, 1983; Moorman & Blakely, 1995) and are voluntary in nature.

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REFERENCES

- Aalto-Setälä, T., Marttunen, M., Tuulio-Henriksson, A., Poikolainen, K., & Lonnqvist, J. (2002). Depressive symptoms in adolescence as predictors of early adulthood depressive disorders and maladjustment. *The American Journal of Psychiatry*, 159(7), 1235-1237.
- Abbey, D. E., & Esposito, J. P. (2001). Social support and principal leadership style: A means to reduce teacher stress. *Education*, 105(3), 327-332.
- Abdel-Halim, A. A. (1982). Social support and managerial affective responses to job stress. *Journal of Occupational Behavior*, 3, 281-295.
- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology*, 81(4), 411-420.
- Adbullah, M. M. B., Uli, J., & Ismail, A. (2009). Training and education program as a major determinant of quality improvement in Malaysian electrical and electronics industry. *International Journal of Business and Management Science*, 1(2), 205-219.
- Adebayo, D. O. (2005). Ethical attitudes and prosocial behaviors in the Nigeria police: Moderator effects of perceived organizational support and public recognition. *Policing: An International Journal of Police Strategies & Management*, 28(4), 684-705.
- Ahmad, R., Ariff, M., & Skully, M. (2007). Factors determining mergers of banks in Malaysia's banking sector reform. *Multinational Finance Journal*, 11(1/2), 1-31.
- Ahsan, N., Abdullah, Z., Fie, D. Y. G., & Alam, S. S. (2009). A study of job stress on job satisfaction among university staff in Malaysia: Empirical study. *European Journal of Social Science*, 8, 121-131.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. California: SAGE Publications, Inc.
- Akers, R. L., Krohn, M. D., Lanza-Kaduce, L., & Radosevich, M. (1979). Social learning and deviant behavior: A specific test of a general theory. *American Sociological Review*, 44(August), 636-655.
- Allen, F., Gersbach, H., Krahnen, J.-P., & Santomero, A. M. (2001). Competition among banks: Introduction and conference overview. *European Finance Review*, 5, 1-11.
- Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology*, 83, 247-260.
- Alotaibi, G. A. (2001). Antecedents of organizational citizenship behavior: A study of public personnel in Kuwait. *Public Personnel Management*, 30, 363-376.
- Andrews, M. C., Kacmar, K. M., & Harris, K. J. (2009). Got political skill? The impact of justice on the importance of political skill for job performance. *Journal of Applied Psychology*, 94(6), 1427-1437.
- Appelbaum, S., Bartolomucci, N., Beaumier, E., Boulanger, J., Corrigan, R., Dore, I., et al. (2004). Organizational citizenship behavior: A case study of culture, leadership and trust. *Management Decision*, 42, 13-40.

- Aquino, K., Freeman, D., Reed-II, A., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology*, 97, 123-141.
- Aryee, S., & Chay, Y. W. (2001). Workplace justice, citizenship behavior, and turnover intentions in a union context: Examining the mediating role of perceived union support and union instrumentality. *Journal of Applied Psychology*, 86, 154-160.
- Asgari, A., Silong, A. D., Silong, A., & Samah, B. A. (2008). The relationship between transformational leadership behaviors, organizational justice, leader-member exchange, perceived organizational support, trust in management and organizational citizenship behaviors. *European Journal of Scientific Research*, 23(2), 227-242.
- Auerbach, S. M., Martelli, M. F., & Mercuri, L. G. (1983). Anxiety, information, interpersonal impacts, and adjustment to a stressful health care situation. *Journal of Personality and Social Psychology*, 44(6), 1284-1296.
- Avolio, B. J., Bass, B., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using multifactor leadership. *Journal of Occupational and Organizational Psychology*, 72(4), 441-462.
- Aziz, Z. A. (2007, July). *The Malaysian banking industry reinvention and transformation*. Paper presented at the 11th Malaysian banking summit "The Malaysian banking industry reinvention and transformation", Kuala Lumpur, Malaysia.
- Bacharach, S. B., Bamberger, P., & Conley, S. (1991). Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behavior*, 12, 39-53.
- Bachrach, D. G., Wang, H., Bendoly, E., & Zhang, S. (2007). Important of organizational citizenship behavior for overall performance evaluation: Comparing the role of task interdependence in China and USA. *Management and Organization Review*, 3(2), 255-276.
- Bagheri, A., & Midi, H. (2009). Robust estimations as a remedy for multicollinearity caused by multiple high leverage points. *Journal of Mathematics and Statistics*, 5(4), 311-321.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284.
- Bakker, A. B., Schaufeli, W. B., Sixma, H. J., Bosveld, W., & Dierendock, D. V. (2000). Patient demands, lack of reciprocity, and burnout: A five-year longitudinal study among general practitioners. *Journal of Organizational Behavior*, 21, 425-441.
- Bandura, A. (1969). Social-Learning theory of identificatory processes. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213-263). United States: Rand McNally & Company.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development. Vol. 6. Six theories of child development* (pp. 1-60). Greenwich, CT: JAI Press.

- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248-287.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3, 265-299.
- Bandura, A. (2004). Health Promotion by social cognitive means. *Health Education and Behavior*, 31(2), 143-164.
- Bandura, A., Adams, N. E., B. Hardy, A., & Howells, G. N. (1980). Tests of the generality of self-efficacy theory. *Cognitive Therapy and Research*, 4, 39-66.
- Bandura, A., Adams, N. E., & Beyer, J. (1977). Cognitive processes mediating behavioral change. *Journal of Personality and Social Psychology*, 35(3), 125-139.
- Bank Negara Malaysia. (2011a). *Bank Negara Annual Report 2010*. Retrieved from [http:// www.bnm.gov.my](http://www.bnm.gov.my)
- Bank Negara Malaysia. (2011b). *List of licensed banking institutions in Malaysia*. Retrieved from <http://www.bnm.gov.my>
- Barhem, B., Sidin, S. M., Abdullah, I., & Alsagoff, S. K. (2004). A new model for work stress patterns. *Asian Academy of Management Journal*, 9, 53-77.
- Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81(6), 827-832.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Bartlett, J. E., Kotlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19, 43-50.
- Bartone, P. T. (2006). Resilience under military operational stress: Can leaders influence hardiness. *Military Psychology*, 18(Suppl), S131-S148.
- Bartram, T., & Casimir, G. (2007). The leadership between leadership and follower in-role performance and satisfaction with leader: The mediating effects of empowerment and trust in the leader. *Leadership & Organization Development Journal*, 28, 4-19.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1990a). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-31.
- Bass, B. M. (1990b). *Handbook of leadership: Theory, research and managerial applications* (3rd ed.). New York: The Free Press.
- Bass, B. M., & Avolio, B. J. (1990). The implications of transactional and transformational leadership for individual, team, and organizational development. *Research in Organizational Change and Development*, 4, 231-272.

- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *International Journal of Public Administration Quarterly*, 17, 112-121.
- Bass, B. M., & Avolio, B. J. (1995). *MLQ multifactor leadership questionnaire for research*. Redwood City, CA: Mind Garden.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207-218.
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". *Academy of Management Journal*, 26, 587-595.
- Bates, N., Martin, E. A., DeMaio, T. J., & Puente, M. d. I. (2006). *Questionnaire effects on measurements of race and Spanish origin* (No. Survey Methodology #2006-12). Washington, D. C.: Statistical Research Division, U.S. Census Bureau.
- Becchetti, L., & Pace, N. (2006). *The valorization of human capital as a key element of competitiveness: The "trust game corporation" perspectives*. Rome, Italy: University of Rome Tor Vergata.
- Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review. *Personnel Psychology*, 31(4), 665-699.
- Bem, S. L. (1977). On the utility of alternative procedures for assessing psychological androgyny. *Journal of Consulting Clinical Psychology*, 45(2), 196-205.
- Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behavioral Research and Therapy*, 42, 1129-1148.
- Bennett, J. A. (2000). Mediator and moderator variables in nursing research: Conceptual and statistical differences. *Research in Nursing & Health*, 23, 415-420.
- Bettman, J. R., & Kakkar, P. (1977). Effects of information presentation format on consumer information acquisition strategies. *Journal of Consumer Research*, 3(4), 233-240.
- Bienstock, C. C., DeMoranville, C. W., & Smith, R. K. (2003). Organizational citizenship behavior and service quality. *Journal of Service Marketing*, 17(4), 357-378.
- Biswas, S., & Varma, A. (2007). Psychological climate and individual performance in India: Test of a mediated model. *Employee Relations*, 29(6), 664-676.
- Biswas, U. N., & Biswas, S. N. (2010). Organizational health, stress & commitment during global financial crisis. *The Indian Journal of Industrial Relations*, 46, 112-125.
- Black, J. S. (1990). Locus of control, social support, stress and adjustment in international transfers. *Asia Pacific Journal of Management*, 7, 1-29.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Willey & Sons.
- Bless, H., Fiedler, K., & Strack, F. (2004). *Social cognition: How individual construct social reality*. New York: Psychology Press.

- Boerner, S., Dutschke, E., & Wied, S. (2008). Charismatic leadership and organizational citizenship: Examining the role of stressor and strain. *Human Resource Development International*, 11(5), 507-521.
- Bogler, R., & Somech, A. (2005). Organizational citizenship behavior in school: How does it relate to participation in decision making? *Journal of Educational Administration*, 43(5), 420-438.
- Bolino, M. C., Turnley, W. H., & Bloodgood, J. M. (2002). Citizenship behavior and the creation of social capital in organizations. *The Academy of Management Review*, 27(4), 505-522.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personal Selection* (pp. 71-98). San Francisco: Jossey-Bass.
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10, 99-109.
- Borman, W. C., Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, 9, 52-69.
- Bowers, D. G., & Seashore, S. E. (1966). Predicting organizational effectiveness with a four-factor theory of leadership. *Administrative Science Quarterly*, 11(2), 238-263.
- Bowling, N. A., Beehr, T. A., Johnson, A. L., Semmer, N. K., Hendricks, E. A., & Webster, H. A. (2004). Explaining potential antecedents of workplace social support: Reciprocity or attractiveness? *Journal of Occupational Health Psychology*, 9(4), 339-350.
- Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behavior. *Academy of Management Review*, 11(4), 710-725.
- Briere, J. (1996). *Trauma symptom checklist for children*. Florida: Psychological Assessment Resources.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1, 185-216.
- Brislin, R. W. (1976). Comparative research methodology: Cross-cultural studies. *International Journal of Psychology*, 11(3), 215-229.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Byrne, Z. S. (2005). Fairness reduces the negative effects of organizational politics on turnover intentions, citizenship behavior and job performance. *Journal of Business and Psychology*, 20(2), 175-200.
- Calvete, E., & Connor-Smith, J. K. (2006). Perceived social support, coping, and symptoms of distress in American and Spanish students. *Anxiety, Stress and Coping*, 19, 47-65.
- Cappelli, P., & Rogovsky, N. (1998). Employee involvement and organizational citizenship: Implications for labor law reform and "lean production". *Industrial and Labor Relations Review*, 51(4), 633-653.
- Carlson, D. S., & Perrewe, P. L. (1999). The role of social support in the stressor-strain relationship: An examination of work-family conflict. *Journal of Management*, 25(4), 513-540.

- Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers. *Journal of Managerial Psychology*, 18(8), 788-813.
- Caruna, A., Ramaseshan, B., & Ewing, M. T. (2001). Anomia and deviant behavior in marketing: Some preliminary evidence. *Journal of Managerial Psychology*, 16(5), 322-328.
- Carvalho, S. P. d., & Cruz, C. D. (1996). Diagnosis of multicollinearity: Assessment of the condition of correlation matrices used in genetic studies. *Brazilian Journal of Genetics*, 19(3), 479-484.
- Casimir, G., Waldman, D. A., Bartram, T., & Yang, S. (2006). Trust and the relationship between leadership and follower performance: Opening the black box in Australia and China. *Journal of Leadership and Organizational Studies*, 12(3), 68-84.
- Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: Qualitative and quantitative research*. Australia: Wiley.
- Chan, Y. H. (2004). Biostatistics 201: Linear regression analysis. *Singapore Medical Journal*, 45(2), 55-61.
- Chang, C. H., Johnson, R. E., & Yang, L. Q. (2007). Emotional strain and organizational citizenship behavior: A meta-analysis and review. *Work & Stress*, 21(4), 312-332.
- Chang, C.-H., Rosen, C. C., & Levy, P. E. (2009). The relationship between perceptions of organizational politics and employee attitudes, strain, and behavior: A meta-analytic examination. *Academy of Management Journal*, 52(4), 779-801.
- Chen, C.-C., & Chiu, S.-F. (2009). The mediating role of job involvement in the relationship between job characteristics and organizational citizenship behavior. *The Journal of Social Psychology*, 149(4), 474-494.
- Chen, X.-P., Hui, C., & Sego, D. J. (1998). The role of organizational citizenship behavior in turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of Applied Psychology*, 83(6), 922-931.
- Cheng, B.-S., Jiang, D.-Y., & Riley, J. H. (2003). Organizational commitment, supervisory commitment and employee outcomes in the Chinese context: Proximal hypothesis or global hypothesis. *Journal of Organizational Behavior*, 24(3), 313-334.
- Cheng-min, C., & Bor-wen, C. (2009). Relationship among personality traits, leadership behavior, and job stress in nurses in Yunlin, Taiwan. *China-USA Business Review*, 8(4), 51-57.
- Cherrington, D. J. (1994). *Organizational behavior: The management of individual and organizational performance* (2nd ed.). USA: Allyn and Bacon.
- Chiu, S.-F., & Tsai, M.-C. (2006). Relationships among burnout, job involvement and organizational citizenship behavior. *The Journal of Psychology*, 140(6), 517-530.
- Cho, J., & Dansereau, F. (2010). Are transformational leaders fair? A multi-level study of transformational leadership, justice perceptions, and organizational citizenship behaviors. *The Leadership Quarterly*, 21, 409-421.
- Cho, J., & Kim, S. (2009). Procedural justice and organizational citizenship behaviors: A social identity motive. *International Journal of Business Research*, 9(6), 107-113.

- Chompookum, D., & Derr, C. B. (2004). The effects of internal career orientation on organizational citizenship behavior in Thailand. *Career Development International*, 9(4), 406-423.
- Chu, C.-I., Hsu, H.-M., Price, J. L., & Lee, J.-Y. (2003). Job satisfaction of hospital nurses: An empirical test of a causal model in Taiwan. *International Nursing Review*, 50, 176-182.
- Chu, C.-I., Lee, M.-S., & Hsu, H.-M. (2006). The impact of social support and job stress on public health nurses' organizational citizenship behaviors in rural Taiwan. *Public Health Nursing*, 23(6), 496-505.
- Chui, C., & Yang, C. F. (1987). Chinese subjects' dilemmas: Humility and cognitive laziness as problems in using rating scales. *Bulletin of the Hong Kong Psychological Society*, 18, 39-50.
- Chui, S.-F., & Tsai, M.-C. (2006). Relationships among burnout, job involvement and organizational citizenship behavior. *The Journal of Psychology*, 140(6), 517-530.
- Coakes, S. J., & Steed, L. (2007). *SPSS: Analysis without anguish: Version 14.0 for Windows*. Australia: John Wiley & Son Australia, Ltd.
- Cobanoglu, C. (2006). An analysis of blogs as a teaching tool as perceived by hospitality management students. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 5(2), 83-88.
- Cohen, A., & Kol, Y. (2004). Professionalism and organizational citizenship behavior: An empirical examination among Israeli nurses. *Journal of Managerial Psychology*, 19(4), 386-405.
- Cohen, J. (1969). *Statistical power analysis for the behavioral sciences*. San Diego: Academic Press.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Cohen, S., & Syme, S. L. (1985). Issues in the study and application of social support. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 3-21). San Francisco: Academic Press.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 86(2), 278-321.
- Colquitt, J. A., LePine, J. A., & Wesson, M. J. (2009). *Organizational Behavior: Improving performance and commitment in the workplace*. New York: McGraw-Hill Irwin.
- Comeau, D. J., & Griffith, R. L. (2005). Structural interdependence, personality and organizational citizenship behavior: An examination of person-environment interaction. *Personnel Review*, 34(3), 310-330.
- Connelly, N. A., Decker, D. J., & Wear, S. (1987, October). *Public tolerance of deer in a suburban environment: Implications for management and control*. Paper presented at the Third Eastern Wildlife Damage Control Conference, University of Nebraska-Lincoln, US.
- Cooper, D. D., & Schindler, P. S. (2003). *Business research method*. Irwin: McGraw-Hill.

- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, 18(4), 621-656.
- Cordes, C. L., Dougherty, T. W., & Blum, M. (1997). Patterns of burnout among managers and professionals: A comparison of models. *Journal of Organizational Behavior*, 18, 685-701.
- Coyle-Shapiro, J. A.-M. (2002). A psychological contract perspective on organizational citizenship behavior. *Journal of Organizational Behavior*, 23(8), 927-946.
- Coyne, I., & Ong, T. (2007). Organizational citizenship behavior and turnover intention: A cross-cultural study. *International Journal of Human Resource Management*, 18(6), 1085-1097.
- Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes, and stress. *Journal of Organizational Behavior*, 18, 159-180.
- Cropanzano, R., Rupp, D., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance and organizational citizenship behaviors. *Journal of Applied Psychology*, 88, 160-169.
- Cropanzano, R., & Wright, T. A. (2001). When a 'happy' worker is really a 'productive' worker: A review and further refinement of happy-productive worker thesis. *Consulting Psychology Journal: Practice and Research*, 53(3), 182-199.
- Cummings, G. G., MacGregor, T., Davey, M., Lee, H., Wong, C. A., Lo, E., et al. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47(3), 363-385.
- Cutrona, C. E. (1990). Stress and social support - In search of optimal matching. *Journal of Social and Clinical Psychology*, 9, 3-14.
- Daft, R. L. (2008). *The leadership experience* (4th ed.). USA: Thomson South-Western.
- Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology*, 90(6), 1241-1255.
- Dasborough, M. T. (2006). Cognitive asymmetry in employee emotional reactions to leadership behaviors. *The Leadership Quarterly*, 17(2), 163-178.
- Dawes, J. (2001). The impact of mentioning a scale mid-point in administering a customer satisfaction questionnaire via telephone. *Australasian Journal of Market Research*, 9, 1-18.
- Declercq, F., Vanheule, S., Markey, S., & Willemsen, J. (2007). Posttraumatic distress in security guards and the various effects of social support. *Journal of Clinical Psychology*, 63(12), 1239-1246.
- De-Hoogh, A. H. B., & Den-Hartog, D. N. (2009). Neuroticism and locus of control as moderators of the relationships of charismatic and autocratic leadership with burnout. *Journal of Applied Psychology*, 94(4), 1058-1067.
- De-Hoogh, A. H. B., Den-Hartog, D. N., Koopman, P. L., Thierry, H., Berg, P. T., Weide, J. G., et al. (2004). Charismatic leadership, environmental dynamism, and performance. *European Journal of Work and Organizational Psychology*, 13(4), 447-471.

- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- Den-Hartog, D. N., & De-Hoogh, A. H. B. (2009). Empowering behavior and leader fairness and integrity: Studying perceptions of ethical leader behavior from a levels-of-analysis perspective. *European Journal of Work and Organizational Psychology*, 18(2), 199-230.
- Den-Hartog, D. N., De-Hoogh, A. H. B., & Keegan, A. E. (2007). The interactive effects of belongingness and charisma on helping and compliance. *Journal of Applied Psychology*, 92(4), 1131-1139.
- Department of Statistic Malaysia. (2009). *Labour force*. Retrieved from <http://www.statistics.gov.my>
- Desa, M. H. B. (2007). *The effect of mergers on the efficiency of commercial banks: Evidence from Malaysia*. Universiti Utara Malaysia, Sintok, Kedah.
- DeVellis, B. M., & Blalock, S. J. (1992). Illness attributions and hopelessness depression: The role of hopelessness expectancy. *Journal of Abnormal Psychology*, 101(2), 257-264.
- Dick, A. A. (2007). Market size, service quality, and competition in banking. *Journal of Money, Credit and Banking*, 39, 49-81.
- Diefendorff, J. M., Brown, D. J., Kamin, A. M., & Lord, R. G. (2002). Examining the roles of job involvement and work centrality in predicting organizational citizenship behaviors and job performance. *Journal of Organizational Behavior*, 23, 93-108.
- Dillman, D. A., Sinclair, M. D., & Clark, J. R. (1993). Effects of questionnaire length, respondent-friendly design, and a difficult question on response rates for Occupant-Addressed Census mail surveys. *The Public Opinion Quarterly*, 57(3), 289-304.
- Dimitriades, Z. S. (2007). The influence of service climate and job involvement on customer-oriented organizational citizenship behavior in Greek service organizations: A survey. *Employee Relations*, 29(5), 469-491.
- Dolbier, C. L., Soderstrom, M., & Steinhardt, M. A. (2001). The relationship between self-leadership and enhanced psychological, health, and work outcomes. *The Journal of Psychology*, 135(5), 469-485.
- Dudley, W. N., Benuzillo, J. G., & Carrico, M. A. S. (2004). SPSS and SAS programming for the testing of mediation models. *Nursing Research*, 53, 59-62.
- Dunkel-Schetter, C., Feinstein, L., & Call, J. (1986). *UCLA social support inventory*. Los Angeles, CA: University of California.
- Dunlop, P. D., & Lee, K. (2004). Workplace deviance, organizational citizenship behavior, and business unit performance: The bad apples do spoil the whole barrel. *Journal of Organizational Behavior*, 25, 67-80.
- Durbin, J., & Watson, G. S. (1971). Testing for serial correlation in least squares regression. *Biometrika*, 58, 1-19.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45(4), 735-744.
- Eagly, A., & Chaiken, S. (1993). *Psychology of Attitudes*. New York: Harcourt Brace Jovanovich.

- Eagly, A. H., & Johannesen-Schmidt, M. C. (2001). The leadership styles of women and men. *Journal of Social Issues*, 57(4), 781-797.
- Eberlin, R. J., & Tatum, B. C. (2008). Making just decisions: Organizational justice, decision making, and leadership. *Management Decision*, 46(2), 310-329.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12(1), 1-22.
- Ehrhart, M. G. (2004). Leadership and procedural justice climate as antecedents of unit-level organizational citizenship behavior. *Personnel Psychology*, 57, 61-94.
- Eisenberger, R., Fasolo, P., & David-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment and innovation. *Journal of Applied Psychology*, 75, 51-59.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- El-Bannany, M. (2007). *A study of determinants of social disclosure level in UK banks*. United Kingdom: Liverpool John Moores University.
- Emmerik, I. H., & Euwema, M. C. (2007). Who is offering a helping hand? Associations between personality and OCBs, and the moderating role of team leader effectiveness. *Journal of Managerial Psychology*, 22(6), 530-548.
- Emmerik, I. H., Jawahar, I. M., & Stone, T. H. (2005). Associations among altruism, burnout dimensions, and organizational citizenship behavior. *Work & Stress*, 19, 93-100.
- Epitropaki, O., & Martin, R. (2005). The moderating role of individual differences in the relation between transformational/transactional leadership perceptions and organizational identification. *The Leadership Quarterly*, 16(4), 569-589.
- Erturk, A. (2007). Increasing organizational citizenship behaviors of Turkish academicians: Mediating role of trust in supervisor on the relationship between organizational justice and citizenship behaviors. *Journal of Managerial Psychology*, 22(3), 257-270.
- European Agency for Safety and Health at Work. (2002). *How to tackle psychological issues and reduced work-related stress*. Luxembourg: European Communities.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272-299.
- Fanning, E. (2005). Formatting a paper-based survey questionnaire: Best practices. *Practical Assessment Research & Evaluation*, 10(12), 1-14.
- Farh, J. L., Podsakoff, P. M., & Organ, D. W. (1990). Accounting for organizational citizenship behavior: Leader fairness and task scope versus satisfaction. *Journal of Management*, 16(4), 705-721.
- Farrar, D. E., & Glauber, R. R. (1967). Multicollinearity in regression analysis: The problem revisited. *The Review of Economic and Statistics*, 49, 92-107.
- Farrell, S. K., & Finkelstein, L. M. (2007). Organizational citizenship behavior and gender: Expectations and attributions for performance. *North American Journal of Psychology*, 9, 81-96.

- Felfe, J., & Yan, W. H. (2009). The impact of workgroup commitment on organizational citizenship behavior, absenteeism and turnover intention: The case of Germany and China. *Asia Pacific Business Review*, 15(3), 433-450.
- Ferris, G. R., & Kacmar, K. M. (1992). Perceptions of organizational politics. *Journal of Management*, 18, 93-116.
- Fiedler, F. E. (1970). The contingency model: A theory of leadership effectiveness. In C. W. Backman & P. F. Secord (Eds.), *Problems in Social Psychology* (pp. 279-289). New York: McGraw-Hill Book Company.
- Finkelstein, M. A., & Penner, L. A. (2004). Predicting organizational citizenship behavior: Integrating the functional and role identity approaches. *Social Behavior and Personality*, 32(4), 383-398.
- Fiske, S. T., & Taylor, S. E. (2008). *Social cognition: From brains to culture*. New York: McGraw-Hill.
- Fleet, D. D., & Griffin, R. W. (2006). Dysfunctional organizational culture: The role of leadership in motivating dysfunctional work behaviors. *Journal of Managerial Psychology*, 21(8), 698-708.
- Fogarty, T. J., Singh, J., Rhoads, G. K., & Moore, R. K. (2000). Antecedents and consequences of burnout in accounting: beyond the role stress model. *Behavioral Research in Accounting*, 12, 31-66.
- Foley, S., Hang-yue, N., & Lui, S. (2005). The effects of work stressors, perceived organizational support, and gender on work-family conflict in Hong Kong. *Asia Pacific Journal of Management*, 22(3), 237-256.
- Foote, D. A., & Tang, T. L.-P. (2008). Job satisfaction and organizational citizenship behavior (OCB): Does team commitment make a difference in self-directed teams? *Management Review*, 46(6), 933-947.
- Forward, J. R., & Williams, J. R. (1970). Internal-external control and black militancy. *Journal of Social Issues*, 26, 75-92.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115-134.
- Frese, M. (1999). Social support as a moderator of the relationship between work stressors and psychological dysfunctioning: A longitudinal study with objective measures. *Journal of Occupational Health Psychology*, 4(3), 179-192.
- Frese, M., & Zapf, D. (1988). Methodological issues in the study of work stress: Objective versus subjective measurement of work stress and the question of longitudinal studies. In C. L. Cooper & R. Payne (Eds.), *Causes, coping and consequences of stress at work*. Oxford, England: John Wiley & Sons.
- Gamst, G., Meyers, L. S., & Guarino, A. J. (2008). *Analysis of the variance designs: A conceptual and computational approach with SPSS and SAS*. New York: Cambridge University Press.
- Ganster, D. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology*, 71, 102-110.
- Garcia-Morales, V. J., Matias-Reche, F., & Hurtado-Torres, N. (2008). Influence of transformational leadership on organizational innovation and performance depending on the level of organizational learning in the pharmaceutical sector. *Journal of Organizational Change Management*, 21(2), 188-212.

- Garland, R. (1991). The mid-point on a rating scale: Is it desirable? *Marketing Bulletin*, 2(May), 66-70.
- Gay, L. R., & Diehl, P. L. (1996). *Research methods for business and management*. Singapore: Prentice Hall.
- Gelberg, L., Andersen, R. M., & Leake, B. D. (2000). The behavioral model for vulnerable populations: Application to medical care use and outcomes for homeless people. *Health Services Research*, 34(6), 1273-1303.
- George, J. M., & Bettenhasen, K. (1990). Understanding prosocial behavior, sales performance and turnover: A group-level analysis in service context. *Journal of Applied Psychology*, 75, 698-705.
- George, J. M., & Brief, A. P. (1992). Feeling good-doing good: A conceptual analysis of the mood at the work-organizational spontaneity relationship. *Psychological Bulletin*, 112(2), 310-329.
- George, J. M., & Jones, G. R. (1997). Organizational spontaneity in context. *Human Performance*, 10(2), 153-170.
- Gibson, J. L., Ivancevich, J. M., Donnelly, J. H., & Konopaske, R. (2009). *Organizations: Behavior, structure, processes* (13th ed.). New York: McGraw-Hill.
- Glantz, S. A., & Slinker, B. K. (2001). *Primer of applied regression and analysis of variance* (2nd ed.). London: McGraw Hill.
- Gomez, C., & Rosen, B. (2001). The leader-member exchange as a link between managerial trust and employee empowerment. *Group & Organization Management*, 26, 53-69.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). New Jersey: Erlbaum.
- Graham, J. W. (1991). An essay on organizational citizenship behavior. *Employee Responsibilities and Right Journal*, 4, 249-270.
- Gray, L. R., & Diehl, P. L. (1996). *Research methods for business and management*. London: Prentice Hall International, Inc.
- Greenberg, J., & Baron, R. A. (1997). *Behavior in organizations: Understanding and managing the human side of work* (7th ed.). New Jersey: Prentice Hall International, Inc.
- Greenglass, E., Fiksenbaum, L., & Eaton, J. (2006). The relationship between coping, social support, functional disability and depression in the elderly. *Anxiety, Stress and Coping*, 19, 15-31.
- Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal*, 27, 25-41.
- Guralnick, M. J., Hammond, M. A., Neville, B., & Connor, R. T. (2008). The relationship between sources and functions of social support and dimensions of child- and parent-related stress. *Journal of Intellectual Disability Research*, 52(12), 1138-1154.
- Gyllensten, K., Palmer, S., & Farrants, J. (2005). Perceptions of stress and stress interventions in finance organizations: Overcoming resistance towards counseling. *Counseling Psychology Quarterly*, 18, 19-29.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159-170.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. New Jersey: Prentice-Hall, Inc.

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). New Jersey: Pearson.
- Halbesleben, J. R. B., & Bowler, W. M. (2005). Organizational citizenship behaviors and burnout. In D. L. Turnipseed (Ed.), *Handbook of organizational citizenship behavior: A review of 'good soldier' activity in organizations* (pp. 399-314). New York: Nova Science Publisher, Inc.
- Halbesleben, J. R. B., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92, 93-106.
- Hannam, R., & Jimmieson, N. (2003). *The relationship between extra-role behavior and job burnout for primary school teacher: A preliminary model and development of an organizational citizenship behavior scale* (Unpublished doctoral dissertation). University of Queensland, Australia.
- Hanschel, E., & Monnin, P. (2005). *Measuring and forecasting stress in the banking sector: Evidence from Switzerland*. Switzerland: Bank for International Settlements.
- Hartog, D. N. D., Hoogh, A. H. B. D., & Keegan, A. E. (2007). The interactive effects of belongingness and charisma on helping and compliance. *Journal of Applied Psychology*, 92(4), 1131-1139.
- Hassan, A., & Noor, K. M. (2008). Organizational justice and extra-role behavior: Examining the relationship in the Malaysian cultural context. *Journal of Economics and Management*, 16(2), 187-208.
- Hatrup, K., O'Connell, M. S., & Wingate, P. H. (1998). Prediction of multidimensional criteria: Distinguishing task and contextual performance. *Human Performance*, 11(4), 305-319.
- Hauck, E. L., Synder, L. A., & Cox-Fuenzalida, L.-E. (2008). Workload variability and social support: Effects on stress and performance. *Current Psychology*, 27, 112-125.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.
- Healey, J. F. (2009). *Statistic: A tool for social research* (8th ed.). USA: Wadsworth Cengage Learning.
- Health and safety stress questionnaire*. (2003). Canada: Canadian Union of Public Employees.
- Hemp, P. (2004). Presenteeism: At work - but out of it. *Harvard Business Review*, 82(10), 49-58.
- Hetland, H., Sandal, G. M., & Johnsen, T. B. (2007). Burnout in the information technology sector: Does leadership matter? *European Journal of Work and Organizational Psychology*, 16, 58-75.
- Hitt, M. A., Miller, C. C., & Colella, A. (2006). *Organizational behavior: A strategic approach*. United States of America: John Wiley & Sons, Inc.
- Ho, J. S.-Y., Downe, A. G., & Loke, S.-P. (2010). Employee attrition in the Malaysian service industry: Push and pull factors. *The IUP Journal of Organizational Behavior*, IX(1 & 2), 16-31.
- Hobfoll, S. E. (1989). Conservation of resource: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.

- Hoogh, A. H. B. D., & Hartog, D. N. D. (2009). Neuroticism and locus of control as moderators of the relationships of charismatic and autocratic leadership with burnout. *Journal of Applied Psychology*, 94(4), 1058-1067.
- House, J. S., Kahn, R. L., McLeod, J. D., & Williams, D. (1985). Measures and concepts of social support. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 83-108). San Francisco: Academic Press.
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationship and health. *Science*, 241, 540-545.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, 16(3), 321-229.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly*, 7(3), 323-352.
- House, R. J., & Baetz, M. L. (1976). Leadership: Some empirical generalizations and new research directions. In B. M. Staw (Ed.), *Research in organizational behavior: An annual series of analytical essays and critical reviews* (Vol. 1, pp. 341-423). Greenwich, Connecticut: JAI Press Inc.
- Howell, J. P., Dorfman, P. W., & Kerr, S. (1986). Moderator variables in leadership research. *Academy of Management Review*, 11, 88-102.
- Hughes, G. D. (1969). Some confounding effects of forced-choice scales. *Journal of Marketing Research*, 6(May), 223-226.
- Hughes, R. L., Ginnett, R. C., & Curphy, G. J. (1996). *Leadership: Enhancing the lesson of experience*. London: Irwin.
- Hung, D. K. M., Ansari, M. A., & Aafaqi, R. (2004). Fairness of human resource management practices, leader-member exchange and organizational commitment. *Asian Academy of Management Journal*, 9, 99-120.
- Hunter, L. W., & Thatcher, S. M. B. (2007). Feeling the heat: Effects of stress, commitment, and job experience on job performance. *Academy of Management Journal*, 50(4), 953-968.
- Hutchison, C. (1999). Social support: Factors to consider when designing studies that measure social support. *Journal of Advanced Nursing*, 29(6), 1520-1526.
- Igbaria, M., Iivari, J., & Maragahh, H. (1995). Why do individuals use computer technology? A Finnish case study. *Information & Management*, 29(5), 227-238.
- Ishak, N. A., & Alam, S. S. (2009a). The effects of leader-member exchange on organizational justice and organizational citizenship behavior: Empirical study. *European Journal of Social Science*, 8(2), 324-334.
- Ishak, N. A., & Alam, S. S. (2009b). Leader-member exchange and organizational citizenship behavior: The mediating impact of self-esteem. *International Journal of Business and Management*, 4(3), 52-61.
- Ismail, A., Mohamad, M. H., Mohamed, H. A.-B., Rafiuddin, N. M., & Zhen, K. W. P. (2010). Transformational leadership and transactional leadership styles as a predictor of individual outcomes. *Theoretical and Applied Economics*, XVII(6), 89-104.
- Itzhaky, H., & York, A. S. (2003). Leadership competence and political control: The influential factors. *Journal of Community Psychology*, 31(4), 371-381.
- Iversen, G. R., & Norpoth, H. (1987). *Analysis of variance* (2nd ed.). California: SAGE Publications, Inc.

- Jackson, P. B. (1992). Specifying the buffering hypothesis: Support, strain and depression. *Social Psychology Quarterly*, 55(4), 363-378.
- James, K., & Arriba, T. (1999). *Energizing the workplace: A strategic response to stress*. Aldershot, Broolfield, VT: Gower.
- James, L. R., & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology*, 69(2), 307-321.
- Jawahar, I. M., Stone, T. H., & Kisamore, J. L. (2007). Role conflict and burnout: The direct and moderating effects of political skill and perceived organizational support on burnout dimensions. *International Journal of Stress Management*, 14(2), 142-159.
- Jenkins, C. R., & Dillman, D. A. (1995). Towards a theory of self-administered questionnaire design. In L. Lyberg, P. Biemer, M. Collins, E. DeLeeuw, C. Dippo, N. Schwarz & D. Trewin (Eds.), *Survey measurement and process quality* (pp. 1-26). New York: Wiley-Interscience.
- Jermier, J. M. (1996). The path-goal theory of leadership: A subtextual analysis. *The Leadership Quarterly*, 7(3), 311-316.
- Jex, S. M., Cunningham, C. J. L., Rosa, G. D. L., & Broadfoot, A. (2006). Stress and employee effectiveness. In A. M. Rossi, P. L. Perrewe & S. L. Sauter (Eds.), *Stress and quality of working life: Current perspectives in occupational health* (pp.101-119). Greenwich, Connecticut: Information Age Publishing.
- Jiao, C., & Zhang, K. (2009, June). *Managing the meanings of citizenship behavior: The role of leadership*. Paper presented at the Association of Canada (ASAC) Conference, Niagara Falls, Ontario.
- Johari, J., Mit, D. A. C., & Yahya, K. K. (2010). Construct validation of the job characteristics scale in the Malaysian public service setting. *International Review of Business Research Papers*, 6(4), 372-384.
- Johari, J., & Yahya, K. K. (2009). Linking organizational structure, job characteristics, and job performance constructs: A proposed framework. *International Journal of Business and Management*, 4(3), 145-152.
- Johns, H. E., & Moser, H. R. (2001). From Trait to transformation: The evolution of leadership theories. *Education*, 110, 115-122.
- Johnson, J. L., & O'Leary-Kelly, A. M. (2003). The effects of psychological contract breach and organizational cynicism: Not all social exchange violations are created equal. *Journal of Organizational Behavior*, 24(5), 627-647.
- Johnson, J. W. (2001). The relative importance of task performance and contextual performance dimensions to supervisor judgments of overall performance. *Journal of Applied Psychology*, 86(5), 984-996.
- Johnson, P. R., & Indvik, J. (1996). Stress and workplace violence: It takes two to tango. *Journal of Managerial Psychology*, 11(6), 18-27.
- Jokipii, T., & Monnin, P. (2010). *The impact of banking sector stability on the real economy*. Retrieved from <http://www.voxeu.org>
- Jones, J. W. (1989). Personality and epistemology: Cognitive social learning theory as a philosophy of science. *Zygon*, 24, 23-38.
- Jong, J. P. J. d., & Den-Hartog, D. N. (2007). How leaders influence employees' innovative behavior. *European Journal of Innovation Management*, 10, 41-64.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755-768.

- Jun, L., Ping-ping, F., & Ting-ting, Z. (2008, September). *A Moderated-mediation model of empowering leadership-OCB link*. Paper presented at the 2008 International Conference on Management Science & Engineering, Long Beach, USA.
- Jung, D. I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on the transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8), 949-964.
- Kacmar, K. M., Andrews, M. C., Van-Rooy, D. L., Steilberg, R. C., & Cerrone, S. (2006). Sure everyone can be replaced...but at what cost? Turnover as predictor of unit-level performance. *Academy of Management Journal*, 49, 133-144.
- Kacmar, K. M., & Ferris, G. R. (1991). Perceptions of organizational politics scale (POPS): Development and construct validation. *Educational and Psychological Measurement*, 51, 193-205.
- Kacmar, K. M., & Ferris, G. R. (1993). Politics at work: Sharpening the focus of political behavior in organizations. *Business Horizons*, 36, 70-74.
- Kamdar, D., & Dyne, L. V. (2007). The joint effects of personality and workplace social exchange relationships in predicting task performance and citizenship performance. *Journal of Applied Psychology*, 92(5), 1286-1298.
- Kaniasty, K., & Norris, F. H. (2008). Longitudinal linkage between perceived social support and posttraumatic stress symptoms: Sequential roles of social causation and social selection. *Journal of Traumatic Stress*, 21(3), 274-281.
- Kaplan, R. M., Atkins, C. J., & Reinsch, S. (1984). Specific efficacy expectations mediate exercise compliance in patients with COPD. *Health Psychology*, 3(3), 223-242.
- Karasek, R. A., Triantis, K. P., & Chaudhry, S. S. (1982). Coworker and supervisor support as moderators of associations between task characteristics and mental strain. *Journal of Occupational Behavior*, 3, 181-200.
- Karassavidou, E., & Glaveli, N. (2006). Towards the ethical or the unethical side? An explorative research of Greek business students' attitudes. *International Journal of Educational Management*, 20(5), 348-364.
- Karatepe, O. M., & Uludag, O. (2008). Role stress, burnout and their effects on frontline hotel employees' job performance: Evidence from Northern Cyprus. *International Journal of Tourism Research*, 10, 111-126.
- Katcher, B. L., & Synder, A. (2007). *30 reasons employees hate their managers: What your people may be thinking and what you can do about it*. New York: AMACOM.
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, 9, 131-133.
- Katz, D., & Kahn, R. L. (1966). *The social psychology of the organization*. New York: Wiley.
- Kelloway, E. K. (1998). *Using LISREL for structural equation modeling*. California: SAGE Publications.
- Khalid, S. A. (2005). *Organizational citizenship behavior, turnover intention and absenteeism of hotel employees* (Unpublished doctoral dissertation). Universiti Utara Malaysia, Kedah, Malaysia.

- Khalid, S. A., & Ali, H. (2005). The effects of organizational citizenship behavior on withdrawal behavior: A Malaysia study. *International Journal of Management & Entrepreneurship*, 1, 30-40.
- Khalid, S. A., & Ali, H. (2005). An exploratory analysis of organizational citizenship behavior factor structure in Malaysian context. *Jurnal Intelek*, 3, 21-34.
- Khalid, S. A., & Ali, H. (2006). Organizational citizenship behavior, turnover intention and absenteeism among Hotel employees. *Malaysian Management Review*, 41(1), 90-102.
- Khalid, S. A., Ali, H., Ismail, M., Rahim, N. A., Kassim, K. M., & Zain, R. S. (2009). Organizational citizenship behavior factor structure among employees in hotel industry. *International Journal of Psychological Studies*, 1, 16-25.
- Khalid, S. A., Jusoff, H. K., Ali, H., Ismail, M., Kassim, K. M., & Rahman, N. A. (2009). Gender as moderator of the relationship between OCB and turnover intentions. *Asian Social Science*, 5(6), 108-117.
- Kidder, D. L. (2002). The influence of gender on the performance of organizational citizenship behaviors. *Journal of Management*, 28, 629-648.
- Kidder, D. L., & Parks, J. M. (2001). The good soldier: Who is s(he)? *Journal of Organizational Behavior*, 22(8), 939-959.
- Kilmister, A. (2008). *The economic crisis and its effects*. Retrieved from <http://www.internationalviewpoint.org>
- Kim, J., & Garman, E. T. (2003). Financial stress and absenteeism: An empirically derived research model. *Financial Counseling and Planning*, 14, 1-13.
- Kim, S.-W., Price, J. L., Mueller, C. W., & Watson, T. W. (1996). The determinants of career intent among physicians at a U.S Air Force hospital. *Human Relations*, 49(7), 947-976.
- Kirkman, B. L., Chen, G., Farh, J.-L., Chen, Z. X., & Lowe, K. B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross cultural examination. *Academy of Management Journal*, 52(4), 744-764.
- Kline, P. (1994). *An easy guide to factor analysis*. London: Routledge.
- Klopper, F. J., & Madden, T. M. (1980). The middlemost choice on attitude items: Ambivalence, neutrality, or uncertainty? *Personality and Social Psychology Bulletin*, 6, 97-101.
- Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Behavior*, 16, 319-333.
- Kompier, M. (2005). Assessing the psychosocial work environment? "Subjective" versus "objective" measurement. *Scandinavian Journal of Work, Environment & Health*, 31(6), 405-408.
- Konovsky, M. A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior*, 17(3), 253-266.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal*, 37(3), 656-669.
- Koster, F., & Sanders, K. (2006). Organizational citizens or reciprocal relationship? An empirical comparison. *Personnel Review*, 35(5), 519-537.

- Koys, D. J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel Psychology*, 54, 101-114.
- Krebs, D. L. (1970). Altruism: An examination of the concept and a review of the literature. *Psychological Bulletin*, 73, 258-302.
- Kreitner, R., & Kinicki, A. (2008). *Organizational behavior* (8th ed.). New York: McGraw-Hill Irwin.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kuehn, K. W., & Al-Busaidi, Y. (2002). Citizenship behavior in a non-western context: An examination of the role of satisfaction, commitment and job characteristic on self-reported OCB. *International Journal of Commerce & Management*, 12(2), 107-125.
- Lachman, M. E., & Weaver, S. L. (1998). The sense of control as moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, 74(3), 763-773.
- Ladebo, O. J. (2006). Perceptions of organizational politics: Examination of a situational antecedents and consequences among Nigeria's extension personnel. *Applied Psychology*, 55(2), 255-281.
- Lam, S. S. K., Hui, C., & Law, K. S. (1999). Organizational citizenship behavior: Comparing perspectives of supervisors and subordinates across four international sample. *Journal of Applied Psychology*, 84, 594-601.
- Lam, W., Chen, Z., & Takeuchi, N. (2009). Perceived human resource management practices and intention to leave of employees: The mediating role of organizational citizenship behavior in a Sino-Japanese joint venture. *The International Journal of Human Resource Management*, 20(11), 2250-2270.
- Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The sources of four commonly reported cutoff criteria: What did they really say. *Organizational Research Methods*, 9(April), 202-220.
- Lassey, W. R. (1976). Dimensions of leadership. In W. R. Lassey & R. R. Fernandez (Eds.), *Leadership and social change* (pp. 10-15). San Diego, California: University Associates, Inc.
- Layne, C. M. (2001). *The relationship of occupational stress, psychological strain, and coping resources to the turnover intentions of rehabilitation counselors*. Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
- Lean, O. K., Zailani, S., Ramayah, T., & Fernando, Y. (2009). Factors influencing intention to use e-government services among citizens in Malaysia. *International Journal of Information Management*, 29, 458-475.
- Leblanc, P. M., Bakker, A. B., Peeters, M. C. W., Heesch, N. C. A. V., & Schaufeli, W. B. (2001). Emotional job demands and burnout among oncology care providers. *Anxiety, Stress and Coping*, 14, 243-263.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123-133.
- Lefkowitz, J. (2000). The role of interpersonal affective regard in supervisory performance ratings: A literature review and proposed causal model. *Journal of Occupational and Organizational Psychology*, 7, 67-85.

- Leka, S., Griffiths, A., & Cox, T. (2004). *Work organization and stress*. Retrieved from http://www.who.int/topics/occupational_health/en/
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87, 52-65.
- LePine, J. A., LePine, M. A., & Jackson, C. L. (2004). Challenge and hindrance stress: Relationship with exhaustion, motivation to learn, and learning performance. *Journal of Applied Psychology*, 89(5), 883-891.
- Levy, S. (1990). Values and deeds. *Applied Psychology*, 39(4), 379-400.
- Li, C.-K., & Hung, C.-H. (2009). The influence of transformational leadership on workplace relationships and job performance. *Social Behavior and Personality*, 37(8), 1129-1142.
- Lin, C. H. (2009). Exploring facets of a social network to explicate the status of social support and its effects on stress. *Social Behavior and Personality*, 37(5), 701-710.
- Lin, C.-P. (2008). Examination of gender differences in modeling OCBs and their antecedents in business organization in Taiwan. *Journal of Business and Psychology*, 22, 261-273.
- Lingard, H., & Francis, V. (2006). Does a supportive work environment moderate the relationship between work-family conflict and burnout among construction professionals? *Construction Management and Economics*, 24, 185-196.
- Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress*, 17, 11-21.
- Liu, J., Siu, O., & Shi, K. (2010). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology: An International Review*, 59(3), 454-479.
- Liu, Y. (2009). Perceived organizational support and expatriate organizational citizenship behavior: The mediating role of affective commitment towards the parent company. *Personnel Review*, 38(3), 307-319.
- Loo, R. (2004). A typology of burnout types among police managers. *An International Journal of Police Strategies & Management*, 27(2), 156-165.
- Lounsbury, M. (2002). Institutional transformation and status mobility: The professionalization of the field of finance. *Academy of Management Journal*, 45, 255-266.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional stress: Comparison of the depression anxiety stress scales (DASS) with the beck depression and anxiety inventories. *Behavior Research and Therapy*, 33(3), 335-343.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7(3), 385-425.
- Luszczynska, A., & Cieslak, R. (2005). Protective, promotive, and buffering effects of perceived social support in managerial stress: The moderating role of personality. *Anxiety, Stress and Coping*, 18(3), 227-244.
- Luthans, F. (2008). *Organizational Behavior* (11th ed.). New York: McGraw-Hill.
- Lyons, J. B., & Schneider, T. R. (2009). The effects of leadership style on stress outcome. *The Leadership Quarterly*, 20, 737-748.

- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84-99.
- MacKenzie, S. B., Podsakoff, P., & Fetter, R. (1991). Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons performance. *Organizational Behavior and Human Decision Processes*, 50, 123-150.
- MacKenzie, S. B., Podsakoff, P. M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *Journal of Marketing*, 62, 87-98.
- MacKenzie, S. B., Podsakoff, P. M., & Fetter, R. (1993). The impact of organizational citizenship behavior on evaluations of salesperson performance. *Journal of Marketing*, 57, 70-80.
- MacKenzie, S. B., Podsakoff, P. M., & Paine, J. B. (1999). Do citizenship behaviors matter more for managers than salespeople? *Academy of Marketing Science*, 27(4), 396-410.
- MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Academy of Marketing Science*, 29(2), 115-134.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83-104.
- Malaysian Industrial Development Authority. (2011). Invest in Malaysia: Service sector overview. Retrieved from <http://www.mida.gov.my>
- Malhotra, N., & Mukherjee, A. (2004). The relative influence of organizational commitment and job satisfaction on service quality of customer-contact employees in banking call centers. *Journal of Service Marketing*, 18(3), 162-174.
- Man, M. M. K. (2009). The relationship between innovativeness and the performance of small and medium-size enterprises (SMEs) of Malaysian manufacturing sector. *International Journal of Management and Innovation*, 1(2), 1-14.
- Manrique-de-Lara, P. Z., & Rodriguez, T. F. E. (2007). Organizational anomie as moderator of the relationship between an unfavorable attitudinal environment and citizenship behavior (OCB): An empirical study among university administration and services personnel. *Personnel Review*, 36(6), 843-866.
- Martinussen, M., Richardsen, A. M., & Burke, R. J. (2007). Job demand, job resources and burnout among police officers. *Journal of Criminal Justice*, 35, 239-249.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99-113.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498-512.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43, 738-748.

- Masterson, S. S., & Stamper, C. L. (2003). Perceived organizational membership: An aggregate framework representing the employee-organization relationship. *Journal of Organizational Behavior*, 24(5), 473-490.
- Matterson, M. T., & Ivancevich, J. M. (1982). *Managing job stress and health: The intelligent person's guide*. New York: The Free Press.
- McClure, L., & Werther, W. B. (1995). Leadership and developmental interventions for dysfunctional workers. *Leadership & Organization Development Journal*, 16, 17-22.
- McKenna, E. (2006). *Business psychology and organizational behavior* (4th ed.). New York: Psychology Press.
- McShane, S. L., & Glinow, M. A. V. (2000). *Organizational behavior*. New York: McGraw-Hill, Irwin.
- Meh, S. C., & Nasurdin, A. M. (2009). *The relationship between job resources, job demands and teachers' OCB: Concept paper*. Retrieved from <http://wbiconpro.com/16.Salmi-pdf.pdf>
- Meierhans, D., Rietmann, B., & Jonas, K. (2008). Influence of fair and supportive leadership behavior on commitment and organizational citizenship behavior. *Swiss Journal of Psychology*, 67(3), 131-141.
- Mia, L., & Patiar, A. (2001). The use of management accounting systems in hotels: An exploratory study. *International Journal of Hospitality Management*, 20(2), 111-128.
- Mia, L., & Patiar, A. (2002). The interactive effect of superior-subordinate relationship and budget participation on managerial performance in the hotel industry: An exploratory study. *Journal of Hospitality & Tourism Research*, 26(3), 235-257.
- Michela, J. L. (2007). Understanding employees' reactions to supervisors' influence behaviors: A community sample predicting employee commitment, turnover, and stress. *International Journal of Organizational Analysis*, 15(4), 322-340.
- Miles, D. E., Borman, W. E., Spector, P. E., & Fox, S. (2002). Building an integrative model of extra role work behaviors: A comparison of counterproductive work behavior with organizational citizenship behavior. *International Journal of Selection and Assessment*, 10, 51-57.
- Miller, N. E., & Dollard, J. (1941). *Social Learning and Imitation*. New Haven: Yale University Press.
- Millette, V., & Gagne, M. (2008). Designing volunteers' tasks to maximize motivation, satisfaction and performance: The impact of job characteristic on volunteer engagement. *Motive Emotion*, 32, 11-22.
- Mills, D. Q. (2005). *Leadership: How to lead, how to live*. Waltham, MA: Mind Edge Press.
- Miner, J. B. (2002). *Organizational behavior: Foundations, theories and analyses*. Oxford: University Press.
- Ministry of Foreign Affair. (2011). *Malaysia's Foreign Policy*. Retrieved from <http://www.kln.gov.my>
- Ministry of International Trade and Industrial. (2009). *MITI Weekly Bulletin: Vol. 71*. Retrieved from <http://www.miti.gov.my>
- Ministry of International Trade and Industrial. (2011). *MITI Weekly Bulletin: Vol. 143*. Retrieved from <http://www.miti.gov.my>

- Mohammad, J., Habib, F. Q. B., & Alias, M. A. B. (2010). Organizational justice and organizational citizenship behavior in higher education institution. *Global Business and Management Research: An International Journal*, 2, 13-32.
- Moideenkutty, U. (2005). *Organizational citizenship behavior and social exchange: A study of the effects of sources of positive benefits*. Retrieved from http://findarticles.com/p/articles/mi_m1TOT/is_1_9/ai_n25121985/
- Moideenkutty, U., Blau, G., Kumar, R., & Nalakath, A. (2005). Relationship of organizational citizenship behavior and objective productivity to managerial evaluations of performance in India. *International Journal of Commerce & Management*, 15(3), 221-229.
- Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education*, 28(3), 458-486.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, 76(6), 845-855.
- Moorman, R. H., & Blakely, G. L. (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior*, 16(2), 127-142.
- Moorman, R. H., Blakely, G. L., & Niehoff, B. P. (1998). Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, 41(3), 351-357.
- Morrison, E. W. (1994). Role definitions of organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal*, 37(6), 1543-1567.
- Moss, S. A., & Rotossa, D. A. (2007). The impact of goal orientation on the association between leadership style and follower performance, creativity and work attitudes. *Leadership*, 3(4), 433-456.
- Mossholder, K. W., Setton, R. P., & Henagan, S. C. (2005). A relational perspective on turnover: Examining structural, attitudinal, and behavioral predictors. *Academy of Management Journal*, 48(4), 607-618.
- Motowidlo, S. J. (2000). Some basis issues related to contextual performance and organizational citizenship behavior in human resource management. *Human Resource Management Review*, 10, 115-126.
- Motowidlo, S. J., & Van-Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79(4), 475-480.
- Mueller, B. H., & Lee, J. (2002). Leader-member exchange and organizational communication satisfaction in multiple contexts. *Journal of Business Communication*, 39(2), 220-244.
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89(6), 852-863.
- Murphy, G., Athanasou, J., & King, N. (2002). Job satisfaction and organizational citizenship behavior: A study of Australian human-service professionals. *Journal of Managerial Psychology*, 17(4), 287-297.

- Murphy, K. R., & Myers, B. (2004). *Statistical power analysis: A simple and general model for traditional and modern hypothesis test*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Nahum-Shani, I., & Somech, A. (2011). Leadership, OCB and individual differences: Idiocentrism and allocentrism as moderators of the relationship between transformational and transactional leadership and OCB. *The Leadership Quarterly*, 22(2), 353-366.
- Neelamegam, R., & Asrafi, S. (2010). Work stress among employees of Dindigul District Central Cooperative Bank, Tamil Nadu: A study. *The IUP Journal of Management Research*, IX(5), 57-69.
- Neilson, K., Yarker, J., Randall, R., & Munir, F. (2009). The mediating effects of team and self-efficacy on the relationship between transformational leadership, job satisfaction and psychological well-being in healthcare professionals: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*, 46, 1236-1244.
- Neuman, G. A., & Kickul, J. R. (1998). Organizational citizenship behaviors: Achievement orientation and personality. *Journal of Business and Psychology*, 13(2), 263-279.
- Newstrom, J. W., & Davis, K. (2002). *Organizational Behavior: Human behavior at work*. New York: McGraw-Hill.
- Ngodo, O. E. (2008). Procedural Justice and trust: The link in the transformational leadership-organizational outcomes relationship. *International Journal of Leadership Studies*, 41, 82-100.
- Nguni, S., Slegers, P., & Denessen, E. (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: The Tanzanian case. *School Effectiveness and School Improvement*, 17(2), 145-177.
- Nielson, K., Yarker, J., Brenner, S.-O., Randall, R., & Borg, V. (2008). The important of transformational leadership style for the well-being of employees working with older people. *Journal of Advanced Nursing*, 63(5), 465-475.
- Nielson, K., Yarker, J., Randall, R., & Munir, F. (2009). The mediating effects of team and self-efficacy on the relationship between transformational leadership, job satisfaction and psychological well-being in healthcare professionals: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*, 46, 1236-1244.
- Noblet, A. J., Williams, J. M., Teo, S. T. T., & Rodwell, J. J. (2006). Work characteristic and employee outcomes in local government. *International Journal of Human Resource Management*, 17(10), 1804-1818.
- Northern Corridor Economic Region. (2010). *Analysis: Fact and figure*. Retrieved from <http://www.ncer.com.my>
- Northouse, P. G. (2004). *Leadership: Theory and practice* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw Hill.
- Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary education and communication strategies into the 21st century. *Health Promotion International*, 15(3), 259-267.

- Offermann, L. R., & Hellmann, P. S. (1996). Leadership behavior and subordinate stress: A 360° view. *Journal of Occupational Health Psychology*, 1(4), 382-390.
- Ongari, H., & Agolla, J. E. (2008). Occupational stress in organizations and its effects on organizational performance. *Journal of Management Research*, 8(3), 123-135.
- Oplatka, I. (2009). Organizational citizenship behavior in teaching: The consequences for teachers, pupils, and the school. *International Journal of Educational Management*, 23(5), 375-389.
- Organ, D. W. (1988). *Organizational citizenship behavior: A good soldier syndrome*. Toronto: Lexington Books.
- Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. In B. M. Staw & L. L. Cummings (Eds.), *Research in Organizational Behavior* (pp. 43-72). Greenwich, CT: JAI Press.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10(2), 85-97.
- Organ, D. W., & Lingl, A. (1995). Personality, satisfaction and organizational citizenship behavior. *Journal of Social Psychology*, 135(3), 339-350.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Thousand Oaks, California: Sage Publication, Inc.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48(4), 775-802.
- Othman, R., Arshad, R., Hashim, N. A., & Isa, R. M. (2005). Psychological contract violation and organizational citizenship behavior. *Gadjah Mada International Journal of Business*, 7(3), 325-349.
- Pajares, F. (2002). *Overview of social cognitive theory and self-efficacy*. United States: Emory University.
- Parasuraman, S., Greenhaus, J. H., & Granrose, C. S. (1992). Role stressors, social support, and well-being among two-career couples. *Journal of Organizational Behavior*, 13, 339-356.
- Peat, J., & Barton, B. (2005). *Medical statistics: A guide to data analysis and critical appraisal*. USA: Blackwell Publishing Ltd.
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). US: Thomson Learning, Inc.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. New Jersey: Lawrence Erlbaum Associates.
- Peelle, H. E. (2007). Reciprocating perceived organizational support through citizenship behaviors. *Journal of Managerial Issues*, 19(4), 554-575.
- Pejtersen, J., & Kristensen, T. S. (2004). *Copenhagen psychosocial questionnaire (COPSOQ)*. Retrieved from National Research Centre for the Working Environment, http://www.arbejdsmiljoforskning.dk/upload/copsoq/uk/copsoq_ii_long_model_questionnaire_with_results_2007.pdf
- Peter, J. P. (1979). Reliability: A review of psychometric basics and recent marketing practices. *Journal of Marketing Research*, 16, 6-17.

- Piccolo, R. F., Bardes, M., Mayer, D. M., & Judge, T. A. (2008). Does high quality leader-member exchange accentuate the effects of organizational justice? *European Journal of Work and Organizational Psychology, 17*(2), 273-298.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristic. *Academy of Management Journal, 49*(2), 327-340.
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review, 26*(2), 298-310.
- Piercy, N. F., Lane, N., & Cravens, D. W. (2002). A gender perspective on salesperson organizational citizenship behavior, sales manager control strategy and sales unit effectiveness. *Women in Management Review, 17*(8), 373-391.
- Pillai, R., Schriesheim, C. A., & Williams, E. S. (1999). Fairness perceptions and trust as mediators for transformational and transactional leadership: A two-sample study. *Journal of Management, 25*(6), 897-933.
- Pillai, R., & Williams, E. A. (2004). Transformational leadership. self-efficacy, group cohesiveness, commitment, and performance. *Journal of Organizational Change Management, 17*(2), 144-159.
- Plotnikoff, R. C., Lippke, S., Courneya, K. S., Birkett, N., & Sigal, R. J. (2008). Physical activity and social cognitive theory: A test in a population sample of adults with type 1 or type 2 diabetes. *Applied Psychology: An International Review, 57*(4), 628-643.
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology, 94*, 122-141.
- Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology, 82*(2), 262-270.
- Podsakoff, P. M., Bommer, W. H., Podsakoff, N., & MacKenzie, S. B. (2006). Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions, and behaviors: A meta-analytic review of existing and new research. *Organizational Behavior and Human Decision Processes, 99*, 113-142.
- Podsakoff, P. M., & MacKenzie, S. B. (1993). Citizenship behavior and fairness in organizations: Issues and directions for future research. *Employee Responsibilities and Right Journal, 6*(3), 257-269.
- Podsakoff, P. M., & MacKenzie, S. B. (1995). An examination of substitutes for leadership within a levels-of-analysis framework. *Leadership Quarterly, 6*(3), 289-328.
- Podsakoff, P. M., & MacKenzie, S. B. (1997). Impact of organizational citizenship behavior on organizational performance: A review and suggestions for future research. *Human Performance, 10*(2), 133-151.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996a). Meta-analysis of the relationship between Kerr and Jermier's substitutes for leadership and employee job attitudes, role perceptions and performance. *Journal of Applied Psychology, 81*(4), 380-399.

- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996b). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, 22(2), 259-298.
- Podsakoff, P. M., MacKenzie, S. B., & Hui, C. (1993). Organizational citizenship behaviors and managerial evaluations of employee performance: A review and suggestions for future research. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 11, pp. 513-563). Greenwich, CT: JAI Press.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction and organizational citizenship behaviors. *Leadership Quarterly*, 1(2), 107-142.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544.
- Poon, J. M. L., Rashid, M. R., & Othman, A. S. (2006). Trust-in-supervisor: Antecedents and effect on affective organizational commitment. *Asian Academy of Management Journal*, 11(2), 35-50.
- Pratibha, G. (2010). Stress management among private sector banking professionals. *Advanced In Management*, 3(9), 52-58.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Business Research Methods, Instruments, & Computers*, 36(4), 717-731.
- Price, J. L. (2001). Reflections on the determinants of voluntary turnover. *International Journal of Manpower*, 22(7), 600-624.
- Public Bank Review. (2008). *Service sector in Malaysia*. Retrieved from <http://www.publicbank.com.my>
- Purvanova, R. K., Bono, J. E., & Dziewieczynski, J. (2006). Transformational leadership, job characteristics and organizational citizenship behavior. *Human Performance*, 19, 1-22.
- Quick, J. C., Macik-Frey, M., Mack, D. A., Keller, N., Gray, D. A., & Cooper, C. L. (2006). Healthy leaders, healthy organizations: Primary prevention and the positive effects of emotional competence. In A. M. Rossi, P. L. Perrewe & S. L. Sauter (Eds.), *Stress and quality of working life: Current perspectives in occupational health* (pp. 137-153). Greenwich, Connecticut: Information Age Publishing.
- Randall, M. J., Cropanzano, R., C, B., & Birjulin, A. (1999). Organizational politics and organizational supports as predictor of work attitudes, job performance and organizational citizenship behavior. *Journal of Organizational Behavior*, 20(2), 159-174.

- Rensnick, B., & Jenkins, L. S. (2000). Testing the reliability and validity of self-efficacy for exercise scale. *Nursing Research*, 49(3), 154-159.
- Robinson, S. L., & Morrison, E. W. (1995). Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior. *Journal of Organizational Behavior*, 16(3), 289-298.
- Rohsenow, D. J. (1982). Social anxiety, daily moods, and alcohol use over time among heavy social drinking men. *Addictive Behaviors*, 7(3), 311-315.
- Rosch, P. J. (2009). *Stress - The epidemic of modern society*. Retrieved from <http://www.distma.com/01%20AIS/1102%20Stress%20%2B%20Heart%20Disease.html>
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences* (2nd ed.). New York: Holt, Rinehart and Winston.
- Rowold, J., & Schlotz, W. (2009). Transformational and transactional leadership and followers' chronic stress. *Leadership Review*, 9(Spring), 35-48.
- Rubin, R. S., Bommer, W. H., & Bachrach, D. G. (2010). Operant leadership and employee citizenship: A question of trust? *The Leadership Quarterly*, 21(3), 400-408.
- Safaria, T., Othman, A., & Abdul-Wahab, M. N. (2011). The role of leadership practices on job stress among Malay academic staff: A structural equation modeling analysis. *International Education Studies*, 4(1), 90-100.
- Salleh, A. L., Bakar, R. A., & Keong, W. K. (2008). How detrimental is job stress? A case study of executives in the Malaysian furniture industry. *International Review of Business Research Paper*, 4(5), 64-73.
- Salovey, P., & Mayer, J. D. (1989). Emotional intelligence. *Imaginations, Cognition and Personality*, 9(3), 185-211.
- Sankpal, S., Negi, P., & Vashishtha, J. (2010). Organizational role stress of employees: Public vs private banks. *The Indian Journal of Management*, 3, 4-16.
- Schaubroeck, J., & Fink, L. S. (1998). Facilitating and inhibiting effects of job control and social support on stress outcomes and role behavior: A contingency model. *Journal of Organizational Behavior*, 19, 167-195.
- Schaubroeck, J., Lam, S. S. K., & Cha, S. E. (2007). Embracing transformational leadership: Team values and the impact of leader behavior on team performance. *Journal of Applied Psychology*, 92(4), 1020-1030.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schaufeli, W. B., & Greenglass, E. R. (2001). Introduction to special issue on burnout and health. *Psychology and Health*, 16, 501-510.
- Schnake, M. (1991). Organizational citizenship: A review proposed model and research agenda. *Human Relations*, 44, 735-759.
- Schriesheim, C., & Kerr, S. (1974). Psychometric properties of the Ohio State leadership scales. *Psychological Bulletin*, 81(11), 756-765.
- Schriesheim, C. A., Castro, S. L., & Coglisier, C. C. (1999). Leader-member exchange (LMX) research: A comprehensive review of theory, measurement, and data-analytic practices. *The Leadership Quarterly*, 10, 63-113.

- Schultz, D. P., & Schultz, S. E. (2006). *Psychology and work today: An introduction to industrial and organizational psychology*. New Jersey: Pearson Education, Inc.
- Segrin, C., Hanzal, A., Donnerstein, C., Taylor, M., & Domschke, T. J. (2007). Social skills, psychological well-being, and the mediating role of perceived stress. *Anxiety, Stress and Coping*, 20(3), 321-329.
- Sekaran, U. (2003). *Research methods for business: A skill-building approach* (4th ed.). NJ: John Wiley & Sons, Inc.
- Seltzer, J., & Numerof, R. E. (1988). Supervisory leadership and subordinate burnout. *Academy of Management Journal*, 31(2), 439-446.
- Seltzer, J., Numerof, R. E., & Bass, B. M. (1989). Transformational leadership: Is it a source of more burnout and stress? *Journal of Health and Human Resource Administration*, 12, 174-185.
- Setton, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person- and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology*, 87(2), 255-267.
- Shanock, L. R., & Eisenberger, R. (2006). When supervisors feel supported: Relationship with subordinates' perceived supervisor support, perceived organizational support, and performance. *Journal of Applied Psychology*, 91(3), 689-695.
- Shen, Y. E. (2009). Relationships between self-efficacy, social support and stress coping strategies in Chinese primary and secondary school teachers. *Stress and Health*, 25, 129-138.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*, 78(5), 774-780.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663.
- Snyder, M., & Monson, T. (1975). Persons, situations, and the control of social behavior. *Journal of Personality and Social Psychology*, 32(4), 637-644.
- Sosik, J. J., & Godshalk, V. M. (2000). Leadership styles, mentoring functions received, and job-related stress: A conceptual model and preliminary study. *Journal of Organizational Behavior*, 21, 365-390.
- Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review*, 12, 269-292.
- Spielberger, C. D., & Vagg, P. R. (1999). *Job stress survey: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Spitzmuller, M., Van-Dyne, L., & Ilies, R. (2008). Organizational citizenship behavior: A review and extension of its nomological network. In J. Barling & C. L. Cooper (Eds.), *Handbook of Organizational behavior* (pp. 106-123). London: SAGE Publication Ltd.
- Spotte, S., Bubucis, P. M., & Overstreet, R. M. (1995). Caridean shrimps associated with the slimy sea plume in Midsummer at Guana Island, British Virgin Islands, West Indies. *Journal of Crustacean Biology*, 15(2), 291-300.

- Spotts, J. B. (1976). The problem of leadership: A look at some recent findings of behavioral science research. In W. R. Lassey & R. R. Fernandez (Eds.), *Leadership and social change* (pp. 44-63). San Diego, California: University Associates, Inc.
- Statistic Canada. (2009). *Environmental and Workplace Health*. Retrieved from <http://www.statcan.gov.gc.ca/start-debut-eng.htm>
- Stone, A. G., Russell, R. F., & Patterson, K. (2004). Transformational versus servant leadership: a difference in leader focus. *The Leadership & Organizational Development Journal*, 25(4), 349-361.
- Strodeur, S., D'hoore, W., & Vandenberghe, C. (2001). Leadership, organizational stress, and emotional exhaustion among hospital nursing staff. *Journal of Advanced Nursing*, 35(4), 533-542.
- Strube, M. J., & Garcia, J. E. (1981). A meta-analytic investigation of Fiedler's contingency model of leadership effectiveness. *Psychological Bulletin*, 90(2), 307-321.
- Suarez-Mendoza, M. J., & Manrique-de-Lara, P. Z. (2007). The impact of work alienation on organizational citizenship behavior in the Canary Islands. *International Journal of Organization Analysis*, 15, 56-76.
- Sun, L.-Y., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, 50(3), 558-577.
- Suruhanjaya Syarikat Malaysia. (2008). *Melangkag ke era transaksi tanpa kertas*. Retrieved from www.ssm.com.my
- Tabernero, C., Chambel, M. J., Curral, L., & Arana, J. M. (2009). The role of task-oriented versus relationship-oriented leadership on normative contract and group performance. *Social Behavior and Personality*, 37(10), 1391-1404.
- Takizawa, T., Kondo, T., Sakihara, S., Ariizumi, M., Watanabe, N., & Oyama, H. (2006). Stress buffering effects of social support on depressive symptoms in middle age: Reciprocity and community mental health. *Psychiatry and Clinical Neurosciences*, 60, 652-661.
- Tang, T. L.-P., & Ibrahim, A. H. S. (1998). Antecedents of organizational citizenship behavior revisited: Public personnel in the United States and in the Middle East. *Public Personnel Management*, 27(4), 529-549.
- Taris, T. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, 20(4), 316-334.
- Tat, H. H., Jantan, M., & Noor, M. N. M. (2008). Discretionary collaborative behavior (DCB) of students from institutes of higher learning in Malaysia. *Asian Academy of Management Journal*, 13(2), 1-15.
- Teng, K. L. L., Ong, S. G., & Ching, P. W. (2007). The use of customer relationship management (CRM) by manufacturing firms in different industries: A Malaysian survey. *International Journal of Management*, 24(2), 386-397.
- Tepper, B. J., Duffy, M. K., Hoobler, J., & Ensley, M. D. (2004). Moderators of the relationship between coworkers' organizational citizenship behavior and fellow employees' attitudes. *Journal of Applied Psychology*, 89(3), 455-465.
- The American Institute of Stress. (2009). *Job stress*. Retrieved from <http://www.stress.org/job.htm>
- The Association Of Banks In Malaysia. (2011a). *Annual report 2010*. Retrieved from <http://www.abm.org.my>

- The Association Of Banks In Malaysia. (2011b). *Commercial banks branch tally*. Retrieved from <http://www.abm.org.my>
- Todd, S. Y., & Kent, A. (2006). Direct and Indirect effects of task characteristics on organizational citizenship behavior. *North American Journal of Psychology*, 8(2), 253-268.
- Tompson, H. B., & Werner, J. M. (1997). The impact of role conflict/facilitation on core and discretionary behaviors: Testing a mediated model. *Journal of Management*, 23(4), 583-601.
- Torlak, O., & Koc, U. (2007). Materialistic attitude as an antecedent of organizational citizenship behavior. *Management Research News*, 30(8), 581-596.
- Toro, P. A., Tulloch, E., & Ouellete, N. (2008). Stress, social support, and outcomes in two probability samples of homeless adults. *Journal of Community Psychology*, 36(4), 483-498.
- Towner, L. (1998). *Managing employee stress: Support your staff by preventing or reducing stress in the workplace with this step-by-step guide*. London: Kogan Page.
- Turnipseed, D. (1996). Organization citizenship behavior: An examination of the influence of workplace. *Leadership & Organization Development Journal*, 17(2), 42-47.
- Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. (2003). The impact of psychological contract fulfillment on the performance of in-role and organizational citizenship behaviors. *Journal of Management*, 29(2), 187-206.
- UCU model stress questionnaire*. (2010). UK: University and College Union.
- Vaithilingam, S., Nair, M., & Samudra, M. (2006). Key drivers for soundness of the banking sector: Lessons for developing countries. *Journal of Global Business and Technology*, 2, 1-11.
- Vakola, M., Tsaousis, I., & Nikolao, I. (2004). The role of emotional intelligence and personality variables on attitudes toward organizational change. *Journal of Managerial Psychology*, 19(2), 88-110.
- Vandenberg, R. J., Lance, C. E., & Taylor, S. C. (2005). A latent variable approach to rating source equivalence: Who should provide ratings on organizational citizenship behavior dimensions? In D. L. Turnipseed (Ed.), *Handbook of organizational citizenship behavior: A review of 'good soldier' activity in organizations* (pp. 109-141). New York: Nova Science Publishers, Inc.
- Van-Dyne, L., & Cummings, L. L. (1990, August). *Extra-role behaviors: In pursuit of the construct and definition clarity*. Paper presented at the annual meeting of the Academy of Management, San Francisco, CA.
- Van-Dyne, L., Cummings, L. L., & McLean-Parks, J. M. (1995). Extra-role behaviors: In pursuit of construct and definition clarity (A bridge over muddied waters). In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 17, pp. 215-285). Greenwich, CT: JAI Press.
- Van-Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior: Construct redefinition, measurement, and validation. *The Academy of Management Journal*, 37(4), 765-802.

- Van-Dyne, L., & Motowidlo, S. J. (1996). Evidence for two factors of contextual performance: Job dedication and interpersonal facilitation. *Journal of Applied Psychology*, 81, 525-531.
- Van-Dyne, L., & Pierce, J. L. (2004). Psychological ownership and feelings of possession: Three field of studies predicting employee attitudes and organizational citizenship behavior. *Journal of Organizational Behavior*, 25(4), 439-459.
- Van-Scotter, J. R. (2000). Relationship of task performance and contextual performance with turnover, job satisfaction and affective commitment. *Human Resource Management Review*, 10, 19-89.
- Van-Scotter, J. R., & Motowidlo, S. J. (1996). Interpersonal facilitation and job dedication as separate facets of contextual performance. *Journal of Applied Psychology*, 81(5), 525-531.
- Vecchio, R. P., Justin, J. E., & Pearce, C. L. (2010). Empowering leadership: An examination of mediating mechanisms within a hierarchical structure. *The Leadership Quarterly*, 21(3), 530-542.
- Vey, M. A., & Campbell, J. P. (2004). In-role or extra-role organizational citizenship behavior: Which are we measuring? *Human Performance*, 17, 119-135.
- Vigoda, E. (2002). Stress-related aftermaths to workplace politics: The relationships among politics, job distress and aggressive behavior in organizations. *Journal of Organizational Behavior*, 23(5), 571-591.
- Vigoda-Gadot, E. (2007). Leadership style, organizational politics, and employees' performance: An empirical examination of two completing models. *Personnel Review*, 36(5), 661-683.
- Wai, C. K., Ching, P. W., & Rahim, M. F. A. (2006). Working Environment and stress: A survey on Malaysian employees in commercial bank. *Malaysian Management Review*, 41, 21-32.
- Walumbwa, F. O., Hartnell, C. A., & Oke, A. (2010). Servant leadership, procedural justice climate, service climate, employee attitudes, and organizational citizenship behavior: A cross-level investigation. *Journal of Applied Psychology*, 95(3), 517-529.
- Walumbwa, F. O., Lawler, J. L., & Avolio, B. J. (2007). Leadership, individual differences, and work-related attitudes: A cross-culture investigation. *Applied Psychology*, 56(2), 212-230.
- Walumbwa, F. O., Wu, C., & Orwa, B. (2008). Contingent reward transactional leadership, work attitudes and organizational citizenship: The role of procedural justice climate perceptions and strength. *The Leadership Quarterly*, 19, 251-265.
- Walz, S. M., & Niehoff, B. P. (1996, August). *Organizational citizenship behaviors and their effect on organizational effectiveness in limited-menu restaurants*. Paper presented at the Academy of Management Best Paper Proceedings, Cincinnati, OH.
- Walz, S. M., & Niehoff, B. P. (2000). Organizational citizenship behaviors: Their relationship to organizational effectiveness. *Journal of Hospitality & Tourism Research*, 24, 301-318.
- Wat, D., & Shaffer, M. A. (2005). Equity and relationship quality influences on organizational citizenship behaviors: The mediating role of trust in the supervisor and empowerment. *Personnel Review*, 34(4), 406-422.

- Watson, G. S., & Durbin, J. (1951). Exact tests of serial correlation using noncircular statistics. *The Annals of Mathematical Statistics*, 22(3), 446-451.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82-111.
- Wegge, J., Van-Dick, R., Fisher, G. K., Wecking, C., & Moltzen, K. (2006). Work motivation, organizational identification and well-being in call centre work. *Work & Stress*, 20, 60-83.
- Weijters, B., Cabooter, E., & Schillewaert, N. (2010). The effect of rating scale format on response style: The number of response categories and response category labels. *Forthcoming Human Resource Management*, 27(3), 1-59.
- Werner, J. M. (2000). Implications of OCB and contextual performance for human resource management. *Human Resource Management Review*, 10, 3-24.
- Wiedenfeld, S. A., O'Leary, A., Bandura, A., Brown, S., Levine, S., & Raska, K. (1990). Impact of perceived self-efficacy in coping with stressor on components of the immune system. *Journal of Personality and Social Psychology*, 59(5), 1082-1094.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601-617.
- Williams, S., Pitre, R., & Zainuba, M. (2002). Justice and organizational citizenship behavior intentions: Fair rewards versus fair treatment. *The Journal of Social Psychology*, 142, 33-44.
- Wong, Y.-T., Ngo, H.-Y., & Wong, C.-S. (2004). *Perceived organizational justice, trust, and OCB: A study of Chinese workers in joint ventures and state-owned enterprises*. Hong Kong: Lingnan University.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review*, 14(3), 361-384.
- Woodward, W. R. (1982). The "discovery" of social behaviorism and social learning theory, 1870-1980. *American Psychologist*, 37(4), 396-410.
- Wright, C. W., & Sablinski, C. J. (2008). Procedural Justice, Mood, and prosocial personality influence on organizational citizenship behavior. *North American Journal of Psychology*, 10(2), 397-412.
- Wright, T. A., & Bonett, D. G. (1997). The contribution of burnout to work performance. *Journal of Organizational Behavior*, 18, 491-499.
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83(3), 486-493.
- Wright, T. A., Cropanzano, R., Denney, P. J., & Moline, G. L. (2002). When a happy worker is a productive worker: A preliminary examination of the three models. *Canadian Journal of Behavioral Science*, 34(3), 146-150.
- Wu, Y.-C. (2011). Job stress and job performance among employees in the Taiwanese finance sector: The role of emotional intelligence. *Social Behavior and Personality*, 39, 21-32.
- Y.A.B Tuan Lim, G. E. (2008). *Business opportunities for a dynamic Penang*. Retrieve from <http://www.penang.gov.my>

- Yap, J. E., Bove, L. L., & Beverland, M. B. (2009). Exploring the effects of different reward programs on in-role and extra-role performance of retail sales associates. *Qualitative Market Research: An International Journal*, 12(3), 279-294.
- Yellen, J. L. (2005, March). *Thoughts on the economy and the banking sector*. Paper presented at the Western Independent Bankers Association Annual Conference, Kauai, Hawaii.
- Yen, H. R., & Niehoff, B. P. (2004). Organizational citizenship behaviors and organizational effectiveness: Examining relationships in Taiwanese banks. *Journal of Applied Social Psychology*, 34, 1617-1637.
- Yin-Fah, B. C., Foon, Y. S., Chee-Leong, L., & Osman, S. (2010). An exploratory study on turnover intention among private sector employees. *International Journal of Business and Management*, 5(8), 57-64.
- Yukl, G. (1998). *Leadership in organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Yukl, G. (1999). An evaluation of conceptual weakness in transformational and charisma leadership theories. *Leadership Quarterly*, 10, 285-305.
- Yunus, N. H., Othman, A. K., Ishak, N. A., & Hassan, C. N. (2010, December). *The influence of supervisors' emotional intelligence on non-bank supervisory employees' organizational citizenship behavior*. Paper presented at the Science and Social Research (CSSR), 2010 International Conference, Kuala Lumpur, Malaysia.
- Zeithaml, V. A., & Bitner, M. (1996). *Services Marketing*. New York: Mc-Graw-Hill.
- Zellars, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, 87(6), 1068-1076.
- Zikmund, W. G., & Babin, B. J. (2007). *Exploring marketing research* (9th ed.). USA: Thomson South-Western.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, 30-41.
- Zwanenberg, Z. v. (2009). "Leading change": An approach to developing collaborative leadership. *International Journal of Mental Health*, 38, 69-77.

Appendix 1 – Sample of Questionnaire



UNIVERSITI UTARA MALAYSIA
COLLEGE OF BUSINESS

Dear Participant,

My name is Jenny Soo Hooi Sin and I'm a PhD candidate at Universiti Utara Malaysia under the supervision of Prof. Dr Hassan Ali and Dr Faridahwati Mohd Shamsudin from the College of Business. I'm currently undertaking a research on organizational citizenship behavior. The objective of this research is to examine factors that influence organizational citizenship behavior. Organizational citizenship behavior is a spontaneous and voluntary behavior of employees that can benefit organizations although this behavior is not required in their normal job functions.

You have been randomly selected to participate in this study. Although your time is precious, this survey will not take more than 10-15 minutes of your valuable time to respond to this questionnaire. If you feel that you want to withdraw from participating in this survey, you may do so at any time. But I do hope that you will help me with my doctoral research by completing this questionnaire as accurately as possible. **Your answers will be kept strictly confidential and they will be used strictly for academic purposes only.**

Should you have any query regarding this research, please do not hesitate to contact me. Thank you for your time and corporation in completing the questionnaire. Your participation in this study is greatly appreciated.

Yours sincerely,

Jenny Soo Hooi Sin
UUM College of Business

SECTION A: LEADERSHIP

The statements below concern leadership behaviors of your immediate leader/supervisor. Please circle the appropriate answer that best describes your immediate leader or supervisor behavior based on the scale given below.

- | | |
|-------------------|------------------|
| 1 = Not at all | 4 = Fairly often |
| 2 = Once in while | 5 = Frequently |
| 3 = Sometimes | |

My immediate leader/supervisor.....

1.	talks about his /her most important values and beliefs.	1	2	3	4	5
2.	makes me feel proud for being associated with him/her.	1	2	3	4	5
3.	specifies the importance of having a clear sense of direction.	1	2	3	4	5
4.	goes beyond self-interest for the good of the team.	1	2	3	4	5
5.	acts in ways that make me respect him/her.	1	2	3	4	5
6.	considers the moral and ethical consequences of decisions.	1	2	3	4	5
7.	displays a sense of power and confidence.	1	2	3	4	5
8.	emphasizes the importance of having a collective sense of mission.	1	2	3	4	5
9.	talks positively about the future.	1	2	3	4	5
10.	is excited when he/she talks about what needs to be accomplished.	1	2	3	4	5
11.	conveys/communicates a clear vision of the future.	1	2	3	4	5
12.	is confidence that goals will be achieved.	1	2	3	4	5
13.	seeks different perspectives when solving problems.	1	2	3	4	5
14.	gets me to look at problems from many different angles.	1	2	3	4	5
15.	suggests new ways of looking at how to complete assignments.	1	2	3	4	5
16.	spends time teaching and coaching me.	1	2	3	4	5
17.	treats me as an individual rather than just as a member of a group.	1	2	3	4	5
18.	know that I have different needs, abilities and ambitions from others.	1	2	3	4	5
19.	helps me develop my strengths.	1	2	3	4	5
20.	helps me in exchange for my efforts.	1	2	3	4	5
21.	discusses specifically who is responsible to achieve performance goals.	1	2	3	4	5
22.	makes clear what reward one can get when performance goals are achieved.	1	2	3	4	5
23.	expresses satisfaction when I meet expectations.	1	2	3	4	5
24.	keeps track of all mistakes.	1	2	3	4	5
25.	concentrates his/her full attention on dealing with mistakes, complaints and failures.	1	2	3	4	5
26.	directs my attention toward failures to meet standards.	1	2	3	4	5
27.	focuses attention on things that didn't work according to the plan.	1	2	3	4	5
28.	fails to get involved before problems become serious.	1	2	3	4	5
29.	waits for things to go wrong only will take action.	1	2	3	4	5
30.	will not change anything if it is still works.	1	2	3	4	5
31.	will take action only when problems become serious.	1	2	3	4	5

SECTION B: STRESS

The relationship between you and your immediate leader/supervisor can become stressful due to certain events that may happen in the relationship. The following statements relate to the stress you may have felt in your interpersonal relationship with your immediate leader/supervisor. Using the scale given below, please indicate how often your immediate leader/supervisor has done the following to you within the **last three (3) months**. Please circle your answer.

1 = Never 3 = Often
2 = Sometimes 4 = Always

My immediate leader/supervisor.....

1.	critical to me	1	2	3	4
2.	displease with me	1	2	3	4
3.	angry with me	1	2	3	4
4.	get on my nerves	1	2	3	4
5.	disturb me	1	2	3	4
6.	make excessive demands on me	1	2	3	4
7.	show lack of recognition on the good work I did	1	2	3	4
8.	does not communicate effectively with me	1	2	3	4
9.	provide inadequate supervision to me	1	2	3	4
10.	does not get along well with me	1	2	3	4

Statements below are concern about the symptoms of stress that you encounter and suffer at the workplace. Using on the scale given below, please indicate how frequent you experience the following stress symptoms over the **last three (3) months**. Please circle your answer.

1 = Never 3 = Often
2 = Sometimes 4 = Always

1.	Headache/migraine	1	2	3	4
2.	Aches and pains	1	2	3	4
3.	High blood pressure	1	2	3	4
4.	Trouble sleeping	1	2	3	4
5.	Backache	1	2	3	4
6.	Problem concentrating	1	2	3	4
7.	Difficulty in remembering thing/memory loss	1	2	3	4
8.	Feeling exhausted after a day's work	1	2	3	4
9.	Feel very tense	1	2	3	4
10.	Become short tempered	1	2	3	4
11.	Anxiety	1	2	3	4
12.	Depression	1	2	3	4
13.	Quarrel/argue with other people	1	2	3	4
14.	Feel happy	1	2	3	4
15.	Relationships with co-worker are good	1	2	3	4
16.	Change in appetite	1	2	3	4
17.	Make errors or mistakes in work	1	2	3	4
18.	Absent from work	1	2	3	4
19.	Getting behind in work schedule	1	2	3	4
20.	Complain about little thing	1	2	3	4

SECTION C: SOCIAL SUPPORT

Listed below are statements concerning the support you get from your friends, family and co-workers. **Your friends in this instance refer to friends outside your workplace.** Using the scale given below, please indicate your agreement or disagreement to the following statement. Please circle your answer.

1 = Strongly disagree 3 = Agree
2 = Disagree 4 = Strongly agree

1.	My co-workers are very friendly with me.	1	2	3	4
2.	I regularly spend time with my co-workers outside of work hours.	1	2	3	4
3.	I always discuss important personal problem with my co-workers.	1	2	3	4
4.	I know almost nothing about my co-workers.	1	2	3	4
5.	My family is not willing to listen to my job-related problems.	1	2	3	4
6.	My family does not show a lot of concern for me in my job.	1	2	3	4
7.	My family can be relied on when things get tough on my job.	1	2	3	4
8.	My family gives helpful advice to me in getting my job done.	1	2	3	4
9.	I can count on my friends when things go wrong.	1	2	3	4
10.	My friends really try to help me.	1	2	3	4
11.	My friend can share my joys and sorrows.	1	2	3	4
12.	I can talk about my problems with my friends.	1	2	3	4

SECTION D: ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Listed below are statements about your job behaviors. Using the following scale, please indicate how much you agree or disagree with each statement. Please circle your answer and do consider your answer in the context of your current work situation.

1 = Strongly disagree 3 = Agree
2 = Disagree 4 = Strongly agree

1.	I help others who have heavy workloads.	1	2	3	4
2.	I help others who have been absent.	1	2	3	4
3.	I willingly give my time to help other with work-related problems.	1	2	3	4
4.	I train new people even though it is not required.	1	2	3	4
5.	I consult with my leader or other individuals who might be affected by my actions or decisions.	1	2	3	4
6.	I do not abuse the rights of others.	1	2	3	4
7.	I take steps to prevent problems with other workers.	1	2	3	4
8.	I inform my leader before taking any important actions.	1	2	3	4
9.	I consume a lot of time complaining about trivial matters.	1	2	3	4
10.	I tend to make a "mountain out of molehills" (make problems bigger than the possible side of it).	1	2	3	4

11.	I always find faults with what the bank is doing.	1	2	3	4
12.	I always focus on what's wrong with my situation, rather than with positive side of it.	1	2	3	4
13.	I am always punctual at work.	1	2	3	4
14.	I never take long lunches.	1	2	3	4
15.	I do not take extra break.	1	2	3	4
16.	I obey to bank rules, regulations and procedures even when no one is watching.	1	2	3	4
17.	I keep abreast of changes in the bank.	1	2	3	4
18.	I attend functions that are not required, but help the bank's image.	1	2	3	4
19.	I attend and participate in formal and informal bank meetings.	1	2	3	4
20.	I keep update with developments in the company.	1	2	3	4

SECTION E: DEMOGRAPHIC INFORMATION

Please answer the questions below. Your answer will be used strictly for academic purpose.
Please tick ☒ the appropriate response.

1. Your gender:

☐ Male

☐ Female

2. Your race:

☐ Malay

☐ Chinese

☐ Indian

☐ Others, please specify _____

3. Your age:

☐ 16 – 20 years

☐ 21 – 30 years

☐ 31 – 40 years

☐ 41 – 50 years

☐ 51 and above

4. Your marital status:

☐ Single

☐ Married

☐ Widowed

☐ Divorced

5. Your highest education:

- | | |
|---|--|
| <input type="checkbox"/> SPM/MCE | <input type="checkbox"/> STPM/HSC |
| <input type="checkbox"/> Diploma | <input type="checkbox"/> Bachelor's degree |
| <input type="checkbox"/> Masters | <input type="checkbox"/> Doctorate |
| <input type="checkbox"/> Others, please specify _____ | |

6. Your current designation:

- | | |
|--|--|
| <input type="checkbox"/> Manager | <input type="checkbox"/> Senior executive |
| <input type="checkbox"/> Officer/executive | <input type="checkbox"/> Customer service representative |
| <input type="checkbox"/> Accountant | <input type="checkbox"/> Teller |
| <input type="checkbox"/> Clerk | <input type="checkbox"/> Messenger |

7. The department you are in:

- | | |
|---|--|
| <input type="checkbox"/> Front line operation | <input type="checkbox"/> Sales & marketing |
| <input type="checkbox"/> Customer service | <input type="checkbox"/> Mortgage department |
| <input type="checkbox"/> Clearing | <input type="checkbox"/> Accounts |

8. Does your job require you to interact with customers daily?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

9. How long have you been working with the present bank?
_____ years

10. How long have you been working with the current leader/supervisor in your unit/department?
_____ years

**THANK YOU VERY MUCH FOR YOUR VALUABLE TIME AND KIND
COOPERATION**

Appendix 2 - Explore Study Variables Testing the Assumptions of Linearity and Normality

Descriptives

			Statistic	Std. Error
Inspiration Motivation	Mean		3.4879	0.03469
	95% Confidence Interval for Mean	Lower Bound	3.4198	
		Upper Bound	3.5561	
	5% Trimmed Mean		3.5103	
	Median		3.5714	
	Variance		0.57	
	Std. Deviation		0.75516	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1	
	Skewness		-0.438	0.112
	Kurtosis		0.227	0.224
Individual Consideration	Mean		3.2039	0.03954
	95% Confidence Interval for Mean	Lower Bound	3.1262	
		Upper Bound	3.2816	
	5% Trimmed Mean		3.2163	
	Median		3.3333	
	Variance		0.741	
	Std. Deviation		0.86083	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1.17	
	Skewness		-0.249	0.112
	Kurtosis		-0.276	0.224
Active M-b-E	Mean		3.3703	0.03644
	95% Confidence Interval for Mean	Lower Bound	3.2986	
		Upper Bound	3.4419	
	5% Trimmed Mean		3.3871	
	Median		3.5	
	Variance		0.63	
	Std. Deviation		0.79343	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1	
	Skewness		-0.303	0.112
	Kurtosis		0.055	0.224
Passive M-b-E	Mean		2.7716	0.04634
	95% Confidence Interval for Mean	Lower Bound	2.6806	
		Upper Bound	2.8627	
	5% Trimmed Mean		2.7596	
	Median		2.75	
	Variance		1.018	
	Std. Deviation		1.00891	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1.5	
	Skewness		0.104	0.112
	Kurtosis		-0.785	0.224

Descriptives

			Statistic	Std. Error
Physical Stress	Mean		2.1329	0.03202
	95% Confidence Interval for Mean	Lower Bound	2.07	
		Upper Bound	2.1958	
	5% Trimmed Mean		2.1086	
	Median		2	
	Variance		0.486	
	Std. Deviation		0.69706	
	Minimum		1	
	Maximum		4	
	Range		3	
	Interquartile Range		1	
	Skewness		0.403	0.112
	Kurtosis		-0.313	0.224
Psychological Stress	Mean		2.281	0.0309
	95% Confidence Interval for Mean	Lower Bound	2.2203	
		Upper Bound	2.3417	
	5% Trimmed Mean		2.2723	
	Median		2.2	
	Variance		0.453	
	Std. Deviation		0.67277	
	Minimum		1	
	Maximum		4	
	Range		3	
	Interquartile Range		1	
	Skewness		0.278	0.112
	Kurtosis		-0.463	0.224
Emotional Stress	Mean		2.1278	0.02811
	95% Confidence Interval for Mean	Lower Bound	2.0726	
		Upper Bound	2.1831	
	5% Trimmed Mean		2.1198	
	Median		2.2	
	Variance		0.375	
	Std. Deviation		0.61202	
	Minimum		1	
	Maximum		4	
	Range		3	
	Interquartile Range		1	
	Skewness		0.163	0.112
	Kurtosis		-0.576	0.224
Behavioral Stress	Mean		1.8194	0.02501
	95% Confidence Interval for Mean	Lower Bound	1.7703	
		Upper Bound	1.8686	
	5% Trimmed Mean		1.7805	
	Median		1.8	
	Variance		0.296	
	Std. Deviation		0.54447	
	Minimum		1	
	Maximum		3.8	
	Range		2.8	
	Interquartile Range		0.6	
	Skewness		1.151	0.112
	Kurtosis		1.691	0.224

Descriptives

			Statistic	Std. Error
Altruism	Mean		3.1097	0.01819
	95% Confidence Interval for Mean	Lower Bound	3.074	
		Upper Bound	3.1454	
	5% Trimmed Mean		3.107	
	Median		3	
	Variance		0.157	
	Std. Deviation		0.39599	
	Minimum		1.25	
	Maximum		4	
	Range		2.75	
	Interquartile Range		0.25	
	Skewness		0.114	0.112
	Kurtosis		1.657	0.224
Courtesy	Mean		3.2421	0.01819
	95% Confidence Interval for Mean	Lower Bound	3.2064	
		Upper Bound	3.2778	
	5% Trimmed Mean		3.2426	
	Median		3	
	Variance		0.157	
	Std. Deviation		0.39596	
	Minimum		1.25	
	Maximum		4	
	Range		2.75	
	Interquartile Range		0.5	
	Skewness		-0.137	0.112
	Kurtosis		1.998	0.224
Sportsmanship	Mean		3.3027	0.02249
	95% Confidence Interval for Mean	Lower Bound	3.2585	
		Upper Bound	3.3469	
	5% Trimmed Mean		3.3285	
	Median		3.25	
	Variance		0.24	
	Std. Deviation		0.48971	
	Minimum		1.5	
	Maximum		4	
	Range		2.5	
	Interquartile Range		0.75	
	Skewness		-0.479	0.112
	Kurtosis		0.333	0.224
Conscientiousness	Mean		3.2152	0.02224
	95% Confidence Interval for Mean	Lower Bound	3.1715	
		Upper Bound	3.2589	
	5% Trimmed Mean		3.2268	
	Median		3	
	Variance		0.235	
	Std. Deviation		0.4843	
	Minimum		1.33	
	Maximum		4	
	Range		2.67	
	Interquartile Range		0.67	
	Skewness		0.043	0.112
	Kurtosis		-0.054	0.224

Descriptives

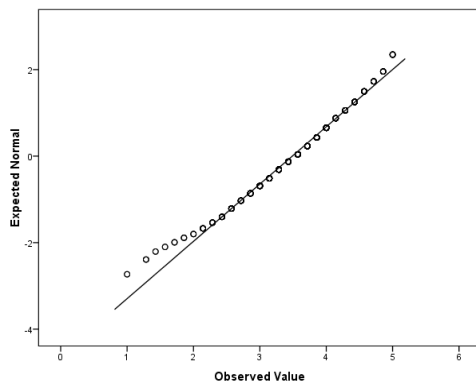
			Statistic	Std. Error
Civic Virtue	Mean		2.9634	0.0232
	95% Confidence Interval for Mean	Lower Bound	2.9178	
		Upper Bound	3.009	
	5% Trimmed Mean		2.9734	
	Median		3	
	Variance		0.255	
	Std. Deviation		0.50515	
	Minimum		1	
	Maximum		4	
	Range		3	
	Interquartile Range		0.67	
	Skewness		-0.252	0.112
	Kurtosis		1.225	0.224
Co-worker Support	Mean		2.538	0.02952
	95% Confidence Interval for Mean	Lower Bound	2.48	
		Upper Bound	2.596	
	5% Trimmed Mean		2.541	
	Median		2.5	
	Variance		0.413	
	Std. Deviation		0.6426	
	Minimum		1	
	Maximum		4	
	Range		3	
	Interquartile Range		1	
	Skewness		-0.166	0.112
	Kurtosis		-0.106	0.224
Family Support	Mean		3.2126	0.02438
	95% Confidence Interval for Mean	Lower Bound	3.1646	
		Upper Bound	3.2605	
	5% Trimmed Mean		3.2369	
	Median		3	
	Variance		0.282	
	Std. Deviation		0.53081	
	Minimum		1.25	
	Maximum		4	
	Range		2.75	
	Interquartile Range		0.56	
	Skewness		-0.325	0.112
	Kurtosis		0.017	0.224
Friends Support	Mean		3.0227	0.02365
	95% Confidence Interval for Mean	Lower Bound	2.9762	
		Upper Bound	3.0692	
	5% Trimmed Mean		3.034	
	Median		3	
	Variance		0.265	
	Std. Deviation		0.51498	
	Minimum		1.25	
	Maximum		4	
	Range		2.75	
	Interquartile Range		0.25	
	Skewness		-0.373	0.112
	Kurtosis		0.839	0.224

Test of Normality

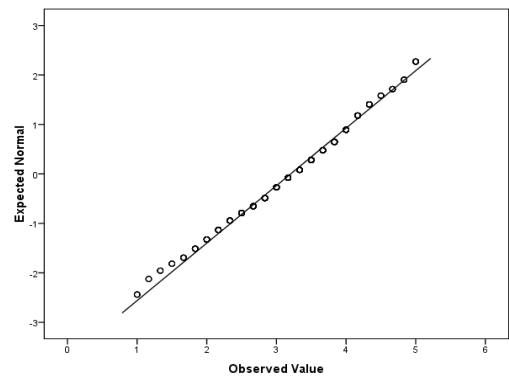
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Inspiration Motivation	0.067	474	0.000	0.983	474	0.000
Individual Consideration	0.067	474	0.000	0.986	474	0.000
Active M-b-E	0.082	474	0.000	0.981	474	0.000
Passive M-b-E	0.072	474	0.000	0.975	474	0.000
Physical Stress	0.126	474	0.000	0.967	474	0.000
Psycho Stress	0.130	474	0.000	0.972	474	0.000
Emotional Stress	0.088	474	0.000	0.978	474	0.000
Behavioral Stress	0.158	474	0.000	0.910	474	0.000
Altruism	0.248	474	0.000	0.897	474	0.000
Courtesy	0.249	474	0.000	0.868	474	0.000
Sportsmanship	0.135	474	0.000	0.931	474	0.000
Conscientiousness	0.245	474	0.000	0.888	474	0.000
Civic Virtue	0.218	474	0.000	0.918	474	0.000
Co-worker Support	0.196	474	0.000	0.927	474	0.000
Family Support	0.183	474	0.000	0.930	474	0.000
Friends Support	0.274	474	0.000	0.884	474	0.000

a. Lilliefors Significance Correction

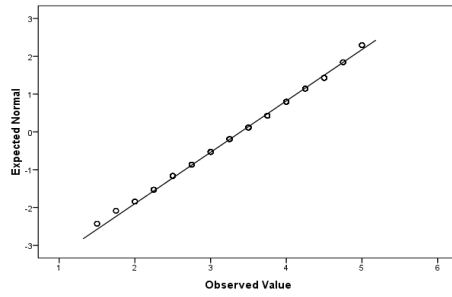
Normal Q-Q Plot for Inspiration Motivation



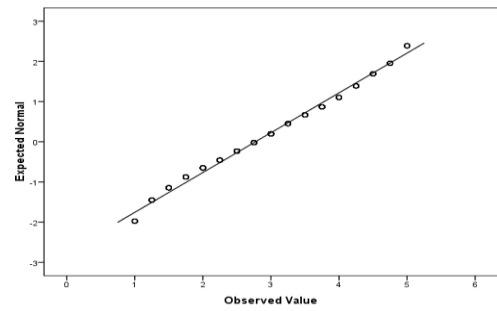
Normal Q-Q Plot for Individual Consideration



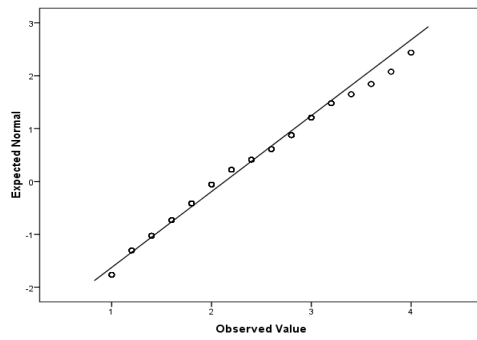
Normal Q-Q Plot for Active M-b-E



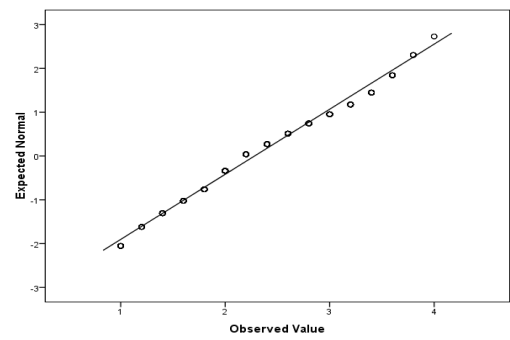
Normal Q-Q Plot for Passive M-b-E



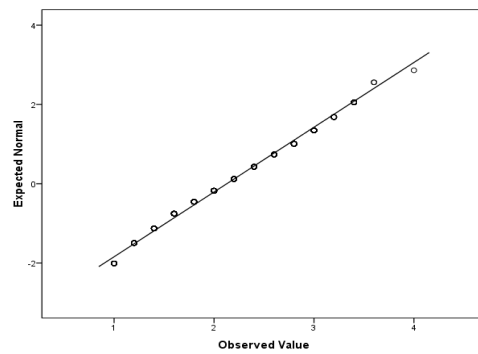
Normal Q-Q Plot for Physical Stress



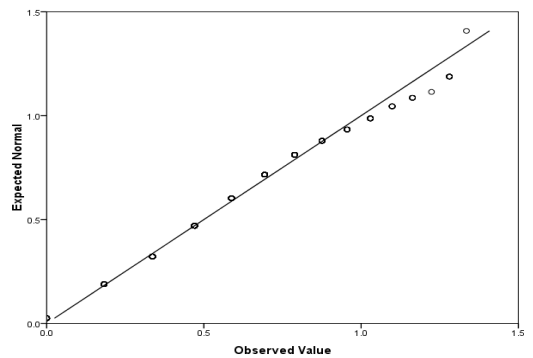
Normal Q-Q Plot for Psychological Stress



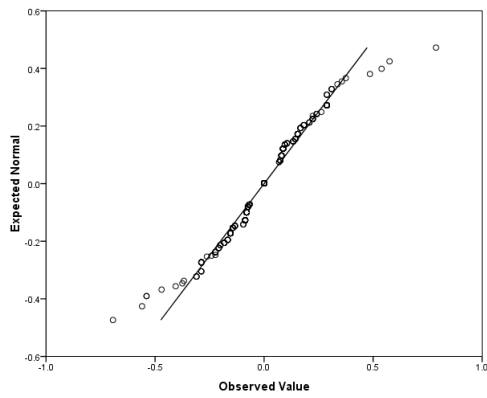
Normal Q-Q Plot for Emotional Stress



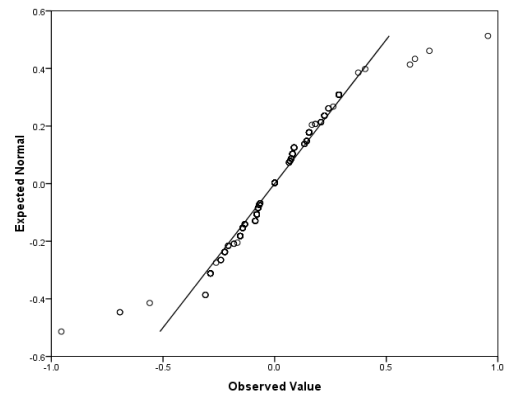
Normal Q-Q Plot for Behavioral Stress



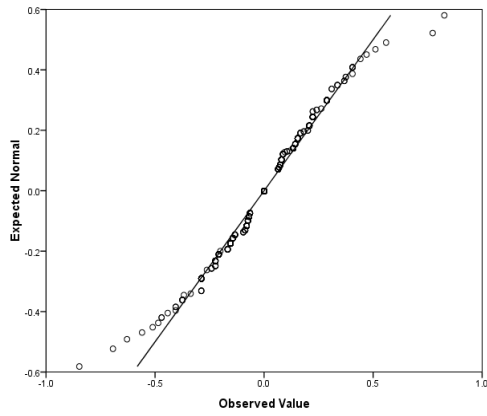
Normal Q-Q Plot for Altruism



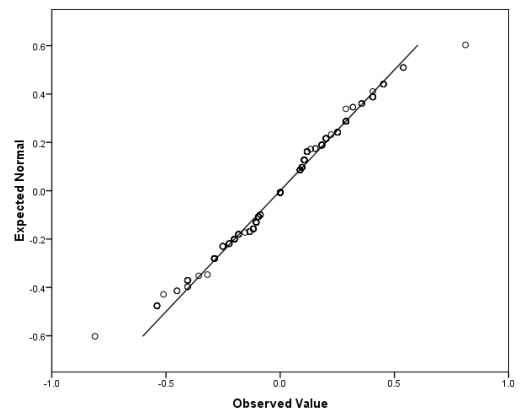
Normal Q-Q Plot for Courtesy



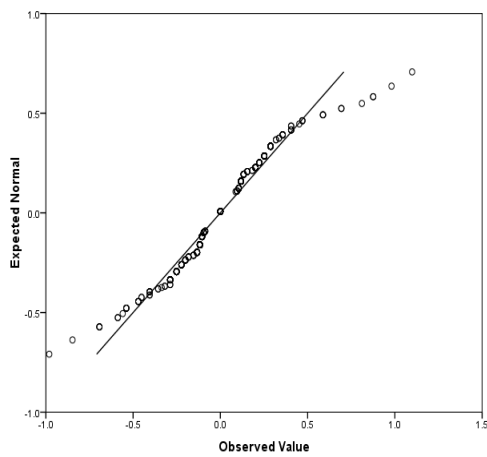
Normal Q-Q Plot for Sportsmanship



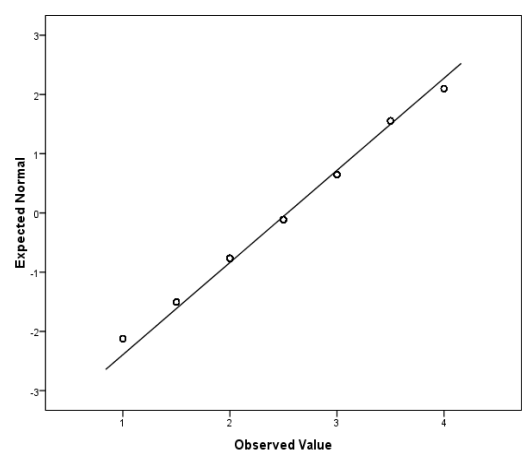
Normal Q-Q Plot for Conscientiousness



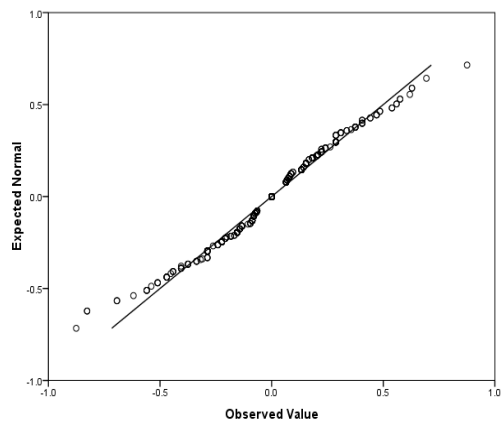
Normal Q-Q Plot for Civic Virtue



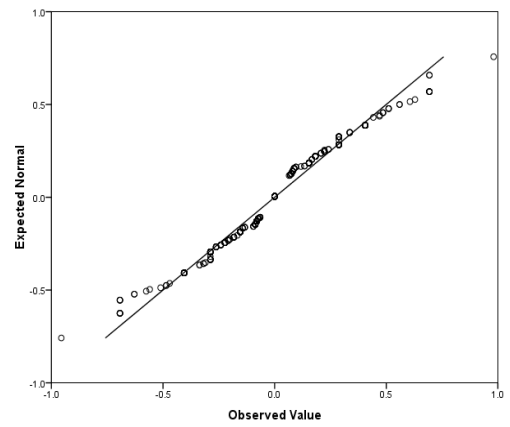
Normal Q-Q Plot for Co-worker Support



Normal Q-Q Plot for Family Support



Normal Q-Q Plot for Friends Support



Appendix 3 – Multiple Regression Evaluating the Main Effects of Leadership on OCB

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Transactional, Transformational ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: OCB

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.224 ^a	.050	.046	.26720	1.385

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: OCB

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.740	2	.870	12.186	.000 ^a
	Residual	32.914	461	.071		
	Total	34.654	463			

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: OCB

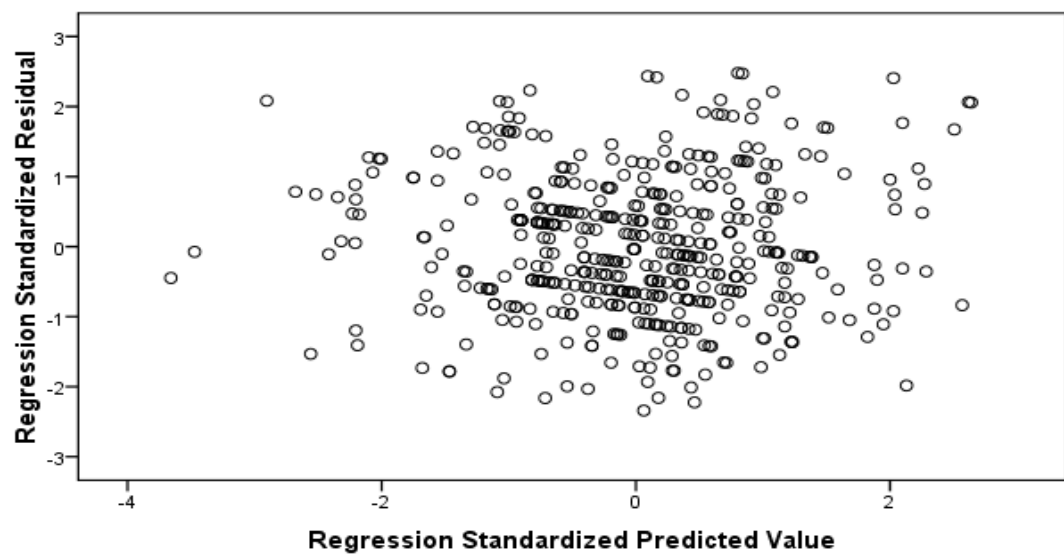
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	3.011	.077		39.205	.000		
Transformational	.081	.017	.218	4.761	.000	.985	1.015
Transactional	-.035	.019	-.086	-1.879	.061	.985	1.015

a. Dependent Variable: OCB

Scatterplot

Dependent Variable: OCB



Appendix 4 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Altruism

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Altruism

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.204 ^a	.042	.032	.24594	1.400

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Altruism

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.072	4	.268	4.429	.002 ^a
	Residual	24.679	408	.060		
	Total	25.751	412			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Altruism

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.031	.078		39.020	.000		
	IM	.076	.023	.221	3.288	.001	.519	1.927
	IC	-.077	.019	-.260	-3.952	.000	.544	1.837
	Active M-b-E	.007	.018	.022	.401	.689	.766	1.305
	Passive M-b-E	-.011	.012	-.044	-.871	.384	.941	1.062

a. Dependent Variable: Altruism

Appendix 5 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Courtesy

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

9b. Dependent Variable: Courtesy

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.148 ^a	.022	.014	.36251	1.761

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Courtesy

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.375	4	.344	2.615	.035 ^a
	Residual	61.106	465	.131		
	Total	62.481	469			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Courtesy

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.987	.105		28.509	.000		
	IM	.057	.031	.118	1.843	.066	.515	1.944
	IC	-.013	.027	-.031	-.497	.619	.532	1.880
	Active M-b-E	.036	.024	.078	1.507	.132	.778	1.286
	Passive M-b-E	-.004	.017	-.011	-.221	.825	.926	1.080

a. Dependent Variable: Courtesy

Appendix 6 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Sportsmanship

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Sportsmanship

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.225 ^a	.051	.042	.42325	1.565

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.326	4	1.082	6.038	.000 ^a
	Residual	81.331	454	.179		
	Total	85.657	458			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.154	.122		25.748	.000		
	IM	.024	.036	.041	.650	.516	.516	1.939
	IC	.078	.031	.155	2.489	.013	.536	1.865
	Active M-b-E	-.005	.028	-.010	-.195	.846	.774	1.291
	Passive M-b-E	-.044	.020	-.103	-2.174	.030	.927	1.078

a. Dependent Variable: Sportsmanship

Appendix 7 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Conscientiousness

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Conscientiousness

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.166 ^a	.028	.019	.46098	1.835

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Conscientiousness

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.792	4	.698	3.285	.011 ^a
	Residual	98.602	464	.213		
	Total	101.394	468			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Conscientiousness

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.279	.133		24.717	.000		
	IM	.017	.039	.028	.436	.663	.514	1.946
	IC	.030	.034	.056	.891	.373	.533	1.877
	Active M-b-E	-.010	.031	-.017	-.326	.744	.776	1.288
	Passive M-b-E	-.062	.022	-.135	-2.848	.005	.928	1.077

a. Dependent Variable: Conscientiousness

Appendix 8 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Civic Virtue

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Civic Virtue

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.287 ^a	.082	.074	.43019	1.551

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.535	4	1.884	10.178	.000 ^a
	Residual	84.020	454	.185		
	Total	91.555	458			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.319	.126		18.338	.000		
	IM	.062	.037	.103	1.660	.098	.524	1.907
	IC	.105	.032	.201	3.307	.001	.546	1.831
	Active M-b-E	.012	.029	.021	.413	.680	.786	1.272
	Passive M-b-E	.031	.020	.070	1.492	.136	.928	1.078

a. Dependent Variable: Civic Virtue

Appendix 9 – Multiple Regression Evaluating the Main Effects of Leadership on Physical Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Transactional, Transformational ^a		Enter

a. All requested variables entered.

b. Dependent Variable: Physical Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.374 ^a	.140	.136	.62893	1.602

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Physical Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.945	2	14.973	37.852	.000 ^a
	Residual	184.329	466	.396		
	Total	214.274	468			

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Physical Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.979	.178		11.121	.000		
	Transformational	-.238	.040	-.259	-5.984	.000	.983	1.017
	Transactional	.304	.043	.305	7.038	.000	.983	1.017

a. Dependent Variable: Physical Stress

Appendix 10 – Multiple Regression Evaluating the Main Effects of Leadership on Psychological Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Transactional, Transformational ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Psychological Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.365 ^a	.133	.129	.62893	1.666

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Psychological Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.278	2	14.139	36.084	.000 ^a
	Residual	184.166	470	.392		
	Total	212.445	472			

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Psychological Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.085	.177		11.808	.000		
	Transformational	-.220	.040	-.240	-5.547	.000	.982	1.018
	Transactional	.305	.043	.308	7.114	.000	.982	1.018

a. Dependent Variable: Psychological Stress

Appendix 11 – Multiple Regression Evaluating the Main Effects of Leadership on Emotional Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Transactional, Transformational ^a		Enter

a. All requested variables entered.

b. Dependent Variable: Emotional Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.425 ^a	.180	.177	.54833	1.737

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Emotional Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.935	2	15.468	51.444	.000 ^a
	Residual	140.713	468	.301		
	Total	171.648	470			

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Emotional Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.060	.155		13.299	.000		
	Transformational	-.256	.035	-.311	-7.366	.000	.981	1.020
	Transactional	.301	.038	.335	7.932	.000	.981	1.020

a. Dependent Variable: Emotional Stress

Appendix 12 – Multiple Regression Evaluating the Main Effects of Leadership on Behavioral Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Transactional, Transformational ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Behavioral Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.287 ^a	.082	.078	.37254	1.572

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Behavioral Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.393	2	2.697	19.431	.000 ^a
	Residual	60.232	434	.139		
	Total	65.625	436			

a. Predictors: (Constant), Transactional, Transformational

b. Dependent Variable: Behavioral Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.783	.109		16.408	.000		
	Transformational	-.123	.024	-.237	-5.113	.000	.985	1.015
	Transactional	.111	.027	.193	4.165	.000	.985	1.015

a. Dependent Variable: Behavioral Stress

Appendix 13 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Physical Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Physical Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.393 ^a	.154	.147	.62489	1.612

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Physical Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.091	4	8.273	21.186	.000 ^a
	Residual	181.184	464	.390		
	Total	214.274	468			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Physical Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.901	.179		10.623	.000		
	IM	.009	.053	.010	.168	.867	.511	1.957
	IC	-.208	.046	-.264	-4.526	.000	.534	1.873
	Active M-b-E	.109	.041	.128	2.633	.009	.773	1.293
	Passive M-b-E	.173	.030	.258	5.826	.000	.927	1.078

a. Dependent Variable: Physical Stress

Appendix 14 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Psychological Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Psychological Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.392 ^a	.153	.146	.61947	1.685

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Psychological Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.456	4	8.114	21.145	.000 ^a
	Residual	179.206	467	.384		
	Total	211.662	471			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Psychological Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.013	.177		11.381	.000		
	IM	-.002	.053	-.002	-.039	.969	.514	1.946
	IC	-.208	.045	-.267	-4.584	.000	.535	1.868
	Active M-b-E	.151	.041	.179	3.683	.000	.768	1.302
	Passive M-b-E	.159	.029	.238	5.407	.000	.933	1.072

a. Dependent Variable: Psychological Stress

Appendix 15 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Emotional Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Emotional Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.434 ^a	.188	.181	.54677	1.739

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Emotional Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.333	4	8.083	27.038	.000 ^a
	Residual	139.316	466	.299		
	Total	171.648	470			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Emotional Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.018	.156		12.906	.000		
	IM	-.067	.047	-.084	-1.437	.151	.513	1.951
	IC	-.149	.040	-.213	-3.724	.000	.534	1.874
	Active M-b-E	.094	.036	.123	2.593	.010	.769	1.301
	Passive M-b-E	.181	.026	.301	6.966	.000	.933	1.072

a. Dependent Variable: Emotional Stress

Appendix 16 – Multiple Regression Evaluating the Main Effects of Leadership Dimensions on Behavioral Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Behavioral Stress

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.348 ^a	.121	.113	.37822	1.599

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Behavioral Stress

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.522	4	2.131	14.893	.000 ^a
	Residual	61.799	432	.143		
	Total	70.321	436			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Dependent Variable: Behavioral Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.830	.112		16.352	.000		
	IM	-.139	.033	-.268	-4.188	.000	.497	2.013
	IC	.034	.029	.073	1.167	.244	.514	1.944
	Active M-b-E	.003	.025	.005	.099	.921	.788	1.270
	Passive M-b-E	.093	.018	.236	5.037	.000	.930	1.075

a. Dependent Variable: Behavioral Stress

Appendix 17 – Multiple Regression Evaluating the Main Effects of Stress on OCB

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Emotional Stress, Physical Stress, Psychological Stress ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: OCB

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.245 ^a	.060	.051	.25375	1.377

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: OCB

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.848	4	.462	7.174	.000 ^a
	Residual	29.040	451	.064		
	Total	30.888	455			

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: OCB

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.246	.051		63.501	.000		
	Physical Stress	.068	.027	.179	2.498	.013	.406	2.463
	Psycho Stress	.042	.030	.107	1.378	.169	.349	2.869
	Emotional Stress	-.125	.027	-.289	-4.605	.000	.530	1.888
	Behavioral Stress	-.031	.028	-.062	-1.113	.267	.661	1.513

a. Dependent Variable: OCB

Appendix 18 – Multiple Regression Evaluating the Main Effects of Stress on Altruism

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Emotional Stress, Physical Stress, Psychological Stress ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Altruism

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.220 ^a	.048	.039	.23211	1.491

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Altruism

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.086	4	.271	5.038	.001 ^a
	Residual	21.443	398	.054		
	Total	22.528	402			

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Altruism

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.904	.049		58.777	.000		
	Physical Stress	.053	.027	.153	1.971	.049	.398	2.514
	Psycho Stress	.047	.030	.128	1.553	.121	.350	2.858
	Emotional Stress	-.018	.027	-.044	-.659	.510	.529	1.889
	Behavioral Stress	-.015	.027	-.035	-.571	.569	.630	1.587

a. Dependent Variable: Altruism

Appendix 19 – Multiple Regression Evaluating the Main Effects of Stress on Courtesy

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Emotional Stress, Physical Stress, Psychological Stress ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Courtesy

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.155 ^a	.024	.016	.36213	1.713

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Courtesy

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.503	4	.376	2.865	.023 ^a
	Residual	60.978	465	.131		
	Total	62.481	469			

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Courtesy

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.254	.070		46.228	.000		
	Physical Stress	.054	.038	.103	1.414	.158	.398	2.510
	Psycho Stress	.028	.043	.053	.669	.504	.339	2.950
	Emotional Stress	-.112	.038	-.188	-2.956	.003	.517	1.936
	Behavioral Stress	.034	.038	.050	.887	.376	.659	1.517

a. Dependent Variable: Courtesy

Appendix 20 – Multiple Regression Evaluating the Main Effects of Stress on Sportsmanship

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Sportsmanship

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.300 ^a	.090	.082	.42294	1.554

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Sportsmanship

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.097	4	2.024	11.317	.000 ^a
	Residual	81.746	457	.179		
	Total	89.843	461			

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Sportsmanship

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.609	.083		43.613	.000		
	Physical Stress	.104	.045	.164	2.329	.020	.402	2.486
	Psycho Stress	.050	.050	.076	.993	.321	.339	2.946
	Emotional Stress	-.277	.045	-.385	-6.128	.000	.504	1.984
	Behavioral Stress	-.011	.045	-.013	-.236	.814	.658	1.520

a. Dependent Variable: Sportsmanship

Appendix 21 – Multiple Regression Evaluating the Main Effects of Stress on Conscientiousness

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Conscientiousness

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.138 ^a	.019	.011	.46590	1.757

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Conscientiousness

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.971	4	.493	2.270	.061 ^a
	Residual	100.932	465	.217		
	Total	102.903	469			

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Conscientiousness

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.380	.091		37.295	.000		
	Physical Stress	.069	.049	.102	1.400	.162	.396	2.525
	Psycho Stress	.012	.055	.017	.222	.825	.338	2.956
	Emotional Stress	-.046	.049	-.060	-.945	.345	.516	1.937
	Behavioral Stress	-.125	.049	-.146	-2.574	.010	.659	1.517

a. Dependent Variable: Conscientiousness

Appendix 22 – Multiple Regression Evaluating the Main Effects of Stress on Civic Virtue

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Civic Virtue

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.151 ^a	.023	.014	.44585	1.522

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Civic Virtue

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.126	4	.532	2.674	.032 ^a
	Residual	90.646	456	.199		
	Total	92.772	460			

a. Predictors: (Constant), Behavioral Stress, Emotional Stress, Physical Stress, Psycho Stress

b. Dependent Variable: Civic Virtue

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.198	.087		36.846	.000		
	Physical Stress	.067	.047	.105	1.427	.154	.399	2.508
	Psycho Stress	-.016	.053	-.024	-.304	.761	.340	2.938
	Emotional Stress	-.114	.047	-.156	-2.422	.016	.516	1.939
	Behavioral Stress	-.033	.047	-.040	-.701	.484	.652	1.533

a. Dependent Variable: Civic Virtue

Appendix 23 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Physical Stress as a mediator in the relationship between Leadership and Altruism

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Physical Stress, Active M-b-E, Passive M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Altruism

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.236 ^a	.056	.044	.24360

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.056	4.772	5	405	.000	1.426

a. Predictors: (Constant), Physical Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Altruism

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.416	5	.283	4.772	.000 ^a
	Residual	24.034	405	.059		
	Total	25.450	410			

a. Predictors: (Constant), Physical Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Altruism

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.971	.084		35.384	.000		
	IM	.074	.023	.214	3.219	.001	.529	1.890
	IC	-.072	.020	-.243	-3.695	.000	.539	1.855
	Active M-b-E	.001	.018	.004	.068	.946	.761	1.313
	Passive M-b-E	-.016	.013	-.065	-1.262	.208	.892	1.121
	Physical Stress	.042	.018	.116	2.268	.024	.885	1.129

a. Dependent Variable: Altruism

Appendix 24 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Physical Stress as a mediator in the relationship between Leadership and Civic Virtue

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Physical Stress, Active M-b-E, Passive M-b-E, Individual Consideration, Inspiration Motivation ^a		Enter

a. All requested variables entered.

b. Dependent Variable: Civic Virtue

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.287 ^a	.082	.072	.43064

	Change Statistics					Durbin-Watson
Model	R Square Change	F Change	df1	df2	Sig. F Change	
1	.082	8.136	5	453	.000	1.549

a. Predictors: (Constant), Physical Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.544	5	1.509	8.136	.000 ^a
	Residual	84.010	453	.185		
	Total	91.555	458			

a. Predictors: (Constant), Physical Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.332	.139		16.820	.000		
	IM	.062	.037	.103	1.663	.097	.524	1.908
	IC	.104	.032	.199	3.206	.001	.528	1.895
	Active M-b-E	.013	.029	.022	.436	.663	.776	1.289
	Passive M-b-E	.032	.021	.073	1.500	.134	.866	1.155
	Physical Stress	-.007	.031	-.011	-.229	.819	.863	1.158

a. Dependent Variable: Civic Virtue

Appendix 25 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Psychological Stress as a mediator in the relationship between Leadership and Altruism

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Psychological Stress, Inspiration Motivation, Passive M-b-E, Active M-b-E, Individual Consideration ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Altruism

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.227 ^a	.051	.040	.24498

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.051	4.416	5	407	.001	1.411

a. Predictors: (Constant), Psycho Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Altruism

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.325	5	.265	4.416	.001 ^a
	Residual	24.426	407	.060		
	Total	25.751	412			

a. Predictors: (Constant), Psycho Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Altruism

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.954	.086		34.343	.000		
	IM	.074	.023	.216	3.214	.001	.518	1.931
	IC	-.068	.020	-.230	-3.439	.001	.520	1.925
	Active M-b-E	.001	.018	.005	.081	.935	.748	1.337
	Passive M-b-E	-.017	.013	-.068	-1.323	.187	.892	1.121
	Psycho Stress	.040	.020	.107	2.055	.040	.867	1.154

a. Dependent Variable: Altruism

Appendix 26 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Psychological Stress as a mediator in the relationship between Leadership and Sportsmanship

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Psychological Stress, Active M-b-E, Passive M-b-E, Inspiration Motivation, Individual Consideration ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Sportsmanship

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.236 ^a	.056	.045	.43135

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.056	5.374	5	456	.000	1.550

a. Predictors: (Constant), Psycho Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.000	5	1.000	5.374	.000 ^a
	Residual	84.844	456	.186		
	Total	89.843	461			

a. Predictors: (Constant), Psycho Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.173	.140		22.695	.000		
	IM	.027	.037	.046	.718	.473	.512	1.955
	IC	.077	.032	.151	2.367	.018	.511	1.959
	Active M-b-E	-.004	.029	-.008	-.144	.886	.755	1.325
	Passive M-b-E	-.049	.021	-.112	-2.296	.022	.874	1.144
	Psycho Stress	-.011	.032	-.017	-.343	.731	.856	1.169

a. Dependent Variable: Sportsmanship

**Appendix 27 – Hierarchical Multiple Regression Evaluating the Interacting Effects
of Psychological Stress as a mediator in the relationship between Leadership and
Civic Virtue**

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Psychological Stress, Active M-b-E, Passive M-b-E, Inspiration Motivation, Individual Consideration ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Civic Virtue

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.295 ^a	.087	.077	.42957		
	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.087	8.630	5	453	.000	1.529

a. Predictors: (Constant), Psycho Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.963	5	1.593	8.630	.000 ^a
	Residual	83.592	453	.185		
	Total	91.555	458			

a. Predictors: (Constant), Psycho Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.417	.142		17.075	.000		
	IM	.063	.037	.105	1.694	.091	.524	1.908
	IC	.095	.032	.182	2.933	.004	.523	1.911
	Active M-b-E	.018	.029	.032	.624	.533	.771	1.298
	Passive M-b-E	.038	.021	.087	1.816	.070	.875	1.143
	Psycho Stress	-.049	.032	-.074	-1.523	.128	.860	1.163

a. Dependent Variable: Civic Virtue

Appendix 28 – Hierarchical Multiple Regression Evaluating the Interacting Effects
of Emotional Stress as a mediator in the relationship between Leadership and
Altruism

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Emotional Stress, Active M-b-E, Passive M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Altruism

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.208 ^a	.043	.032	.24603		
	Change Statistics					Durbin-Watson
Model	R Square Change	F Change	df1	df2	Sig. F Change	
1	.043	3.682	5	407	.003	1.396

a. Predictors: (Constant), Emotional Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Altruism

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.114	5	.223	3.682	.003 ^a
	Residual	24.637	407	.061		
	Total	25.751	412			

a. Predictors: (Constant), Emotional Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Altruism

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.995	.089		33.765	.000		
	IM	.076	.023	.223	3.313	.001	.518	1.930
	IC	-.074	.020	-.250	-3.749	.000	.528	1.892
	Active M-b-E	.005	.018	.017	.304	.761	.757	1.321
	Passive M-b-E	-.014	.013	-.057	-1.088	.277	.851	1.175
	Emotional Stress	.019	.022	.045	.840	.402	.826	1.211

a. Dependent Variable: Altruism

Appendix 29 – Hierarchical Multiple Regression Evaluating the Interacting Effects
of Emotional Stress as a mediator in the relationship between Leadership and
Sportsmanship

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Emotional Stress, Active M-b-E, Passive M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Sportsmanship

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.293 ^a	.086	.076	.42436

	Change Statistics					Durbin-Watson
Model	R Square Change	F Change	df1	df2	Sig. F Change	
1	.086	8.580	5	456	.000	1.564

a. Predictors: (Constant), Emotional Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.725	5	1.545	8.580	.000 ^a
	Residual	82.118	456	.180		
	Total	89.843	461			

a. Predictors: (Constant), Emotional Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.416	.142		24.065	.000		
	IM	.020	.036	.034	.542	.588	.510	1.960
	IC	.060	.032	.118	1.895	.059	.519	1.926
	Active M-b-E	.006	.028	.011	.207	.836	.767	1.304
	Passive M-b-E	-.023	.021	-.052	-1.075	.283	.846	1.182
	Emotional Stress	-.140	.035	-.194	-3.946	.000	.830	1.205

a. Dependent Variable: Sportsmanship

Appendix 30 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Emotional Stress as a mediator in the relationship between Leadership and Civic Virtue

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Emotional Stress, Active M-b-E, Passive M-b-E, Individual Consideration, Inspiration Motivation ^a		Enter

a. All requested variables entered.

b. Dependent Variable: Civic Virtue

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.305 ^a	.093	.083	.42808		
	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.093	9.320	5	453	.000	1.542

a. Predictors: (Constant), Emotional Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.540	5	1.708	9.320	.000 ^a
	Residual	83.015	453	.183		
	Total	91.555	458			

a. Predictors: (Constant), Emotional Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Civic Virtue

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.486	.145		17.192	.000		
	IM	.058	.037	.096	1.553	.121	.523	1.912
	IC	.093	.032	.179	2.919	.004	.533	1.877
	Active M-b-E	.018	.029	.031	.621	.535	.780	1.282
	Passive M-b-E	.046	.021	.104	2.136	.033	.844	1.186
	Emotional Stress	-.083	.036	-.115	-2.342	.020	.831	1.203

a. Dependent Variable: Civic Virtue

**Appendix 31 – Hierarchical Multiple Regression Evaluating the Interacting Effects
of Behavioral Stress as a mediator in the relationship between Leadership and
Sportsmanship**

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Active M-b-E, Passive M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Sportsmanship

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.225 ^a	.051	.040	.42372

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.051	4.820	5	453	.000	1.564

a. Predictors: (Constant), Behavioral Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.327	5	.865	4.820	.000 ^a
	Residual	81.330	453	.180		
	Total	85.657	458			

a. Predictors: (Constant), Behavioral Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Sportsmanship

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.158	.138		22.812	.000		
	IM	.023	.036	.041	.642	.521	.513	1.951
	IC	.078	.031	.155	2.485	.013	.536	1.865
	Active M-b-E	-.005	.028	-.010	-.193	.847	.774	1.292
	Passive M-b-E	-.044	.021	-.102	-2.083	.038	.866	1.155
	Behavioral Stress	-.002	.038	-.003	-.059	.953	.906	1.103

a. Dependent Variable: Sportsmanship

**Appendix 32 – Hierarchical Multiple Regression Evaluating the Interacting Effects
of Behavioral Stress as a mediator in the relationship between Leadership and
Conscientiousness**

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Behavioral Stress, Active M-b-E, Passive M-b-E, Individual Consideration, Inspiration Motivation ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Conscientiousness

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.172 ^a	.029	.019	.46102

	Change Statistics					Durbin-Watson
Model	R Square Change	F Change	df1	df2	Sig. F Change	
1	.029	2.811	5	463	.016	1.822

a. Predictors: (Constant), Behavioral Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Conscientiousness

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.987	5	.597	2.811	.016 ^a
	Residual	98.408	463	.213		
	Total	101.394	468			

a. Predictors: (Constant), Behavioral Stress, Active M-b-E, Passive M-b-E, IC, IM

b. Dependent Variable: Conscientiousness

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.312	.151		22.006	.000		
	IM	.022	.039	.036	.558	.577	.511	1.955
	IC	.025	.034	.046	.741	.459	.535	1.870
	Active M-b-E	-.001	.031	-.003	-.049	.961	.779	1.283
	Passive M-b-E	-.051	.023	-.111	-2.249	.025	.866	1.154
	Behavioral Stress	-.051	.041	-.060	-1.245	.214	.905	1.105

a. Dependent Variable: Conscientiousness

Appendix 33 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Co-worker Support as a moderator in the relationship between Leadership and Physical Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, IC, IM ^a		. Enter
2	Co-worker Support ^a		. Enter
3	PassivexCS, ICxCS, ActivexCS, IMxCS ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Physical Stress

Model Summary^d

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.393 ^a	.154	.147	.62489	.154	21.186	4	464	.000	
2	.393 ^b	.154	.145	.62556	.000	.002	1	463	.968	
3	.417 ^c	.174	.158	.62095	.020	2.725	4	459	.029	1.619

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support

c. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support, PassivexCS, ICxCS, ActivexCS, IMxCS

d. Dependent Variable: Physical Stress

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.091	4	8.273	21.186	.000 ^a
	Residual	181.184	464	.390		
	Total	214.274	468			
2	Regression	33.091	5	6.618	16.913	.000 ^b
	Residual	181.183	463	.391		
	Total	214.274	468			
3	Regression	37.294	9	4.144	10.747	.000 ^c
	Residual	176.981	459	.386		
	Total	214.274	468			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support

c. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support, PassivexCS, ICxCS, ActivexCS, IMxCS

d. Dependent Variable: Physical Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.901	.179		10.623	.000		
	IM	.009	.053	.010	.168	.867	.511	1.957
	IC	-.208	.046	-.264	-4.526	.000	.534	1.873
	Active M-b-E	.109	.041	.128	2.633	.009	.773	1.293
	Passive M-b-E	.173	.030	.258	5.826	.000	.927	1.078
2	(Constant)	1.904	.200		9.542	.000		
	IM	.009	.053	.010	.167	.867	.511	1.958
	IC	-.208	.046	-.264	-4.471	.000	.523	1.911
	Active M-b-E	.109	.041	.128	2.630	.009	.773	1.293
	Passive M-b-E	.174	.030	.259	5.730	.000	.897	1.115
	Co-worker Support	-.002	.046	-.002	-.041	.968	.948	1.055
3	(Constant)	2.643	.760		3.476	.001		
	IM	.247	.202	.277	1.225	.221	.035	28.359
	IC	-.244	.177	-.311	-1.380	.168	.035	28.219
	Active M-b-E	-.106	.188	-.125	-.563	.574	.037	27.289
	Passive M-b-E	-.099	.135	-.147	-.732	.464	.045	22.353
	Co-worker Support	-.280	.290	-.264	-.963	.336	.024	41.789
	IMxCS	-.094	.079	-.424	-1.196	.232	.014	69.953
	ICxCS	.009	.070	.044	.131	.896	.016	62.185
	ActivexCS	.087	.076	.389	1.153	.249	.016	63.126
	PassivexCS	.104	.051	.529	2.057	.040	.027	36.703

a. Dependent Variable: Physical Stress

Appendix 34 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Co-worker Support as a moderator in the relationship between Leadership and Emotional Stress

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, IC, IM ^a		. Enter
2	Co-worker Support ^a		. Enter
3	PassivexCS, ICxCS, ActivexCS, IMxCS ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Emotional Stress

Model Summary^d

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.438 ^a	.192	.185	.54435	.192	27.590	4	465	.000	
2	.442 ^b	.195	.186	.54385	.003	1.855	1	464	.174	
3	.459 ^c	.211	.195	.54085	.016	2.291	4	460	.059	1.767

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support

c. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support, PassivexCS, ICxCS, ActivexCS, IMxCS

d. Dependent Variable: Emotional Stress

ANOVA^d

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.701	4	8.175	27.590	.000 ^a
	Residual	137.786	465	.296		
	Total	170.487	469			
2	Regression	33.250	5	6.650	22.483	.000 ^b
	Residual	137.237	464	.296		
	Total	170.487	469			
3	Regression	35.930	9	3.992	13.648	.000 ^c
	Residual	134.557	460	.293		
	Total	170.487	469			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support

c. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Co-worker Support, PassivexCS, ICxCS, ActivexCS, IMxCS

d. Dependent Variable: Emotional Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.014	.156		12.941	.000		
	IM	-.072	.046	-.091	-1.553	.121	.512	1.953
	IC	-.147	.040	-.210	-3.677	.000	.533	1.876
	Active M-b-E	.097	.036	.127	2.673	.008	.769	1.301
	Passive M-b-E	.182	.026	.303	7.031	.000	.933	1.072
2	(Constant)	2.118	.173		12.225	.000		
	IM	-.073	.046	-.092	-1.582	.114	.512	1.954
	IC	-.140	.040	-.200	-3.481	.001	.525	1.906
	Active M-b-E	.096	.036	.127	2.671	.008	.769	1.301
	Passive M-b-E	.189	.026	.315	7.168	.000	.901	1.110
	Co-worker Support	-.055	.040	-.058	-1.362	.174	.950	1.053
3	(Constant)	1.839	.657		2.797	.005		
	IM	.409	.176	.513	2.327	.020	.035	28.347
	IC	-.361	.153	-.516	-2.363	.019	.036	27.836
	Active M-b-E	-.136	.165	-.179	-.826	.409	.036	27.461
	Passive M-b-E	.225	.118	.375	1.908	.057	.044	22.521
	Co-worker Support	.059	.252	.063	.236	.813	.024	41.217
	IMxCS	-.195	.069	-.980	-2.831	.005	.014	69.822
	ICxCS	.090	.061	.482	1.487	.138	.016	61.261
	ActivexCS	.093	.066	.464	1.398	.163	.016	64.197
	PassivexCS	-.015	.045	-.083	-.328	.743	.027	37.187

a. Dependent Variable: Emotional Stress

Appendix 35 – Hierarchical Multiple Regression Evaluating the Interacting Effects of Family Support as a moderator in the relationship between Leadership and Behavioral Stress

Variables Entered/Removed^p

Model	Variables Entered	Variables Removed	Method
1	Passive M-b-E, Active M-b-E, IC, IM ^a		. Enter
2	Family Support ^a		. Enter
3	PassivexFamS, ActivexFamS, ICxFamS, IMxFamS ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Behavioral Stress

Model Summary^d

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.335 ^a	.112	.104	.37496	.112	13.680	4	434	.000	
2	.337 ^b	.114	.103	.37503	.002	.843	1	433	.359	
3	.379 ^c	.144	.126	.37037	.030	3.740	4	429	.005	1.580

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Family Support

c. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Family Support, PassivexFamS, ICxFamS, ActivexFamS, IMxFamS

d. Dependent Variable: Behavioral Stress

ANOVA^d

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.693	4	1.923	13.680	.000 ^a
	Residual	61.018	434	.141		
	Total	68.711	438			
2	Regression	7.812	5	1.562	11.108	.000 ^b
	Residual	60.899	433	.141		
	Total	68.711	438			
3	Regression	9.864	9	1.096	7.990	.000 ^c
	Residual	58.847	429	.137		
	Total	68.711	438			

a. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM

b. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Family Support

c. Predictors: (Constant), Passive M-b-E, Active M-b-E, IC, IM, Family Support, PassivexFamS, ActivexFamS, ICxFamS, IMxFamS

d. Dependent Variable: Behavioral Stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.800	.111		16.261	.000		
	IM	-.125	.033	-.242	-3.759	.000	.492	2.032
	IC	.020	.029	.043	.686	.493	.511	1.957
	Active M-b-E	.011	.025	.023	.441	.660	.784	1.275
	Passive M-b-E	.090	.018	.230	4.921	.000	.934	1.071
2	(Constant)	1.905	.159		11.977	.000		
	IM	-.124	.033	-.241	-3.736	.000	.492	2.033
	IC	.021	.029	.046	.726	.468	.510	1.961
	Active M-b-E	.010	.025	.020	.401	.689	.783	1.277
	Passive M-b-E	.088	.018	.226	4.795	.000	.923	1.083
3	Family Support	-.032	.035	-.042	-.918	.359	.977	1.023
	(Constant)	.886	.687		1.289	.198		
	IM	-.149	.216	-.290	-.691	.490	.011	88.143
	IC	-.307	.198	-.669	-1.549	.122	.011	93.407
	Active M-b-E	.590	.164	1.192	3.597	.000	.018	54.955
	Passive M-b-E	.170	.121	.435	1.408	.160	.021	47.860
	Family Support	.287	.209	.376	1.372	.171	.027	37.583
	IMxFamS	.007	.066	.060	.111	.912	.007	145.975
	ICxFamS	.098	.060	.858	1.624	.105	.007	139.894
	ActivexFamS	-.179	.051	-1.397	-3.549	.000	.013	77.565
	PassivexFamS	-.023	.037	-.201	-.624	.533	.019	52.107

a. Dependent Variable: Behavioral Stress

Appendix 36 – Analysis of Variance of Inspiration Motivation by Physical Stress by Family Support on OCB

Tests of Between-Subjects Effects

Dependent Variable: OCE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	8.127 ^a	7	1.161	15.841	.000	.192
Intercept	4682.455	1	4682.455	63884.537	.000	.993
Inspiration Motivation (IM)	1.185	1	1.185	16.170	.000	.034
Physical Stress (PhyStress)	.005	1	.005	.068	.795	.000
Family Support (FamSup)	6.233	1	6.233	85.035	.000	.154
IM * PhyStress	.005	1	.005	.071	.790	.000
IM * FamSup	.013	1	.013	.177	.674	.000
PhyStress * FamSup	.317	1	.317	4.318	.038	.009
IM * PhyStress * FamSup	.322	1	.322	4.392	.037	.009
Error	34.156	466	.073			
Total	4821.170	474				
Corrected Total	42.283	473				

a. R Squared = .192 (Adjusted R Squared = .180)

Appendix 37 – Analysis of Variance of Individual Consideration by Physical Stress
by Family Support on OCB

Tests of Between-Subjects Effects

Dependent Variable: OCB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	8.863 ^a	7	1.266	17.655	.000	.210
Intercept	4660.164	1	4660.164	64979.930	.000	.993
Individual Consideration (IC)	1.510	1	1.510	21.052	.000	.043
Physical Stress (PhyStress)	.002	1	.002	.032	.859	.000
Family Support (FamSup)	5.770	1	5.770	80.458	.000	.147
IC * PhyStress	.042	1	.042	.581	.446	.001
IC * FamSup	.038	1	.038	.528	.468	.001
PhyStress * FamSup	.349	1	.349	4.873	.028	.010
IC * PhyStress * FamSup	.682	1	.682	9.513	.002	.020
Error	33.420	466	.072			
Total	4821.170	474				
Corrected Total	42.283	473				

a. R Squared = .210 (Adjusted R Squared = .198)

Appendix 38 – Analysis of Variance of Individual Consideration by Psychological Stress by Family Support on OCB

Tests of Between-Subjects Effects

Dependent Variable: OCB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	8.252 ^a	7	1.179	16.143	.000	.195
Intercept	4614.050	1	4614.050	63182.016	.000	.993
Individual Consideration (IC)	1.577	1	1.577	21.598	.000	.044
Psychological Stress (PsychoStress)	.035	1	.035	.485	.487	.001
Family Support (FamSup)	5.330	1	5.330	72.990	.000	.135
IC * PsychoStress	.027	1	.027	.375	.541	.001
IC * FamSup	.014	1	.014	.198	.656	.000
PsychoStress * FamSup	.016	1	.016	.225	.635	.000
IC * PsychoStress * FamSup	.369	1	.369	5.057	.025	.011
Error	34.031	466	.073			
Total	4821.170	474				
Corrected Total	42.283	473				

a. R Squared = .195 (Adjusted R Squared = .183)

Appendix 39 – Analysis of Variance of Passive Management-by-Exception by
Psychological Stress by Friends Support on OCB

Tests of Between-Subjects Effects

Dependent Variable: OCB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4.683 ^a	7	.669	8.291	.000	.111
Intercept	3543.944	1	3543.944	43921.705	.000	.990
Passive M-b-E	.134	1	.134	1.666	.197	.004
Psychological Stress (PsychoStress)	.000	1	.000	.002	.963	.000
Friends Support (FrenSup)	2.251	1	2.251	27.898	.000	.056
Passive M-b-E * PsychoStress	.207	1	.207	2.570	.110	.005
Passive M-b-E * FrenSup	.037	1	.037	.459	.499	.001
PsychoStress * FrenSup	.234	1	.234	2.898	.089	.006
Passive M-b-E* PsychoStress * FrenSup	.600	1	.600	7.435	.007	.016
Error	37.600	466	.081			
Total	4821.170	474				
Corrected Total	42.283	473				

a. R Squared = .111 (Adjusted R Squared = .097)

Appendix 40 – Analysis of Variance of Active Management-by-Exception by
Emotional Stress by Family Support on OCB

Tests of Between-Subjects Effects

Dependent Variable: OCB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	8.103 ^a	7	1.158	15.781	.000	.192
Intercept	4364.469	1	4364.469	59503.152	.000	.992
Active M-b-E	.335	1	.335	4.565	.033	.010
Emotional Stress (EmoStress)	.639	1	.639	8.718	.003	.018
Family Support (FamSup)	4.962	1	4.962	67.656	.000	.127
Active M-b-E * EmoStress	.000	1	.000	.005	.945	.000
Active M-b-E * FamSup	.383	1	.383	5.228	.023	.011
EmoStress * FamSup	.101	1	.101	1.382	.240	.003
Active M-b-E * EmoStress * FamSup	.366	1	.366	4.994	.026	.011
Error	34.180	466	.073			
Total	4821.170	474				
Corrected Total	42.283	473				

a. R Squared = .192 (Adjusted R Squared = .179)