

REFERENCES

Adams, J. S. (1963). Toward an understanding of inequity. Journal of Abnormal and Social Psychology, 67, 422-436.

Alderfer, C.P. (1972). Existence, relatedness, and growth: Human needs in organizational settings. New York: The Free Press.

Allen, N.J., & Meyer, J.P. (1996). Affective, continuance, and normative commitment to the organization: an examination of construct validity. Journal of Vocational Behavior, 49, 252-276.

Allen, P., & Sienko, S. (1998). Job motivations of professional and technical contingent workers: Are they different from permanent workers? Journal of Employment Counselling, 35, 169-179.

Allscheid, S.P., & Cellar, D.F. (1996). An interactive approach to work motivation: The effects of competition, rewards, and goal difficulty on task performance. Journal of Business and Psychology, 11, 219-237.

Ambrose, M.L., & Kulik, C.T. (1999). Old friends, new faces: Motivation research in the 1990s. Journal of Management, 25, 231-293.

Amenta, M.H. (1984). Death anxiety, purpose in life and duration of service in hospice volunteers. Psychological Reports, 54, 979-984.

Anastasi, A. (1990). Psychological testing. New York: Macmillan Publishing Company.

Anastasi, A., & Urbina, S. (1997). Psychological testing. New Jersey: Prentice Hall.

Andrews, F.M., Klem, L., O'Malley, P.M., Welch, W.L., & Davidson, T.N. (1998). Selecting statistical techniques for social science data: A guide for SAS users. SAS Institute, Inc.

Antonovsky, A. (1979). Health, stress and coping. San Francisco: Jossey-Bass.

Antonovsky, A. (1983). The sense of coherence: Development of a research instrument. Newsletter and Research Reports, Tel Aviv University, Israel. W. S. Schwartz Research Centre for Behavioral Medicine.

Appignanesi, R. (1994). Marx for beginners. Cambridge: Biddles Ltd.

Babbie, E. (1998). The practice of social research (8th ed.). London: Wadsworth Publishing Company.

Bailey, K.D. (1994). Methods of social research (4th ed.). New York: The Free Press.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84, 191-215.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

Battista, J., & Almond, R. (1973). The development of meaning in life. Psychiatry, 36, 409-427.

Baum, S.K., & Stewart, R.B. (1990). Sources of meaning through the lifespan. Psychological Reports, 67, 3-14.

Baumeister, R.F. (1991). The meanings of life. New York: Guilford Press.

Becker, H.S. (1960). Notes on the concept of commitment. The American Journal of Sociology, 66, 32-42.

Bentler, P.M., & Chou, C.P. (1987). Practical issues in Structural Modeling. Sociological Methods and Research, 16, 87-117.

Biberman, J., & Whitty, M. (1997). A post-modern spiritual future for work. Journal of Organizational Change Management, 10, 130-138.

Blau, P.M. (1970). Weber's theory of bureaucracy. In Wrong, D. (Ed.), Makers of modern social science: Max Weber. Englewood Cliffs: Prentice-Hall Inc.

Blau, G.J. (1985a). A multiple study investigation of the dimensionality of job involvement. Journal of Vocational Behavior, 27, 19-36.

Blau, G.J. (1985b). The measurement and prediction of career commitment. Journal of Occupational Psychology, 58, 277-288.

Blau, G.J. (1987). Using a Person-Environment fit model to predict job involvement and organizational commitment. Journal of Vocational Behavior, 30, 240-257.

Blau, G.J. (1988a). Further exploring the meaning and measurement of career commitment. Journal of Vocational Behavior, 32, 284-297.

Blau, G.J. (1988b). Testing the generalisability of a career commitment measure and its impact on employee turnover. Journal of Vocational Behavior, 35, 88-103.

Blau, G., Paul, A., & St. John, N. (1993). On developing a general index of work commitment. Journal of Vocational Behavior, 42, 298-314.

Blood, M.R. (1969). Work values and job satisfaction. Journal of Applied Psychology, 53, 456-459.

Boshoff, A.B., Bennet, H.F., & Kellerman, A.M. (1994). Career orientations as predictors of the level of job involvement of professional people. Journal of Industrial Psychology, 20, 8-13.

Boshoff, A.B., & Hoole, C. (1998). Portability of the job Involvement and job satisfaction constructs between the United States of America and South Africa. South African Journal of Economic and Management Science, NS1, 73-84.

Brown, R.B (1996a) Organizational commitment: clarifying the concept and simplifying the existing construct typology. Journal of Vocational Behavior, 49, 230-251.

Brown, S.P. (1996b). A meta-analysis and review of organizational research on job involvement. Psychological Bulletin, 120, 235-255.

Bryant, C.D. (1972a). The dysfunctions and disaffections of work. In Bryant, C. D. (Ed.), The social dimensions of work. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Bryant, C.D. (1972b). Toward a social interpretation of work. In Bryant, C. D. (Ed.), The social dimensions of work. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. Administrative Science Quarterly, 19, 533-456.

Buchholz, R.A. (1977). The belief structure of managers relative to work concepts as measured by a factor analytic model. Personnel and Psychology, 30, 367-387.

Buhler, C. (1959). Theoretical observations about life's basic tendencies. American Journal of Psychotherapy, 13, 561-581.

Bumpus, M.A., & Munchus, G. (1996). Values in the workplace: Diversity in meaning and importance. International Journal of Value-Based Management, 9, 169-194.

Bumpus, M.A., & Olbeter, S. (1998). Influences of situational characteristics on intrinsic motivation. Journal of Psychology Interdisciplinary & Applied, 132, 451-463.

Callahan, R.E., Fleenor, C.P., & Knudson, H.R. (1986). Understanding organizational behavior: A managerial viewpoint. Columbus: Charles E. Merrill Publishing Co.

Campion, M.A., & McClelland, C.L. (1991). Interdisciplinary examination of the costs and benefits of enlarged jobs: A job design quasi-experiment. Journal of Applied Psychology, 76, 186-198.

Carlisle, Y.M., & Manning, D.J. (1994). The concept of ideology and work motivation. Organization Studies, 15, 683-704.

Carson, K.D., & Bedeian, A.G. (1994). Career commitment: construction of a measure and examination of its psychometric properties. Journal of Vocational Behavior, 44, 237-262.

Carver, C.S. (1997). The internal-external scale confound internal locus of control with expectancies of positive outcomes. Personality and Social Psychology Bulletin, 23, 580-586.

Cassidy, T., & Lynn, R. (1989). A multifactorial approach to achievement motivation: The development of a comprehensive measure. Journal of Occupational Psychology, 62, 301-312.

Caudron, S. (2000). The search for meaning at work. ASTD. Retrieved 5 May 2000 from the World Wide Web, <http://www.pathfinders.org/astd.html>.

Cavanagh, G.F. (1999). Spirituality for managers: Context and critique. Journal of Organizational Change Management, 12, 186-199.

Chamberlain, K., & Zika, S. (1988). Measuring meaning in life: An examination of three scales. Personality and Individual Differences, 9, 589-596.

Cherrington, D. (1980). The work ethic: Working values and values that work. New York: AMACOM.

Clark, A., Oswald, A., & Warr, P. (1996). Is job satisfaction U-shaped in age? Journal of Occupational and Organizational Psychology, 69, 57-82.

Cohen, A. (1999). Relationships among five forms of commitment: An empirical assessment. Journal of Organizational Behavior, 20, 285-308.

Cohen, A. (2000). The relationship between commitment forms and work outcomes: A comparison of three models. Human Relations, 53, 387-417.

Cook, T.D., & Campbell, D.T. (1979) Quasi-Experimentation: Design and Analysis Issues for Field Settings. Boston: Houghton Mifflin Company.

Corsini, R.J. (1977). A medley of current personality theories. In Corsini, R. J. (Ed.), Current personality theories. Itasca: F. E. Peacock Publishers, Inc.

Crumbaugh, J.C. (1968). Cross-validation of Purpose in Life Test based on Frankl's concepts. Journal of Individual Psychology, 24, 74-81.

Crumbaugh, J.C. (1971). Frankl's logotherapy: A new orientation in counseling. Journal of Religion and Health, October, 373-386.

Crumbaugh, J.C. (1977). The Seeking of Noetic Goal Test (SONG): A complementary scale to the Purpose in Life Test (PIL). Journal of Clinical Psychology, 33, 900-907.

Crumbaugh, J.C., & Maholick, L.T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noögenic neurosis. Journal of Clinical Psychology, 20, 200-207.

Das, A.K. (1998). Frankl and the realm of meaning. Journal of Humanistic Counseling Education and Development, 36, 199-212.

Davis, L.E. (1980). Changes in the work environments: The next 20 years. In Duncan, K. D., Gruneberg, M. M., & Wallis, D. (Eds.), Changes in Working Life: Proceedings of an International Conference on Changes in the Nature and Quality of Working Life. New York: John Wiley and Sons, Ltd.

Debats, D.L. (1990). The Life Regard Index: reliability and validity. Psychological Reports, 67, 27-34.

Debats, D.L. (1996). Meaning in life: Clinical relevance and predictive power. British Journal of Clinical Psychology, 35, 503-516.

Debats, D.L. (1999). Sources of meaning: An investigation of significant commitments in life. Journal of Humanistic Psychology, 39, 30-58.

Debats, D.L., & Drost, J. (1995). Experiences of meaning in life: A combined qualitative and quantitative approach. British Journal of Psychology, 86, 359-379.

Debats, D.L., Van der Lubbe, P.M., & Wezeman, F.R. (1993). On the psychometric properties of the Live Regard Index (LRI): A measure of meaningful life. Personality and Individual Differences, 14, 337-345.

Deci, E.L. (1975). Intrinsic motivation. New York: Plenum Press.

Deci, E.L., & Ryan, R.M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum Press.

Deci, E.L., & Ryan, R.M. (1987). The support of autonomy and the control of behavior. Journal of Personality and Social Psychology, 53, 1024-1037.

Deci, E.L., & Ryan, R.M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), Nebraska Symposium on Motivation: Vol. 38. Perspectives on Motivation, 237-288. Lincoln: University of Nebraska Press.

Deci, E.L., & Ryan, R.M. (1992). The initiation and regulation of intrinsically motivated learning and achievement. In Boggiana, A.K., & Pittman, T.S. (Eds.), Achievement and motivation. New York: Cambridge University Press.

Depolo, M., & Sarchielli, G. (1986). A socio-cognitive approach to the psychology of unemployment. In Debus, G., & Schroiff, H. W. (Eds.), The psychology of work and organization: Current trends and issues. Amsterdam: Elsevier Science Publishers.

Dessler, G. (1986). Organization theory: Integrating structure and behavior (2nd ed.). Englewood Cliffs: Prentice-Hall Inc.

De Vogler, K.L., & Ebersole, P. (1980). Categorization of college students' meaning in life. Psychological Reports, 46, 387-390.

De Vogler, K., & Ebersole, P. (1983). Young adolescents' meaning in life. Psychological Reports, 52, 303-310.

De Vogler-Ebersole, K.L., & Ebersole, P. (1985a). Young adolescents' meaning in life. Psychological Reports, 5, 427-431.

De Vogler-Ebersole, K., & Ebersole, P. (1985b). Depth of meaning in life: Explicit rating criteria. Psychological Reports, 56, 303-310.

Doerr, J.E. (1998). Small world, (too) big jobs: People want meaning in their lives. Management Review, 87, 5-6.

Doerries, L.E. (1970). Purpose in life and social participation. Journal of Individual Psychology, 26, 50-53.

Dweck, C.S. (1986). Motivational processes affecting learning. American Psychologist, 41, 1040-1048.

Dweck, C.S. (1991). Self-theories and goals: Get their role in motivation, and personality, and development. In R. A. Dienstbier (Ed.), Nebraska Symposium on Motivation. Lincoln: University of Nebraska Press.

Ebersole, P., & Kobayakawa, S. (1989). Bias in meaning in life ratings. Psychological Reports, 65, 911-914.

Ebersole, P., & Quiring, G. (1989). The social desirability in the Purpose in Life Test. The Journal of Psychology, 123, 305-307.

Ebersole, P., & Sacco, J. (1983). Depth of meaning in life: A preliminary study. Psychological Reports, 53, 890.

Elizur, D. (1984). Facets of work values: A structural analysis of work outcomes. Journal of Applied Psychology, 35, 379-389.

Elizur, D. (1996). Work values and commitment. International Journal of Manpower, 17, 25-31.

Elliot, E.S., & Dweck, C.S. (1988). Goals: An approach to motivation and achievement. Journal of Personality and Social Psychology, 54, 5-12.

Etzioni, A. (1975). Comparative analysis of complex organizations. New York: MacMillan Publishing Company.

Fabry, J. (1988). Guideposts to meaning. Oakland: Harbinger.

Fagan, L., & Little, L. (1984). The forsaken families. Harmondsworth: Penguin.

Fairholm, G.W. (1996). Spiritual leadership: Fulfilling whole-self needs at work. Leadership and Organization Development Journal, 17, 11-17.

Fayol, H. (1949). General industrial management. Translated by Storrs, C. London: Sir Isaac Pitman and Sons Ltd.

Fellows, E.W. (1966). Happiness: A survey of research. Journal of Humanistic Psychology, 6, 17-30.

Firth, R. (1972). Anthropological background to work. In Bryant, C.D. (Ed.), The social dimensions of work. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Florian, V., Snowden, L.R. (1989). Fear of personal death and positive life regard: a study of different ethnic and religious affiliated American college students. Journal of Cross-Cultural Psychology, 1, 64-79.

Frankl, V.E. (1967). Psychotherapy and existentialism. London: Souviner Press.

Frankl, V.E. (1969). The doctor and the soul: From psychotherapy to logotherapy. London: Souviner Press.

Frankl, V.E. (1970). The will to meaning: Foundations and applications of logotherapy. New York: New American Library.

Frankl, V.E. (1972). The feeling of meaninglessness: A challenge to psychotherapy. American Journal of Psychoanalysis, 32, 85-89.

Frankl, V.E. (1975). The unconscious God: Psychotherapy and theology (Expanded version of the first American edition). London: Hodder and Stoughton.

Frankl, V.E. (1978). The unheard cry for meaning: Psychotherapy and humanism. London: Hodder and Stoughton.

Frankl, V.E. (1984a). Man's search for meaning: Revised and updated. New York: Washington Square Press.

Frankl, V.E. (1984b). Man in search of meaning. Public lecture presented at University of South Africa, 29 September [Video Casette]. Pretoria, South Africa.

Frankl, V.E. (1992). Meaning in industrial society. The International Forum for Logotherapy, 15, 66-70.

French, W.L., & Bell, C.H. (1978). Organization development: behavioral science interventions for organization improvement (2nd ed.). Englewood Cliffs: Prentice-Hall, Inc.

Friedman, E.A., & Havighurst, R.J. (1954). The meaning of work and retirement. Chicago: University of Chicago Press.

Fryer, D., & Payne, R. (1986). Being unemployed: A review of the literature on the psychological experience of unemployment. In Cooper, C. (Ed.), International Review of Industrial and Organizational Psychology. New York: John Wiley and Sons Ltd.

Furnham, A. (1990a). A content, correlational, and factor analytic study of seven questionnaire measures of the Protestant work ethic. Human Relations, 43, 383-399.

Furnham, A. (1990b). The Protestant work ethic: The psychology of work-related beliefs and behaviors. London: Routledge.

Furnham, A., Brewin, C.R., & O'Kelly, H. (1994). Cognitive style and attitudes to work. Human Relations, 47, 1509-1521.

Furnham, A., & Walsh, J. (1991). Consequences of person-environment incongruence: Absenteeism, frustration, and stress. Journal of Social Psychology, 131, 187-204.

Gage, R. (1994). The meaning of life. Manitoba Business, 16, 22.

Gane, L., & Chan, K. (1997). Nietzsche for beginners. Cambridge: Icon Books.

Garfield, C.A. (1973). A psychometric and clinical investigation of Frankl's concept of existential vacuum and anomia. Psychiatry, *36*, 396-408.

Gellerman, S.W. (1963). Motivation and productivity. New York: American Management Association, Inc.

Gemmil, G., & Oakley, J. (1992). The meaning of boredom in organizational life. Group and Organization Management, *17*, 358-369.

George, J.M., & Jones, G.R. (1997). Experiencing work: values, attitudes, and moods. Human Relations, *50*, 393-415.

Giesbrecht, H. (1998). Meaning as a predictor of job satisfaction, work stress and coping. Masters Dissertation, Trinity Western University, USA.

Gill, F. (1999). The meaning of work: Lessons from sociology, psychology, and political theory. The Journal of Socio Economics, *28*, 725-743.

Giorgi, L., & Marsh, C. (1990). The Protestant work ethic as a cultural phenomenon. European Journal of Social Psychology, *20*, 499-517.

Giovacchini, P.L. (1977). Psychoanalysis. In Corsini, R. J. (Ed.), Current personality theories. Itasca: F. E. Peacock Publishers, Inc.

Gouldner, A.W. (1957). Cosmopolitans and locals: Toward an analysis of latent social roles. Administrative Science Quarterly, *2*, 281-306.

Greenhaus, J.H. (1971). An investigation of the role of career salience in vocational behavior. Journal of Vocational Behavior, *1*, 209-216.

Greenhaus, J.H. (1973). A factorial investigation of career salience. Journal of Vocational Behavior, *3*, 95-98.

Greenhaus, J.H., Callanan, G.A. (1994). Career Management. Fort Worth: Dryden Press.

Guevare, K., & Ord, J. (1996). The search for meaning in a changing work context. Futures, 28, 709-722.

Guion, R.M., & Landy, F.J. (1972). The meaning of work and the motivation to work. Organizational Behavior and Human Performance, 7, 308-339.

Hackman, J.R., & Oldham, G.R. (1980). Work redesign. Reading: Addison Wesley.

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1995). Multivariate data analysis. New Jersey: Prentice-Hall.

Hammond, S. (1995). Introduction to multivariate data analysis. In Breakwell, G. M., Hammond, S., Fife-Shaw, C. (Eds.), Research methods in psychology. London: Sage.

Harackiewicz, J.M., & Elliot, A.J. (1998). The joint effects of public and purpose goals on intrinsic motivation: A mediational analysis. Personality and Social Psychology Bulletin, 24, 657-690.

Harackiewicz, J.M., & Sansone, C. (1991). Goals and intrinsic motivation: You can get there from here. In Maher, M.L., & Pintrich, P.R. (Eds.), Advances in motivation and achievement. Greenwich: JAI.

Hardcastle, B. (1985). Midlife themes of invisible citizens: An exploration into how ordinary people make sense of their lives. Journal of Humanistic Psychology, 25, 45-63.

Harlow, L.L., Newcomb, M.D., & Bentler, P.M. (1986). Depression, self derogation, substance use, and suicide ideation: Lack of purpose in life as mediational factor. Journal of Clinical Psychology, 45, 5-21.

Hawkins, J.M. (Ed.). (1989). Oxford Paperback Dictionary (3rd ed.). Oxford: Oxford University Press.

Heatherton, T.D., & Nichols, P.A. (1994). Personal accounts of successful purses failed attempts at life change. Personality and Social Psychology Bulletin, 20, 664-675.

Herzberg, F., Mausner, B., & Snyderman, B.B. (1959). The motivation to work (2nd ed.). New York: Wiley.

Hirschfeld, R.R. (2000). Does reviving the intrinsic and extrinsic subscales of the Minnesota Satisfaction Questionnaire Short Form make a difference? Educational and Psychological Measurement, 60, 255-271.

Ho, R., & Lloyd, J. (1984). Development of an Australian work ethic scale. Australian Psychology, 13, 321-332.

Hoeller, K. (1990). Introduction to existential psychology. In K. Hoeller (Ed.), Review of existential psychology and psychiatry. Seattle: REPP.

Hoff, E.H. (1986). Subjective theories on work, leisure and control. In Debus, G., & Schroiff, H. W. (Eds.), The psychology of work and organization: Current trends and issues. Amsterdam: Elsevier Science Publishers.

Holdstock, T.L., & Rogers, C.R. (1977). Person-centered theory. In Corsini, R. J. (Ed.), Current personality theories. Itasca: F. E. Peacock Publishers, Inc.

Holland, J. (1973). Making vocational choices: a theory of careers. New York: Prentice-Hall.

Holland, J. (1985). The Self directed search: Professional manual. Odessa: Psychological Assessment Resources.

Hoole, C. (1997). Work commitment: Its dimensions and relationships with role stays and intention to quit. Doctoral dissertation, University of Pretoria, South Africa.

Hornby, A.S., & Cowie, A.P. (Eds.). (1974). Oxford Advanced Learner's Dictionary of Current English. (3rd ed.). Oxford: Oxford University Press.

Howard, B.S., & Howard, J.R. (1997). Occupation as spiritual activity. The American Journal of Occupational Therapy, 51, 181-185.

Hoyle, R.H. (1995). Structural Equation Modeling: Concepts, issues, and applications. Thousand Oaks: Sage Publications.

Ingeborg, G. (2000). Giving meaning to work: The spiritual challenge of our time. Institute for Social Ethics. University of Vienna. Retrieved 6 July 2000 from the World Wide Web, <http://ust-personweb3.stthomas.edu:9000/>.

Ivancevich, J.M., & Matteson, M.T. (1980) Stress and work: A managerial perspective. London: Scott, Foresman and Company.

Jackson, H.J., & Morgan C.P. (1982). Organization theory: A macro perspective for management (2nd ed.). Englewood Cliffs: Prentice-Hall Inc.

Johada, M. (1982). Employment and unemployment: A social-psychological analysis. Cambridge: University of Cambridge Press.

Jones, A. (1997). Soul talk. In Mullins, T., & Spangler, A. (Eds.), Vitamins for the soul. New York: Doubleday.

Jung, C.G. (1933). Modern man in search of a soul. London: Routledge and Kegan Paul, Ltd.

Jung, C.G. (1960). The structure and dynamics of the psyche. London: Routledge & Kegan Paul.

Jung, C.G. (1969). On the nature of the psyche. London: Ark Paperbacks.

Jurgensen, C.E. (1978). Job preferences (what makes a job good of bad?). Journal of Applied Psychology, 63, 267-276.

Kamfer, L., Venter, D., & Boshoff, A.B. (1998). The portability of American job involvement and job satisfaction scales to non-English speaking South Africans. South African Journal of Economic and Management Sciences, NS1, 85-107.

Kanungo, R.N. (1979). The concepts of alienation and involvement revisited, Psychological Bulletin, 86, 119-38.

Kanungo, R.N. (1981). Work alienation and involvement: Problems and prospects. International Review of Applied Psychology, 30, 1-15.

Kanungo, R.N. (1982). Measurement of job and work involvement. Journal of Applied Psychology, 67, 341-349.

Kaplan, R.A.L. (1990). The career anchors, job involvement and job satisfaction of professional people. Doctoral Dissertation, University of Cape Town, South Africa.

Katz, D., & Kahn, R.L (1978). The social psychology of organizations. New York: Wiley.

Katzell, R.A., & Thompson, D.A. (1990). Work motivation: Theory and practice. American Psychologist, 45, 144-153.

Keeva, S. (1999). Integrating your Heart and Mind. ABA Journal, 85, 58-65.

Kelly, J. (1992). Does job redesign theory explain job redesign outcomes? Human Relations, 45, 753-775.

Kerlinger, F.N., & Lee, H.B. (2000). Foundations of behavioral research (4th ed.). New York: Harcourt College Publishers.

Kerr, S., Von Glinow, M., & Schriesheim, J. (1977). Issues in the study of "professionals" in organizations: The case of scientists and engineers. Organizational Behavior and Human Performance, 18, 329-345.

King, S., & Nicol, D.M. (1999). Organizational enhancement through recognition of individual spirituality: Reflections of Jacques and Jung. Journal of Organizational Change Management, 12, 234-243.

Kobasa, S.C., & Maddi, S.R. (1977). Existential personality theory. In Corsini, R. J. (Ed.), Current personality theories. Itasca: F. E. Peacock Publishers, Inc.

Konz, G.N.P., & Ryan, F.X. (1999). Maintaining an organizational spirituality: No easy task. Journal of Organizational Change Management, 12, 200-210.

Kornhauser, A. (1972). Toward an assessment of the mental health of factory workers. In Bryant, C. D. (Ed.), The social dimensions of work. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Kovacs, G. (1985). Viktor E. Frankl's place in philosophy. The International Forum for Logotherapy, 8, 17-21.

Kreitner, R., & Kinicki, A. (1998). Organizational behavior (4th ed.). Boston: Irwin McGraw-Hill.

Kristjansson, M. (1993). Deci and Ryan's cognitive evaluation theory of intrinsic motivation: A set of common sense theorems. Scandinavian Journal of Psychology, 34, 338-352.

Latham, G.P., & Locke, E.A. (1979). Goal setting: A motivational technique that works. Organizational Dynamics, 8, 68-80.

Lawler, E.E. (1969). Job design and employee motivation. Personnel Psychology, 22, 426-435.

Lawler, E.E. (1980). Motivation: Closing the gap between theory and practice. In Duncan, K. D., Gruneberg, M. M., & Wallis, D. (Eds.), Changes in working life. New York: John Wiley and Sons Ltd.

Lawler, E.E., & Hall, D.T. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. Journal of Applied Psychology, 4, 305-312.

Lazarus, L.S., & DeLongis, A. (1983). Psychological stress and coping in aging. American Psychologist, 38, 245-254.

Leedy, P.D. (1993). Practical Research: Planning and Design (5th ed.). New York: Macmillan Publishing Company.

Lefkowitz, J., Somers, M.J., & Weinberg, K. (1984). The role of need level and/or need salience as moderators of the relationship between need satisfaction and work alienation-involvement. Journal of Vocational Behavior, 24, 124-158.

Leonard, N.H., Beauvais, L.L., & Scholl, R.W. (1995a). A self concept-based model of work. Academy of Management Journal. (American Academy of Management Best Papers Proceedings 1995), 322-326.

Leonard, N.H., Beauvais, L.L., & Scholl, R.W. (1995b). A self concept-based model of work motivation. Paper presented at the meeting of Academy of Management Annual Meeting, Vancouver, B.C.

Leonard, N.H., Beauvais, L.L., & Scholl, R.W. (1999). Work motivation: The incorporation of self concept based processes. Human Relations, 52, 969-996.

Levin, R.I. (1987). Statistics for management (4th ed.). Englewood Cliffs: Prentice-Hall international, Inc.

Locke, E.A. (1968). Toward a theory of task motivation and incentives. Organizational Behavior and Human Performance, 3, 157-189.

Locke, E.A. (1976). The nature and causes of job satisfaction. In Dunnette, M. D. (Ed.), Handbook of industrial and organizational psychology. Skokie: Rand McNally.

Locke, E.A., & Latham, P.G. (1990). A theory of goal setting and task performance. Prentice-Hall: Englewood Cliffs.

Locke, A.E., Shaw, K.N., Saari, L.M., & Latham, G.P. (1981). Goal setting and task performance: 1969-1980. Psychological Bulletin, 90, 125-152.

Lodahl, T.M., & Kejner, M. (1965). The definition and measurement of job involvement. Journal of Applied Psychology, 49, 24-33.

London, M. (1985). Developing managers: a guide to motivating and preparing people for successful managerial careers. San Francisco: Jossey-Bass.

Lonkila, M. (1998). The social meaning of work: aspects of the teaching profession in post-Soviet Russia: The importance of work-mediated social relations in post-Soviet Russia. Europe-Asia Studies, 50, 699-713.

Lorence, J. (1987). Age differences in work involvement: Analyses of three explanations. Work and Occupations, 14, 533-557.

Loscocco, K.A. (1985). The meaning of work: An examination of the determinants of work commitment and work orientation among manufacturing employees. Doctoral dissertation, Indiana University, Indiana.

Loscocco, K.A. (1989). The interplay of personal and job characteristics in determining work commitment. Social Science Research, 18, 370-394.

Lu, L. (1999). Work motivation, job stress and employees' well-being. Journal of Applied Management Studies, 8, 61-73.

Lukas, E. (1986). Meaningful living: A logotherapy guide to health. New York: Grove.

Lunden, R.W. (1977). Behaviorism. In Corsini, R.J. (Ed.), Current personality theories. Itasca: F. E. Peacock Publishers, Inc.

Luthans, F. (1989). Organizational behavior (3rd ed.). New York: McGraw-Hill Book Company.

Luthans, F. (1999). Organizational behavior (12th ed.). New York: McGraw-Hill Book Company.

Luthans, F, & Stajkovic, A.D. (1999). Reinforcement for pay: the need to go beyond pay and even rewards. Academy of Management Executive, 13, 49-56.

Mackay, N. (1989). Motivation and explanation: An essay on Freud's philosophy of science. Psychological Issues, Monograph 56. London: International University Press.

Mackenzie, K.D. (2001, July). Patching, repairing, remodeling, stripping, scraping, and rebuilding. Paper presented at the Eighth Annual International Conference on Advances in Management, Athens, Greece.

Maddi, S.R. (1967). The existential neurosis. Journal of Abnormal Psychology, 72, 311-325.

Maddi, S.R. (1970). The search for meaning. Nebraska Symposium on Motivation.

Marks, T. (1972). The meaning of life according to seven philosophers, psychologists and theologians: An independent study project in psychology of religion. Tufts University. Retrieved 3 May 2000

Matteson, M.T., & Ivancevich, J.M. (1989). Controlling work stress: Effective human resource and management strategies. San Francisco: Jossey-Bass Publishers.

Maslow, A.H. (1954). Motivation and personality. New York: Harper and Row.

Maslow, A.H. (1963). The need to know and the fear of knowing. The Journal of General Psychology, 68, 111-125.

Maslow, A.H. (1966). Comments on Dr Frankl's paper. Journal of Humanistic Psychology, 6, 107-112.

Maslow, A.H. (1979). A theory of human behavior: Dynamics of the basic needs. In Steers, R. M., & Porter, L. W. (Eds.), Motivation and work behavior (2nd ed.). New York: McGraw-Hill Book Company.

McCarthy, S.V. (1983). Geropsychology: Meaning in life for adults over seventy. Psychological reports, 53, 497-489.

McClelland, D.F. (1961). The achieving society. New York: Irvington Publishers, Inc.

Meier, A., & Edwards, H. (1974). Purpose in Life Test: age and sex differences. Journal of Clinical Psychology, 30, 384-386.

Meltzer, H., & Ludwig, D. (1968). Memory dynamics and work motivation. Journal of Applied Psychology, 52, 184-187.

Mento, A.J., Locke, E.A., & Klein, H.J. (1992). Relationship of goal level to valence and instrumentality. Journal of Applied Psychology, 77, 395-405.

Meyer, J.P., & Allen, N.J. (1984). Testing the "Side-Bet theory" of organizational commitment: Some methodological considerations. Journal of Applied Psychology, 69, 372-378.

Mink, O.G., Shultz, J.M., & Mink, B.P. (1991). Developing and managing open organizations: A model and methods for maximizing organizational potential. Austin: Somerset Consulting Group, Inc.

Mintzberg, H. (1973). The nature of managerial work. Englewood Cliffs: Prentice-Hall Inc.

Mirels, H., & Garrett, J. (1971). Protestant ethic as a personality variable. Journal of Consulting and Clinical Psychology, 36, 40-44.

Misiak, H., & Sexton, V.S. (1973). Phenomenological, existential, and humanistic psychologies: A historical survey. New York: Grune and Stratton.

Moomal, Z. (1999). The relationship between meaning in life and mental well-being. South African Journal of Psychology, 29, 42-49.

Morrow, P.C. (1983). Concept redundancy in organizational research: The case of work commitment. Academy of Management Review, 8, 486-500.

Morrow, P.C. (1993). The theory and measurement of work commitment. Greenwich: JAI Press.

Morrow, P.C., Eastman, K., & McElroy, J.A. (1991). Concept redundancy and rater naivety in organizational research. Journal of Applied Social Psychology, 21, 219-232.

Morse, N.C., & Weiss, R.S. (1955). The function of work and the job. American Sociological Review, 20, 191-198.

M.O.W. International Research Team. (1987). The meaning of working. London: Academic Press.

Mowday, R.T., Steers, R.M., & Porter, L.M. (1979). The measurement of organizational commitment. Journal of Vocational Behavior, 14, 224-247.

Muchinsky, P.M. (1987). Psychology applied to work: An introduction to industrial and organizational psychology (2nd ed.). Chicago: The Dorsey Press.

Munitz, M.K. (1993). Does life have a meaning? Buffalo: Prometheus Books.

Naylor, J.C., Pritchard, R.D., & Ilgen, D.R. (1980). A sequential view of behavior and motivation. In Duncan, K. D., Gruneberg, M. M., & Wallis, D. (Eds.), Changes in working life. New York: John Wiley and Sons Ltd.

Neal, J.A, Lichtenstein, B.M.B, & Banner, D. (1999). Spiritual perspectives on individual, organizational and societal transformation. Journal of Organizational Change Management, 12, 175-186.

Neck, C.P., & Milliman, J.F. (1994). Thought self-leadership refining spiritual fulfillment in organizational life. Journal of Managerial Psychology, 9, 9-16.

Neff, W.S. (1965). Psychoanalytic conceptions of the meaning of work. Psychiatry Year, 28, 324-333.

Newcomb, M.D., & Harlow, L.L. (1986). Life events and substance use among adolescents: Mediating effects of perceived loss of control and meaninglessness in life. Journal of Personality and Social Psychology, 51, 564-577.

Niles, F.S. (1999). Toward an understanding of work-related beliefs. Human Relations, 52, 855-867.

O'Connel, W.E. (1970). Is "the third Viennese school of psychotherapy" real? Review of Viktor E. Frankl's "The will to meaning: Foundations and applications of logotherapy". Journal of Individual Psychology, 26, 85-86.

O'Connor, K., & Chamberlain, K. (1996). Dimensions of life meaning: A qualitative investigation at mid-life. British Journal of Psychology, 87, 461-478.

Orgler, H. (1973). Alfred Adler - The man and his work: Triumph over the inferiority complex. London: Sedgwick and Jackson.

Orzack, L.H. (1972). Work as a "central life interest" of professionals. In Bryant, C. D. (Ed.), The social dimensions of work. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Pascarella, P. (1998). Rethinking the pursuit of happiness. Management Review, 87, 68-70.

Paterson, T.T. (1972). Job evaluation. London: Business Books.

Paterson, J.M., & O'Driscoll, M.P. (1990). An empirical assessment of Kanungo's (1982) concept and measure of job involvement. Applied Psychology: An International Review, *39*, 293-306.

Paullay, I.M., Alliger, G.M., & Stone-Romero, E.F. (1994). Construct validation of two instruments designed to measure job involvement and work centrality. Journal of Applied Psychology, *79*, 224-228.

Peacock, E.J., & Reker, G.T. (1982). The Life Attitude Profile (LAP): Further evidence of reliability and empirical validity. Canadian Journal of Behavioral Science, *14*, 92-95.

Pearson, P.R., & Sheffield, B.F. (1974). Purpose in life and the Eysenck Personality Inventory. Journal of Clinical Psychology, *30*, 562-564.

Petri, H.L. (1991). Motivation: Theory, research, and applications (3rd ed.). Belmont: Wadsworth Publishing Company.

Phillips, W.M. (1980). Purpose in life, depression, and locus of control. Journal of Clinical Psychology, *36*, 661-667.

Pinder, C.C. (1984). Work motivation: Theory, issues and applications. Glenview: Scott, Foresman and Company.

Pinder, C.C. (1998). Work motivation in organizational behavior. New Jersey: Prentice-Hall.

Pollock, T.G., Whitbred, R.C., & Contractor, N. (2000). Social information processing and job characteristics. Human Communication Research, *26*, 292-2231.

Pool, S.W. (1997). The relationship of job satisfaction with substitutes of leadership, leadership behavior and work motivation. Journal of Psychology Interdisciplinary and Applied, *131*, 271-284.

Porter, L.W., & Lawler, E.E. (1968). Managerial attitudes and performance. Homewood: Richard D. Irwin, Inc.

Rahim, M.A. (2001, July). Improving measures in management. Paper presented at the Eighth Annual International Conference on Advances in Management, Athens, Greece.

Randall, D.M., & Cote, J.A. (1991). Interrelationships of work commitment constructs. Work and Occupations, 18, 194-212.

Reker, G. (1977). The Purpose-In-Life test in an inmate population: An empirical investigation. Journal of Clinical Psychology, 33, 688-693.

Reker, G.T. (1991). Contextual and thematic analyses of sources of provisional meaning: A life-span perspective. Paper presented at the Biennial Meeting of the International Society for the Study of Behavioral Development, Minnesota.

Reker, G.T. (1994). Logotherapy and logotherapy: Challenges, opportunities, and some empirical findings. The International Forum for Logotherapy, 17, 47-55.

Reker, G.T., & Cousins, J.B. (1979). Factor structure, construct validity and reliability of the Seeking of Noetic Goals (SONG) and Purpose in Life (PIL) tests. Journal of Clinical Psychology, 35, 85-91.

Reker, G.T., & Peacock, E.J. (1981). The Life Attitude Profile (LAP): A multidimensional instrument for assessing attitudes toward life. Canadian Journal of Behavioral Science, 13, 254-273.

Reker, G.T., Peacock, E.J., & Wong, P.T.P. (1987). Meaning and Purpose in Life and Well-Being: A life span perspective. Journal of Gerontology, 42, 44-49.

Reker, G.T., & Wong, P.T.P. (1988). Aging as an individual process: Toward a theory of personal meaning. In Bitten, J. E., & Bengston, V. L. (Eds.), Emergent theories of Aging. New York: Springer.

Renesch, J. (1995) The New Leaders. Sterling and Stone, Bonus Issue, Spring, San Francisco, CA.

Riipenen, M. (1997). The relationship between job involvement and well-being. The Journal of Psychology, 81-89.

Robbins, S.P. (1989) Organizational behavior: Concepts, controversies and applications. Englewood Cliffs: Prentice-Hall, Inc

Roffey, A.E. (1993). Existentialism in a post-modern world: Meaningful lessons for the counselor. Counseling and Values, 37, 129-149.

Rogers, R.E., & McIntire, R.H. (1983). Organization and management theory. New York: John Wiley and Sons.

Rokeach, M. (1973). The nature of human values. New York: The Free Press.

Ros, M., Schwartz, S.H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. Applied Psychology: An International Review, 48, 49-71.

Ryff, C.D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology, 57, 1069-1081.

Saari, C. (1991). The creation of meaning in clinical social work. New York: The Guilford Press.

Sagie, A., Elizur, D., & Koslowsky, M. (1996). Work values: A theoretical overview and a model of their effects. Journal of Organizational Behavior, 17, 503-514.

Sahakian, W.S. (1985). Viktor E. Frankl's meaning for psychology. The International Forum for Logotherapy, 8, 11-16.

Sargent, G.A. (1973). Motivation and meaning: Frankl's logotherapy in the work situation. Doctoral dissertation, Graduate Faculty of the School of Human Behavior, United States International University.

Sartain, A.Q., North, A.J., & Strange, J.R. (1973). Psychology: Understanding human behavior. Tokyo: McGraw-Hill Kogushka, Ltd.

Savickas, M.L. (1991). The meaning of work and love: Career issues and interventions. Career Development Quarterly, 39, 315-325.

Schein, E.H. (1992). Organizational culture and leadership. New York: Jossey-Bass.

Sechrest, L. (1977). Personal constructs theory. In Corsini, R.J. (Ed.), Current personality theories. Itasca: F. E. Peacock Publishers, Inc.

Sharpe, D., & Viney, L.L. (1973). Weltanschauung and the Purpose in Life Test. Journal of Clinical Psychology, 29, 489-491.

Skinner, B.F. (1953). Science and human behavior. London: The Free Press.

Shimmin, S. (1980). The future of work. In Duncan, K.D., Gruneberg, M.M., & Wallis, D. (Eds.), Changes in working life: Proceedings of an international conference on changes in the nature and quality of working life. New York: John Wiley and Sons, Ltd.

Smircich, L., & Morgan, G. (1982). Leadership: The management of meaning. The Journal of Applied Behavioral Sciences, 18, 257-273.

Sosik, J.J., & Dworakivsky, A.C. (1998). Self-concept based aspects of the charismatic leader: More than meets the eye. Leadership Quarterly, 9, 503-527.

Stajkovic, A.D., & Luthans, F. (1997). A meta-analysis of the effects of organizational behavior modification on task performance, 1975-95. Academy of Management Journal, 40, 1122-1149.

Steers, R.M., & Porter, L.W. (1979). Motivation and work behavior (2nd ed.). New York: McGraw-Hill Book Company.

Strong, S. (1998). Meaningful work in supportive environments: Experiences with the recovery process. The American Journal of Occupational Therapy, 52, 31-38.

Super, D.E., & Sverko, B. (1995). Life roles, values and careers. San Francisco: Jossey Bass Inc.

Sverko, B. (1989). Origin of individual differences in importance attached to work: a model and a contribution to its evaluation. Journal of Vocational Behavior, 34, 28-39.

Terez, T. (1999). Meaningful work. Executive Excellence, 16, 19-20.

Terkel, S. (1985). Working. New York: Ballantine Books.

Thomas, K. (1999). The Oxford book of work. Oxford: Oxford University Press.

Thompson, S.C., & Janigian, A.S. (1988). Life schemes: A framework for understanding the search for meaning. Journal of Social and Clinical Psychology, 7, 260-280.

Tryon, W.W., & Radzin, A.B. (1972). Purpose in life as a function of ego resiliency, dogmatism and biographical variables. Journal of Clinical Psychology, 28, 544-545.

Vandewalle, D. (1997). Development and validation of a work domain goal orientation instrument. Educational and Psychological Measurement, 57, 995-1016.

Van Eerde, W., & Thierry, H. (1996). Vroom's expectancy models and work-related criteria: A meta-analysis. Journal of Applied Psychology, 81, 575-586.

Vallerand, R.J., & Pelletier, L.G. (1992). The academic motivation scale: a measure of intrinsic, extrinsic, and motivation in education. Educational and Psychological Measurement, *52*, 1003-1018.

Van Wyk, R., Boshoff, A.B., & Owen, J.H. (1999). Construct validity of psychometric instruments developed in the United States, when applied to professional people in South Africa. South African Journal of Economic and Management Sciences, *SS 1*, 1-72.

Vogl, A.J. (1997). Soul searching: Looking for meaning in the workplace. Across the Board, *34*, 16-24.

Vroom, V.H. (1964). Work and motivation. New York: Wiley.

Wallbank, M. (1980). Effort in motivated work behavior. In Duncan, K. D., Gruneberg, M. M., & Wallis, D. (Eds.), Changes in working life. New York: John Wiley and Sons Ltd.

Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. Journal of Occupational Psychology, *52*, 129-148.

Washburn, E.R. (1998). The physician leader as logotherapist. Physician Executive, *24*, 34-40.

Weber, M. (1984). Bureaucracy. In Fisher, F., & Sirianni, C. (Eds.), Critical studies in organization and bureaucracy. Philadelphia: Temple University Press.

Welch, J. (1998). Lack of personal meaning frustrates US employees. People Management, *4*, 21-23.

Wieland, G.F., & Ullrich, R. A. (1976). Organizations: Behavior, design and change. Homewood: Richard D. Irwin, Inc.

Wiersma, U.J. (1992). The effects of extrinsic rewards in intrinsic motivation: A meta-analysis. Journal of Occupational and Organizational Psychology, 65, 101-115.

World Council of Churches (1949). The meaning of work: An ecumenical enquiry. Geneva: World Council of Churches.

Wrightsman, L.S. (1992). Assumptions about human nature: Implications for researchers and practitioners (2nd ed.). London: Sage Publications.

Yalom, I.D. (1980). Existential psychotherapy. New York: Basic Books.

Yalom, I.D., & Yalom, B. (1998). Life in the balance. Inc, 20, 29-31.

Yarnell, T. (1972). Validation of the Seeking of Noetic Goals test with schizophrenic and normal subjects. Psychological Reports, 30, 79-80.

Yiu-kee, C., & Tang, C.S. (1995). Existential correlates of burnout among mental health professionals in Hong Kong. Journal of Mental Health Counseling, 17, 220-230.

Zika, S., & Chamberlain, K. (1992). On the relationship between meaning in life and psychological well-being. British Journal of Psychology, 83, 133-146.

APPENDIX A: FINAL QUESTIONNAIRE

STUDY OF WORK MOTIVATION AND COMMITMENT

A research project undertaken from the University of Pretoria.

Responsible Researchers

Mias de Klerk

PhD Candidate

Faculty of Economic and

Management Sciences

University of Pretoria

Adré B Boshoff

Professor

Faculty of Economic and

Management Sciences

University of Pretoria

Dr René van Wyk

Faculty of Economic and

Management Sciences

University of Pretoria

Dear Respondent

We value your co-operation in completing this questionnaire. Your answers will be treated in strict confidence and your responses will be used for research purposes only. Your name should therefore not appear anywhere on this document.

The questions are intended to cover views towards work and life from various perspectives. There are no right or wrong answers to any of the questions, we are only interested in your personal opinions. You are participating in a scientific study; frank and truthful answers are the most important contributions you can make to its success.

It is essential that you complete the questionnaire personally. If you do not see your way open to complete it personally, rather do not return the questionnaire. Handing it to someone else to complete will jeopardise the validity of the results and conclusions.

If you are interested in receiving feedback with regard to the information provided, please complete the relevant section at the back of the questionnaire. The results of the study will then be sent to you.

Different instructions will precede different sets of questions. All the questions are from well-researched and established instruments, measuring different and unique perspectives. You will therefore find that the evaluation scales on some of the instruments differ. Scientific rigour prescribes that the original response formats of the questions should be maintained. Please follow the instructions as carefully as possible. Please answer all questions. Please mark one item per question only.

Thank you for your co-operation.

FOR OFFICE USE ONLY			
1	Respondent number	V1	<input type="text"/> <input type="text"/> <input type="text"/> 1 - 3
2	Card number	V2	<input type="text"/> <input type="text"/> 4 - 5
3	Repeat number	V3	<input type="text"/> 6
4	Unit	V4	<input type="text"/> 7

People have different attitudes towards working. We would like to ask you a few questions on the subject. We shall start with questions regarding your views on work in general.

Please respond to the following statements.

1 = I strongly disagree
2 = I disagree
3 = I agree
4 = I strongly agree

Use the scale on the right to reflect your views.

Draw an X in the appropriate block

					FOR OFFICE USE ONLY		
1	People who work deserve success.	1	2	3	4	V5	<input type="text"/> 8
2	Hard work is fulfilling in itself.	1	2	3	4	V6	<input type="text"/> 9
3	Nothing is impossible if you work hard enough.	1	2	3	4	V7	<input type="text"/> 10
4	If you work hard, you will succeed.	1	2	3	4	V8	<input type="text"/> 11
5	You should be the best at what you do.	1	2	3	4	V9	<input type="text"/> 12
6	By working hard an individual can overcome most obstacles that life presents, and makes his or her own way in the world.	1	2	3	4	V10	<input type="text"/> 13
7	Hard work is not a key to success.	1	2	3	4	V11	<input type="text"/> 14

The following questions are about the same issues, but from a different perspective.

Please respond to the following statements.

Use the scale on the right to reflect your views.

- | |
|-------------------------|
| 1 = I strongly disagree |
| 2 = I disagree |
| 3 = I disagree somewhat |
| 4 = I agree somewhat |
| 5 = I agree |
| 6 = I strongly agree |

Draw an X in the appropriate block

	1	2	3	4	5	6			
1 The most important things that happen in life involve work.							V12	<input type="checkbox"/>	15
2 Work is something people should get involved in most of the time.							V13	<input type="checkbox"/>	16
3 Work should be only a small part of one's life.							V14	<input type="checkbox"/>	17
4 Work should be considered central to life.							V15	<input type="checkbox"/>	18
5 In my view, an individual's personal life goals should be work-oriented.							V16	<input type="checkbox"/>	19
6 Life is worth living only when people get absorbed in work.							V17	<input type="checkbox"/>	20

FOR OFFICE
USE ONLY

This survey continues with statements about your **LINE OF WORK** or **CAREER FIELD** in which you are currently employed. You may consider line of work/career field as having the same meaning as *occupation, profession, or vocation*.

Please respond to the following statements.

Use the scale on the right to reflect your views.

- | |
|-------------------------|
| 1 = I strongly disagree |
| 2 = I disagree |
| 3 = I am not sure |
| 4 = I agree |
| 5 = I strongly agree |

Draw an X in the appropriate block

	1	2	3	4	5			
1 My line of work/career field is an important part of who I am.						V18	<input type="checkbox"/>	21
2 This line of work/career field has a great deal of personal meaning to me.						V19	<input type="checkbox"/>	22
3 I do not feel "emotionally attached" to this line of work/career field.						V20	<input type="checkbox"/>	23
4 I strongly identify with my chosen line of work/career field.						V21	<input type="checkbox"/>	24
5 I do not have a strategy for achieving my goals in this line of work/career field.						V22	<input type="checkbox"/>	25

FOR OFFICE
USE ONLY

6	I have created a plan for my development in this line of work/career field	1	2	3	4	5	V23	<input type="checkbox"/>	26
7	I do not identify specific goals for my development in this line of work/career field.	1	2	3	4	5	V24	<input type="checkbox"/>	27
8	I do not often think about my personal development in this line of work/career field.	1	2	3	4	5	V25	<input type="checkbox"/>	28
9	The costs associated with my line of work/career field sometimes seem too great.	1	2	3	4	5	V26	<input type="checkbox"/>	29
10	Given the problems I encounter in this line of work/career field, I sometimes wonder if I get enough out of it.	1	2	3	4	5	V27	<input type="checkbox"/>	30
11	Given the problems in this line of work/career field, I sometimes wonder if the personal burden is worth it.	1	2	3	4	5	V28	<input type="checkbox"/>	31
12	The discomfort associated with my line of work/career field sometimes seems too great.	1	2	3	4	5	V29	<input type="checkbox"/>	32

Now we can move in a little closer to how you personally feel about your present job. Again we would like you to think about a number of statements that people have made about work, but this time think about your present job, not work in general. Please indicate on the scale how strongly you agree or disagree with each comment. Remember that I'm asking you about your present job.

Please respond to the following statements.

Use the scale on the right to reflect your views.

1 = No, I strongly disagree
2 = No, I disagree quite a lot
3 = No, I disagree just a little
4 = I am not sure about this
5 = Yes, I agree just a little
6 = Yes, I agree quite a lot
7 = Yes. I strongly agree

Draw an X in the appropriate block

1	I feel a sense of personal satisfaction when I do this job well.	1	2	3	4	5	6	7	V30	<input type="checkbox"/>	33
2	My opinion of myself goes down when I do this job badly.	1	2	3	4	5	6	7	V31	<input type="checkbox"/>	34
3	I take pride in doing my job as well as I can.	1	2	3	4	5	6	7	V32	<input type="checkbox"/>	35
4	I feel unhappy when my work is not up to my usual standard.	1	2	3	4	5	6	7	V33	<input type="checkbox"/>	36

FOR OFFICE
USE ONLY

5	I like to look back on the day's work with a sense of a job well done.	1	2	3	4	5	6	7
---	--	---	---	---	---	---	---	---

V34 37

6	I try to think of ways of doing my job effectively.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---	---

V35 38

The following questions are about the same issues, but from a different perspective.

Please respond to the following statements.

- | |
|---|
| 1 = I strongly disagree
2 = I disagree
3 = I disagree somewhat
4 = I agree somewhat
5 = I agree
6 = I strongly agree |
|---|

Use the scale on the right to reflect your views.

Draw an X in the appropriate block

1	The most important things that happened to me involve my present job.	1	2	3	4	5	6
---	---	---	---	---	---	---	---

FOR OFFICE USE ONLY

V36 39

2	To me, my job is only a small part of who I am.	1	2	3	4	5	6
---	---	---	---	---	---	---	---

V37 40

3	I am very much involved personally in my job.	1	2	3	4	5	6
---	---	---	---	---	---	---	---

V38 41

4	I live, eat, and breathe my job.	1	2	3	4	5	6
---	----------------------------------	---	---	---	---	---	---

V39 42

5	Most of my interests are centred around my job.	1	2	3	4	5	6
---	---	---	---	---	---	---	---

V40 43

6	I have very strong ties with my present job which would be very difficult to break.	1	2	3	4	5	6
---	---	---	---	---	---	---	---

V41 44

7	Usually I feel detached from my job.	1	2	3	4	5	6
---	--------------------------------------	---	---	---	---	---	---

V42 45

8	Most of my personal life goals are job-oriented.	1	2	3	4	5	6
---	--	---	---	---	---	---	---

V43 46

9	I consider my job to be very central to my existence.	1	2	3	4	5	6
---	---	---	---	---	---	---	---

V44 47

10	I like to be absorbed in my job most of the time.	1	2	3	4	5	6
----	---	---	---	---	---	---	---

V45 48

The following questions reflect on goals in the workplace.

Please respond to the following statements.

Use the scale on the right to reflect your views.

- | |
|-------------------------|
| 1 = I strongly disagree |
| 2 = I disagree |
| 3 = I disagree somewhat |
| 4 = I agree somewhat |
| 5 = I agree |
| 6 = I strongly agree |

Draw an X in the appropriate block

1	I am willing to select a challenging work assignment that I can learn a lot from.	1	2	3	4	5	6
2	I often look for opportunities to develop new skills and knowledge.	1	2	3	4	5	6
3	I enjoy challenging and difficult tasks at work where I will learn new skills.	1	2	3	4	5	6
4	For me, development of my work ability is important enough to take risks.	1	2	3	4	5	6
5	I prefer to work in situations that require a high level of ability and talent.	1	2	3	4	5	6
6	I would avoid taking on a new task if there were a chance that I would appear rather incompetent to others.	1	2	3	4	5	6
7	Avoiding a show of low ability is more important to me than learning a new skill.	1	2	3	4	5	6
8	I am concerned about taking on a task at work if my performance would reveal that I had low ability.	1	2	3	4	5	6
9	I prefer to avoid situations at work where I might perform poorly.	1	2	3	4	5	6

FOR OFFICE
USE ONLY

V46	<input type="checkbox"/>	49
V47	<input type="checkbox"/>	50
V48	<input type="checkbox"/>	51
V49	<input type="checkbox"/>	52
V50	<input type="checkbox"/>	53
V51	<input type="checkbox"/>	54
V52	<input type="checkbox"/>	55
V53	<input type="checkbox"/>	56
V54	<input type="checkbox"/>	57

FOR OFFICE USE ONLY

1	Respondent number	V55	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 - 3
2	Card number	V56	<input type="text"/>	<input type="text"/>		4 - 5
3	Repeat number	V57	<input type="text"/>			6
4	Unit	V58	<input type="text"/>			7

The following questions refer to your daily life, also outside your workplace.

Please respond to the following statements.

Use the scale on the right to reflect your views.

Draw an X in the appropriate block

1 = I strongly disagree
2 = I disagree
3 = I am not sure
4 = I agree
5 = I strongly agree

							FOR OFFICE USE ONLY		
1	Other people seem to have a much better idea of what they want to do with their lives than I do.	1	2	3	4	5	V59	<input type="checkbox"/>	8
2	When I look at my life I feel the satisfaction of really having worked to accomplish something.	1	2	3	4	5	V60	<input type="checkbox"/>	9
3	I just do not know what I really want to do with my life.	1	2	3	4	5	V61	<input type="checkbox"/>	10
4	I do not really value what I am doing.	1	2	3	4	5	V62	<input type="checkbox"/>	11
5	I feel that I am living fully.	1	2	3	4	5	V63	<input type="checkbox"/>	12
6	I get completely confused when I tried to understand my life	1	2	3	4	5	V64	<input type="checkbox"/>	13
7	I have a very clear idea of what I would like to do with my life.	1	2	3	4	5	V65	<input type="checkbox"/>	14
8	I feel that I am really going to attain what I want in life.	1	2	3	4	5	V66	<input type="checkbox"/>	15
9	I really feel good about my life.	1	2	3	4	5	V67	<input type="checkbox"/>	16
10	I really do not believe in anything about my life very deeply.	1	2	3	4	5	V68	<input type="checkbox"/>	17
11	I really do not have much of a purpose for living, even for myself.	1	2	3	4	5	V69	<input type="checkbox"/>	18
12	I have really come to terms with what is important for me in my life.	1	2	3	4	5	V70	<input type="checkbox"/>	19
13	I need to find something that I can really be committed to	1	2	3	4	5	V71	<input type="checkbox"/>	20
14	Nothing very outstanding ever seems to happen to me.	1	2	3	4	5	V72	<input type="checkbox"/>	21
15	Something seems to stop me from doing what I really want to do.	1	2	3	4	5	V73	<input type="checkbox"/>	22

16	I have some aims and goals that would personally give me a great deal of satisfaction if I could accomplish them.	1	2	3	4	5	V74	<input type="text"/>	23
17	I have a system or framework that allows me to truly understand my being alive.	1	2	3	4	5	V75	<input type="text"/>	24
18	Other people seem to feel better about their lives than I do.	1	2	3	4	5	V76	<input type="text"/>	25
19	I feel like I have found a really significant meaning for leading my life.	1	2	3	4	5	V77	<input type="text"/>	26
20	I have a lot of potential that I do not normally use.	1	2	3	4	5	V78	<input type="text"/>	27
21	I have a philosophy of life that really gives my living significance.	1	2	3	4	5	V79	<input type="text"/>	28
22	I do not seem to be able to accomplish those things that are really important to me.	1	2	3	4	5	V80	<input type="text"/>	29
23	I get so excited by what I am doing that I find new stores of energy I did not know that I had.	1	2	3	4	5	V81	<input type="text"/>	30
24	I have real passion in my life.	1	2	3	4	5	V82	<input type="text"/>	31
25	There honestly is not anything that I totally want to do.	1	2	3	4	5	V83	<input type="text"/>	32
26	Living is deeply fulfilling.	1	2	3	4	5	V84	<input type="text"/>	33
27	I spent most of my time doing things that really are not very important to me.	1	2	3	4	5	V85	<input type="text"/>	34
28	There are things that I devote all my life's energy to.	1	2	3	4	5	V86	<input type="text"/>	35

The following questions request biographic and lifestyle information. Responses will be used purely for statistical purposes.

Draw an X in the appropriate block next to the item that most closely represents your personal situation. Mark one item per question only.

Biographic and lifestyle information

1 Age (in years)

2 Gender
 Male
 Female

3 Sasol pay grade level
 Level 2
 Level 3
 Level 4
 Level 5
 Level 6

4 Qualifications (mark highest level attained only)

Secondary school	<input type="checkbox"/>
Std 10 or equivalent	<input type="checkbox"/>
Post-school certificate / diploma	<input type="checkbox"/>
National Diploma/National Higher Diploma	<input type="checkbox"/>
Bachelor's degree or equivalent	<input type="checkbox"/>
Honours degree or equivalent	<input type="checkbox"/>
Masters degree or equivalent	<input type="checkbox"/>
Doctoral degree or equivalent	<input type="checkbox"/>

FOR OFFICE USE ONLY

V87 36-37

1 V88 38
 2

1 V89 39
 2
 3
 4
 5

V90 40

1
 2
 3
 4
 5
 6
 7
 8

5 Fields of study and employment

Mark one item per question only. If unsure indicate the most appropriate item.	Engineering	Human Resources	Economic and Financial Sciences	Management	Natural Sciences	Law	Education	Medicine	Other
Initial field of study									
Field of most recent studies									
Field of first employment									
Field of current employment									
	1	2	3	4	5	6	7	8	9

FOR OFFICE USE ONLY

<input type="text"/>	V91	<input type="text"/>	41
<input type="text"/>	V92	<input type="text"/>	42
<input type="text"/>	V93	<input type="text"/>	43
<input type="text"/>	V94	<input type="text"/>	44

6 How many years have you been working for Sasol?

V95 45 -46

7 Did you make any substantial career changes in your working life? Yes No

1 V96 47
2

8 Indicate the level of satisfaction with your career progress to date

Completely satisfied	<input type="checkbox"/>
Satisfied	<input type="checkbox"/>
Not sure	<input type="checkbox"/>
Dissatisfied	<input type="checkbox"/>
Completely dissatisfied	<input type="checkbox"/>

1 V97 48
2
3
4
5

9 Would you continue working if you won the lottery (say R20 million)? Yes No

1 V98 49
2

10 Would you continue with your present job if you won this lottery? Yes No

1 V99 50
2

11 How many hours do you, on average, work per week?

V100 51-52

12 How many hours do you, officially, have to work per week?

V101 53-54

13 Do you regularly work over weekends or holidays? Yes

1 V102 55

		No	<input type="checkbox"/>		<input type="checkbox"/>	2													
14	How many days vacation leave do you typically take per year?		<input type="text"/>			<input type="text"/> V103	<input type="text"/> <input type="text"/> 56-57												
15	Do you purposely make time to be alone?	Yes	<input type="checkbox"/>			1 V104	<input type="text"/> 58												
		No	<input type="checkbox"/>			2													
16	Do you find it difficult to be alone when you are not engaged in activities?	Yes	<input type="checkbox"/>			1 V105	<input type="text"/> 59												
		No	<input type="checkbox"/>			2													
17	Do you purposely make time for leisure?	Yes	<input type="checkbox"/>			1 V106	<input type="text"/> 60												
		No	<input type="checkbox"/>			2													
For office use only																			
18	Do you purposely make time to spend with your family (or friends)?	Yes	<input type="checkbox"/>			1 V107	<input type="text"/> 61												
		No	<input type="checkbox"/>			2													
19	Do you actively participate in a sport or a hobby?	Yes	<input type="checkbox"/>			1 V108	<input type="text"/> 62												
		No	<input type="checkbox"/>			2													
20	Are you actively involved in any type of community or welfare work?	Yes	<input type="checkbox"/>			1 V109	<input type="text"/> 63												
		No	<input type="checkbox"/>			2													
21	Do you contribute financially in a regular fashion to community work, or welfare work?	Yes	<input type="checkbox"/>			1 V110	<input type="text"/> 64												
		No	<input type="checkbox"/>			2													
22	Marital Status	<table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Never married</td><td><input type="checkbox"/></td></tr> <tr><td>Married</td><td><input type="checkbox"/></td></tr> <tr><td>Widow(er)</td><td><input type="checkbox"/></td></tr> <tr><td>Divorced</td><td><input type="checkbox"/></td></tr> <tr><td>Estranged</td><td><input type="checkbox"/></td></tr> <tr><td>Cohabiting</td><td><input type="checkbox"/></td></tr> </table>		Never married	<input type="checkbox"/>	Married	<input type="checkbox"/>	Widow(er)	<input type="checkbox"/>	Divorced	<input type="checkbox"/>	Estranged	<input type="checkbox"/>	Cohabiting	<input type="checkbox"/>			1 V111	<input type="text"/> 65
Never married	<input type="checkbox"/>																		
Married	<input type="checkbox"/>																		
Widow(er)	<input type="checkbox"/>																		
Divorced	<input type="checkbox"/>																		
Estranged	<input type="checkbox"/>																		
Cohabiting	<input type="checkbox"/>																		
						2													
						3													
						4													
						5													
						6													

23 How would you classify the dominant nature of your social heritage, culture or upbringing?

Sotho (Northern, Western, Southern)	
Nguni (Zoeloe, Xhosa, Swazi, Ndebele)	
Other African	
Afrikaner	
English	
Jewish	
Indian	
Malayan	
Arabic	
Mediterranean	
Western European	
Eastern European	
North American	
Latin American	
Other Asian	
Other	

1	V112			66-67
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

24 Religious orientation

Christian	
Jewish	
Islamic or Muslim	
African traditional	
Hindu	
Buddhist	
Sikh	
Other	
Agnostic/Atheist	

1	V113		68
2			
3			
4			
5			
6			
7			
8			
9			

25 If Christian, please indicate:

Protestant	
Catholic	

1	V114		69
2			

26 Strength of religious conviction

Very strong	
Strong	
Moderate	
Weak	
Very weak	
Not applicable	

1	V115		70
2			
3			
4			
5			
6			

27 Ethnical grouping
(for statistical purposes only)

White
Coloured
Indian
Black
Other

For office use only

1	V116		71
2			
3			
4			
5			

Should you be interested in receiving feedback with regard to the information that you provided, please complete the last page of the questionnaire and return it to us. A comparison of your responses with those of the remainder of the sample will then be sent to you in due course. However, a comparison will not be possible if this slip is sent separate of the questionnaire. Please take note that attaching this slip to your questionnaire will lead to a loss of anonymity. However, we still guarantee confidentiality.

Feedback slip: Study of Work

Please provide feedback with regards to the information provided to the following address:

You can, if you wish, attach this slip to your questionnaire. However, this will lead to a loss of anonymity. However, we still guarantee confidentiality. If you prefer to keep the slip separate from the questionnaire you can mail it to:

Prof. A B Boshoff
 Study of work
 p/a Central Records
 SASOL Ltd.
 ROSEBANK

APPENDIX B: INTRODUCTION LETTER

Dear Sir/Madam

RESEARCH ON WORK MOTIVATION AND COMMITMENT

(A research programme by the University of Pretoria)

You will agree that the success of organisations is largely dependent on the motivation and commitment of their employees. Many theories exist on motivation and commitment, however, they fail to provide an answer to the question: "Why are people motivated/committed at all?" More knowledge about why people are internally motivated and committed is imperative for organisations to optimise the effort and contribution of their employees. This is especially true for the more senior employees who set the tone and direction in any organisation. Such insights will not only contribute towards more successful motivational programmes, but also contribute towards creating managers who are intrinsically fulfilled and inspired.

The focus of this study is the sources of motivation and commitment of the more senior employees. As you fulfil a senior position in your company we shall appreciate it if you could provide us with information to carry out this study.

You are a member of a carefully chosen sample to participate in this research project, which has been endorsed by Sasol's top management. Please be so kind as to participate in this important research project. Your responses will be handled in the strictest confidence and it will be impossible to trace your response back to you. Responses will be used for research purposes only.

Your participation is vitally important to us as we rely on your willingness to assist us in our efforts to learn more about the sources of motivation and commitment of senior staff. We will sincerely appreciate it if you will give us about 35 minutes of your valuable time by completing the attached questionnaire. Please return the completed questionnaire to us, through the internal mail system, in the addressed envelope included with this letter.

It is highly appreciated that you are willing to take part in this research project by spending your valuable time in completing the attached questionnaire.

AB BOSHOFF
PROFESSOR

DR R VAN WYK

JJ DE KLERK
RESEARCHER

APPENDIX C. FIRST REMINDER

13 March, 2001

Dear participant

We recently sent a letter and a questionnaire to you on motivation and work commitment. In the letter we explained that you had been included in a randomly selected sample of senior employees who are to take part in a large research project on the sources of motivation and work commitment. We hope that the letter and questionnaire have reached you by now.

This letter is a further request to you to complete the questionnaire and to return it to us at your earliest convenience in the addressed envelope provided.

If you did not receive our previous letter and questionnaire or have any questions about the study, please contact us at one of the following addresses or telephone numbers.

By mail:

Prof AB Boshoff

Study of work

p/a Central Records

SASOL Ltd.

ROSEBANK

By E-mail:

aboshoff@orion.up.ac.za

By Fax:

012-3625194

By telephone:

083-2590096:

We are entirely in your hands as far as success of this project is concerned. Please assist us by completing the questionnaire.

Yours truly,

A B BOSHOFF

PROFESSOR

DR R VAN WYK

J J DE KLERK

RESEARCHER

APPENDIX D. SECOND REMINDER

20 March 2001

Dear participant

We recently sent a letter and a questionnaire on the sources of work motivation and commitment to you. In the letter we explained that you had been randomly selected to be a member of a sample of senior employees who are to take part in a research project on motivation and commitment that has been endorsed by Sasol's top management. We are therefore eager to obtain your responses to the questionnaire.

Up to now the response rate has been too low for scientific purposes. Unfortunately, to ensure confidentiality, we have no method of establishing who have returned their questionnaires. If you did return the questionnaire we thank you and ask you to please ignore this letter.

If up to now you have not had the time to complete the questionnaire we are asking you to do so, if at all possible. We are eager to obtain a representative sample as we feel that the information gathered will be valuable to both organisations and individuals. We are in your hands in our effort to provide useful information to everyone involved in the project.

If you no longer have a questionnaire, we include the questionnaire again, with the introductory letter explaining the purpose of the research, and an addressed envelope to use for returning the questionnaire to us.

We are really in your hands and will appreciate your help most sincerely.

Yours truly,

A B BOSHOFF
PROFESSOR

DR R VAN WYK

J J DE KLERK
RESEARCHER

APPENDIX E. FINAL REMINDER

30 March, 2001

Please ignore this letter if you have already completed the questionnaire on work motivation and commitment.

Dear participant

We recently sent a letter and a questionnaire to you on motivation and work commitment, followed by a second copy of the questionnaire, due to a low response rate, for the benefit of those who misplaced their copy. However, the response rate is still too low for scientific purposes. If up to now you have not had the time to complete the questionnaire we are requesting you one more time to do so, if at all possible.

In the previous letters we explained that you had been included in a randomly selected sample of senior employees who are to take part in a large research project on motivation and work commitment that has been endorsed by Sasol's top management. We are eager to obtain a representative sample as we feel that the information gathered will be valuable to both organisations and individuals.

If you need a copy of the questionnaire please contact us at one of the following addresses or telephone numbers.

By E-mail:

aboshoff@orion.up.ac.za

By Fax:

012-3625194

By telephone:

083-2590096

We are entirely in your hands as far as success of this project is concerned. Please assist us by completing the questionnaire.

Yours truly,

A B BOSHOFF
PROFESSOR

DR R VAN WYK

MIAS DE KLERK
RESEARCHER

APPENDIX F. FIGURE CAPTIONS PAGE

Figure 1. The argumentative flow chart as a research model.....	15
Figure 2. 3D model of complementary perspectives.....	28
Figure 3. Sverko's (1989) model of determinants of work-importance.	59
Figure 4. Cherrington's (1980) matrix of meaning in life and meaningful work.....	62
Figure 5. Randall and Cote's (1991) model of relationships between work commitment constructs.....	70
Figure 6. Morrow's (1993) model of work commitment relationships.....	71
Figure 7. Cohen's (1999) analysis of the Randall and Cote (1991) model.	72
Figure 8. Cohen's (2000) analysis of the Morrow (1993) model.	73
Figure 9. Cohen's (2000) analysis of the Randall and Cote (1991) model.	74
Figure 10. Sargent's (1973) primary findings.....	105
Figure 11. Integration of work motivation and work commitment models (Cohen, 1999, 2000; Sargent, 1973).	106
Figure 12. Integration model with "irrelevant" or "insignificant" relationships removed.....	107
Figure 13. Integration model with "outcomes" removed.....	108
Figure 14. Merging of three sub-models, with construct redundancy removed.	109
Figure 15. The merged model, enriched with theory.	109
Figure 16. Research proposition.....	110
Figure 17. The logic followed in selecting the sample.	116
Figure 18. Response rates per participating organisation.	118
Figure 19. Age distribution of the respondents.	120
Figure 20. Gender distribution.	121
Figure 21. Levels of job seniority of the subjects.	122
Figure 22. Highest qualifications obtained by the respondents.	123
Figure 23. Changes in fields of study, from initial studies, to latest studies.....	125
Figure 24. Changes in fields of employment, from initial employment to current.	126
Figure 25. Number of years with current employer.....	129
Figure 26. Subjects that feel they made substantial career changes or not.	130
Figure 27. Satisfaction with career progress.....	131
Figure 28. Respondents that will continue working if they won the lottery.....	132
Figure 29. Respondents that will continue with their present jobs if they won the lottery. ...	133
Figure 30. Actual working hours per week.....	135
Figure 31. Working hours per week within band widths.....	136
Figure 32. Official working hours required per week.....	137

Figure 33. Actual working hours versus official working hours required per week.	138
Figure 34. Respondents working regularly over weekends and holidays.	139
Figure 35. Typical number of vacation days that respondents take per year.	141
Figure 36. Typical number of vacation days taken per year (frequencies clustered).....	142
Figure 37. Respondents purposely making time to be alone.	142
Figure 38. Respondents finding it difficult not being engaged in specific activities.....	143
Figure 39. Respondents purposely making time for leisure.	144
Figure 40. Respondents purposely making time to spend with their family (or friends).....	145
Figure 41. Respondents actively taking part in a sport or a hobby.	146
Figure 42. Respondents being actively involved in community work or welfare work.....	147
Figure 43. Respondents contributing financially in a regular fashion to community work or welfare work.	147
Figure 44. Marital status of the respondents.....	148
Figure 45. Dominant source of social heritage, upbringing or culture.....	149
Figure 46. Ethnical groupings (race).....	150
Figure 47. Religious orientations.	151
Figure 48. Religious orientations: Christianity versus other religions.	151
Figure 49. Orientation of Christians: Protestant versus Catholic.	152
Figure 50. Strength of religious convictions.	153
Figure 51. Eigenvalues higher than 1.00, all items included.....	181
Figure 52. Three factor solution with Eigenvalues higher than 1.00.	184
Figure 53. Theoretical Structural Equations model of the postulated relationships.	223
Figure 54. Empirically derived Structural Equations Model of relationships	225
Figure 55. A new postulated model based on the results of this research, integrated with previous research and existing theories.....	246

APPENDIX G. LIST OF TABLES

Table 1. Instruments for measuring meaning in life	42
Table 2. Positive effects as outcomes of having found meaning or purpose in life	44
Table 3. Negative effects of a lack of meaning	46
Table 4. Sources of meaning according to various researchers	49
Table 5. Psychological functions of work in human life according to different studies.....	56
Table 6. Main theories of motivation	84
Table 7. Evaluation of main work motivation theories.....	87
Table 8. Sources of motivation model (Leonard et al., 1995a)	88
Table 9. An existential source of motivation	100
Table 10. Questionnaire response rates	117
Table 11. Age distribution of the respondents	119
Table 12. Gender distribution.....	121
Table 13. Hierarchical, seniority levels of the sample.....	122
Table 14. Highest qualifications obtained by respondents.....	123
Table 15. Changes in fields of study (change in interest) over years	125
Table 16. Changes in fields of employment (careers) over years.....	125
Table 17. Years with current employer	128
Table 18. Subjects that feel they made substantial career changes.....	130
Table 19. Satisfaction with career progress	131
Table 20. Responses to the lottery question.....	132
Table 21. Actual working hours per week	134
Table 22. Actual working hours per week within band widths.....	136
Table 23. Official working hours required per week.....	137
Table 24. Respondents that regularly work over weekends or holidays.....	139
Table 25. Typical number of vacation days that respondents report taking per year	140
Table 26. Typical number of vacation days taken per year (frequencies clustered).....	141
Table 27. Respondents that purposely making time to be alone	142
Table 28. Respondents finding it difficult not being engaged in specific activities.....	143
Table 29. Respondents that purposely make time for leisure	144
Table 30. Respondents purposely making time to spend with their family (or friends).....	145
Table 31. Respondents actively taking part in a sport or a hobby	146
Table 32. Respondents being actively involved in community work or welfare work.....	146
Table 33. Respondents contributing financially to community work or welfare work	147
Table 34. Marital status of the respondents	148

Table 35. Dominant source of social heritage, upbringing or culture	149
Table 36. Ethnical groupings (race)	150
Table 37. Religious orientations	151
Table 38. Orientation of Christians: Protestant versus Catholic	152
Table 39. Strength of religious convictions	153
Table 40. Data for Framework and Fulfilment scales (Battista & Almond, 1973)	156
Table 41. Eigenvalues with all items included in Principal Factor Analysis	180
Table 42. Rotated Factor Loading Pattern for a one factor solution (first round)	182
Table 43. Eigenvalues with items loading < 0.25 omitted	184
Table 44. Rotated Factor Loading Pattern for the three-factor solution	185
Table 45. The intercorrelations of the factors for a three-factor solution	186
Table 46. One-factor structure of LRI (Battista & Almond, 1973)	188
Table 47. Factor Loading for the one-factor solution of Kanungo's (1982) WIQ	189
Table 48. Factor Loading for the one-factor structure of Kanungo's (1982) JIQ	190
Table 49. Factor Loading for Carson and Bedeian's (1984) CCS	191
Table 50. Intercorrelations Carson and Bedeian's (1984) Career Commitment Scale	191
Table 51. Factor Loading Vandewalle's (1997) Goal Orientation Measure	192
Table 52. Factor Loading Ho and Lloyds' (1984) Australian Work Ethic Scale	193
Table 53. Factor Loading Warr, Cook and Wall's (1979) Intrinsic Motivation Measure	194
Table 54. New groupings of classes within certain discrete variables	196
Table 55. Conformance to the requirements of normal distributions	198
Table 56. Comparative data on levels of meaning scores in two samples	199
Table 57. Discrete variables that showed significant relationship to meaning	201
Table 58. Biographic/lifestyle variables that did not show variance with meaning	203
Table 59. Relationships of continuous biographical/lifestyle variables with meaning	205
Table 60. Biographical/lifestyle variables with significant relationships with meaning	206
Table 61. Biographical/lifestyle variables without significant relationship with meaning	207
Table 62. Results from Spearman's Rho Correlation Coefficients of factor variables	211
Table 63. Spearman's Rho Correlations of meaning with the dependent variables	212
Table 64. Correlation Coefficients of meaning with dependent variables	215
Table 65. Stepwise Multiple Regression Analysis with work involvement "forced" into the regression model	218
Table 66. Stepwise Multiple Regression Analysis with work involvement not "forced" into the regression model	220
Table 67. Partial contribution of meaning to predict dependent variables	222
Table 68. Indices of the empirical derived SEM model	226