

ACADEMICA

ISSN (online) : 2249-7137

ACADEMICA

An International
Multidisciplinary Research
Journal



Published by

South Asian Academic Research Journals

A Publication of CDL College of Education, Jagadhri
(Affiliated to Kurukshetra University, Kurukshetra, India)

ACADEMICIA

An International Multidisciplinary Research Journal

ISSN (online) : 2249 –7137

Editor-in-Chief : Dr. B.S. Rai

Impact Factor : SJIF = 5.099

Frequency : Monthly

Country : India

Language : English

Start Year : 2011

Indexed/ Abstracted : Ulrich's Periodicals Directory, ProQuest, U.S.A.
EBSCO Discovery, Summon(ProQuest),
Google Scholar, CNKI Scholar, ISRA-JIF, GIF, IJIF

E-mail id: academicia@saarj.com**VISION**

The vision of the journals is to provide an academic platform to scholars all over the world to publish their novel, original, empirical and high quality research work. It propose to encourage research relating to latest trends and practices in international business, finance, banking, service marketing, human resource management, corporate governance, social responsibility and emerging paradigms in allied areas of management including social sciences , education and information & technology. It intends to reach the researcher's with plethora of knowledge to generate a pool of research content and propose problem solving models to address the current and emerging issues at the national and international level. Further, it aims to share and disseminate the empirical research findings with academia, industry, policy makers, and consultants with an approach to incorporate the research recommendations for the benefit of one and all.

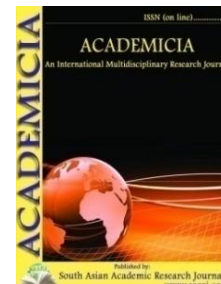


Published by: South Asian Academic Research Journals

ACADEMICIA:

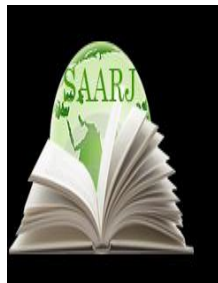
An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)



SR. NO.	PARTICULAR	PAGE NO	DOI NUMBER
1.	SOCIO – ECONOMIC CONDITION OF RURAL INDIA Aseen Khan	1-7	10.5958/2249-7137.2016.00035.5
2.	EFFECT OF EMOTIONAL MATURITY ON ACADEMIC CHEATING AMONG SENIOR SECONDARY STUDENTS Dr. Umender Malik & Rahul Kant	8-18	10.5958/2249-7137.2016.00036.7
3.	EXCESSIVE LIGHT IS ANOTHER FORM OF POLLUTION ON THE ENVIRONMENT P Muralidhar & V Srihari	19-25	10.5958/2249-7137.2016.00037.9
4.	ESTIMATING THE IMPACT OF SIZE OF THE FIRM ON NET OPERATING CYCLE AND ITS ELEMENTS IN THE CONTEXT OF INDIAN MANUFACTURING INDUSTRIES Dr.Vikas Kumar Choubey	26-41	10.5958/2249-7137.2016.00038.0
5.	VITAMIN D AND NON-SKELETAL HEALTH Dr. Afifa Jahan	42-84	10.5958/2249-7137.2016.00039.2
6.	A STUDY ON CUSTOMER PERCPETION OF POSTAL SAVINGS OF ERNAKULAM DISTRICT Naseema C M	85-94	10.5958/2249-7137.2016.00040.9
7.	ESTIMATION OF MULTIPLE MODELS THROUGH A SINGLE REGRESSION	95-100	10.5958/2249-7137.2016.00041.0

	M.Venkataramana, Dr.M.Subbarayudu M.Rajani & Dr. K.N. Sreenivasulu		
8.	SPECTRUM SENSING IN COGNITIVE RADIO NETWORKS USING THE ENERGY DETECTION TECHNIQUE B.Ramadasu & Suresh Pabboju	101-108	10.5958/2249-7137.2016.00042.2
9.	WORKPLACE SPIRITUALITY- TRANSFORMING THE WORKPLACE INTO A SPIRITUAL ONE Dr. K.Vinithi	109-113	10.5958/2249-7137.2016.00043.4
10.	EXPLORING THE TALENT AND EMPOWERING THE ENTREPRENEURIAL TOUCH OF THE WOMEN: A STUDY OF KUDUMBASHREE UNITS IN KERALA Mohammad Ashraf Ali & Muhammed As-had V P,	114-122	10.5958/2249-7137.2016.00044.6
11.	ACADEMIC ACHIEVEMENT AND SOCIAL SUPPORT AMONG POSTGRADUATE STUDENTS: AN EMPIRICAL STUDY Dr. Ritu Rani & Shashi	123-132	10.5958/2249-7137.2016.00045.8
12.	COOPERATIVE SPECTRUM SENSING IN COGNITIVE RADIO NETWORKS USING RANDOM ADAPTIVE ACCESS B.Ramadasu & Suresh Pabboju	133-142	10.5958/2249-7137.2016.00046.X
13.	IMPACT OF FAMILY CLIMATE ON THE ACADEMIC ACHIEVEMENT OF SENIOR SECONDARY STUDENTS Dr. Sadaf Jafri	143-153	10.5958/2249-7137.2016.00047

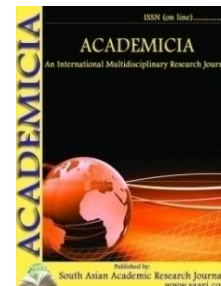


Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)

DOI NUMBER: **10.5958/2249-7137.2016.00035.5**

SOCIO – ECONOMIC CONDITION OF RURAL INDIA

Aseen Khan *

*Lecturer in Economics
Govt. College Govindgarh, Alwar

ABSTRACT

'India lives in villages' said Mahatma Gandhi, many years ago. Today, Socio – political point of view India has been divided into two parts - one is Urban and another is Rural India (Bharat). I attempt state the socio-economic conditions of Rural India which have 833.0 million people out of 1210 million total population of India. The Rural India lives in 640867 villages as per Census 2011. I have also highlighted the difficulties of agrarian population, social and gender discrimination, poverty and other indicators of development in this paper.

KEYWORDS: Rural india, Agriculture, , Discrimination, Literacy, Poverty.

REFERENCES

1. Kurian, N.J. (2007). Widening economic & social disparities : Implications for India. Review Article, Indian J Med Res 126, October 2007, pp 374 – 380.
2. Kaur, Ramandeep (2013). Causes of rural poverty and Anti poverty schemes in India.
3. Swaminathan, M.S.(2015). Impact of Climate Change and Sustainable Agriculture. Yojana, December, 2015
4. Khan, Mohammad Hamza (2015) /Alwar/ Indian Express, November 15, 2015.
5. Das, Dinesh & Pathak, Minakshree (2012). The Growing Rural-Urban Disparity in India: Some Issues. International Journal of Advancement in Research & Technology, Volume 1, Issue 5, October – 2012.
6. Shukla, Rajesh (2014). Rural India, a reality check. The Financial Express, August 14, 2015.
7. Jansatta. Hindi News Paper, National ,Front page October 20, 2014

8. Chatejee, Somnath (2007). The development challenges in rural India. The Hindu April 4,2007.
9. Government of India (2011). Census Report, New Delhi.
10. Singh, Ashutosh Kumar. Badlta Gaon, Ubharta Bharat. Kurukshetra Magezine, December, 2015.
11. Socio Economic Caste Census (SECC) for Rural India (2011). Government of India, PIB July3, 2015.



Published by: South Asian Academic Research Journals

ACADEMICIA:
An International
Multidisciplinary
Research Journal

(A Double Blind Refereed & Reviewed International Journal)



DOI NUMBER: 10.5958/2249-7137.2016.00036.7

**EFFECT OF EMOTIONAL MATURITY ON ACADEMIC CHEATING
AMONG SENIOR SECONDARY STUDENTS**

Dr. Umender Malik*; Rahul Kant**

*Assistant Professor-II,
Department of Education, M.D.U., Rohtak, INDIA.

**Ph.D. Research Scholar,
Department of Education, M.D.U., Rohtak, INDIA.

ABSTRACT

The present study was undertaken to study the effect of emotional maturity on academic cheating among senior secondary students. Academic cheating was treated as dependent variable whereas emotional maturity was treated as independent variable. Descriptive survey method was used for the present study. Random sampling technique was used to select the sample for the present study. The sample comprised of 600 senior secondary students of private schools. Academic cheating scale by Kalia and Kirandeep (2011) and Emotional maturity scale by Singh and Bhargava (1990) were used to study the effect of emotional maturity on academic cheating among senior secondary students. Mean, Standard deviation and 't' test were used to analyse the data. The findings of the study revealed that significant difference exists between the academic cheating of senior secondary students in relation to their emotional maturity. It was also found that significant difference exists between the academic cheating of male, female, rural and urban senior secondary students in relation to their emotional maturity

KEYWORDS: Academic Cheating, Emotional Maturity

REFERENCES:

1. Arthur Lovejoy, *Eco-criticism*: The nature of Nature in Literary theory and Practice.
2. Aurobindo.Sri. Collected Poems, Pondicherry: Sri Aurobindo Publications. 2010. Print.

3. Barry, Peter. "Eco-criticism" Beginning Theory: An Introduction to Literary and Cultural Theory. 3rd ed. Manchester: 2009.
4. Bate, J. (1991). Romantic ecology: Wordsworth and the environmental tradition. London: Routledge.
5. Coupe, Lawrence . The Green Studies Reader: From Romanticism to Eco-criticism. London: Routledge, 2000.
6. Estok, Simon C (2001) "A report card on Eco-criticism". AUMLA 96 (November) 200-38.
7. Garrard, Greg. Eco-criticism, London and New York: Routledge, 2004.
8. Glotfelty, Cheryll and Harold Fromm (Eds) The Eco-criticism Reader: Landmarks in Literary Ecology. Athens and London: university of Georgia, 1996.
9. Guha, Ramachandra, ed. Social Ecology. New Delhi and other places: Oxford UP, 2nd impression, 2000.
10. Hartman, G. H. (1987). Wordsworth's poetry, 1787-1814. Massachusetts: Harvard University Press.
11. Henry David Thoreau. Walden 1854.
12. Huggan, Graham and Tiffin, Helen. Post colonial Eco-criticism. 2000, Routledge.
13. Jean. Arnold, Introduction to Eco-criticism, google.com, ASLE.
14. Murphy, Patrick. Farther Afield in the Study of Nature-Oriented Literature. Charlottesville and London: University Press of Virginia, 2000.
15. P.D. Sharma, Ecology and Environment, Meerut: Rastogi publications, page 1 and 2.
16. Patrick D. Murphy. Eco-critical explorations in literary and cultural studies. 2010, Lexington Books.
17. Rueckert, William. "Literature and Ecology": An Experiment in Eco-criticism. Iowa Review 9.1 (1978): 71-86
18. Slovic, Scott. Literature and the Environment, Greenwood, 2004.
19. Todd A. Borlik Eco-criticism and Early Modern English Literature (2011), Routledge, New York.
20. Zapf, Hubert. "Literary Ecology and the Ethics of Texts". New Literary History 39.4 (2008): 847-868.

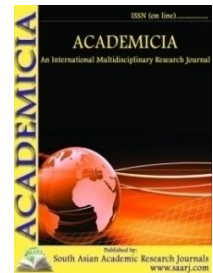


Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)

DOI NUMBER: **10.5958/2249-7137.2016.00037.9**

EXCESSIVE LIGHT IS ANOTHER FORM OF POLLUTION ON THE ENVIRONMENT

P Muralidhar *; V Srihari **

*National Institute of Construction Management and Research (NICMAR)
Hyderabad, INDIA.

**National Institute of Construction Management and Research (NICMAR)
Hyderabad, INDIA.

ABSTRACT

The every activity of man leads to pollution. All these activities pollute the environment in different ways. The contamination of air, water, soil and noise are treated as major pollution in this biosphere. In addition to different types of pollution a new kind of pollution has been added i.e light pollution. This type of pollution occurs because of using artificial lighting in the night time, no darkness in the night causes impact on the bio diversity and ecosystem results the lot of disturbance in bio diversity life cycle. This effects the human health directly in terms sleep disorders and causing various other hazards on many species, effects the natural body cycles called circadian rhythms. The present paper describes many causes and effects of excessive usage of light in the public areas because of urbanization, high level of road transport activities in the night time.

KEYWORDS: Light pollution, environment, glare, road transportation, LED lighting.

REFERENCES

1. A Statement on Astronomical Light Pollution and Light Trespass, IES CP-46, Illuminating Engineering Society of North America, 1985.
2. IES Lighting Handbook, 8th ed., Reference and Application, Illuminating Engineering Society of North America, New York, 1993.
3. Lewin, PhD, "Light Trespass: Problems and Directions", Lighting Design and Applications, IES, New York, June 1992.

4. Crawford, David, PhD, Statement on Light Trespass (Draft), March 1991. 4. Batinsey, John, "Light Pollution: The Neglected Problem", New Jersey Municipalities, May 1995
5. Finch, D.M., "Atmospheric Light Pollution", Journal of the IES, Volume 7, No.2, January 1978.
6. Raven, J. A., & Cockell, C. S. (2006). Influence on photosynthesis of starlight, moonlight, planetlight, and light pollution (reflections on photosynthetically active radiation in the universe). *Astrobiology*, 6(4), 668-675. doi: 10.1089/ast.2006.6.668
7. Chepesiuk, R. (2009). Missing the dark: health effects of light pollution. *Environ Health Perspect*, 117(1), A20-27.



Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)

DOI NUMBER: **10.5958/2249-7137.2016.00038.0**

ESTIMATING THE IMPACT OF SIZE OF THE FIRM ON NET OPERATING CYCLE AND ITS ELEMENTS IN THE CONTEXT OF INDIAN MANUFACTURING INDUSTRIES

Dr Vikas Kumar Choubey*

*Assitant professor,
Department of industrial & production engineering,
IERT Allahabad (Engineering Degree Division).

ABSTRACT

Net operating cycle (NOC) is very important in measuring the overall operational efficiency of the firm. The elements of Net operating cycle [i.e. Inventory Conversion Period (ICP), Accounts Receivable Period (ARP) and Accounts Payable Period (APP)] also represent efficiency related to in-house and out-bound activities of the firm. NOC metric is an important measure as it bridges across inbound material activities with suppliers, through manufacturing operations, and the outbound logistics and sales activities with customers. In this study an effort has been made to find the impact of NOC and its components (i.e. ARP, ICP and APP) on size of the firm by investigating a sample of 4322 manufacturing firms over a period of 10 years (i.e. 2002-2003 to 2011-2012).

KEYWORDS: *Net Operating Cycle, Inventory Conversion Period, Accounts Receivable Period, Accounts Payable Period, Size*

REFERENCES:

Aurand, S., & Miller, P., (1997). The Operating Curve: A Method to Measure and Benchmark Manufacturing Line Productivity. IEEE/SEMI Advanced Semiconductor Manufacturing Conference, 391-397.

Beamon, B.M. (1999). Measuring supply chain performance. International Journal of Operations & Production Management, 19(3), 275-92.

Berryman, J. (1983). Small business failure and bankruptcy: a survey of the literature, *European Small Business Journal*, 1(4), 47-59.

Bloomsbury Business Library - Business & Management Dictionary 2007, p. 1383.

Chen, H., Murray, F., & Owen, W. (2005). What actually happened to the inventories of American companies between 1981 and 2000? *Management Science*, 51(7), 1015-31.

Chittenden, F., Poutziouris, P. & Michaelas, N. (1998, December). Financial and Working Management Practise in UK SMEs, European Regional Development Fund Publication, Manchester Business School, Manchester, 27.

Churchill, N., & Mullins, J. (2001, May). How fast can your company afford to grow? *Harvard Business Review*, 135–149. Daugherty, P.J., Richey, R.G., Roath, A.S., Min, S., Chen, H., Arndt, A.D., and Genchev, S.E. (2006). Is collaboration paying off for firms? *Business Horizons*, 49(1), 61–70.

Deloof, M. (2003). Does Working Capital Management Affect Profitability of Belgian Firms? *Journal of Business, Finance and Accounting*, 30(3&4), 573-587.

Dunn, P., & Cheatham, L. (1993). Fundamentals of small business financial management for start-up, survival, growth, and changing economic circumstances. *Managerial Finance*, 19(8), 1-13.

Edward, C. (2009). Managing Capital Flows in Supply Chains of Fortune 500 Manufacturing Companies. *California Journal of Operations Management*, 7(1), 1-10.

Eljelly, Abuzar M..A. (2004). Liquidity Profitability Trade off: An Empirical Investigation in an Emerging Market. *International Journal of Commerce and Management*, 14(2), 48-61.

Elliott, A. C., & Woodward, W. A. (2007). Statistical analysis quick reference guidebook with SPSS examples. London: Sage.

Farris, M.T., & Hutchison, P.D. (2002). Cash-to-cash: the new supply chain management metric. *International Journal of Physical Distribution & Logistics Management*, 32(4), 288-298.

Gallinger, G. (1997). The current and quick ratios: do they stand up to scrutiny? Drop the current ratio—pick up the C2C. *Business Credit*, 99(5), 22-23.

Gaur, V., Fisher, M.L., & Raman, A. (2005). An econometric analysis of inventory turnover performance in retail services. *Management Science*, 51(2), 181-94.

Gomm, M.L. (2010). Supply chain finance: applying finance theory to supply chain management to enhance finance in supply chains. *International Journal of Logistics: Research and Applications*, 13(2), 133–142.

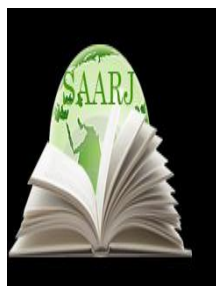
Hesford, J.W., Lee, S., Van der Stede, W., & Young, M. (2007). Management accounting: A bibliometric study. *Handbook of Management Accounting Research*, 1, Elsevier, The Netherlands, 3-26.

Keown, A. J., Martin, J. D., Petty, J. W., & Scott, D. F., (2003). *Foundations of Finance*, Pearson Education, New Jersey.

- Ketchen, D.J., Rebarick, W., Hult, G.T.M., & Meyer, D. (2008). Best value supply chains: a key competitive weapon for the 21st century. *Business Horizons*, 51(3), 235–243.
- Lalonde, B. (2000). Making Finance Take Notice. *Supply Chain Management Review*, 4 (5), pp. 11-12.
- Lancaster, C., Stevens, J.L., & Jennings, J.A. (1998). Corporate liquidity and the significance of earnings versus cash flow. *Journal of Applied Business Research*, 14(4), 27-38.
- Lazaridis, I., & Tryfonidis, D. (2006). Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange. *Journal of Financial Management and Analysis*, 19(1), 26-35.
- Lee, H.L. (2004). The triple-A supply chain. *Harvard Business Review*, 82(10), 102–112.
- Lo, N. (2005). Go with the flow, available at: www.cfoasia.com/archives/200503-02.htm.
- Moers, F. (2007). Doing archival research in management accounting. *Handbook of Management Accounting Research*, 1, Elsevier, The Netherlands, 399-413.
- Moss, J.D., & Stine, B. (1993). Cash conversion cycle and firm size: a study of retail firms. *Managerial Finance*, 19(8), 25-38.
- Otto, A., & Obermaier, R. (2009). How can supply networks increase firm value? A causal framework to structure the answer. *Logistics Research*, 1(3–4), 131–148.
- Padachi, K. (2006). Trends in working capital management and its impact on firms' performance: an analysis of Mauritian small manufacturing firms. *International Review of Business Research Papers*, 2(2), 45-58.
- Randall, W. S., & Farris II, M. T. (2009). Supply chain financing: using cash-to-cash variables to strengthen the supply chain. *International Journal of Physical Distribution & Logistics Management*, 39(8), 669 – 689.
- Reason, T. (2008). Preparing your company for recession, *CFO Magazine*, available at: www.cfo.com/article.cfm/10600055.
- Saccurato, F. (1994). The study of working capital. *Business Credit*, 96 (2), 36-7.
- Schilling, G. (1996). Working capital's role in maintaining corporate liquidity. *TMA Journal*, 16(5), 4-8.
- Shin, H., & Soenen, L. (1998). Efficiency of Working Capital Management and Corporate Profitability. *Financial Practice and Education*, 8, 37-45.
- Slater, D. (2000). By the numbers. *CIO Magazine*, 13(10), 38.
- Soenen, L.A. (1993). Cash conversion cycle & corporate profitability. *Journal of Cash Management*, 13(4), 53-58.
- Stewart, G. (1995). Supply chain performance benchmarking study reveals keys to supply chain excellence, *Logistics Information Management*, 8(2), 38-45.
- Teruel Garcia, P.J., & Solano Martinez, P. (2007). Effects of working capital management on SME profitability. *International Journal of Managerial Finance*, 3(2), 164–177.

Uyar, A. (2009). The Relationship of Cash Conversion Cycle with Firm Size and Profitability: An Empirical Investigation in Turkey. *International Research Journal of Finance and Economics*. 24, 186-192.

Wagner, S.M. (2008). Cost management practices for supply chain management: an exploratory analysis. *International Journal of Services and Operations Management*, 4(3), 296–320.

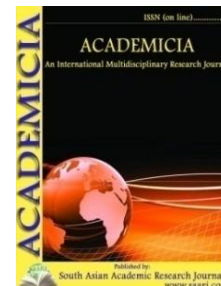


Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)



DOI NUMBER: 10.5958/2249-7137.2016.00039.2

VITAMIN D AND NON-SKELETAL HEALTH

Dr. Afifa Jahan*

*Department of Food and Nutrition
Post Graduate & Research CentreProfessor Jayashankar Telangana State Agricultural University,
Rajendranagar, Hyderabad- INDIA.

ABSTRACT

Vitamin D deficiency is pandemic, yet it is the most under-diagnosed and under-treated nutritional deficiency in the world. Vitamin D deficiency is widespread in individuals irrespective of their age, gender, race, socio-economic status and geography. However, vitamin D deficiency is widely prevalent despite plentiful sunshine even in tropical countries like India. Vitamin D deficiency has a bearing not only on skeletal but also on extra skeletal diseases. Owing to its multifarious implications on health, the epidemic of vitamin D deficiency in India is likely to significantly contribute to the enormous burden on the healthcare system of India. Vitamin D can play a role in decreasing the risk of many chronic illnesses, including common cancers, autoimmune diseases, infectious diseases, and cardiovascular disease.

KEYWORDS: *Vitamin D, infectious diseases, cardiovascular disease, epidemic*

REFERENCES:

- Aasheim, E. T., Hofso, D., Hjelmessaeth, J., Birkeland, K. I and Bohmer, T. 2008. Vitamin status in morbidly obese patients: a cross-sectional study. *American Journal of Clinical Nutrition*. 87: 362–369.
- Abba, K., Sudarsanam, T. D., Grobler, L and Volmink, J. 2008. Nutritional supplements for people being treated for active tuberculosis. *Cochrane Database of Systematic Reviews*. (4): CD006086, 1-33.

Abbas, S., Linseisen, J and Chang-Claude, J. 2007. Dietary vitamin D and calcium intake and premenopausal breast cancer risk in a German case-control study. *Nutrition and Cancer*. 59: 54-61.

Ahmed, S. F., Franey, C., McDevitt, H., Somerville, L., Butler, S., Galloway, P., Reynolds, L., Shaikh, M. G and Wallace, A. M. 2011. Recent trends and clinical features of childhood vitamin D deficiency presenting to a children's hospital in Glasgow. *Archives of Disease in Childhood*. 96: 694-696.

Ahonen, M. H., Tenkanen, L., Teppo, L., Hakama, M and Tuohimaa, P. 2000. Prostate cancer risk and prediagnostic serum 25-hydroxyvitamin D levels (Finland). *Cancer Causes Control*. 11: 847-852.

Anderson, J. L., May, H. T., Horne, B. D., Bair, T. L., Hall, N. L., Carlquist, J. F., Lappe, D. L and Muhlestein, J. B. 2010. Relation of vitamin D deficiency to cardiovascular risk factors, disease status, and incident events in a general healthcare population. *American Journal of Cardiology*. 106 (7): 963-968.

Andjelkovic, Z., Vojinovic, J., Pejnovic, N. M., Popovic, Dujic, A. Mitrovic, D., Pavlica, L. J and Stefanovic, D. 1999. Disease modifying and immunomodulatory effects of high dose 1 α (OH) D₃ in rheumatoid arthritis patients. *Clinical and Experimental Rheumatology*. 17 (4): 453-456.

Anglin, R. E., Samaan, Z., Walter, S. D and McDonald, S. D. 2013. Vitamin D deficiency and depression in adults: systematic review and meta-analysis. *British Journal of Psychiatry*. 202: 100-107.

Armstrong, D. J., Meenagh, G. K., Bickle, I., Lee, A. S., Curran, E. S and Finch, M. B. 2007. Vitamin D deficiency is associated with anxiety and depression in fibromyalgia. *Clinical Rheumatology*. 26 (4): 551-554.

Arnson, Y., Itzhaky, D and Mosseri, M. 2013. Vitamin D inflammatory cytokines and coronary events: a comprehensive review. *Clinical Reviews in Allergy and Immunology*. 45 (2): 236-247.

Balton, C., Griffith, L. E., Striffler, L., Henderson, M., Patterson, C., Heckman, G., Llewellyn D. J and Raina, P. 2012. Vitamin D, cognition, and dementia: a systematic review and meta-analysis. *Neurology*. 79 (13): 1397-1405.

Bartels, L. E., Jorgensen, S. P., Bendix, M., Hvas, C. L., Aqnholt, J., Aqger, R and Dahlerup, J. F. 2013. 25-Hydroxyvitamin D₃ modulates dendritic cell phenotype and function in Crohn's disease. *Inflammo-pharmacology*. 21 (2): 177-186.

Bertone-Johnson, E. R., Chen, W. Y., Holick, M. F., Hollis, B. W., Colditz, G. A., Willett, W. C and Hankinson, S. E. 2005. Plasma 25-hydroxyvitamin D and 1, 25-dihydroxyvitamin D and risk of breast cancer. *Cancer Epidemiology Biomarker Previews*. 14: 1991-1997.

Bischoff-Ferrari, H. A., Giovannucci, E., Willett, W. C., Dietrich, T and Dawson-Hughes, B. 2006. Estimation of optimal serum concentrations of 25-hydroxyvitamin D for multiple health outcomes. *American Journal of Clinical Nutrition*. 84: 18-28.

Bjelakovic, G., Gluud, L. L., Nikolova, D., Whitfield, K., Wetterslev, L., Simonetti, R. G., Bjelakovic, M and Gluud, C. 2011. Vitamin D supplementation for prevention of mortality in adults. *Cochrane Database Systematic Reviews*. (7): CD007470-7482.

Blazer, D. G., Umbach, D. M., Bostick, R. M and Taylor, J. A. 2000. Vitamin D receptor polymorphisms and prostate cancer. *Molecular Carcinogenesis*. 27 (1): 18–23.

Bolland, M. J., Grey, A., Gamble, G. D and Reid, I. R. 2011. Calcium and vitamin D supplements and health outcomes: a reanalysis of the Women's Health Initiative (WHI) limited access data set. *American Journal of Clinical Nutrition*. 94 (4): 1144-1149.

Bretherton-Watt, D., Given-Wilson, R., Mansi, J. L., Thomas, V., Carter, N and Colston, K. W. 2001. Vitamin D receptor gene polymorphisms are associated with breast cancer risk in a UK Caucasian population. *British Journal of Cancer*. 85 (2): 171–175.

Brewer, L. C., Michos, E. D and Reis, J. P. 2011. Vitamin D in atherosclerosis, vascular disease, and endothelial function. *Current Drug Targets*. 12: 54–60.

Buell, J. S and Dawson-Hughes, B. 2008. Vitamin D and neurocognitive dysfunction: preventing “D” ecline? *Molecular Aspects of Medicine*. 29: 415– 422.

Buell, J. S., Dawson-Hughes, B., Scott, T. M., Weiner, D. E., Dallal, G. E., Qui, W. Q., Bergethon, P., Rosenberg, I. H., Folstein, M. F., Patz, S., Bhadelia, R. A and Tucker, K. L. 2010. 25-Hydroxyvitamin D, dementia, and cerebrovascular pathology in elders receiving home services. *Neurology*. 74: 18–26.

Burgaz, A., Orsini, N., Larsson, S. C and Wolk, A. 2011. Blood 25-hydroxyvitamin D concentration and hypertension: a meta analysis. *Journal of Hypertension*. 29: 636–645.

Burton, J. M., Kimball, S., Vieth, R., Bar-Or, A., Dosh, H. M., Cheung, R., Gagne, D., D’Souza, C., Ursell, M and O’Connor, P. 2010. A phase I/II dose-escalation trial of vitamin D3 and calcium in multiple sclerosis. *Neurology*. 74 (23): 1852-1859.

Buttiglieri, C., Monagheddu, C., Petroni, P and Berruti, A. 2011. Prognostic role of vitamin D status and efficacy of vitamin D supplementation in cancer patients: a systematic review. *Oncologist*. 16 (9): 1215-1227.

Camargo, C. A. Jr., Ingham, T., Wickens, K., Thadhani, R., Silver, K. M., Epton, M. J., Town, G. T., Pattemore, P. K and Espnola, J. A. 2011. Cord-blood 25-hydroxyvitamin D levels and risk of respiratory infection, wheezing, and asthma. *Pediatrics*. 127 (1): e180-e187.

Cannell, J. J., Vieth, R., Umhau, J. C., Holick, M. F., Grant, W. B., Madronich, S and Garland, C. F and Giovannucci, E. 2006. Epidemic influenza and vitamin D. *Epidemiology and Infection*. 134: 1129–1140.

Cantorna, M. T and Mahon, B. D. 2004. Mounting evidence for vitamin D as an environmental factor affecting autoimmune disease prevalence. *Experimental Biology and Medicine*. 229 (11): 1136-1142.

Chaudhuri, J. R., Mridula, K. R., Anamika, A., Boddu, D. B., Misra, P. K., Lingaiah, A., Balaraju, B and Bandaru, V. S. 2013. Deficiency of 25-hydroxyvitamin d and dyslipidemia in Indian subjects. *Journal of Lipids*. 2013: 623420.

Chowdhury, R., Stevens, S., Ward, H., Chowdhury, S., Sajjad, A and Franco, O. H. 2012. Circulating vitamin D, calcium and risk of cerebrovascular disease: a systematic review and meta-analysis. *European Journal of Epidemiology*. 27: 581–591.

Chung, M., Lee, J., Terasawa, T., Lau, J and Trikalinos, T. A. 2011. Vitamin D with or without calcium supplementation for prevention of cancer and fractures: an updated meta-analysis for the U.S. Preventive Services Task Force. *Annals Internal Medicine*. 155 (12): 827-838.

Cigolini, M., Iagulli, M. P., Miconi, V., Galiotto, M., Lombardi, S and Targher, G. 2006. Serum 25-hydroxyvitamin D3 concentrations and prevalence of cardiovascular disease among type 2 diabetic patients. *Diabetes Care*. 29 (3): 722-724.

Daga, R. A., Laway, B. A., Shah, Z. A., Mir, S. A., Kotwal, S. K and Zargar, A. H. 2012. High prevalence of vitamin D deficiency among newly diagnosed youth-onset diabetes mellitus in north India. *Arq Bras Endocrinology Metabolism*. 56, 423-428.

Dankner, R., Chetrit, A., Shanik, M. H., Raz, I and Roth, J. 2009. Basal-state hyperinsulinemia in healthy normoglycemic adults is predictive of type 2 diabetes over a 24-year follow-up: A preliminary report. *Diabetes Care*. 32: 1464–1466.

David, J., Llewellyn, Iain, A., Lang, Kenneth, M., Langa and Melzer, D. 2011. Vitamin D and Cognitive Impairment in the Elderly U.S. Population. *Journal of gerontology*. Vol.66A (1): 59-65.

De-Regil, L. M., Palacios, C., Ansary, A., Kulier, R and Pena-Rosas, J. P. 2012. Vitamin D supplementation for women during pregnancy. *Cochrane Database Systematic Reviews*. (2): CD008873.

Doherty, T. M., Tang, W., Dascalos, S., Watson, E. K., Demer, L. L., Shavelle, M. R and Detrano, C. R. 1997. Ethnic origin and serum levels of 1a, 25-dihydroxyvitamin D3 are independent predictors of coronary calcium mass measured by electron-beam computed tomography. *Circulation*. 96 (5): 1477-1481.

Dong, Y., Stallmann-Jorgensen, I. S., Pollock, N. K., Harris, R. A., Keeton, D., Huang, Y., Li, K., Bassali, R., Guo, D. H., Thomas, J., Pierce, G. L., White, J., Holick, M. F., Zhu, H. 2010. A

16-week randomized clinical trial of 2000 international units daily vitamin D3 supplementation in black youth: 25- hydroxyvitamin D, adiposity, and arterial stiffness. *Journal of Clinical Endocrinology and Metabolism*. 95 (10): 4584-4591.

Durup, D., Jorgensen, H. L., Christensen, J., Schwarz, P., Heegaard, A. M and Lind, B. 2012. A reverse J-shaped association of allcause mortality with serum 25-hydroxyvitamin D in general practice: the CopD study. *Journal of Clinical Endocrinology and Metabolism*. 97 (8): 2644-2652.

Eisen, A., Lev, E., Iakobishvilli, Z., Porter, A., Brosh, D., Hasdai, D and Mager, A. 2014. Low Plasma Vitamin D Levels and Muscle-Related Adverse Effects in Statin Users. *Israel medical association Journal*. 16: 42-45.

Eyles, D. W., Smith, S., Kinobe, R., Hewison, M and McGrath, J. J. 2005. Distribution of the vitamin D receptor and 1 alphahydroxylase in human brain. *Journal of Chemical Neuroanatomy*. 29: 21–30.

Eyles, D. W., Burne, T. H and McGrath, J. J. 2013. Vitamin D, effects on brain development, adult brain function and the links between low levels of vitamin D and neuropsychiatric disease. *Front Neuro-endocrinology*. 34 (1): 47-64.

Ferguson, J. H and Chang, A. B. 2009. Vitamin D supplementation for cystic fibrosis. *Cochrane Database Systematic Reviews*. (4): CD007398.

Fleck, A. 1989. Latitude and ischaemic heart disease. *Lancet* 1: 613.

Forouhi, N. G., Ye, Z., Rickard, A. P., Khaw, K. T., Luben, R., Langenberg, C and Wareham, N. J. 2012. Circulating 25- hydroxyvitamin D concentration and the risk of type 2 diabetes: results from the European Prospective Investigation into Cancer (EPIC)-Norfolk cohort and updated meta-analysis of prospective studies. *Diabetologia*. 55 (8): 2173-2182.

Freedman, D. M., Looker, A. C., Abnet, C. C., Linet, M. S and Graubard, B. I. 2010. Serum 25-hydroxyvitamin D and cancer mortality in the NHANES III study (1988-2006). *Cancer Research*. 70 (21): 8587-8597.

Freedman, D. M., Looker, A. C., Chang, S. C and Graubard, B. I. 2007. Prospective study of serum vitamin D and cancer mortality in the United States. *Journal of the National Cancer Institute*. 99: 1594–1602.

Gale, C. R., Robinson, S. M., Harvey, N. C., Javaid, M. K., Jiang, B., Martyn, C. N., Godfrey, K. M and Cooper, C. 2008. Maternal vitamin D status during pregnancy and child outcomes. *European Journal of Clinical Nutrition*. 62 (1): 68-77.

Gandini, S., Boniol, M., Haukka, J., Byrnes, G., Cox, B., Sneyd, M. J., Mullie, P and Autier, P. 2011. Meta-analysis of observational studies of serum 25-hydroxyvitamin D levels and colorectal, breast and prostate cancer and colorectal adenoma. *International Journal of Cancer*. 128: 1414–1424.

Garland, C. F., Garland, F. C and Gorham, E. D. 1991. Can colon cancer incidence and death rates be reduced with calcium and vitamin D? *American Journal of Clinical Nutrition*. 54: 193S–201S.

Garland, C. F., Gorham, E. D., Mohr, S. B., Grant, W. B., Giovannucci, E. L., Lipkin, M., Newmark, H., Holick, M. F and Garland, F. C. 2007. Vitamin D and prevention of breast cancer: Pooled analysis. *Journal of Steroid Biochemistry and Molecular Biology*. 103: 708–711.

George, P. S., Pearson, E. R and Witham, M. D. 2012. Effect of vitamin D supplementation on glycaemic control and insulin resistance: a systematic review and meta-analysis. *Diabetic Medicine*. 29 (8): e142-e150.

Giangreco, A. A and Nonn, L. 2013. The sum of many small changes: microRNAs are specifically and potentially globally altered by vitamin D (3) metabolites. *Journal of Steroid Biochemistry and Molecular Biology*. 136: 86-93.

Ginde, A. A., Mansbach, J. M and Camargo, C. A., Jr. 2009a. Association between serum 25-hydroxyvitamin D level and upper respiratory tract infection in the Third National Health and Nutrition Examination Survey. *Archives of Internal Medicine*. 169: 384–390.

Ginde, A. A., Scragg, R., Schwartz, R. S and Camargo, C. A., Jr. 2009b. Prospective study of serum 25-hydroxyvitamin D level, cardiovascular disease mortality, and all-cause mortality in older U.S. adults. *Journal of the American Geriatrics Society*. 57: 1595–1603.

Giovannucci, E., Liu, Y., Rimm, E. B., Hollis, B. W., Fuchs, C. S., Stampfer, M. J and Willett, W. C. 2006. Prospective study of predictors of vitamin D status and cancer incidence and mortality in men. *Journal of the National Cancer Institute*. 98: 451–459.

Gloth, F. M., Alam, W and Hollis, B. 1999. Vitamin D vs broad spectrum phototherapy in the treatment of seasonal affective disorder. *Journal of Nutrition Health and Aging*. 3 (1): 5-7.

Grant, W. B. 2002. An estimate of premature cancer mortality in the U.S. due to inadequate doses of solar ultraviolet-B radiation. *Cancer*. 94 (6): 1867-1875.

Grant, W. B. 2004. Geographic variation of prostate cancer mortality rates in the United States: implications for prostate cancer risk related to vitamin D. *International Journal of Cancer*. 111(3): 470-471.

Grant, W. B. 2006. Lower vitamin-D production from solar ultraviolet-B irradiance may explain some differences in cancer survival rates. *Journal of National Medicine Association*. 98: 357–364.

Grant, W. B. 2011. An estimate of the global reduction in mortality rates through doubling vitamin D levels. *European Journal of Clinical Nutrition*. 65 (9): 1016-1026.

Grant, W. B. 2012. Ecological studies of the UV-B-vitamin D-cancer hypothesis. *Anticancer Research*. 32 (1): 223-236.

Groves, N. J., Kesby, J. P., Eyles, D. W., McGrath, J. J., Mackay-Sim, A and Burne, T. H. 2013. Adult vitamin D deficiency leads to behavioural and brain neurochemical alterations in C57BL/6J and BALB/c mice. *Behavioural Brain Research*. 241: 120-131.

Grundmann M, Haidar M, Placzko S, Niendorf, R., Daraschonak, N., Hubel, C. A and Versen-Hoyneck, F. V. 2012. Vitamin D improves the angiogenic properties of endothelial progenitor cells. *American Journal of Physiology- Cell Physiology*. 303 (9): C954-C926.

Gulseth, H. L., Gjelstad, I. M., Birkeland, K. I and Drevon, C. A. 2014. Vitamin D and the metabolic syndrome. *Current Vascular Pharmacology*. 11: 968-984.

Guy, M., Lowe, L. C., Bretherton-Watt D., Mansi, J. L and Colston, K. W. 2003. Approaches to evaluating the association of vitamin D receptor gene polymorphisms with breast cancer risk. *Recent Results Cancer Research*. 164: 43–54.

Habuchi, T., Suzuki, T., Sasaki, R., Wang, L., Sato, K., Satoh, S., Akao, T., Tsuchiya, N., Shimoda, N., Wada, Y., Koizumi, A., Chihara, J., Ogawa, O and Kato, T. 2000. Association of vitamin D receptor gene polymorphism with prostate cancer and benign prostatic hyperplasia in a Japanese population. *Cancer Research*. 60 (2): 305–308.

Haga, H. J., Schmedes, A., Naderi, Y., Moreno, A. M and Peen, E. 2013. Severe deficiency of 25-hydroxyvitamin D3 (25-OH-D3) is associated with high disease activity of rheumatoid arthritis. *Clinical Rheumatology*. 15: 15.

Hamasaki, T., Inatomi, H., Katoh, T., Ikuyama, T and Matsumoto, T. 2001. Clinical and pathological significance of vitamin D receptor gene polymorphism for prostate cancer which is associated with a higher mortality in Japanese. *Endocrine Journal*. 48 (5): 543–549.

Hanchette, C. L and Schwartz, G. G. Geographic patterns of prostate cancer mortality. 1992. Evidence for a protective effect of ultraviolet radiation. *Cancer*. 70: 2861–2869.

Harms, L. R., Burne, T. H. J., Eyles, D. W and McGrath, J. J. 2011. Vitamin D and the brain, best practice & research. *Clinical endocrinology & metabolism*. 25: 657-69.

Helzlsouer, K. J. 2010. Overview of the Cohort Consortium Vitamin D Pooling Project of Rarer Cancers. *American Journal of Epidemiology*. 172 (1): 4-9.

Hewison, M and Adams, J. S. 2010. Vitamin D insufficiency and skeletal development in utero. *Journal of Bone and Mineral Research*. 25 (1): 11-13.

Higgins, M. J., Mackie, S. L., Thalayasingam, N., Bingham, S. J., Hamilton, J and Kelly, C. A. 2013. The effect of vitamin D levels on the assessment of disease activity in rheumatoid arthritis [published online January 23]. *Clinical Rheumatology*. 32(6): 863-867.

Holick, M. F. 2006 a. Calcium plus vitamin D and the risk of colorectal cancer. *The New England Journal of Medicine*. 354 (21): 2287-2288.

Holick, M. F. 2006 b. Resurrection of vitamin D deficiency and rickets. *Journal of Clinical Investigations*. 116 (8): 2062-2072.

Holick, M. F. 2006 c. The role of vitamin D for bone health and fracture prevention. *Current Osteoporosis. Rep.* 4: 96–102.

Holick, M. F. 2006 d. Vitamin D: its role in cancer prevention and treatment. *Progress in Biophysics & Molecular Biology*. 92: 49-59.

Holick, M. F. 2007. Vitamin D deficiency. *The New England Journal of Medicine*. 357: 266-281.

Holick, M. F. 2011. Vitamin D: evolutionary, physiological and health perspectives. *Current Drug Targets*. 12 (1): 4-18.

Holick, M. F. 2012 c. Evidence-based D-bate on health benefits of vitamin D revisited. *Dermatoendocrinology*. 4 (2): 183-190.

Hollo, A., Clemens, Z., Kamondi, A., Lakatos, P and Szucs, A. 2012. Correction of vitamin D deficiency improves seizure control in epilepsy: a pilot study. *Epilepsy and Behaviour*. 24: 131-133.

Hoogendijk, W. J., Lips, P., Dik, M. G., Deeg, D. J., Beekman, A. T and Penninx, B. W. 2008. Depression is associated with decreased 25- hydroxyvitamin D and increased parathyroid hormone levels in older adults. *Archives of General Psychiatry*. 65 (5): 508-512.

Hosseini-nezhad, A and Holick, M., F. 2012. Optimize dietary intake of vitamin D: an epigenetic perspective. *Current Opinion in Clinical Nutrition & Metabolic Care*. 15 (6): 567-579.

Hypponen, E., Laara, E., Reunanen, A., Jarvelin, M. R and Virtanen, S. M. 2001. Intake of vitamin D and risk of type 1 diabetes: A birth-cohort study. *Lancet*. 358: 1500–1503.

Ingles, S. A., Garcia, D. G., Wang, W., Nieters, A., Henderson, B. E., Kolonel, L. N., Haile, R. W and Coetzee, G. A. 2000. Vitamin D receptor genotype and breast cancer in Latinas (United States). *Cancer Causes Control*. 11 (1): 25–30.

Jorgensen, S. P., Agnholt, J., Glerup, H., Lyhne, S., Villadsen, G. E., Hvas, C. L., Bartels, L. E. and Kelsen, J. 2010. Clinical trial: vitamin D3 treatment in Crohn's disease: a randomized double-blind placebo-controlled study. *Alimentary Pharmacology and Therapeutics*. 32 (3): 377-383.

Judd, S. E., Nanes, M. S., Ziegler, T. R., Wilson, P. W and Tangpricha, V. 2008. Optimal vitamin D status attenuates the age-associated increase in systolic blood pressure in white Americans: results from the third National Health and Nutrition Examination Survey. *American Journal of Clinical Nutrition*. 87: 136–141.

Karvonen, M., Viik-Kajander, M., Moltchanova, E., Libman, I., LaPorte, R and Tuomilehto, J. 2000. Incidence of childhood type 1 diabetes worldwide. Diabetes Mondiale (DiaMond) Project Group. *Diabetes Care*. 23: 1516–1526.

Kibel, A. S., Isaacs, S. D., Isaacs, W. B and Bova, G. S. 1998 Vitamin D receptor polymorphisms and lethal prostate cancer. *Journal of Urology*. 160 (4): 1405–1409.

Kienreich, K., Grubler, M., Tomaschitz, A., Schmid, J., Verheyen, N., Rutters, F., Dekker, J. M and Pilz, S. 2013. Vitamin D, arterial hypertension & cerebrovascular disease. *Indian Journal of Medical Research*. 137: 669–679.

Kimball, S. M., Ursell, M. R., O'Connor, P and Vieth, R. 2007. Safety of vitamin D3 in adults with multiple sclerosis. *American Journal of Clinical Nutrition*. 86 (3): 645-651.

Kirii, K., Mizoue, T., Iso, H., Takahashi, Y., Kato, M., Inoue, M., Noda, M and Tsugane, S. 2009. Calcium, vitamin D and dairy intake in relation to type 2 diabetes risk in a Japanese cohort. *Diabetologia*. 52: 2542–2550.

Knekt, P., Laaksonen, M., Mattila, C., Harkanen, T., Marniemi, J., Heliovaara, M., Rissanen, H., Montonen, J and Reunanen, A. 2008. Serum vitamin D and subsequent occurrence of type 2 diabetes. *Epidemiology*. 19: 666–671.

Knip, M and Akerblom, H. K. 2005. Early Nutrition and later diabetes risk. *Advances in Experimental Medicine and Biology*. 569: 142-150.

Kostoglou, A. Athanassiou, P., Gkountouvas, A and Kaldrymides, P. 2013. Vitamin D and glycemic control in diabetes mellitus type 2. *Therapeutic Advances in Endocrinology and Metabolism*. 4 (4): 122-128.

Kota, S. K., Kota, S. K., Jammula, S., Meher, L. K., Panda, S., Tripathy, P. R and Modi, K. D. 2011. Renin-angiotensin system activity in vitamin D deficient, obese individuals with hypertension: An urban Indian study. *Indian Journal of Endocrinology and Metabolism*. 15: S395-401.

Kristal-Boneh, E., Froom, P., Harari, G and Ribak, J. 1997. Association of calcitriol and blood pressure in normotensive men. *Hypertension*. 30: 1289–1294.

Kumar, J., Muntner, P., Kaskel, F. J., Hailpern, S. M and Melamed, M. L. 2009. Prevalence and associations of 25-hydroxyvitamin D deficiency in US children: NHANES 2001-2004. *Paediatrics*. 124 (3): e362-e370.

Lansdowne, A. T and Provost, S. C. 1998. Vitamin D3 enhances mood in healthy subjects during winter. *Psychopharmacology*. 135 (4): 319-323.

Lapid, M. I., Cha, S. S and Takahashi, P. Y. 2013. Vitamin D and depression in geriatric primary care patients. *Journal of Clinical Interventions in Aging*. 8: 509-514.

Lappe, J., Travers-Gustafson, D., Davies, M. K., Recker, R. R and Heaney, R. P. 2007. Vitamin D and calcium supplementation reduces cancer risk: results of a randomized trial. *American Journal of Clinical Nutrition*. 85 (6): 1586-1591.

Lee, J. E., Li, H., Chan, A. T., Hollis, B. W., Lee, I. M., Stampfer, M. J., Wu, K., Giovannucci, E and Ma, J. 2011. Circulating levels of vitamin D and colon and rectal cancer: The Physicians' Health Study and a meta-analysis of prospective studies. *Cancer Prevention Research*. 4: 735–743.

Lehmann, B., Querings, K and Reichrath, J. 2004. Vitamin D and skin: new aspects for dermatology. *Experimental Dermatology*. 13: 11-15.

Li, L. H., Yin, X. Y., Yao, C. Y., Zhu, X. C and Wu, X. H. 2013. Serum 25-hydroxyvitamin D, parathyroid hormone, and their association with metabolic syndrome in Chinese. *Endocrine*. 44: 465-72.

Liang, K., Barry, I., Albanes, D., David, R., Fraser, Stephanie, J., Weinstein, Virtamo, J and Kaye, E. B. 2013. Hypertension, Pulse, and Other Cardiovascular Risk Factors and Vitamin D Status in Finnish Men. *American Journal of Hypertension*. 26 (8): 951-956.

Linday, L. A., Shindledecker, R. D., Dolitsky, J. N., Chen, T. C and Holick, M. F. 2008. Plasma 25-hydroxyvitamin D levels in young children undergoing placement of tympanostomy tubes. *Annals Otolaryngology, Rhinology & Laryngology*. 117: 740–744.

Liu, S., Song, Y., Ford, E. S., Manson, J. E., Buring, J. E and Ridker, P. M. 2005. Dietary calcium, vitamin, D and the prevalence of metabolic syndrome in middle-aged and older US women. *Diabetes Care*. 28: 2926–2932.

Liu, E., Meigs, J. B., Pittas, A. G., Economos, C. D., McKeown, N. M and Booth, S. L. 2010. Predicted 25-hydroxyvitamin D score and incident type 2 diabetes in the Framingham Offspring Study. *American Journal of Clinical Nutrition*. 91: 1627–1633.

Looker, A. C., Pfeiffer, C. M., Lacher, D. A., Schleicher, R. L., Picciano, M. F and Yetley, E. A. 2008. Serum 25-hydroxyvitamin D status of the US population: 1988-1994 compared with 2000-2004. *American Journal of Clinical Nutrition*. 88: 1519–27.

Lopez, A. D., Mathers, C. D, Ezzati, M., Jamison, D. T and Murray, C. J. 2006. Global and regional burden of disease and risk factors, 2001: systematic analysis of population health data. *Lancet*. 367: 1747–57.

Lucas, R. M., Ponsonby, A. L., Pasco, J. A and Morley, R. 2008. Future health implications of prenatal and early-life vitamin D status. *Nutrition Reviews*. 66 (12): 710-720.

Lucas, R. M., Ponsonby, A. L., Dear, K., Valery, P. C., Pender, M. P., Taylor, B.V and Kilpatrick, T. J. 2011. Sun exposure and vitamin D are independent risk factors for CNS demyelination. *Neurology*. 76 (6): 540-548.

Lundin, A. C., Soderkvist, P., Eriksson, B., Bergman-Jungstrom, M and Wingren, S. 1999. Association of breast cancer progression with a vitamin D receptor gene polymorphism. South-East Sweden Breast Cancer Group. *Cancer Research*. 59 (10): 2332–2334.

Luxwolda, M. F., Kuipers, R. S., Kema, I. P., Dijck-Brouwer, D., A and Muskiet, F. A. 2012. Traditionally living populations in East Africa have a mean serum 25-hydroxyvitamin D concentration of 115 nmol/l. *British Journal of Nutrition*. 108 (9): 1557-1561.

Ma, Y., Zhang, P., Wang, F., Yang, J., Liu, Z and Qin, H. 2011. Association between vitamin D and risk of colorectal cancer: a systematic review of prospective studies. *Journal of Clinical Oncology*. 29 (28): 3775-3782.

MacLaughlin, J and Holick, M. F. 1985. Aging decreases the capacity of human skin to produce vitamin D3. *Journal of Clinical Investigations*. 76 (4): 1536-1538.

Maddock, J., Berry, D. J., Geoffroy, M. C., Power, C and Hypponen, E. 2013. Vitamin D and common mental disorders in mid-life: crosssectional and prospective findings. *Clinical Nutrition*. 21 (13): 00030-00037.

Maka, N., Makrakis, J., Parkington, H. C., Tare, M., Morley, R and Black, M. J. 2008. Vitamin D deficiency during pregnancy and lactation stimulates nephrogenesis in ra offspring. *Pediatric Nephrology*. 23 (1): 55-61.

Martin, R., Harvey, N. C., Crozier, S. R., Poole, J. R., Javaid, M. K., Dennison, E. M., Inskip, H. M., Hanson, M., Godfrey, K. M and Cooper, C. 2007. Placental calcium transporter (PMCA3) gene expression predicts intrauterine bone mineral accrual. *Bone*. 40 (5): 1203-1208.

Martins, D., Wolf, M., Pan, D., Zadshir, A., Tareen, N., Thadhani, R., Felsenfeld, A., Levine, B., Mehrotra, R and Norris, K. 2007. Prevalence of cardiovascular risk factors and the serum levels of 25-hydroxyvitamin D in the United States: Data from the Third National Health and Nutrition Examination Survey. *Archives of Internal Medicine*. 167: 1159–1165.

McCann, J. C and Ames, B. N. 2008. Is there convincing biological or behavioural evidence linking vitamin D deficiency to brain dysfunction? *FASEB Journal*. 22: 982–1001.

McGrath, J., Selten, J. P and Chant, D. 2002. Long-term trends in sunshine duration and its association with schizophrenia birth rates and age at first registration: data from Australia and the Netherlands. *Schizophrenia Research*. 54: 199-212.

McGrath, J., Saari, K., Hakko, H., Jokelainen, J., Jones, P., Jarvelin, M. R., Chant, D and Isohanni, M. 2004. Vitamin D supplementation during the first year of life and risk of schizophrenia: a Finnish birth cohort study. *Schizophrenia Research*. 67 (2-3): 237-245.

McGrath, J. J., Eyles, D. W., Pedersen, C. B., Anderson, C., Ko, P., Burne, T. H., Norgaard-Pedersen, B., Hougaard, D. M and Mortensen, P. B. 2010 a. Neonatal vitamin D status and risk of schizophrenia: a population-based case-control study. *Archives of General Psychiatry*. 67: 889-894.

McGrath, J. J., Saha, S., Burne, T. H and Eyles, D. W. 2010 b. A systematic review of the association between common single nucleotide polymorphisms and 25-hydroxyvitamin D concentrations. *Journal of Steroid Biochemistry and Molecular Biology*. 121: 471-477.

Melamed, M. L., Michos, E. D., Post, W and Astor, B. 2008. 25- Hydroxyvitamin D levels and the risk of mortality in the general population. *Archives of Internal Medicine*. 168 (15): 1629-1637.

Merewood, A., Mehta, S. D., Chen, T. C., Bauchner, H and Holick, M. F. 2009. Association between vitamin D deficiency and primary caesarean section. *Journal of Clinical Endocrinology and Metabolism*. 94 (3): 940-945.

Merlino, L. A., Curtis, J., Mikuls, T. R., Cerhan, J. R., Criswell, L. A and Saag, K. G. 2004. Vitamin D intake is inversely associated with rheumatoid arthritis: results from the Iowa Women's Health Study. *Arthritis & Rheumatology*. 50 (1): 72-77.

Mitri, J., Dawson-Hughes, B., Hu, F. B and Pittas, A. G. 2011 .Effects of vitamin D and calcium supplementation on pancreatic β cell function, insulin sensitivity, and glycemia in adults at high risk of diabetes: the Calcium and Vitamin D for Diabetes Mellitus (CaDDM) randomized controlled trial. *American Journal of Clinical Nutrition*. 94 (2): 486-494.

Moan, J., Porojnicu, A. C., Dahlback, A and Setlow, R. B. 2008. Addressing the health benefits and risks, involving vitamin D or skin cancer, of increased sun exposure. *Proceedings of National Academics of Sciences USA*. 105: 668-673.

Modan, M., Halkin, H., Almog, S., Lusky, A., Eshkol, A., Shefi, M., Shitrit, A and Fuchs, Z. 1985. Hyperinsulinemia. A link between hypertension obesity and glucose intolerance. *Journal of Clinical Investigations*. 75: 809-817.

Mohapatra, S., Saxena, A., Gandhi, G., Koner, B. C and Ray, P. C. 2013. Vitamin D and VDR gene polymorphism (FokI) in epithelial ovarian cancer in Indian population. *Journal of Ovarian Research*. 6: 37.

Mohr, S. B., Garland, C. F., Gorham, E. D and Garland, F. C. 2008. The association between ultraviolet B irradiance, vitamin D status and incidence rates of type 1 diabetes in 51 regions worldwide. *Diabetologia*. 51: 1391-1398.

Munger, K. L., Zhang, S. M., O'Reilly, E., Hernan, M. A., Olek, M. J., Willett, W. C and Ascherio, A. 2004. Vitamin D intake and incidence of multiple sclerosis. *Neurology*. 62 (1): 60-65.

Muscogiuri, G., Sorice, G. P., Ajjan, R., Mezza, T., Pilz, S., Prioletta, A., Scragg, R., Volpe, S. L., Witham, M. D and Giaccari, A. 2012. Can vitamin D deficiency cause diabetes and cardiovascular diseases? Present evidence and future perspectives. *Nutrition Metabolism and Cardiovascular Diseases*. 22: 81-87.

Nagpal, S., Na, S and Rathnachalam, R. 2005. Noncalcemic actions of vitamin D receptor ligands. *Endocrine Reviews*. 26 (5): 662-687.

Nagpal, J., Pande, J. N and Bhartia, A. 2009. A double-blind, randomized, placebo-controlled trial of the short-term effect of vitamin D₃ supplementation on insulin sensitivity in apparently healthy, middle-aged, centrally obese men. *Diabetic Medicine*. 26: 19-27.

Newschaffer, C. J., Croen, L. A., Daniels, J., Giarelli, E., Grether, J. K., Levy, S. E., Mandell, D. S., Miller, L. A., Pinto-Martin, J., Reaven, J., Reynolds, A. M., Rice, C. E., Schendel, D and

Windham, G. C. 2007. The epidemiology of autism spectrum disorders. *Annual Review of Public Health*. 28: 235-258.

Nowson, C. A., McGrath, J. J., Ebeling, P. R., Haikerwal, A., Daly, R. M., Sanders, K. M., Seibel, M. J and Mason, R. S. 2012. Vitamin D and health in adults in Australia and New Zealand: a position statement. *Medical Journal of Australia*. 196 (11): 686-687.

O'Loan, J., Eyles, D. W., Kesby, J., Ko, P., McGrath, J. J and Burne, T. H. 2007. Vitamin D deficiency during various stages of pregnancy in the rat, its impact on development and behaviour in adult offspring. *Psychoneuroendocrinology*. 32 (3): 227-234.

Oh, J. Y and Barrett-Connor, E. 2002. Association between vitamin D receptor polymorphism and type 2 diabetes or metabolic syndrome in community-dwelling older adults: the Rancho Bernardo Study. *Metabolism*. 51 (3): 356-359.

Pandit, L., Ramagopalan, S. V., Malli, C., D'Cunha, A., Kunder, R and Shetty, R. 2013. Association of vitamin D and multiple sclerosis in India. *Multiple Sclerosis Journal*. 19, 1592-1596.

Pilz, S., Iodice, S., Zittermann, A., Grant, W. B and Gandini, S. 2011. Vitamin D status and mortality risk in CKD: a meta-analysis of prospective studies. *American Journal of Kidney Diseases*. 58 (3): 374-382.

Pilz, S., Tomaschitz, A., Marz, W., Drechsler, C., Ritz, E., Zittermann, A., Cavalier, E., Pieber, T. R., Lappe, J. M., Grant, W. B., Tomaschitz, A., Holick, M. F and Dekker, J. M. 2011. Vitamin D, cardiovascular disease and mortality. *Clinical Endocrinology*. 75: 575-584.

Pittas, A. G., Dawson-Hughes, B., Li, T., VanDam, R. M., Willett, W. C and Manson, J. E. 2006. Vitamin D and calcium intake in relation to type 2 diabetes in women. *Diabetes Care*. 29: 650-656.

Pittas, A. G., Lau, J., Hu, F. B and Dawson-Hughes, B. 2007. The role of vitamin D and calcium in type 2 diabetes. A systematic review and meta-analysis. *The Journal of Clinical Endocrinology & Metabolism*. 92: 2017-2029.

Pittas, A. G., Chung, M., Trikalinos, T., Mitri, J., Brendel, M., Patel, K., Lichtenstein, A. H., Lau, J., Balk, E. M. 2010. Systematic review: vitamin D and cardiometabolic outcomes. *Annals of Internal Medicine*. 152 (5): 307-314.

Poole, K. E., Loveridge, N., Barker, P. J, Halsall, D. J., Rose, C., Reeve, J and Warburton, E. A. 2006. Reduced vitamin D in acute stroke. *Stroke*. 37: 243-245.

Rafraf, M., Hasanabad, S. K and Jafarabadi, M. A. 2013. Vitamin D status and its relationship with metabolic syndrome risk factors among adolescent girls in Boukan, Iran. *Public Health Nutrition*. 20: 1-7.

Rajakumar, K, de las, H. J., Lee S, Holick, M. F and Arslanian, S. A. 2012. 25-Hydroxyvitamin D concentrations and in vivo insulin sensitivity and b-cell function relative to insulin sensitivity in black and white youth. *Diabetes Care*. 35 (3): 627-633.

Ramagopalan, S. V., Heger, A., Berlanga, A. J., Maugeri, J. N., Lincoln, M. R., Amy Burrell, A., Handunnetthi, L., Handel, E. A., Disanto, G., Orton, S., Watson, T. C., Morahan, M. J., Giovannoni, G., Ponting, P. C., Ebers, C. G and Julian, C. Knight. 2010. A ChIP-seq defined genome-wide map of vitamin D receptor binding: associations with disease and evolution. *Genome Research*. 20 (10): 1352-1360.

Rees, G. S., Symes, E. K., Nicholl, C. G., Legon, S and Chapman, R. S. 1998. Lack of correlation of free deoxypyridinoline excretion with Taq1 restriction length polymorphisms in the vitamin D receptor gene in males. *Clinica Chimica Acta*. 272 (2): 149–157.

Reichrath, J and Holick, M. F. 1999. Clinical utility of 1,25-dihydroxyvitamin D₃ and its analogs for the treatment of psoriasis and other skin diseases. In: Holick MF (ed.) *Vitamin D: Physiology, Molecular Biology and Clinical Applications*. Totowa, NJ: *Humana Press*. 357-374.

Reinehr, T., De Sousa, G., Alexy, U., Kersting, M and Andler, W. 2007. Vitamin D status and parathyroid hormone in obese children before and after weight loss. *European Journal of Endocrinology*. 157: 225-232.

Rejnmark, L., Avenell, A., Masud, T., Anderson, F., Meyer, E. H., Kerrie M. Sanders, M. K., Salovaara, K., Cooper, C., Smith, E. H., Jacobs, E. T., Torgerson, D., Jackson, R. D., Manson, E. J., Brixen, K., Mosekilde, L., Robbins, A. J., Francis, M. R and Abrahamsen, B. 2012. Vitamin D with calcium reduces mortality: patient level pooled analysis of 70,528 patients from eight major vitamin D trials. *Journal of Clinical Endocrinology and Metabolism*. 97 (8): 2670-2681.

Rochat, M. K., Ege, M. J., Plabst, D., Steinle, J., Bitter, S., Braun-Fahrlander, C., Dalphin, J. C., Riedler, J., Roponen, M., Hirvonen, M. R., Buchele, G., Renz, H., Lauener, R., Krauss-Etschmann, S and Von Mutius, E. 2010. Maternal vitamin D intake during pregnancy increases gene expression of ILT3 and ILT4 in cord blood. *Clinical and Experimental Allergy*. 40 (5): 786-794.

Rock, C. L., Emond, J. A., Flatt, S. W., Heath, D. D., Karanja, N., Pakiz, B., Sherwood, N. E and Thomson, C. A. 2012. Weight loss is associated with increased serum 25-hydroxyvitamin D in overweight or obese women. *Obesity (Silver Spring)*. 20: 2296-2301.

Rostand, S. G. 1997. Ultraviolet light may contribute to geographic and racial blood pressure differences. *Hypertension*. 30: 150-156.

Ruggiero, M., Pacini, S., Aterini, S., Fallai, C., Ruggiero, C and Pacini, P. 1998. Vitamin D receptor gene polymorphism is associated with metastatic breast cancer. *Oncology Research*. 10 (1): 43-46.

Runia, T. F., Hop, W. C., de Rijke, Y. B., Buljevac, D and Hintzen, R. Q. 2012. Lower serum vitamin D levels are associated with a higher relapse risk in multiple sclerosis. *Neurology*. 79 (3): 261-266.

Sabetta, J. R., DePetrillo, P., Cipriani, R. J., Smardin, J., Burns, L. A and Landry, M. L. 2010. Serum 25-hydroxyvitamin D and the incidence of acute viral respiratory tract infections in healthy adults. *PLoS One*. 5 (6): 0011088.

Schnatz, P. F., Jiang, X., Vila-Wright, S., Aragaki, A. K., Nudy, M., O'Sullivan, D. M., Jackson, R., Leblanc, E., Robinson, J. G., Shikany, J. M., Womack, C. R., Martin, L. W., Neuhausser, M. L., Vitolins, M. Z., Song, Y., Kritchevsky, S and Manson, J. E. 2014. Calcium/vitamin D supplementation, serum 25-hydroxyvitamin D concentrations, and cholesterol profiles in the Women's Health Initiative calcium/vitamin D randomized trial. *Menopause* (New York, N.Y.) 21 (8): 823-833.

Schwalfenberg, G. K. 2012. Solar radiation and vitamin D: mitigating environmental factors in autoimmune disease. *Journal of Environment and Public Health*. 2012: 619381.

Scragg, R., Jackson, R., Holdaway, I. M., Lim, T and Beaglehole, R. 1990. Myocardial infarction is inversely associated with plasma 25-hydroxyvitamin D3 levels: a community-based study. *International Journal of Epidemiology*. 19: 559-563.

Scragg, R., Sowers, M and Bell, C. 2007. Serum 25-hydroxyvitamin D, ethnicity, and blood pressure in the third National Health and Nutrition Examination Survey. *American Journal of Hypertension*. 20: 713-719.

Sen, D and Ranganathan, P. 2012. Vitamin D in rheumatoid arthritis: panacea or placebo? *Discovery Medicines*. 14 (78): 311-319.

Shui, I. M., Mucci, L. A., Kraft, P., Tamimi, R. M., Lindstrom, S., Penney, K. L., Nimptsch, K., Hollis, B. W., Dupre, N., Platz, E. A., Stampfer, M. J and Giovannucci, E. 2012. Vitamin D-related genetic variation, plasma vitamin D, and risk of lethal prostate cancer: a prospective nested case-control study. *Journal of the National Cancer Institute*. 104 (9): 690-699.

Simon, K. C., Munger, K. L and Ascherio, A. 2012. Vitamin D and multiple sclerosis: epidemiology, immunology, and genetics. *Current Opinion in Neurology*. 25 (3): 246-251.

- Sisodia, R. S., Jain, D. K., Agarwal, S. S and Gupta, A. 2011. TB control in India—Efforts, challenges and priorities. *Journal of the Indian Medical Association*. 109: 921–924, 928.
- Skinner, H. G., Michaud, D. S., Giovannucci, E., Willett, W. C., Colditz, G. A and Fuchs, C. S. 2006. Vitamin D intake and the risk for pancreatic cancer in two cohort studies. *Cancer Epidemiology & Biomarkers Prevention*. 15 (9): 1688-1695.
- Slatter, M. L., Yakumo, K., Hoffman, M and Neuhausen, S. 2001. Variants of the VDR gene and risk of colon cancer (United States). *Cancer Causes Control*. 12 (4): 359–364.
- Snijder, M. B., Van Dam, R. M., Visser, M., Deeg, D. J., Dekker, J. M., Bouter, L. M., Seidell, J. C and Lips, P. 2005. Adiposity in relation to vitamin D status and parathyroid hormone levels: a population-based study in older men and women. *Journal of Clinical Endocrinology and Metabolism*. 90: 4119–4123.
- Stampfer, M. J., Ma, J., Gann, P. H., Hough, H. L., Giovannucci, E and Kelsey, K. T. 1998. Vitamin D receptor polymorphisms, circulating vitamin D metabolites, and risk of prostate cancer in United States physicians. *Cancer Epidemiology Biomarkers and Prevention*. 7 (5): 385–390.
- Stein, M. S., Liu, Y., Gray, O. M., Baker, J. E., Kolbe, S. C., Ditchfield, M. R., Egan, G. F., Mitchell, P. J., Harrison, L. C., Butzkueven, H and Kilpatrick, T. J. 2011. A randomized trial of high dose vitamin D2 in relapsing-remitting multiple sclerosis. *Neurology*. 77 (17): 1611-1618.
- Stene, L. C., Ulriksen, J., Magnus, P and Joner, G. 2000. Use of cod liver oil during pregnancy associated with lower risk of type I diabetes in the offspring. *Diabetologia*. 43 (9): 1093-1098.
- Stolzenberg-Solomon, R. Z., Hayes, R. B., Horst, R. L., Anderson, K. E., Hollis, B. W and Silverman, D. T. 2009. Serum vitamin D and risk of pancreatic cancer in the Prostate, Lung, Colorectal, and Ovarian Screening Trial. *Cancer Research*. 69 (4): 1439-1447.
- Sun, Q., Pan, A., Hu, F. B., Manson, J. E and Rexrode, K. M. 2012. 25-hydroxyvitamin D levels and the risk of stroke: a prospective study and meta-analysis. *Stroke*. 43, 1470–1477.
- Sundar, I. K and Rahman, I. 2011. Vitamin D and susceptibility of chronic lung diseases: role of epigenetics. *Frontiers in Pharmacology*. 2: 50-59.
- Talaei, A., Mohamadi, M and Adgi, Z. 2013. The effect of vitamin D on insulin resistance in patients with type 2 diabetes. *Diabetology Metabolic Syndrome*. 5: 8.
- Tamez, H and Thadhani, R. I. 2012. Vitamin D and hypertension: an update and review. *Current Opinion in Nephrology and Hypertension*. 21: 492-499.

- Tamez, H., Kalim, S and Thadhani, R. I. 2013. Does vitamin D modulate blood pressure? *Current Opinion in Nephrology and Hypertension*. 22 (2): 204-209.
- Tessel, F., Runia, Wim, C. J., Hop, Yolanda, B., Rijke, D., Buljevac, D and Rogier, Q. H. 2012. Lower serum vitamin D levels are associated with a higher relapse risk in multiple sclerosis. *Neurology*. 79 (3): 261-266.
- Thomas, G. N., O Hartaigh, B., Bosch, J. A., Pilz, S., Loerbroks, A., Kleber, M. E., Fischer, J. E., Grammer, T. B, Bohm, B. O and Marz, W. 2012. Vitamin D levels predict all-cause and cardiovascular disease mortality in subjects with the metabolic syndrome: the Ludwigshafen Risk and Cardiovascular Health (LURIC) Study. *Diabetes Care*. 35 (5): 1158-1164.
- Tolppanen, A. M., Williams, D., Henderson, J and Lawlor, D. A. 2011. Serum 25-hydroxy-vitamin D and ionised calcium in relation to lung function and allergen skin tests. *European Journal of Clinical Nutrition*. 65 (4): 493-500.
- Triggiani, L., Barracchini, A., Corona, R and Minisola, G. 2013. Assessment of Vitamin D Deficiency in Patients with Neurological Disorders. *Neurology*. 80: 03.271.
- Tripkovic, L., Lambert, H., Hart, K., Smith, C. P., Bucca, G., Penson, S., Chope, G., Hypponen, E., Berry, J., Vieth, R and Lanham-New, S. 2012. Comparison of vitamin D2 and vitamin D3 supplementation in raising serum 25- hydroxyvitamin D status: a systematic review and meta-analysis. *American Journal of Clinical Nutrition*. 95 (6): 1357-1364.
- Urashima, M., Segawa, T., Okazaki, M., Kurihara, M., Wada, Y and Ida, H. 2010. Randomized trial of vitamin D supplementation to prevent seasonal influenza A in schoolchildren. *American Journal of Clinical Nutrition*. 91 (5): 1255-1260.
- Utiger, R. 1998. The need for more vitamin D. *The New England Journal of Medicine*. 338 (12): 828–829.
- Vacek, J. 2012. Vitamin D Deficiency and Supplementation and Relation to Cardiovascular Health. *The American Journal of Cardiology*. 109 (3): 359–363.
- Vaidya, A and Forman, J. P. 2010. Vitamin D and Hypertension: Current Evidence and Future Directions. *Hypertension*. 56: 774-779.
- Valina-Toth, A. L., Lai, Z., Yoo, W. Abou-Samra, A., Gadegbeku, C. A and Flack, J. M. 2010. Relationship of vitamin D and parathyroid hormone with obesity and body composition in African Americans. *Clinical Endocrinology (Oxf)*. 72 (5): 595–603.

Villaggio, B., Soldano, S and Cutolo, M. 2012. 1, 25-dihydroxyvitamin D3 downregulates aromatase expression and inflammatory cytokines in human macrophages. *Clinical and Experimental Rheumatology*. 30 (6): 934-938.

Wang, L., JoAnn, E., Manson, Julie, E., Buring, I-Min, L and Howard, D. S. 2008 a. Dietary Intake of Dairy Products, Calcium, and Vitamin D and the Risk of Hypertension in Middle-Aged and Older Women. *Hypertension*. 51: 1073-1079.

Wang, T. J., Pencina, M. J., Booth, S. L., Jacques, P. F., Ingelsson, E., Lanier, K., Benjamin, E. J., D'Agostino, R. B., Wolf, M and Vasan, R. S. 2008 b. Vitamin D deficiency and risk of cardiovascular disease. *Circulation*. 117: 503–511.

Wang, Y., Jacobs, E. J., McCullough, M. L., Rodriguez, C and Thun, M. J. 2009. Comparing methods for accounting for seasonal variability in a biomarker when only a single sample is available: insights from simulations based on serum 25-hydroxyvitamin D. *American Journal of Epidemiology*. 170: 88-94.

Watson, K. E., Abrolat, M. L., Malone, L. L., Hoeg, J. M., Doherty, T., Detrano, R and Demer, L. L. 1997. Active serum vitamin D levels are inversely correlated with coronary calcification. *Circulation*. 96: 1755–1760.

Wei, S. Q., Qi, H. P., Luo, Z. C and Fraser, W. D. 2013. Maternal vitamin D status and adverse pregnancy outcomes: a systematic review and meta-analysis. *Journal Maternal- Fetal and Neonatal Medicine*. 26 (9): 889-899.

Weinstock-Guttman, B., Mehta, B. K., Ramanathan, M., Karmon, Y., Henson, L. J., Halper, J and Riskind, P. 2012. Vitamin D and multiple sclerosis. *Neurologist*. 18 (4): 179-183.

Welsh, P., Doolin, O., McConnachie, A. Boulton, E., McNeil, G., Macdonald, H., Hardcastle, A., Hart, C., Upton, M., Watt, G., and Sattar, N. 2012. Circulating 25OHD, dietary vitamin D, PTH, and calcium associations with incident cardiovascular disease and mortality: the MIDSPAN Family Study. *Journal of Clinical Endocrinology and Metabolism*. 97 (12): 4578-4587.

Whitehouse, A. J., Holt, B. J., Serralha, M., Holt, P. G., Kusel, M. M and Hart, P. H. 2012. Maternal serum vitamin D levels during pregnancy and offspring neurocognitive development. *Paediatrics*. 129 (3): 485-493.

Wjst, M. 2012. Is vitamin D supplementation responsible for the allergy pandemic? *Current Opinion on Allergy and Clinical Immunology*. 12 (3): 257-262.

Woolcott, C. G., Wilkens, L. R., Nomura, A. M., Horst, R. L., Goodman, M. T and Murphy, S. P., Henderson, B. E., Kolonel, L. N and Le Marchand, L. 2010. Plasma 25-hydroxyvitamin D

levels and the risk of colorectal cancer: the multiethnic cohort study. *Cancer Epidemiology, Biomarkers & Prevention*. 19: 130–134.

World Health Organization. 2008. Mental Health Gap Action Programme: Scaling Up Care for Mental, Neurological, and Substance Use Disorders.

Zhao, Y., Sun, Y., Ji, H. F and Shen, L. 2013. Vitamin D levels in Alzheimer's and Parkinson's diseases: a meta-analysis. *Nutrition*. 29: 828-832.

Zhou, W., Heist, R. S., Liu, G. Wei Zhou, Heist, R. S., Geoffrey, L., Asomaning, K., Neuberg, S. D., Hollis, W. B., Wain, C. J., Thomas J. L, Giovannucci, E., Li, S., and David, C. C. 2007. Circulating 25-hydroxyvitamin D levels predict survival in early-stage non-small-cell lung cancer patients. *Journal of Clinical Oncology*. 25: 479–485.

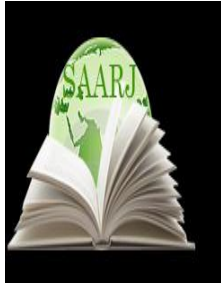
Zipitis, C. S and Akobeng, A. K. 2008. Vitamin D supplementation in early childhood and risk of type 1 diabetes: A systematic review and meta-analysis. *Archives of Disease in Childhood*. 93: 512–517.

Zittermann, A., Schleithoff, S. S and Koefor, R. 2005. Putting cardiovascular disease and vitamin D insufficiency into perspective. *British Journal of Nutrition*. 94: 483-492.

Zittermann, A., Iodice, S., Pilz, S., Grant, W. B., Bagnardi, V and Gandini, S. 2012. Vitamin D deficiency and mortality risk in the general population: a meta-analysis of prospective cohort studies. *American Journal of Clinical Nutrition*. 95 (1): 91-100.

Zittermann, A., Kuhn, J., Dreier, J., Knabbe, C., Gummert and Borgermann, J. 2013. Vitamin D status and the risk of major adverse cardiac and cerebrovascular events in cardiac surgery. *European Heart Journal*. 34 (18): 1358-1364.

Zmuda, J. M., Cauley, J. A and Ferrell, R. E. 2000. Molecular epidemiology of vitamin D receptor gene variants. *Epidemiological Reviews*. 22 (2): 203–217.



Published by: South Asian Academic Research Journals

ACADEMICIA:
An International
Multidisciplinary
Research Journal

(A Double Blind Refereed & Reviewed International Journal)

**DOI NUMBER: 10.5958/2249-7137.2016.00040.9****A STUDY ON CUSTOMER PERCEPTION OF POSTAL SAVINGS OF
ERNAKULAM DISTRICT****Naseema C M***

* Guest Lecturer, PSMO College,
Tirurangade, Malappuram.INDIA.

ABSTRACT

Customer perception has been regarded as an indication of marketing effectiveness of the firm. The success of any marketing strategy lies in the post purchase experience as delivered through the product or service and as perceived by the customer. There are several types of post office savings schemes that cater to the differing needs of various classes of people in which they have an option to invest with small amount. Most of the postal investment is exempted from Income Tax Act, 1961. The interest income is also exempted from tax u/s 10 of Income Tax Act, 1961 in some cases. This has enabled investors to compete successfully with other avenues of investment available to them like commercial and co-operative banks, non banking financial institution and public sector companies. It is necessary for institution offering investment instruments to study the opinion and perception of customers towards various investment instruments because it has influenced the savings behaviour of investors since decade.

KEYWORDS: *customer perception, post office savings schemes, marketing strategy*

REFERENCES

1. Ritika Agarwal (2012), Identifying Factors Influencing Preference Towards Post Office Savings Schemes, International Journal of Research in Management and Technology, Vol.2, No.6, Dec 2012
2. Dr. Dhiraj Jain and Ms. Ruhika Kothari (2012), Investors Attitude Towards Post Office Deposits Schemes – Empirical Study in Udipur District, Rajasthan , Internal Journal of Marketing and Technology, Vol. 2, Issue 7, July 2012

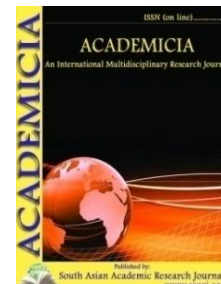
3. B. Sukanya and G.B. Karthigeyan (2015), A Study on Investors Behaviour Towards Post Office Savings Schemes (With special reference to Coimbatore City), Tactful Management Research Journal, Vol. 3, Issue 5, Feb 2015
4. S. Selvatharangini (2009), Post Office Savings Schemes in the Maze of Investment Alternatives, Unpublished thesis Bharathiar University, Coimbatore
5. R. Kasilingam and G. Jayabal(2009), A Study on the Perception of Investors Towards Small Savings Schemes, Paradigm, Dec 2009, PP 1-12



Published by: South Asian Academic Research Journals

ACADEMICIA:
An International
Multidisciplinary
Research Journal

(A Double Blind Refereed & Reviewed International Journal)



DOI NUMBER: **10.5958/2249-7137.2016.00041.0**

**ESTIMATION OF MULTIPLE MODELS THROUGH A SINGLE
REGRESSION**

M. Venkataramana^{*}; Dr.M.Subbarayudu^{}; M.Rajani^{***};
Dr. K.N. Sreenivasulu^{****}**

^{*} Research Scholar,
Department of Statistics, S.V. University, T
irupati- INDIA.

^{**}Professor and Head,
Department of Statistics, S.V. University,
Tirupati-INDIA,

^{***}Research Scholar
Department of Statistics, S.V. University,
Tirupati- INDIA.

^{****}Assistant Professor & Head,
Department of Statistics, A. N. G. R. Ag. University, Ag. College,
Mahanandi, Kurnool (Dt), INDIA

ABSTRACT

Regression analysis with dummy variables has interesting and useful relationship among qualitative and quantitative variables under study. Qualitative variables are used to classify the data into different groups. The aim of this paper is to suggest a method to estimate two variable linear model, three variable linear model and three variable non linear model in a single regression using dummy variables with a numerical example.

KEYWORDS: *Regression model, OLS estimation, dummy variables.*

REFERENCES:

1. Damodar Gujarati (Dec-1970): Use of dummy variables for equality between sets of coefficients in linear regression: A generalisation, The American Statistician, Vol.24, No.5, PP: 18-22.

2. Damodar N.Gujarati (1995): Basic Econometrics, 3rd edition McGraw-Hill, Inc.
3. Snedecor , George W and Cochran, Willam G (1968) : Statistical methods , 6th edition.



Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)

DOI NUMBER: **10.5958/2249-7137.2016.00042.2**

SPECTRUM SENSING IN COGNITIVE RADIO NETWORKS USING THE ENERGY DETECTION TECHNIQUE

B.Ramadasu*; Suresh Pabboju**

*Asst.Proff.
CSE,CBIT,Hyd, INDIA.

**professor,
IT Dept. CBIT,

ABSTRACT

The growing demand of wireless application has put a lot of constraints on the usage of available radio spectrum which is limited and precious resource. However, a fixed spectrum assignment has lead to under utilization of spectrum as a great portion of licensed spectrum is not effectively utilized Opportunistic unlicensed access to the (temporarily) unused frequency bands across the licensed radio spectrum is currently being investigated as a means to increase the efficiency of spectrum usage. Such opportunistic access calls for implementation of safeguards so that ongoing licensed operations are not compromised. Among different candidates, sensing-based access, where the unlicensed users transmit if they sense the licensed band to be free, is particularly appealing due to its low deployment cost and its compatibility with the legacy licensed systems. The ability to reliably and autonomously identify unused frequency bands is envisaged as one of the main functionalities of cognitive radios. Cognitive radio is a promising technology which provides a novel way to improve utilization efficiency of available electromagnetic spectrum. Spectrum sensing helps to detect the spectrum holes (underutilized bands of the spectrum) providing high spectral resolution capability. In this paper, survey of spectrum sensing techniques is presented. The challenges and issues involved in implementation of spectrum sensing techniques are discussed in detail

KEYWORDS: Cognitive Radio, Spectrum Sensing, Energy Detection, Primary user, Secondary user, Threshold, Probability of detection

REFERENCES:

[1] S. Hakin, “*Cognitive Radio: Brain-Empowered Wireless Communications*,” IEEE J. On selected areas in communication, vol.23, pp.201-220, Feb. 2005.

[2] Nisha Yadav, “*A comprehensive study of spectrum sensing techniques in cognitive radio.*”

Department of Electronics and Communication Engineering, Gurgaon Institute of Technology & Management, Bilaspur, Gurgaon, India. International Journal of Advances in Engineering & Technology, July 2011.

[3] V. Stoianovici, V. Popescu, M. Murrone (2008), “A Survey on spectrum sensing techniques In cognitive radio” Bulletin of the Transilvania University of Brasov, Vol. 15 (50).

[4] Mansi Subhedar and Gajanan Birajdar, “*SPECTRUM SENSING TECHNIQUES IN COGNITIVE RADIO NETWORKS: A SURVEY*”, International Journal of Next-Generation Networks (IJNGN) Vol.3, No.2 June 2001



Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)



DOI NUMBER: 10.5958/2249-7137.2016.00043.4

WORKPLACE SPIRITUALITY- TRANSFORMING THE WORKPLACE INTO A SPIRITUAL ONE

Dr. K.Vinithi*

*Assistant Professor,
Dept of Commerce,
DKM College for Women, Vellore.

ABSTRACT

In a developing country like India, there are so many battles to be won against poverty and deprivation. Workplace spirituality is a necessity for a society which needs to be modernized without losing track of its ethical and spiritual moorings. By improving spirituality climates, managers can promote organizational commitment and thus, individual and organizational performance. It is likely that this occurs because people react reciprocally towards an organization that satisfies their spiritual needs, allows them to experience a sense of psychological safety, makes them feel that they are valued as human beings and that they deserve respectful treatment, and allows them to experience senses of purpose, self-determination, enjoyment and belonging.

KEYWORDS: *spirituality climates, psychological safety, self-determination,*

REFERENCES

- Armenio Rego ., Miguel Pina e Cunha. 2007. Workplace Spirituality and organizational commitment: an empirical study. *Journal of Organizational Change Management*. Vol. 21 No.1, 2008. Pp.53-75.
- Ashmos, D.P. and Duchon, D. (2000), "Spirituality at work: a conceptualization and measure", *Journal of Management Inquiry*, Vol. 9 No. 2, pp. 134-45.
- Brown, R.B. (2003), "Organizational spirituality: the sceptic's version", *Organization*, Vol. 10, No. 2, pp. 393-400.

Cacioppe, R. (2000), "Creating spirit at work: re-visioning organization development and leadership – Part I", *Leadership and Organization Development Journal*, Vol. 21 No. 1, pp. 48-54.

Chakraborty, S K(ed.) (1995). *Human Values for Managers*, New Delhi: Wheeler Publishing.

Fry, L.W. (2003), "Toward a theory of spiritual leadership", *The Leadership Quarterly*, Vol. 14, No. 6, pp. 693-727.

Fry, L.W., Vitucci, S. and Cedillo, M. (2005), "Spiritual leadership and army transformation: theory, measurement, and establishing a baseline", *The Leadership Quarterly*, Vol. 16 No. 5, pp. 835-62.

Gavin, J.H. and Mason, R.O. (2004), "The virtuous organization: the value of happiness in the workplace", *Organizational Dynamics*, Vol. 33 No. 4, pp. 379-92.

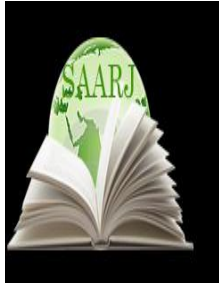
Jurkiewicz, C.L. and Giacalone, R.A. (2004), "A values framework for measuring the impact of workplace spirituality on organizational performance", *Journal of Business Ethics*, Vol. 49, No. 2, pp. 129-42.

Karasek, R. and Theorell, T. (1990), *Healthy Work: Stress, Productivity, and the Reconstruction of Working Life*, Basic Books, New York, NY.

Kim, W.C. and Mauborgne, R. (1998), "Procedural justice in strategic decision making, and the knowledge economy", *Strategic Management Journal*, Vol. 19 No. 4, pp. 323-38. Likert, R (1961). *New Patterns of Management*, New York: McGraw-Hill.

McDonald, G (2000). "Business Ethics: Practical Proposals for Organizations," *Journal of Business Ethics*, 25(2), 169-184.

Pava, M.L. (2003), "Searching for spirituality in all the wrong places", *Journal of Business Ethics*, Vol. 48 No. 4, pp. 393-400.



Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)

DOI NUMBER: **10.5958/2249-7137.2016.00044.6**

EXPLORING THE TALENT AND EMPOWERING THE ENTREPRENUERIAL TOUCH OF THE WOMEN: A STUDY OF KUDUMBASHREE UNITS IN KERALA

Mohammad Ashraf Ali *; Muhammed As-had V P **

*Professor in Department of Commerce AMU,
Aligarh, INDIA.

**Research Scholar,
Department of Commerce AMU, Aligarh, INDIA

ABSTRACT

Entrepreneurship among women, absolutely enhances the wealth of the nation in general and of the family in particular. It is an undeniable fact that greater opportunities for women to become entrepreneurs and make them available all supports will help much in reducing poverty, corruption and domestic violence and leads to over all development of a society. Kudumbashree is the project implemented in Kerala in 1998 with the sole objectives of women empowerment and poverty eradication. Kudumbashree was conceived as a joint programme of the Government of Kerala and NABARD implemented through Community Development Societies of Poor Women, serving as the community wing of Local Governments. Thus, governments across the India as well as various developmental organizations are actively and seriously undertaking promotion of women entrepreneurs through various schemes, incentives and promotional measures. This paper aims to explain the importance of women entrepreneurship for economic development of the county, try to know to what extend the kudumbashree project helps them to start an entrepreneurship by identifying their inner strength and opportunities for growth and to develop conceptual framework for entrepreneurial skill and talent development in rural areas.

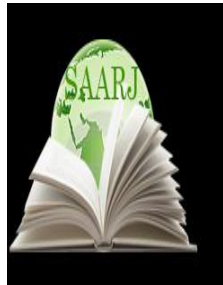
KEYWORDS: *Entrepreneurship, Empowerment, Poverty, Corruption and Promotional measures*

REFERENCE

- A path out of poverty developing rural and Women Entrepreneurship - United Nations Industrial Development Organization(Economy, Environment Employment)
- A Study on the Micro Enterprises Promoted by Kudumbashree and their Marketing Strategies in Malappuram District by M.K. Irshad and B.K. Muhammed Juman
- Dhameja S K (2002), Women Entrepreneurs: Opportunities, Performance and Problems, Deep Publisher (P) Ltd., New Delhi.
- Dr. Suryani Motik, MGA significant role of women entrepreneurs in economic development
- Enhancing Women's Economic Empowerment through Entrepreneurship and Business Leadership in OECD Countries
- Women's Economic Empowerment DAC Network on Gender Equality (GENDERNET)
- Women Entrepreneurship in Asian developing countries: Their development and main constraints by Tulus Tambunan , Journal of Development and Agricultural Economics Vol. 1(2), pp. 027-040, May, 2009
- Women-Empowerment through Women Entrepreneurship - A study of Faizabad Zone of Uttar-Pradesh by Nivedita Dwivedi
- Women's Empowerment and Economic Development by Esther Duflo
- Women Entrepreneurship in India-Problems and Prospects by Meenu Goyal* and Jai Prakash International Journal of Multidisciplinary Research Vol.1 Issue 5, September 2011
- Kudumbashree mission hope publication

WEBSITES

www.kudumbashree.org
www.kerala.gov.in

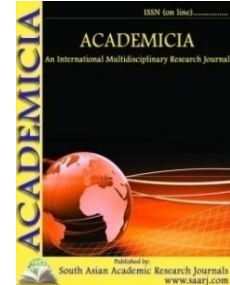


Published by: South Asian Academic Research Journals

ACADEMICA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)

**DOI NUMBER: 10.5958/2249-7137.2016.00045.8**

ACADEMIC ACHIEVEMENT AND SOCIAL SUPPORT AMONG POSTGRADUATE STUDENTS: AN EMPIRICAL STUDY

Dr. Ritu Rani *; Shashi **

*Assistant Professor,
Department of Education,
Chaudhary Ranbir Singh University, Jind.

**Student, Department of Education,
Chaudhary Ranbir Singh University, Jind.

ABSTRACT

The present paper intends to explore the social support among postgraduate students. For this purpose, descriptive survey method was used. In order to measure social support of post graduate students, Multidimensional Scale of Perceived Social Support by Zimet (1988) was used and administered to a sample of 100 students chosen through systematic random sampling. Results of the study indicated that the academic achievement of boys and girls differed significantly and academic achievement of urban and rural did not differ significantly. Moreover, it can be inferred that there was found no significant difference in social support of male and female students and students belonging to urban and rural area. Further, the correlation coefficient indicated that social support and academic achievement has small but positively correlated with each other.

KEYWORDS: Social support, academic achievement, and postgraduate students.

REFERENCES

- Cirik.I (2015). Relationships between social support, motivation, and science achievement: structural equation modeling. *Anthropologist*, 20(1,2): 232-242.
- Iglesia.G.D.L, Stovera.J.B, & Liporacea.M.F. (2014) Perceived social support and academic achievement in Argentinean college students. *Europe's Journal of Psychology*, 10(4), 637-649.

Kumari.A, &Chamundeswari.S. (2013) Self-concept and academic achievement of students at the higher secondary level. *Journal of Sociological Research*, 4(2) 105.

MatsudaT, Tsuda.A., Kim.E., Deng.K(2014) Association between perceived social support and subjective well-being among Japanese, Chinese, and Korean College Students.

Tasdan.M. &Yalcin.T.(2010).Relationship between primary school teachers' perceived social support and organizational trust level. *Educational Sciences: Theory & Practice*10 (4) 2609-2620.

Zimet GD, Dahlem NW, FarelyGK(1988). The multidimensional scale of perceived social support. *Journal of personality assessment* 1988;52:30-41.

Albrecht, T.L, & Adelman, M.B.(1987) Communicating sobcial support: A theoretical perspective. In T.L. Albrecht & M.B. Adelman(eds), communicating social support (pp. 18-39). Newbury park, CA:sage.

www.wikipedia.com



Published by: South Asian Academic Research Journals

ACADEMICIA:

An International Multidisciplinary Research Journal

(A Double Blind Refereed & Reviewed International Journal)

DOI NUMBER: **10.5958/2249-7137.2016.00046.X**

COOPERATIVE SPECTRUM SENSING IN COGNITIVE RADIO NETWORKS USING RANDOM ADAPTIVE ACCESS

B.Ramadasu*; Suresh Pabboju **

*Asst.Prof.

CSE,CBIT,

**Professor Dept.of

IT, CBIT,Hyderabad, INDIA.

ABSTRACT

Recent research shows that more than 70% of the available spectrum is not utilized efficiently. The bandwidth becomes expensive due to a shortage of frequencies. Therefore for efficient utilization of spectrum, we need to sense the spectrum to determine whether it is being used by primary user or not. Opportunistic unlicensed access to the (temporarily) unused frequency bands across the licensed radio spectrum is currently being investigated as a means to increase the efficiency of spectrum usage. Such opportunistic access calls for implementation of safeguards so that ongoing licensed operations are not compromised. Among different candidates, sensing based access, where the unlicensed users transmit if they sense the licensed band to be free, is particularly appealing due to its low deployment cost and its compatibility with the legacy licensed systems. The ability to reliably and autonomously identify unused frequency bands is envisaged as one of the main functionalities of cognitive radios. The energy detector senses spectrum holes by determining whether the primary signal is absent or present in a given frequency slot. The energy detector typically operates without prior knowledge of the primary signal parameters. A new cooperative spectrum sensing scheme using random access is proposed in a cognitive radio network. In typical cooperative spectrum sensing situations, spectrum sensing data of several secondary users are collected before sensing decision. Yet how to collect the sensing data is not an easy problem because coordination between secondary users is needed. This study addresses this problem. The proposed scheme uses random access to report

the sensing data of the secondary users. In the proposed scheme, the length of the sensing data collection period is determined adaptively based on the current status of the collected sensing data. We apply backward induction approach to decide when to stop the collection procedure of the sensing data. The proposed scheme does not need complex slot management to collect sensing data and shows performance improvement over conventional methods.

KEYWORDS: *Backward induction, cognitive radio, cooperative spectrum sensing, random access, Energy Detection.*

9.REFERENCES

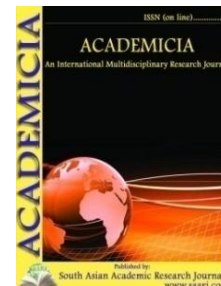
- [1] Dong-Jun Lee, “Adaptive Cooperative Spectrum Sensing In Cognitive Radio Networks,” *IEEE Trans. Signal Process.*, vol. 58, no. 12, pp. 6266–6283, Dec. 2013
- [2] W. Zhang, R. K. Mallik, and K. B. Letaief, “Optimization of cooperative spectrum sensing with energy detection in cognitive radio networks,” *IEEE Trans. Wireless Commun.*, vol. 8, no. 12, pp. 5761–5766, Dec. 2009.
- [3] J. Ma, G. Zhao, and Y. Li, “Soft combination and detection for cooperative spectrum sensing in cognitive radio networks,” *IEEE Trans. Wireless Commun.*, vol. 7, no. 11, pp. 4502–4507, Nov. 2008.
- [4] Z. Quan, S. Cui, and A. H. Sayed, “Optimal linear cooperation for spectrum sensing in cognitive radio networks,” *IEEE J. Sel. Topics Signal Process.*, vol. 2, no. 1, pp. 28–40, Feb. 2008.
- [5] Z. Quan, W.-K. Ma, S. Cui, and A. H. Sayed, “Optimal linear fusion for distributed detection via semidefinite programming,” *IEEE Trans. Signal Process.*, vol. 58, no. 4, pp. 2431–2436, Apr. 2010.
- [6] Q. Zou, S. Zheng, and A. H. Sayed, “Cooperative sensing via sequential detection,” *IEEE Trans. Signal Process.*, vol. 58, no. 12, pp. 6266–6283, Dec. 2010.



Published by: South Asian Academic Research Journals

ACADEMICIA:
An International
Multidisciplinary
Research Journal

(A Double Blind Refereed & Reviewed International Journal)



DOI NUMBER: 10.5958/2249-7137.2016.00047.

**IMPACT OF FAMILY CLIMATE ON THE ACADEMIC ACHIEVEMENT
OF SENIOR SECONDARY STUDENTS**

Dr. Sadaf Jafri*

*Doctorate in Education,
AMU, Aligarh, U.P.

ABSTRACT

The world is becoming more and more competitive and quality of performance is the key factor for personal progress. Excellence particularly, in academics and generally in all other areas has been seen as an important aspect. Parents desire that their children climb the ladder of performance to as high level as possible. This desire of a high level of achievement puts a lot of pressure on students, teachers, institutions and the educational system itself in general. In fact it appears as if the whole system of education revolves around academic achievement of the students, though various other outcomes are also expected from the system. Thus, a lot of time and efforts of the schools are utilized in helping students to achieve better in their scholastic endeavors. Thus the present study aims at investigating the impact of family climate on the academic achievement of senior secondary students. The sample consists of 865 male and female respondents of science and arts stream. Family Environment Scale (FES) constructed by Bhatia and Chadha in the year 1993 was used for this study. The findings of the research study depicts the influence of only 2 dimensions of FC (out of 8 dimensions of FC) on students' academic achievement. Results, clearly shows that the t-value is found to be highly significant at .01 level of confidence. This clearly indicates that two dimensions of FC i.e., Active recreational orientation (F6) & independence (F5) contribute in determining the academic achievement of both science and arts stream students.

*Again the value of R-square from the table shows that F6 & F5 plays a determining role in the academic achievement of the total sample. The beta value from the table clearly depicts that it is positively significant in case of both F6 (.10738**) & F5 (.08521**) which enables us to conclude that higher the F6 & F5 higher will be their academic achievement.*

KEYWORDS: *R-square, endeavors, indicates, achievement, conclude*

REFERENCES:

- Agarwal, K.L. (1986). A study of the effect of parental encouragement upon the educational development of the students'. Ph.D. Edu., Garhwal Univ.
- Ahuja, M. & Goyal, S. (2006). Subject-wise Achievement of Adolescents in Relation to Parental Involvement and Parental Aspirations. Journal of Community Guidance and Research, Vol.23 (1), 30-57.
- Chopra, S.C. (1982). A Study of some Non-Intellectual Correlates of Academic Achievement. D. Lit., Edu., Lucknow Univ.
- Coleman (1988). To examine the impact of changes in family status on the relations between family processes and academic achievement. Social capital in the creation of human capital, American Journal of Sociology, vol. 94, 95-120.
- Darolia, R., & Wydick, B. (2006). The Economics of Parenting, Self-Esteem, and Academic Performance: Theory and a Test. Research Paper. ERS group, Emeryville, CA. 2000 Powell, S., Suite 500 Emeryville, C.A. 94608.
- Demo, D.H., & Acock, A.C. (1996). A longitudinal analysis of family relationships and children's school achievement in one- and two-parent families. Journal of Research on Adolescence, vol. 6, 457-488.
- Devi, S., & Myuri, K. (2003). The effects of Family and School on the Academic Achievement of Residential School Children. Journal of Community Guidance and Research, vol. 20 (2), 139-148.
- Eccles, J. S. (1999). The development of children ages 6 to 14. Future of Children, vol. 9(2), 30-44.
- Eysenck, H.J. & Arnold, W.J. (1972). Encyclopedia of Psychology, vol. 2. West Germany Search Press.
- Fuligni, A.J. (1997). The academic achievement of adolescents from immigrant families: The roles of family background, attitudes, and behavior. Child Development: Abstracts and Bibliography, vol. 71 (3). Published by the Univ. of Chicago Press for the Society for Research in Child Development.
- Gonzales, N.A. et al. (2006). Family, peer, and neighborhood influences on academic achievement among African-American adolescents: One year prospective effects. American Journal of Community Psychology, vol. 24(3). Available at: <http://scholar.google.com/scholar?q=>
- Khanam, R. (2006). Family climate as a correlate of academic achievement of male and female students at the secondary school level. M.Ed dissertation. AMU, Aligarh. PP: 10, 11, 13, 15.
- Kulshreshta, L. (1981). A Study of Certain Factors Related to Differential Patterns of Achievement among Bright Students. Ph. D., Agra Univ.

Shankar, S.P. & Rachel, J. (2005).Parents' anxiety in developing their children's attitude towards learning at the board examination level. Journal of Community Guidance and Research, vol. 22(1), 139-143.

Steinberg, L., Bradford, B., &Dornbusch, S. (1996). Beyond the classroom:Why school reform has failed and what parents need to do. New York.

Uwaifo, V.O. (2008).The Effects of Family Structure and Parenthood on theAcademic Performance of Nigerian University Students.Department ofVocational and Technical Education, Ambrose Alli University, Ekpoma, EdoState, Nigeria. Available at <http://www.krepublishers.com>

Wiersma, W. (1991).Research Methods in Education. Boston: Allyn andBacon.

Weiner, B., & Graham, S. (1999).Attribution in personality psychology. Basic and Applied Social Psychology, vol. 20, 155-166.

Zahir, S. (1988).Study of relationship between perceived maternal behaviourand personality as well as scholastic achievement of Adolescents. Ph.D. Edu.,Lucknow Univ.

Editorial Board

Dr. B.S. Rai, Editor in Chief

Former Principal
G.N. Khalsa PG.College, Yamunanagar,
Haryana, INDIA

Dr. Romesh Chand

Professor- cum-Principal
CDL College Of Education,Jagadhri,
Haryana,INDIA

Dr. Dhramveer

Former Principal
CDL College of Education, Jagadhri,
Haryana, INDIA

Dr. Victor Sohmen

Professor
Department of Management and Leadership
Drexel University Philadelphia, Pennsylvania,
USA

Dr. Anisul M. Islam

Professor
Department of Economics University of
Houston-Downtown, Davies College of Business
Shea Street Building Suite B-489
One Main Street, Houston, TX 77002, USA

Obidjon Khamidov

Professor
Tashkent State University of Economics,
UZBEKISTAN

Dilbar Aslanova

Professor
Samarkand Institute of Economics and Service,
Samarkand, UZBEKISTAN

Dr. S S Narta

Professor
Department of Commerce,
Himachal Pradesh University, Shimla, INDIA.

Dr. Michelle L. Rosser

Professor
Psychology, Ashford University, USA.

Dr. Secil Tastan

Professor
Management and Organizational Behaviour,
Marmara University, TURKEY.

Dr. Ludmila Mladkova

Faculty
Management, University of Economics Prague,
CZECH REPUBLIC

Dr. Suresh Dhanda

Associate professor
Head, Department of Political Science,
S. A. Jain College, Ambala City, Haryana, INDIA.

Nagah A. A. Mohamed

Associate professor
Sudan University of science and technology,
SUDAN.

Dr. Ipseeta Satpathy

Associate Professor
Organizational Behavior & Human Resource
Management, KSOM, KIIT, University,
Bhubaneswar, Odisha, INDIA.

Dr B. Mohan

Associate Professor in English
S.V. College of Engineering and Technology
Chittoor, Andhra Pradesh, INDIA

Dr. Durgesh Nandini

Associate Professor
Department of Public Administration,
IGNOU, Delhi, INDIA

Jumana M. ELhafiz

Associate Professor
Department of Biochemistry, Shendi University,
Ministry of Health, SUDAN

Dr. Karun Kant Uppal

Assistant Professor
P G Deptt. of Commerce & Management,
Kamla Lohtia S D College, Ludhiana, INDIA

Dr. Dalbir Singh

Assistant Professor
Haryana School of Business, G.J.U.S & T, Hisar,
Haryana, INDIA

Nadeera Jayathunga

Senior Lecturer
Department of Social Sciences,
Sabaragamuwa University,Belihuloya, SRI LANKA

Rania Al Omari

Lecturer
Applied Science University,
Faculty of Economic and Administrative Science,
Accounting Department, Jordan-AMMAN

Amir Askari

PhD in Psychology
Crisis Intervention Committee Chair,
Iranian Psychological Association, Tehran, IRAN

Categories

- Business Management
- Social Science & Humanities
- Education
- Information Technology
- Scientific Fields

Review Process

Each research paper/article submitted to the journal is subject to the following reviewing process:

1. Each research paper/article will be initially evaluated by the editor to check the quality of the research article for the journal. The editor may make use of iThenticate/Viper software to examine the originality of research articles received.
2. The articles passed through screening at this level will be forwarded to two referees for blind peer review.
3. At this stage, two referees will carefully review the research article, each of whom will make a recommendation to publish the article in its present form/modify/reject.
4. The review process may take one/two months.
5. In case of acceptance of the article, journal reserves the right of making amendments in the final draft of the research paper to suit the journal's standard and requirement.

Published by

South Asian Academic Research Journals

A Publication of CDL College of Education, Jagadhri (Haryana)
(Affiliated to Kurukshetra University, Kurukshetra, India)

Our other publications :

South Asian Journal of Marketing & Management Research (SAJMMR)

ISSN (online) : 2249-877X

SAARJ Journal on Banking & Insurance Research (SJBIR)

ISSN (online) : 2319 – 1422