# Holendro Singh Chungkham

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#### Research

I address empirical causal questions on the work-stressors (e.g. psychological work demand-control, effort-reward imbalance) and health (e.g. depression), and application of advanced statistical techniques to clustered and longitudinal data (such as, multilevel modeling, structural equation modeling, marginal structural, mediation, moderation etc.). At present I am working on the estimation of healthy life expectancy in relation to work-stressors using multi-state life tables using data from some European countries. Another area of interest is in modeling of missing data for longitudinal design. I also collaborate with researchers from Stockholm University, Sweden.

# **Employment**

Indian Statistical Institute, North-East Centre	2014-till date
Senior Researcher (Stockholm University, Stockholm)	2013-2014
Post-Doctoral Fellow (Stockholm University, Stockholm)	2011-2013
Assistant Professor (North-Eastern Hill University, Shillong)	2009-2011
Research Analyst (BBC, Delhi)	2008-2009

#### **Education**

International Institute for Population Sciences, Ph.D. Population Studies	2005-2009
International Institute for Population Sciences, M.Phil. Population Studies	2003-2004
Manipur University, M.Sc. Statistics	2000-2002
DM College, Manipur University, B.Sc. Statistics	1995-1998

#### **Publications**

**Books** 

Hyde M, Chungkham HS and Ladusingh L (eds.). 2017 Work and Health in India London: Policy Press, Bristol UNiversity Press (ISBN: 978-1447327363) [Link]

Magnusson Hanson LL, Hyde M, Westerlund H, "Work, Stress and Health: Theories and Models", 2017, appeared in the volume *Work and Health in India*, ed. Hyde M, Chungkham HS, Ladusingh. *Policy Press*, University of Bristol, United Kingdom [Link]

#### Journal Articles

Magnusson Hanson LL, Peristera P, **Chungkham HS**, Westerlund H. 2017 "Psychosocial work characteristics, sleep disturbances, and risk of subsequent depression: A study of time-varying effect modification." *Journal of Sleep Research* 26(3): 266–276 [Link]

Platts L, Head J, Stenholm S, **Chungkham HS**, Zins M, Goldberg M. 2017 "Physical occupational exposures and health expectancies in a French occupational cohort." *Occupational & Environmental Medicine* 74: 176–183 [Link]

Magnusson Hanson LL, Persistera P, **Chungkham HS**, Westerlund H. 2016 "Longitudinal mediation modeling of health behaviors as mediators between workplace demands/support and depressive symptoms." *PLoS One* 11(12): 1–14 [Link]

Magnusson Hanson LL, Westerlund H, **Chungkham HS**, Vahtera J, Sverke M, Alexanderson K. 2016 "Purchases of prescription antidepressants in the Swedish population in relation to major workplace downsizing." *Epidemiology* 27(2): 257–264 [Link]

Leineweber C<sup>§</sup>, **Chungkham HS**<sup>§</sup>, Lindqvist R, Westerlund H, Runnesdotter S, Tishelman C. 2016 "Impact of nurses environment and satisfaction with schedule flexibility on intention to leave: Results from a multi-country-multilevel study." *International Journal of Nursing Studies* 58: 47–58 [§contributed equally] [Link]

Magnusson Hanson LL, **Chungkham HS**, Ferrie J, Sverke M. 2015 "Threat of dismissal and symptoms of major depression: a study using repeat measures in the Swedish working population." *Journal of Epidemiology and Community Health* 69(10): 963–969 [Link]

Hyde M, Magnusson Hanson LL, **Chungkham HS**, Leineweber C, Westerlund H. 2015 "The impact of involuntary job loss in later life on the risk of major depression and being prescribed anti-depressant medication." *Aging & Mental Health* 19(5): 381–389 [Link]

Hamren K, **Chungkham HS**, Hyde M. 2015 "Religion, spirituality, social support and quality of life: measurement and predictors CASP-12 (v2) amongst older Ethiopians living in Addis Ababa." *Aging & Mental Health* 19(7): 610–621 [Link]

Magnusson Hanson LL<sup>†</sup>, **Chungkham HS**<sup>†</sup>, Åkerstedt T, Westerlund H. 2014 "The role of sleep risturbances in the longitudinal relationship between psychosocial working conditions, measured by work demands and support, and depression." *Sleep* 37(12): 1977-1985 [†contributed equally] [Link]

Magnusson Hanson LL, Leineweber C, **Chungkham HS**, Westerlund H. 2014 "Work-to-home interference and its prospective relation to major depression and treatment with antidepressants using the Swedish Longitudinal and Occupational Survey of Health (SLOSH)." *Scandinavian Journal of Work Environment & Health* 40(1): 66-73 [Link]

Danielsson CB, **Chungkham HS**, Wulff C, Westerlund H. 2014 "Office design impact on sick leave rates." *Ergonomics* 57(2): 139–147 [Link]

Leineweber C, Westerlund H, **Chungkham HS**, Lindqvist R, Runnesdotter S, Tishelman C. 2014 "Nurses' practice environment and work-family conflict in relation to burn out: A multilevel modelling approach." *PLoS One* 9(5): 1–9 [Link]

Lima F, Hyde M, **Chungkham HS**, Novaes M, Correia C, Junqueira F, Campos M, Laks J, Petribu K. 2014 "Quality of life amongst older Brazilians: A cross-cultural validation of the CASP-19 into

Brazilian-Portuguese." PLoS One 9(4): 1–8 [Link]

Leineweber C, Chungkham HS, Westerlund H, Tishelman C, Lindqvist R. 2014 "Hospital organizational factors influence work-family conflict in registered nurses: multilevel modelling of a nation-wide cross-sectional survey in Sweden." *International Journal of Nursing Studies* 51(5): 744–751 [Link]

**Chungkham HS**, Ingre M, Karasek R, Westerlund H & Theorell T. 2013 "A longitudinal analysis of confirmatory factor structure and measurement invariance of the demand control support model: an evidence from SLOSH." *PLoS One* 8(8): 1–11 [Link]

**Chungkham HS**, L. Ladusingh 2010 "Inpatient Length of Stay: A finite mixture modeling analysis." *European Journal of Health Economics* 11(2): 119–12 [Link]

**Chungkham HS** 2009 "Public-private differential in healthcare and healthcare cost in India: the case of inpatients." *Journal of Public Health* 17(6): 401–407 [Link]

**Chungkham HS**, L. Ladusingh 2009 "Household use of inpatient healthcare services in India." *World Health and Population* 12(1): 30–40 [Link]

**Chungkham HS**, L. Ladusingh 2009 "Correlates of inpatient healthcare seeking behavior in India." *Indian Journal of Public Health* 53(1): 6–12 [Link]

L. Ladusingh, **Chungkham HS**, Kh Jitenkumar 2008 "Contraceptive prevalence rates among ST & SC in EAG states." *Journal of Family Welfare* 1: 1–6 [Link]

L. Ladusingh, **Chungkham HS**, 2007 "Rich-poor gap in maternal care: the case of Northeast India." *Asian Population Studies* 3(1): 79–94 [Link]

L. Ladusingh, **Chungkham HS** 2006 "Place, community education, gender and child mortality in Northeast India." *Population, Space and Place* 12(1): 65–76 [Link]

Proceedings of Conferences

Platts L, Head J, Stenholm S, Chungkham HS, Zins M, Goldberg M. "Physical occupational exposures and healthy life expectancy in a French occupational cohort" in G. Ritschard & M. Studer (eds), Proceedings of the International Conference on Sequence Analysis and Related Methods, Lausanne, June 8-10, 2016, p. 435. [link]

Manuscripts: Under Review or Submitted

Head J, **Chungkham HS**, Hyde M, Zaninotto P, Alexanderson K, Stenholm S, Salo P, Kivimaki M, Zins M, Goldberg M, Vahtera J, Westerlund H. Does healthy life expectancy vary by socioeconomic status in Finland, and France, Sweden, and England? Evidence from four prospective European cohort studies (submitted to *JECH*, May, 2017).

Magnusson Hanson LL, Westerlund H, **Chungkham HS**, Vahtera J, Alexanderson K, Goldberg M, Kivim"{a}ki M, Platts L, Rod NH, Zins M, Head J. Loss of healthy life years between ages 50 to 75 attributed to job strain: Analyses of 64,533 individuals from four prospective cohort studies (submitted to *J Occup Environ Med*, July, 2017).

Peristera P, Rod NH, Chungkham HS, Magnusson Hanson LL. Does physical inactivity modify the relationship between psychosocial work factors and depressive symptoms? Modeling the

interrelationship between time-dependent exposure, moderator and outcome in longitudinal data (submitted to the *Journal of Psychosomatic Research*, March, 2017).

#### **Presentations: Conferences**

Head J, Chungkham HS, Hyde M, Zaninotto P, Stenholm S, Zins M, Vahtera J, Westerlund H. Does healthy life expectancy vary by socioeconomic status in Finland, and France, Sweden, and England? Evidence from four prospective European cohort studies. Paper at the symposium session of the 21st IAGG World Congress of Gerontology and Geriatrics, Sas Francisco, 23-27 July 2017.

Platts L, Magnusson Hanson LL, Head J, Stenholm S, Chungkham HS, Zins M, "Health Expectancy Between Ages 50-75 in Relation to Physical and Psychosocial Exposures". Paper at the symposium session of the 21st IAGG World Congress of Gerontology and Geriatrics, San Francisco, 23-27 July 2017.

Magnusson Hanson LL, Westerlund H, Chungkham HS, Vahtera J, Rod NH, Alexanderson K, Goldberg M, Kivimaki M, Stenholm S, Platts LG, Zins M, Head J. "Loss of Healthy Life Years Between Ages 50-75 Years Attributed to Job Strain: Analyses of 64533 Individuals from Four Prospective European Cohort Studies". Paper to be presented at the International Congress of Behavioral Medicine, Melbourne, 07-10 December 2016.

Platts L, Head J, Stenholm S, Chungkham HS, Zins M, Goldberg M. "Physical occupational exposures and healthy life expectancy in a French occupational cohort". Proceedings, International Conference on Sequential Analysis and Related Methods, University of Lausanne, Switzerland, 08-10 June 2016.

Magnusson Hanson LL, Peristera P, Chungkham HS, Westerlund H. "The role of life style factors in the longitudinal relationship between work characteristics and depression". Paper presented at the Work Stress and Health Conference, Atlanta, May 2015.

Magnusson Hanson L, Westerlund H, Vahtera J, Sverke M, Chungkham HS, & Alexanderson K. "Treatment with antidepressants in the Swedish population in relation to major workplace downsizing". Paper presented at the 17th EPA Section Epidemiology and Social Psychiatry Meeting in Ulm, Germany, 21-24 May 2014.

**Chungkham HS**, Magnusson Hanson LL, Westerlund H, Torbjorn A, Kivimaki M. "Does disturbed sleep mediate the longitudinal relationship between work stress and depression?" (Paper to be presented at the European Congress of Epidemiology, 11-14 August, 2013, Arhus, Denmark).

Chungkham HS, Westerlund H & Theorell T. "A Longitudinal Analysis of Confirmatory Factor Structure and Measurement Invariance of the Demand Control Support Model: An Evidence from SLOSH (Oral to be presented at the Work Stress and Health Conference of the American Psychological Association in Los Angeles, 14-19, May, 2013).

**Chungkham HS**, Westerlund H & Theorell T. A Longitudinal Analysis of Confirmatory Factor Structure and Measurement Invariance of the Demand Control Support Model: An Evidence from SLOSH (Oral to be presented at the Sixth International Conference on Work Environment and Cardiovascular Diseases in Tokyo, 27-30, March, 2013).

Magnusson Hanson LL, Leineweber C, Chungkham HS, & Westerlund H. "Prospective effects of work-to-home interference and its prospective relation to major depression and treatment with

antidepressants using the Swedish Longitudinal Occupational Survey of Health". Paper presented at the Work, Stress, and Health Conference 2013: Protecting and Promoting Total Worker Health, Los Angeles, CA, 18 May 2013.

Magnusson Hanson L, Leineweber C, Chungkham HS, & Westerlund H. "Prospective relationships between work-to-home interference, major depression and treatment with antidepressants using the Swedish Longitudinal Occupational Survey of Health (SLOSH)". Paper presented at FALF 2013: Changes in Working Life: Individual, Organizational, and Methodological Perspectives, Stockholm, Sweden, 19 June 2013.

Westerlund H, Chungkham HS, Kivimaki M, & Head J. Is medically-certified sickness absence related to a long-term reduction of physical and mental health functioning? An 18-year follow-up in the Whitehall II study (Poster presented at the 70th annual scientific meeting of the American Psychosomatic Society (APS) in Athens, Greece, 15 March 2012).

Chungkham HS, Leineweber C, Tishelman C, Westerlund H, & Lindqvist R. Imbalence between working environment and family life of registered nurses: a multilevel modeling analysis (Poster presented at the 12th International Congress of Behavioral Medicine (ICBM) in Budapest, Hungary, 29 August 2012).

Westerlund H, Chungkham HS, Kivimaki M & Head J. "Is medically-certified sickness absence related to a long-term reduction of physical health functioning? An 18-year follow-up in the Whitehall II study". Poster presented at the 12th International Congress of Behavioural Medicine: From Basic Science to Clinical Investigation and Public Health, Budapest, Hungary 29 August 2012. Selected as one of the 11 Top Posters by the ISBM Awards Committee.

Hyde M, Magnusson Hanson LL, Chungkham HS, Leineweber C, Westerlund H. "The impact of involuntary job loss in later life on the risk of major depression and being prescribed anti-depressant medication". Poster presented at the Gerontological Society of America, 20-24 Nov 2013, Sheraton New Orleans & New Orleans Marriott, New Orleans, Louisiana.

Hyde M, Chungkham HS, & Westerlund H. "The impact of psychosocial working conditions on expected and desired retirement ages in a representative sample of Swedish workers". Paper presented at the 20th IAGG World Congress of Gerontology and Geriatrics, Digital@geing: A new horizon for health care and active ageing, Seoul, Korea, 24 June 2013.

Holendro Singh Ch. & L. Ladusingh. Health Care Behavior: The Case of Inpatients in India (Poster presented at the XXIX Annual Conference of the Indian Association for the Study of Population at Banaras Hindu University, Varanasi, India, 26-28 October 2007).

L. Ladusingh, Holendro Singh Ch. & Kh. Jitenkumar. Small Area Estimation with an Application to Contraceptive Prevalence Estimates among ST & SC in EAG States. National Seminar on Tribal Demography, Health and Development in India, February 25-26, 2005, Raipur, India.

# **Teaching**

Continue giving a full-credit course on Numerical Methods and Optimization in first semester of Post Graduate Diploma in Statistical Methods and Analytics, at ISI, North-East Centre, Tezpur since July-December, 2015 till date.

Continue giving a half-credit course on Regression Analysis in second semester of Post Graduate Diploma in Statistical Methods and Analytics, at ISI, North-East Centre, Tezpur since January-June,

2015 till date.

Continue giving a half-credit course on Actuarial Statistics in second semester of Post Graduate Diploma in Statistical Methods and Analytics, at ISI, North-East Centre, Tezpur since January-June, 2015 till date.

Gave a 4-credit course on Distribution Theory-II, in Semester-I of M.Sc., Statistics, Department of Statistics, NEHU, Shillong, August-December, 2009, 2010.

Gave a 2-credit course on Vital & Official Statistics in Sem-I of Post Graduate Diploma, Department of Statistics, NEHU, Shillong, August-December, 2009.

Gave a 4-credit course on Introduction to Sample Survey, in Semester-II of M.Sc., Statistics, Department of Statistics, NEHU, Shillong, February-July, 2010.

Gave a 2-credit course on Sample Survey Methodology in Sem-II of Post Graduate Diploma, Department of Statistics, NEHU, Shillong, February-July, 2010.

Gave a 2-credit course on Time Series Analysis & Forecasting in Sem-IV of M.Sc., Statistics, Department of Statistics, NEHU, Shillong, Februaryl-July, 2010.

Gave a 2-credit course on Introduction to Probability Theory & Distributions in Sem-II of M.Sc., Statistics, Department of Statistics, NEHU, Shillong, February-July, 2011.

Gave a 12 & 25-hours contact classes on Statistics and Research Methodology to the students of M.Phil, Department of Clinical Psychology, LGB Regional Institute of Mental Health, Tezpur in February 2016, 2017.

Gave a 04-hours contact classes on Statistics and Research Methodology to the students of Second Year, Master in Mass Communication, Tezpur University, Tezpur in April 2017.

#### Lectures/Invited Talkes

Gave a two-day workshop on Biostatistics with applications using SPSS to the students of M.Sc. & M.Phil, LGB Regional Institute of Mental Health, organized by the Department of Psychiatry, Tezpur during 17-18 December, 2015.

Organized and gave a lecture on Logistic Regression Analysis with applications using SPSS in a workshop "Statistical Methods and Applications" funded by the Applied & Official Statistics Unit of ISI, North-East Centre at the Department of Statistics, Manipur University during 30-02 February, 2015.

Conducted a workshop "Work Environment, Stress and Health in India" through a grant from the Swedish Research Council for Health, Working Life and Welfare (FORTE), Forte, #2012-1839, during December 9-11, 2013, at Taj Ambassador Hotel, New Delhi.

Gave a 02-hours lecture on Sampling Techniques with Applications to the employees of Department of Economics & Statistics, North-Eastern States, conducted by ISI, North-East Centre, Tezpur on 13 February 2017.

Gave a 04-hours lecture on Sampling Techniques with Applications to the employees of Department of Economics & Statistics, North-Eastern States, conducted by ISI, North-East Centre, Tezpur during 10-11 October 2017.

# **Projects Involved**

IDEAR (Integrated Datasets in Europe for Ageing Research) [This is a network for Sweden, the UK, Finland, France, and Denmark to study the determinants of Healthy Life Expectancy], PI - Westerlund H, Professor, Stress Research Institute, Sweden.

Swedish Longitudinal Occupational Survey of Health (SLOSH), PI - Westerlund H, Professor, Stress Research Institute, Sweden.

RN4CAST-Hospital Organization, Working Group and individual factors on nurses' job satisfaction, burnout and intention to quit. (FAS 2011-0403), PI: Carol Tishelman, Karolinska Institute, Stockholm, Sweden.

### Academic-Related Responsibilities

In-Charge, Students' Academic Affairs, ISI, North-East Centre, Tezpur since og September, 2015.

Member, Selection Committee for the Post-Graduate Diploma in Statistical Methods and Analytics, Indian Statistical Institute since 2015.

#### Mentoring Students' Projects

Malaria and rainfall: a distributed lagged regression modeling, Post Graduate Diploma in Statistical Methods & Analytics, ISI, North-East Centre, 2016-2017.

Mental stress and life satisfaction: a regression analysis, Post Graduate Diploma in Statistical Methods & Analytics, ISI, North-East Centre, 2015-2016.

Birth weight and maternal characteristics (use of logistic regression model), Post Graduate Diploma in Statistical Methods & Analytics, ISI, North-East Centre, 2014-2015.

Child mortality in North-East India (use of multilevel model), M.Sc., NEHU, Shillong, 2009-2011.

### Fellowships and Awards

Shri Krishnagopal Memorial Gold Medal for securing First Class First in M.Sc. (Statistics), Manipur University, India

GoI, Ministry of Health & Family Welfare, India Fellowship for pursuing M.Phil, I.I.P.S, India 2003-2004

GoI, Ministry of Health & Family Welfare, India Fellowship for pursuing Ph.D, I.I.P.S, India 2005-2008

# **Professional Memberships**

Life Member-International Epidemiological Association.

Life Member-International Biometrics Society.

# Computer and Programming Skills

Packages/Tools: STATA, MLwiN, SAS (introductory level).

Programming Languages: R.

# Journals Reviewed

Ageing and Mental Health
Social Science and Medicine
PLoS One
International Journal of Nursing Studies
Scandinavian Journal of Public Health

Asian Population Studies

#### References

Hugo Westerlund, Director & Professor of Epidemiology, Stress Research Institute, Stockholm University, SE-10691, Stockholm, SWEDEN; e-mail: hugo.westerlund@su.se, hugo.westerlund@gmail.com; phone: +46855378946, +46-737078926.

S.M. Bendre, Professor, Indian Statistical Institute, Chennai Centre, CIT Campus, Taramani, Chennai-600 113, INDIA; e-mail: <a href="mailto:smbendre@gmail.com">smbendre@gmail.com</a>; phone: (M)+919436769060, (O) +91-0361-2267331.

Jenny Head, Professor, Department of Epidemiology & Public Health, University College London, 1-19 Torrington Place, London WC1E 6BT; e-mail: j.head@ucl.ac.uk; phone: +44 207 1683.

L. Ladu Singh, Professor & Head, Department of Mathematical Demography & Statistics, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400 088, INDIA; e-mail: <a href="mailto:lslaishram@iips.net">lslaishram@iips.net</a>; phone (O): +91-022-42372411.