



## Biography

Behrooz is a Senior Research Fellow at Institute for Safety, Compensation and Recovery Research where he leads the Data Analytics Team. His current areas of research include Compensation Health, Health Service Use, Injury Recovery, and Return to Work. He applies a wide range of statistical and computational techniques such as time series analysis, data mining, and predictive modelling to investigate patterns, trends and responses in the behaviour of individuals and organisations with direct applications to design policy.

## Qualifications

## Employment

## Research output

### **Characterizing Early and Late Return to Work after Traumatic Brain Injury**

Spitz, G., Mahmoei, B. H., Ross, P., McKenzie, D. & Ponsford, J. L., 1 Sep 2019, In : Journal of Neurotrauma. 36, 17, p. 2533-2540 8 p.

### **Early identification of undesirable outcomes for transport accident injured patients using semi-supervised clustering**

Khorshidi, H. A., Haffari, G., Aickelin, U. & Hassani-Mahmoei, B., 8 Aug 2019, *Digital Health: Changing the Way Healthcare is Conceptualised and Delivered: Selected Papers from the 27th Australian National Health Informatics Conference (HIC 2019)*. Cummings, E., Merolli, M. & Schaper, L. K. (eds.). Amsterdam Netherlands: IOS Press, p. 1-6 6 p. (Studies in Health Technology and Informatics; vol. 266).

### **Evaluating the success of legislative amendments designed to reduce work disability**

Gray, S., Lane, T. J., Hassani-Mahmoei, B. & Collie, A., 6 May 2019, In : Policy Design and Practice.

### **Impact of comorbidity on health outcome after a transport-related injury**

Samoborec, S., Simpson, P., Hassani-Mahmoei, B., Ruseckaite, R., Giummarra, M., Ayton, D. & Evans, S., 19 Apr 2019, (Accepted/In press) In : Injury Prevention. 8 p.

### **An interpretable algorithm on post-injury health service utilization patterns to predict injury outcomes**

Akbarzadeh Khorshidi, H., Hassani-Mahmoei, B. & Haffari, G., 2019, (Accepted/In press) In : Journal of Occupational Rehabilitation. 12 p.

### **Patterns and Predictors of Failed and Sustained Return-to-Work in Transport Injury Insurance Claimants**

Gray, S. E., Hassani-Mahmoei, B., Cameron, I. D., Kendall, E., Kenardy, J. & Collie, A., Dec 2018, In : Journal of Occupational Rehabilitation. 28, 4, p. 740-748 9 p.

### **A population-based study of treated mental health and persistent pain conditions after transport injury**

Giummarra, M. J., Black, O., Smith, P., Collie, A., Hassani-Mahmoei, B., Arnold, C. A., Gong, J. & Gabbe, B. J., Oct 2018, In : Injury. 49, 10, p. 1787-1795 9 p.

### **Factors associated with graduated return to work following injury in a road traffic crash**

Gray, S. E., Hassani-Mahmoei, B., Kendall, E., Cameron, I. D., Kenardy, J. A. & Collie, A., Sep 2018, In : Journal of Transport & Health. 10, p. 167-177 11 p.

**Effectiveness of employer financial incentives in reducing time to report worker injury: An interrupted time series study of two Australian workers' compensation jurisdictions**

Lane, T. J., Gray, S., Hassani Mahmooei, B. & Collie, A., 5 Jan 2018, In : BMC Public Health. 18, 1, 10 p., 100.

**The impact of legislative change on workers' compensation processes and outcomes: Findings from the COMPARE project**

Collie, A., Lane, T., Gray, S. & Hassani-Mahmooei, B., Jun 2017, Melbourne: Monash University. 34 p.

**Prescription opioid dispensing and prescription opioid poisoning: Population data from Victoria, Australia 2006 to 2013**

Berecki-Gisolf, J., Hassani Mahmooei, B., Clapperton, A. & Health, H. S. O., 2017, In : Australian and New Zealand Journal of Public Health. 41, 1, p. 85-91 7 p.

**Victoria Police Safer Workplaces Project**

Muir, C., Haffari, R. & Hassani-Mahmooei, B., 2017, Institute for Safety, Compensation and Recovery Research (ISCRR). 100 p.

**Compensation Research Database: population-based injury data for surveillance, linkage and mining**

Prang, K. H., Hassani-Mahmooei, B. & Collie, A., 1 Oct 2016, In : BMC Research Notes. 9, 1, 11 p., 456.

**Work-related injury and illness in Australia, 2004 to 2014: What is the incidence of work-related conditions and their impact on time lost from work by state and territory, age, gender and injury type?**

Lane, T., Collie, A. & Hassani-Mahmooei, B., Jun 2016, Melbourne Vic Australia: Monash University Publishing. 54 p.

**The effect of pre-existing health conditions on the cost of recovery from road traffic injury: Insights from data linkage of medicare and compensable injury claims in Victoria, Australia**

Hassani Mahmooei, B., Berecki-Gisolf, J., Hahn, Y. & McClure, R. J., 29 Apr 2016, In : BMC Health Services Research. 16, 1, 8 p., 162.

**Does time off work after injury vary by jurisdiction? A comparative study of eight Australian workers' compensation systems**

Collie, A., Lane, T. J., Hassani-Mahmooei, B., Thompson, J. & McLeod, C., 2016, In : BMJ Open. 6, 5, 11 p., e010910.

**Prescription opioid and benzodiazepine use after road traffic injury**

Berecki-Gisolf, J., Hassani Mahmooei, B., Collie, A. & McClure, R., 2016, In : Pain Medicine. 17, 2, p. 304-314 10 p.

**The role of identity and authority from anarchy to order: Insights from modelling the trajectory of duelling in Europe**

Vahabi, M. & Hassani Mahmooei, B., 2016, In : Economic Modelling. 55, p. 57 - 72 16 p.

**Victoria Police Census: Understanding employee movements within Victoria Police**

Muir, C. & Hassani-Mahmooei, B., 2016, MUARC. 32 p.

**"Anarchy" reigns: A quantitative analysis of agent-based modelling publication practices in JASSS, 2001-2012**

Angus, S. & Hassani Mahmooei, B., 2015, In : Journal of Artificial Societies and Social Simulation. 18, 4, p. 1 - 20 20 p.

**Evaluation of WorkSafe Victoria's introduction of Streamlined Treatment Approvals policy initiative**

Koppel, S. N., Collie, A., Nheu, N., Grant, G. M., Berecki-Gisolf, J., Hassani-Mahmooei, B., Iles, R. & Newstead, S. V., 2015, WorkSafe Victoria, Victorian WorkCover Authority. 270 p.

**The complexities of agent-based modeling output analysis**

Lee, J-S., Filatova, T., Ligmann-Zielinska, A., Hassani Mahmooei, B., Stonedahl, F., Lorscheid, I., Voinov, A., Polhill, J. G., Sun, Z. & Parker, D. C., 2015, In : Journal of Artificial Societies and Social Simulation. 18, 4, p. 1 - 27 27 p.

**Use of antidepressant medication after road traffic injury**

Berecki-Gisolf, J., Collie, A., Hassani Mahmooei, B. & McClure, R. J., 2015, In : Injury. 46, 7, p. 1250 - 1256 7 p.

### **The cost of comorbidity to the Transport Accident Commission Compensation Scheme**

Hassani-Mahmooei, B., Berecki-Gisolf, J., Hahn, Y. & McClure, R. J., Jul 2014, Melbourne, Australia: Monash University. 65 p.

### **Dynamics of effort allocation and evolution of trust: an agent-based model**

Hassani Mahmooei, B. & Parris, B. W., 2014, In : Computational and Mathematical Organization Theory. 20, 2, p. 133 - 154 22 p.

### **Review of the Victorian WorkCover Authority (VWA) Injured Worker Survey: Final Report**

Koppel, S. N., Collie, A., Nheu, N., Grant, G. M., Berecki-Gisolf, J., Hassani-Mahmooei, B. & Newstead, S. V., 2014, Victorian WorkCover authority (VWA). 51 p.

### **Resource scarcity, effort allocation and environmental security: An agent-based theoretical approach**

Hassani Mahmooei, B. & Parris, B. W., 2013, In : Economic Modelling. 30, p. 183 - 192 10 p.

### **Climate change and internal migration patterns in Bangladesh: an agent-based model**

Hassani Mahmooei, B. & Parris, B. W., 2012, In : Environment and Development Economics. 17, 6, p. 763 - 780 18 p.

### **Climate change impacts and adaptation in Bangladesh: An agent-based approach**

Angus, S., Parris, B. W. & Hassani Mahmooei, B., 2009, *Proceedings of the 18th IMACS World Congress and MODSIM09 International Congress on Modelling and Simulation*. Anderssen, R. S., Braddock, R. D. & Newham, L. T. H. (eds.). [www.mssanz.org.au/modsim09](http://www.mssanz.org.au/modsim09): Modelling and Simulation Society of Australia and New Zealand (MSSANZ), p. 2720 - 2726 7 p.

### **Designing adaptive artificial agents for an economic production and conflict model**

Hassani Mahmooei, B. & Parris, B. W., 2009, *Artificial Life: Borrowing from Biology*. Korb, K., Randall, M. & Hendtlass, T. (eds.). Heidelberg Germany: Springer-Verlag London Ltd., p. 179 - 190 12 p.

## **Awards**

### **Development of an Occupational Health and Safety Monitoring Framework for the Victorian Public Health Sector**

Collie, A., Hassani Mahmooei, B. & Gibson, K.  
26/10/16 → 30/06/17

## **Activities**