Johannes Alfons Karl

142a Kelburn Parade Kelburn, Wellington 6012 New Zealand johannes.a.karl@gmail.com

Education:

Victoria University of Wellington

MSc Cross-cultural Psychology

February, 2018

Wellington, New Zealand **HaM Erding**

Bachelor of Arts, Business Psychology

November, 2015

Erding, Bavaria, Germany

Publications:

Karl, J. A., Fischer, R., (in press). Rituals, rigidity and cognitive load: A competitive test of ritual benefits for stress. Human Nature

Chrystal, M., Karl, J. A., Fischer, R., (under review). *Mind the Gap: How discrepancies between values and behaviour affect well-being. Manuscript submitted for publication. Frontiers in Psychology*

Fischer, R., Karl, J. A. (under review). *Experimental Methods in the Handbook of Contemporary Cross-Cultural Management*.

Karl, J. A., Fischer, R. (under review). The effect of blue and green spaces on physiology and affect. Journal of Environmental Psychology

Karl, J. A., Fischer, R. (2018). Equivalence Testing using R: Theory and Practice. Manuscript in preparation.

Karl, J. A., Fischer, R. (2018). *Food technology neophobia across cultures: A measurement approach*. Manuscript in preparation.

Karl, J. A., Milfont, T. L., Sibley, C. G. (2018). *Values and Environmentalism: A Multi-Study Investigation. Manuscript submitted for publication. Journal of Environmental Psychology*

Karl, J. A., Fetvadjiev, V. H., Dimitrova, R., Ward, C., Buzea, C., Jordanov, V., Jordanov E. (2017). *National and European Identification and Well-Being in Eastern Europe*. Manuscript in preparation.

Conference Presentations (Presenter is underlined):

Chrystal, M., <u>Karl, J. A.</u>, Fischer, R. (March, 2018). *Mind the Gap: How Discrepancies Between Values and Behaviour Affect Well-Being*. Paper presented at the Conference of the Society of Australasian Social Psychologists 2018, Wellington, New Zealand.

<u>Karl, J. A.</u> Ward, C., Masgoret, A. (August, 2017). *Domestic students' attitudes toward and willingness to help international students*. Paper presented at the 12th Biennial Conference of the Asian Association of Social Psychology, Auckland, New Zealand.

<u>Ward, C.</u>, Stuart, J., Karl, J. A. (August, 2017). *Does Multiculturalism threaten Social Cohesion?* Paper presented at the 12th Biennial Conference of the Asian Association of Social Psychology, Auckland, New Zealand.

<u>Karl, J. A.</u>, Fetvadjiev, V. H., Dimitrova, R., Ward, C., Buzea, C., Jordanov, V., Jordanov E. (July, 2017). *Diversity as a Predictor of Identity and Well-being. In Under-represented ethnic and cultural groups from the Eastern-European context: a research incubator for young academics.* Symposium conducted at the 9th European International Association of Cross-Cultural Psychology Conference, Warsaw, Poland.

<u>Karl, J. A</u>, Ward, C., Masgoret, A. (June, 2017). *Public Perceptions of International Students: An Integrated Threat Approach*. Paper presented at the 10th Biennial Conference of the International Academy for Intercultural Research, New York, USA.

Qumseya, T., Gonzalez, J., Karl, J. A., <u>Wiium, N.</u> (September, 2017). *Internal & external developmental assets among Arab Palestinian youth in Palestinian territory*. Paper presented at the 18th European Conference on Developmental Psychology, Utrecht, Netherlands.

Milfont, T. L., Karl, J. A, Sibley, C. G. (April, 2017). *Values and environmentalism: A one-year longitudinal analysis*. Paper presented at the Conference of the Society of Australasian Social Psychologists 2017, Melbourne, Australia.

<u>Karl, J. A.</u> Milfont, T. L. (August, 2017). *Values and environmentalism: A cross-cultural meta-analysis across 58 countries*. Paper presented at the Conference of the International Conference on Environmental Psychology, A Coruña, Spain.

Karl, J. A., Fetvadjiev, V. H., Dimitrova, R., Ward, C., Buzea, C., Jordanov, V., Jordanov E. (December, 2016). *National and Supranational Identities as Predictors of Well-being in Romania and Bulgaria*. Paper presented at the Australian Conference on Personality and Individual Differences 2016, Melbourne, Australia.

<u>Karl, J. A</u> (September, 2015). *Gamification and Employee Education*. Paper presented at the Herbstkongress des Muenchner Bildungs Forums, Munich, Germany.

Recent Grants and Awards:

International Academy for Intercultural Research Travel Award Faculty Strategic Research Grant VUW

\$1000 \$2000

Skills

Computing & Programming Skills:

- Applications: SPSS, AMOS, MATLAB, M PLUS
- Languages: R (experienced), Python(basic), C++ for Arduino (basic)
- Web-based: Qualtrics programming for surveys, Web-design
- Current projects: Developing an R package for Cross-cultural analysis, Development of an open-source physiology recording device for field use.

Research Skills

• Experiments:

I have experience with the development, execution, and supervision of individual and group-based experiments which generated physiological and self-report data.

• Surveys:

I developed, designed, and implemented surveys ranging from simple designs to surveys that support the execution of code for attentional stimuli. Further, I implemented surveys as part of a multinational collaborative team and together with field-assistants in local communities.

• Peer-review:

I am currently in the process to finish a training as part of the Publons Academy to be certified as reviewer for journals affiliated with Publons.

Statistical Skills:

- Basic Analysis such as: Correlation, Regression, ANOVAs, Structural Equation Modelling, etc.
- Recurrence Quantification Analysis:
 - This is a novel technique which looks at state-state transitions in non-linear data, such as movement data. This technique allows for the examination of data in areas in which traditional linear analysis techniques are not applicable. I use this technique for example to examine recurring patterns in participants movements under stress.
- Response Surface Analysis:
 - I use this technique to plot the effect of the relationship between two variables onto an outcome variable within a three-dimensional space. This technique represents an extension from classical moderation analysis by allowing non-linear quadratic effects to be examined. I use this technique to examine the interaction of country level factors and individual level factors on well-being.

Teaching Skills:

- Created material and thought a summer course on R to third year students, post-grads, and academic staff from psychology and applied linguistics. The material and slides for this course are available from mindculture evolution.com
- Tutoring a course on evolutionary psychology for third year students.

Supervisions Skills:

• Assisted in the supervision of third year students during their self-directed research course, by arranging meetings, methods training, organising materials, and providing feedback to student questions.

Relevant Work Experience:

Lab-manager for the Mindcultureevolution lab

27.11.2017 - current

- Development of surveys for data-collection
- Management of the physiology equipment and training for students.

Research Assistant to Prof. Ronald Fischer

27.11.2017 - 23.02.2018

- Development, planning, and execution of group experiments.
- Training and supervision of student volunteers.
- Organizing, planning, and running of weekly teaching session on R programming for students and academic staff.

Research Assistant to Prof Colleen Ward

06.09 - 21.12.2017

• Preparing surveys, monitoring data collection, instructing field assistants, and preparing data for analysis.

Research Assistant to Prof. Ronald Fischer

03.07 - 28.07.2017

• Creating a website for research presentation and outreach for the mind, culture, evolution lab at the school of psychology.

Research Assistant to Dr. Taciano Milfont

06.04.2017 - 30.04.2017

• Creating a website for research presentation and outreach for the environmental psychology lab at the school of psychology.

Research statement:

Current Research

My main research interest is the abundance and persistence of ritualistic behaviour. To date, this line of research has produced widely diverging hypotheses to account for the persistence of rituals across cultures. In my thesis, "Rituals, rigidity and cognitive load: A competitive test of ritual benefits for stress," I investigated competing mechanisms through which rituals might reduce anxiety as proposed in previous research. For this I used lab-based experiments, employing physiology and self-report data. The main finding was that repetitive behaviour increases in response to stress and increases recovery from physiological stress.

Future Research Goals

My goal is to further explore the effects of ritualistic behaviour, such as mindfulness, on psychological and physiological indicators. I would like to extend my current research in three different directions:

a) Rituals and Place

Anthropologists highlight the importance of place for rituals. I would like to investigate whether features of natural places, such as aquatic features, interact with the recovery effect of rituals. In a pilot study conducted with Prof. Ronald Fischer, we found that participants prefer places containing aquatic features, but did not find a general restorative effect. This pilot contained no control condition as we were interested in preferences of blue over green spaces.

b) Rituals and Group Cohesion

The research conducted as part of my thesis looked at individual rituals. Nevertheless, collective rituals are ubiquitous in the real world and previous research has found them instrumental in creating group cohesion. As part of a group-based experimental design, Prof. Fischer and I are currently investigating whether acute stress not only increases ritualistic behaviour in individuals, but also affects markers of social cohesion. I would like to investigate the possible restorative effects of rituals mediated through their effect on social cohesion.

c) Novel and Familiar Rituals

My current work focuses on novel, arbitrary rituals. In contrast to this, real world rituals are often deeply connected to individuals' life histories and might therefore differentially affect emotional and physiological well-being compared to arbitrary rituals. Investigating how real-world rituals differ from current experimental practice could inform further research on ritualistic behaviour to create more efficient and convincing research designs.

I aim to tackle the above proposed research branches through the use and implementation of novel technologies to obtain richer data. As part of my thesis, I used a modified commercially available camera set to obtain unobtrusive measures of participants' movements. This helped me to identify a novel relationship between repetitive behaviour and physiological recovery. I intend to pursue this mixed measures approach to my research questions further by using custom made software and hardware solutions.