

## DOCTORAL RESEARCH

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**Do not pursue the past. Do not lose yourself in the future. The past is history. The future yet to come. Looking deeply at life as it is in the very here and now, the practitioner dwells unshaken and free in heart. We must be diligent today, as death may strike tomorrow, for there is no bargaining with the lord of death. –The Buddha**

My main research interest is the measurement of mindfulness and the source of differences in trait mindfulness. Previous research on mindfulness focuses widely on mindfulness as trait or state as predictor of well-being. My current research can be broken up into the following components:

**Structure of Mindfulness Measures.** The previous research on mindfulness utilised the Five-Facet Mindfulness Questionnaire, which summarises a number of previous measures used to measure mindfulness. This measure has been shown to have good measurement properties, nevertheless some of the facets fail to emerge in non-meditating samples. We ran a study that aimed to replicate the development of the FFMQ in a non-meditating sample, including further measures of mindfulness not included in the original analysis. We analysed the emergence of factors and their relationship with conceptually related variables such as well-being and personality. We found that the expected five factors emerged reliability in our analysis providing support for the structure.

**Temporal Stability and Relationships of Mindfulness.** Our previous research showed that the FFMQ is a valid tool of measuring trait mindfulness in a western context. We aim to elaborate on this by providing information on the temporal stability of the individual facets and the longitudinal relationship of the FFMQ with important individual difference measures, such as personality and behavioural inhibition/ behavioural activation. We will assess this using a four-wave longitudinal design using first-year university students. Those students go through a period of substantial transition. We aim to examine how individual difference measures and mindfulness are causally linked over this period.

**Cross-Cultural Validity of the FFMQ.** While the FFMQ was developed in a western context, it proposes to measure a mindfulness concept derived from a Buddhist tradition. It is currently unclear how reliable the FFMQ is for cross-cultural comparisons and whether the factor structure is equivalent across cultures. To test this, we are running two studies. The first uses published data on a shortened version of the FFMQ in Thailand, Vietnam, Malaysia, New Zealand, and the USA. The second study uses a mixture of published and unpublished data on the FFMQ from international collaborators. Both studies will first test the equivalence of the proposed structure and examine where possible differences might arise. If non-invariance between the measures is found, we aim to derive a structure of the FFMQ which yields maximal agreement between cultures. This lays the foundation for the comparison of mindfulness between cultures and is an essential first step for a cross-cultural approach to mindfulness research.

**Conceptualisation of Mindfulness in Buddhist Texts** The previous points of our research program examine the applicability and robustness of the FFMQ in a western context, address the nomological network of mindfulness from a cross-sectional and longitudinal perspective, and examined the cross-cultural applicability. A necessary next step is to confirm how well the western derived measures of mindfulness represent original texts on mindfulness. To assess this, in cooperation with computational linguistics experts we developed a text-mining approach that aims at examining the structure of mindfulness in original texts. This research step provides us with insight if additional components of mindfulness could be incorporated to extend the breadth of the validated mindfulness measures.

## EDUCATION

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- 2018 – CURRENT    **Doctor of Philosophy**  
Psychology  
*Victoria University of Wellington*
- 2018    **Master of Science**  
FIRST CLASS HONOURS  
Cross-Cultural Psychology  
*Victoria University of Wellington*
- 2015    **Bachelor of Arts**  
Business Psychology  
*FHaM Erding*

## AWARDS

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- 2018    **\$ 800 Graduate Travel Award**  
*Society for Personality and Social Psychology*
- 2018    **\$ 2000 Faculty Strategic Research Grant**  
*Victoria University of Wellington*
- 2017    **\$ 2000 Faculty Strategic Research Grant**  
*Victoria University of Wellington*
- 2017    **\$1000 Conference Travel Award**  
*International Academy for Intercultural*

## STATISTICAL SKILLS

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### *Basic Analysis*

Correlation, Regression, ANOVAs, Structural Equation Modeling, etc. in R, SPSS, Python, and M Plus

### *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

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- 2019    **Teaching Assistant PSYC 461 Structural Equation Modeling**
- 2018    **Tutoring PSYC 325 Advanced Research Methods in Psychology**
- 2018    **Tutoring PSYC 317 Evolutionary Psychology**

## COMPUTER SKILLS

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BEGINNER Python, Matlab,  
C++ for Arduino, MATLAB, L<sup>A</sup>T<sub>E</sub>X

INTERMEDIATE SPSS, AMOS  
Web-design

EXPERT R, Qualtrics

## RESEARCH SKILLS

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### *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.

## CONFERENCE PAPERS

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**Karl, J. A.**, Fischer, R. (April, 2019). *Rituals, Repetitiveness and Cognitive Load: A Competitive Test of Ritual Benefits for Stress*. 46th Annual Conference of the Australasian Society for Experimental Psychology, Wellington, New Zealand.

Luczak-Roesch, M., Grener A., **Karl, J. A.**, Fetvadjeiev, V. H., Fischer, R. (April, 2019). *Tracing values and personality in historical narratives using a computational approach* 3<sup>rd</sup> World Conference on Personality, Hanoi, Vietnam.

**Karl, J. A.**, Fetvadjeiev, V.H. (April, 2019). *Person-culture fit and well-being* 3<sup>rd</sup> World Conference on Personality, Hanoi, Vietnam.

**Karl, J. A.**, McNamara A. R (February, 2019). *Gender and Morality*. Poster presented at the Society of Personality and Social Psychology Conference 2019. Portland, Oregon, USA

Fischer, R., **Karl, J. A.**, Van Rensburg G. (September, 2018). *Culture and well-being: A critical examination of predictors of psychological health and well-being* 3<sup>rd</sup> International Conference on Well-Being and Public Policy, Wellington, New Zealand.

**Karl, J. A.**, Fischer, R. (September, 2018). *Landscape and Well-Being: Using Psychology to Inform Urban Planning* 3<sup>rd</sup> International Conference on Well-Being and Public Policy, Wellington, New Zealand.

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

Qumseya, T., Gonzalez, J., **Karl, J. A.**, Wiium, N. (September, 2017). *Internal and External Developmental Assets Among Arab Palestinian Youth in Palestinian Territory*. 18. European Conference on Developmental Psychology, Utrecht, Netherlands.

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

**Karl, J. A.,** Ward, C., Masgoret, A. (August, 2017). *Domestic Students' Attitudes Toward and Willingness to Help International Students*. 12. Biennial Conference of the Asian Association of Social Psychology, Auckland, New Zealand.

Ward, C., Stuart, J., **Karl, J. A.** (August, 2017). *Does Multiculturalism threaten Social Cohesion?* 12. Biennial Conference of the Asian Association of Social Psychology, Auckland, New Zealand.

**Karl, J. A.,** Fetvadjeiev, 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 9.European International Association of Cross-Cultural Psychology Conference, Warsaw, Poland.

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

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

**Karl, J. A.,** Fetvadjeiev, 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*. Australian Conference on Personality and Individual Differences 2016, Melbourne, Australia.

**Karl, J. A.** (September, 2015). *Gamification and Employee Education*. Herbstkongress des Muenchner Bildungs Forums, Munich, Germany

## PUBLICATIONS

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Fischer, R., **Karl, J.A.,** Fischer, M. (in press). Norms Across Cultures: A Cross-Cultural Meta-Analysis of Norms Effects in the Theory of Planned Behavior. *Journal of Cross-Cultural Psychology*.

Chrystal, M., **Karl, J. A.,** Fischer, R. (2019). Mind the Gap: How discrepancies between values and behaviour affect well-being. *Frontiers in Psychology*, 10:736. doi: 10.3389/fpsyg.2019.00736

Fischer, R., **Karl, J. A.** (2019). Equivalence Testing using R: Theory and Practice. *Frontiers in Psychology*, doi: 10.3389/fpsyg.2019.01507

**Karl, J. A.,** Walsh, A., Robinson, K., Twitchin S. (2019). Developing the credibility of psychological science: Graduate student reflections on open science, *Psychology Aotearoa*, 46-29

Fischer, R., **Karl, J. A.** (2019). Experimental Methods in the Handbook of Contemporary Cross-Cultural Management.

**Karl, J. A.,** Fischer, R. (2018). Rituals, Repetitiveness and Cognitive Load. *Human Nature*, 1-24. doi: 10.1007/s12110-018-9325-3

## RESEARCH REPORTS

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Kunz, D. *Personality, Lifestyle, and Physiology*. **Honour's Thesis**

Wainwright, T. *Implicit Motives and Explicit Personality: Investigating the Relationships between Conscious and Sub-Conscious Personality*. **Honour's Thesis**

Carswell K. *People perception: The evolution of contextual colour discriminations and intrasexual competition*. **Honour's Thesis**

*All students were supported with research guidance and statistical consultancy*

## WORK EXPERIENCE

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CURRENT, FROM NOV 2017

Victoria University of Wellington

### ***Lab-manager***

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

NOV 2017 – DEC 2018

Victoria University of Wellington

### ***Research Assistant to Prof. Ronald Fischer***

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.

SEP 2017 – DEC 2017

Victoria University of Wellington

### ***Research Assistant to Prof Colleen Ward***

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

JUN 2017 – JUN 2017

Victoria University of Wellington

### ***Research Assistant to Prof. Ronald Fischer***

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

APR 2017 – APR 2017

Victoria University of Wellington

### ***Research Assistant to Dr. Taciano Milfont***

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

## REFERENCES

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### **Prof. Ronald Fischer**

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EMPLOYER VUW School of Psychology  
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### **Dr. Rita McNamara**

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PHONE +64 04 4635571 (Work)