

Community Gardening Insights: Understanding the relationship between mindfulness, nature connectedness, and psychological well-being

Introduction

- interaction with green spaces positively affects mental health and Psychological Well-being (PWB) (White, Alcock, Wheeler & Depledge, 2013; Triguero-Mas et al., 2015)
- Mindfulness (M) and Nature Connectedness (NC) have been investigated as potential parts of the mechanism underlying the nature/well-being relationship
- associations between NC, M and PWB have been found (Howell, Dopko, Passmore & Buro, 2011), however, this relationship is underexamined
- community gardens facilitate contact with nature in the city
- the current study aims to better understand the relationship among the constructs of NC, Mindfulness, PWB and frequency of community gardening

Hypotheses

- (H1)** Nature Connectedness will have a relationship with frequency of gardening
- (H2)** Nature Connectedness will have a relationship with Mindfulness
- (H3)** frequency of gardening will be predictive of greater Psychological Well-being, and this relationship could be mediated by Nature Connectedness
- (H4)** Mindfulness will be a significant predictor of Psychological Well-being

Methods

Procedure

- community garden representatives contacted via email, Facebook groups, and in person
- approached community gardens across all of Scotland
- asked to distribute online survey



13. I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees.

☐ Strongly disagree

☐

☐ Neutral

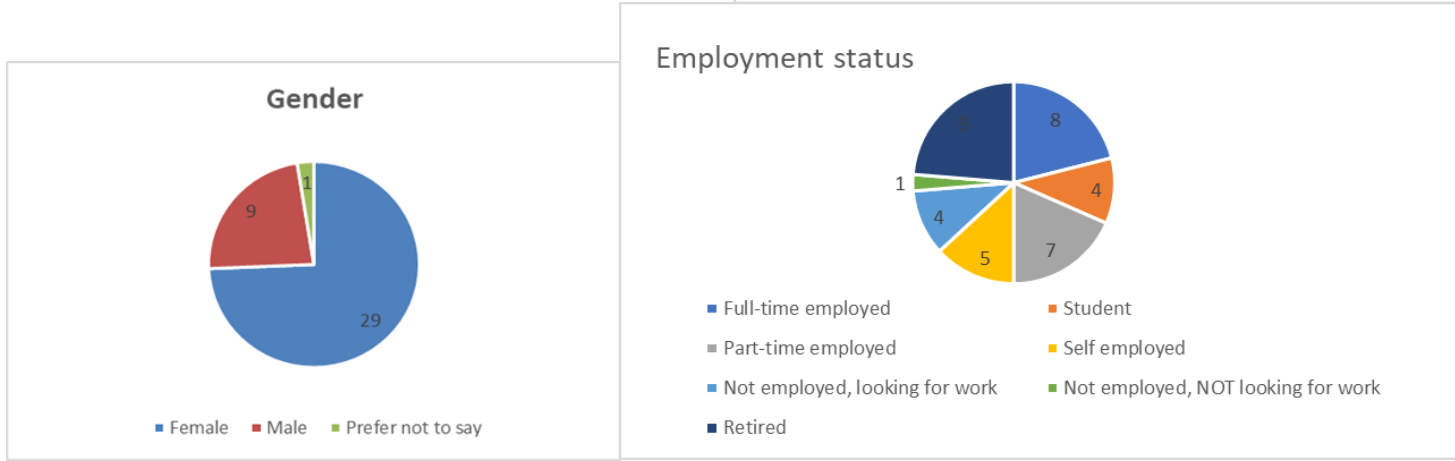
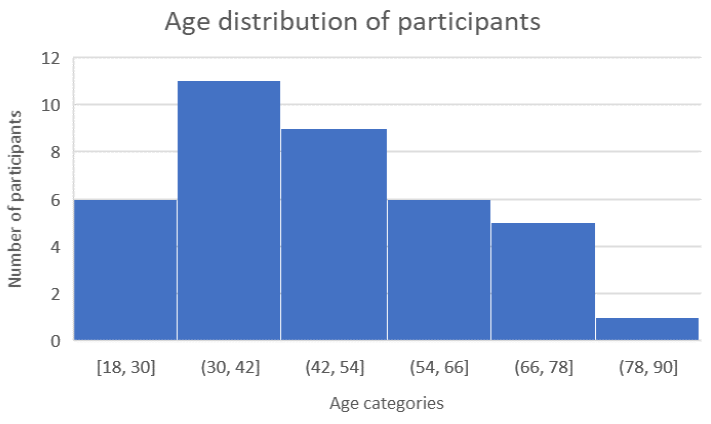
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☐ Strongly agree

- online survey included:
 - Connectedness to Nature Scale** (Mayer and Frantz, 2004)
 - The Kentucky Inventory of Mindfulness Skills** (Baer, Smith, & Allen, 2004)
 - The Psychological Well-being Scale** (Ryff and Keyes, 1995)
 - Self generated questions** (demographics and gardening frequency)

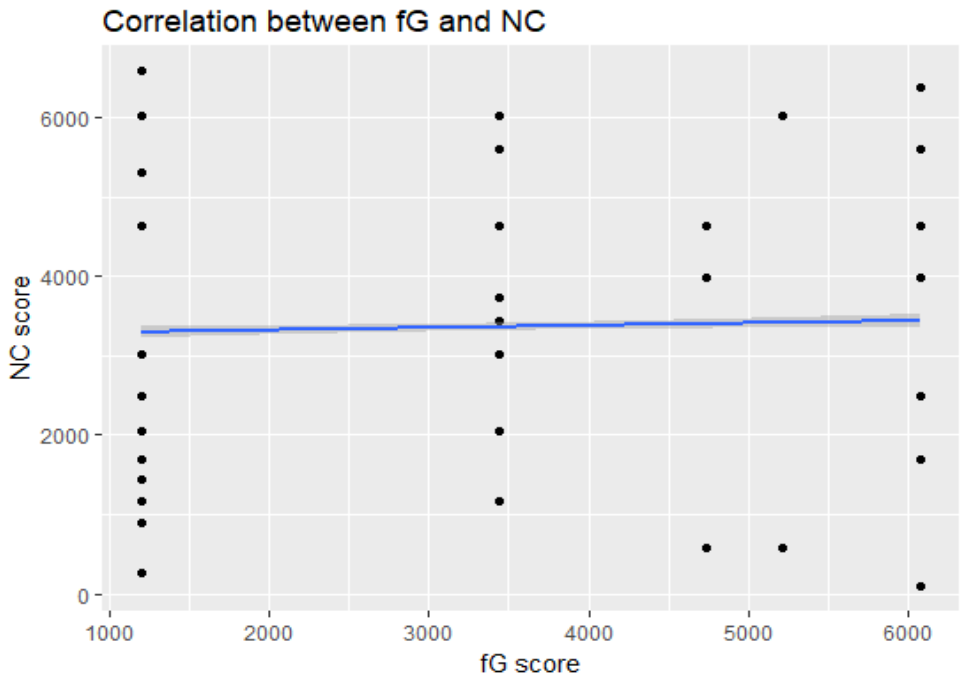
Participants

- N = 39, 29 female, 1 prefer not to say
- predominantly White Scottish
- age (M = 46.4, SD = 16.2)
- diverse employment status

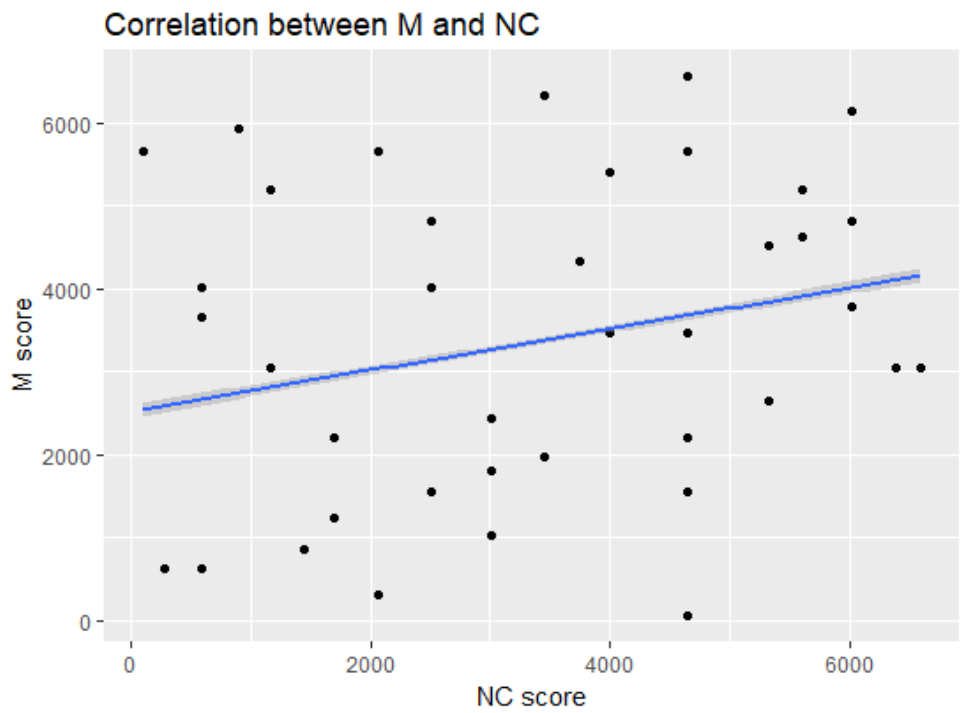


Results

- all hypotheses were supported



(H1) Small but significant positive association between NC and fG ($r_s = 0.02808154$, $p = 0.0213$)

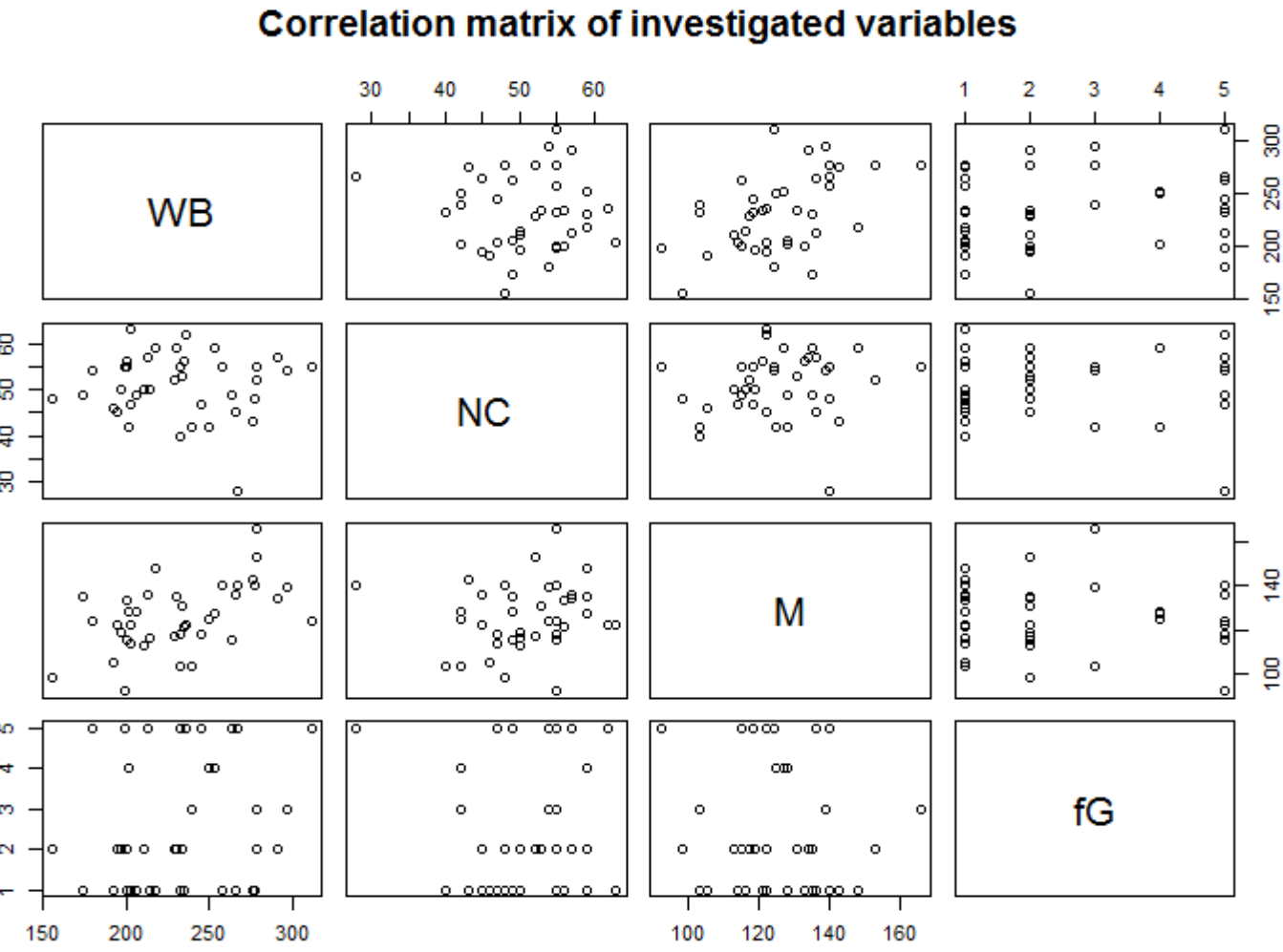


(H2) Small but significant positive association between NC and fG ($r_s = 0.02808154$, $p = 0.0213$)

(H3) and (H4):

- predictors explained 45.1% of the variance in PWB
 - ($F(7, 6716) = 788.8$, $p < 0.001$, $R^2 = 0.4512$)
- fG and M were significant predictors
 - fG ($\beta = 35.446$, $p = 0.01936$)
 - M ($\beta = 2.44$, $p < 0.001$)
 - NC n.s. ($\beta = -0.202$, n.s.)

(H3) Significant mediation effect of NC on the relationship between fG and PWB, ACME = 0.111 ($p < 0.001$)



Implications

- connecting with nature through community gardening is associated with positive outcomes
- community gardening could have various implications for public well-being as well as natural well-being.

References

Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment*, 11(3), 191-206.

Howell, A. J., Dopko, R. L., Passmore, H. A., & Buro, K. (2011). Nature connectedness: Associations with well-being and mindfulness. *Personality and individual differences*, 51(2), 166-171.

Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of environmental psychology*, 24(4), 503-515.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, 69(4), 719.

Triguero-Mas, M., Dadvand, P., Cirach, M., Martínez, D., Medina, A., Mompert, A., ... & Nieuwenhuijsen, M. J. (2015). Natural outdoor environments and mental and physical health: relationships and mechanisms. *Environment international*, 77, 35-41.

White, M. P., Alcock, I., Wheeler, B. W., & Depledge, M. H. (2013). Would you be happier living in a greener urban area? A fixed-effects analysis of panel data. *Psychological science*, 24(6), 920-928.