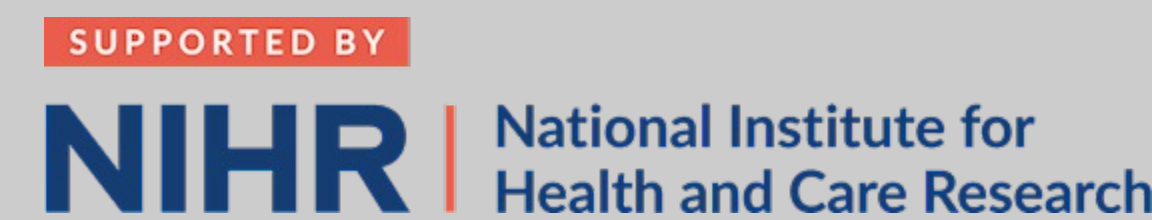


Predisposing, precipitating and perpetuating factors in functional neurological disorder: a pilot study

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Introduction

- Functional neurological disorder (FND) is an interface disorder with a complex multifactorial aetiology (Brown & Reuber, 2016; Pick et al., 2019).
- The predisposing, precipitating and perpetuating (PPP) factors in FND are diverse and vary between cases.
- It remains to be understood which specific PPP factors are the strongest indicators of clinical outcomes.

Aims

- In this pilot study, we aimed to assess a range of biopsychosocial PPP factors in FND and explore potential relationships with important clinical outcomes.

Methods

Participants

- 17 participants with FND (motor symptoms and/or seizures)
- 17 healthy controls (HCs)
- Groups comparable in age ($p=.51$) and sex ($p=1.0$)



Methods

Materials & measures

- Sociodemographic/medical history.
- Abbreviated SCID-5-RV.
- Validated questionnaires:
 - Traumatic Experiences Checklist (TEC)
 - Toronto Alexithymia Scale-20
 - Multiscale Dissociation Inventory
 - Somatoform Dissociation Questionnaire-20
 - Autistic Spectrum Quotient
 - Patient Health Questionnaire-9
 - Patient Health Questionnaire-15
 - Generalised Anxiety Disorder-7
 - Brief Illness Perception Questionnaire (B-IPQ)
 - Short Form Survey-36 (SF-36)
 - Work & Social Adjustment Scale (WSAS)

Results

Most commonly reported FND symptom precipitants:	Perceived causes of FND (B-IPQ):
physical activity/exertion (59%)	physical (e.g., injury, illness, 65%)
stress/emotion (59%)	stress/emotions (53%)
sensory (47%)	psychosocial trauma (47%)
fatigue (41%)	work-related (29%)

FND: worse HRQoL than HCs in all SF-36 domains (all $ps .01 - <.001$)

Results

Most frequently reported adverse experiences (TEC)

FND	Controls
looking after parents/siblings as a child (41%)	bereavement (35%)
family problems (41%)	parental divorce (41%)
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intense pain (41%)	
emotional neglect (41%)	
sexual abuse (non-familial, 41%)	

FND group exhibited higher scores on:

- impact of life events ($p=.035$)
- alexithymia ($p=.002$)
- somatoform dissociation ($p<.001$)
- aspects of psychological dissociation:
 - disengagement $p=.003$
 - depersonalisation $p=.001$
 - derealisation $p=.002$
- anxiety ($p<.001$)
- depression ($p<.001$)
- physical symptoms ($p<.001$)

No significant differences in total traumatic life events ($p=.06$), autistic spectrum traits ($p=.22$) and some types of psychological dissociation (emotional constriction $p=.38$, identity disturbance $p=.17$).

Worse HRQoL associated positively with dissociation, anxiety and adverse experiences ($ps .044 - .005$)

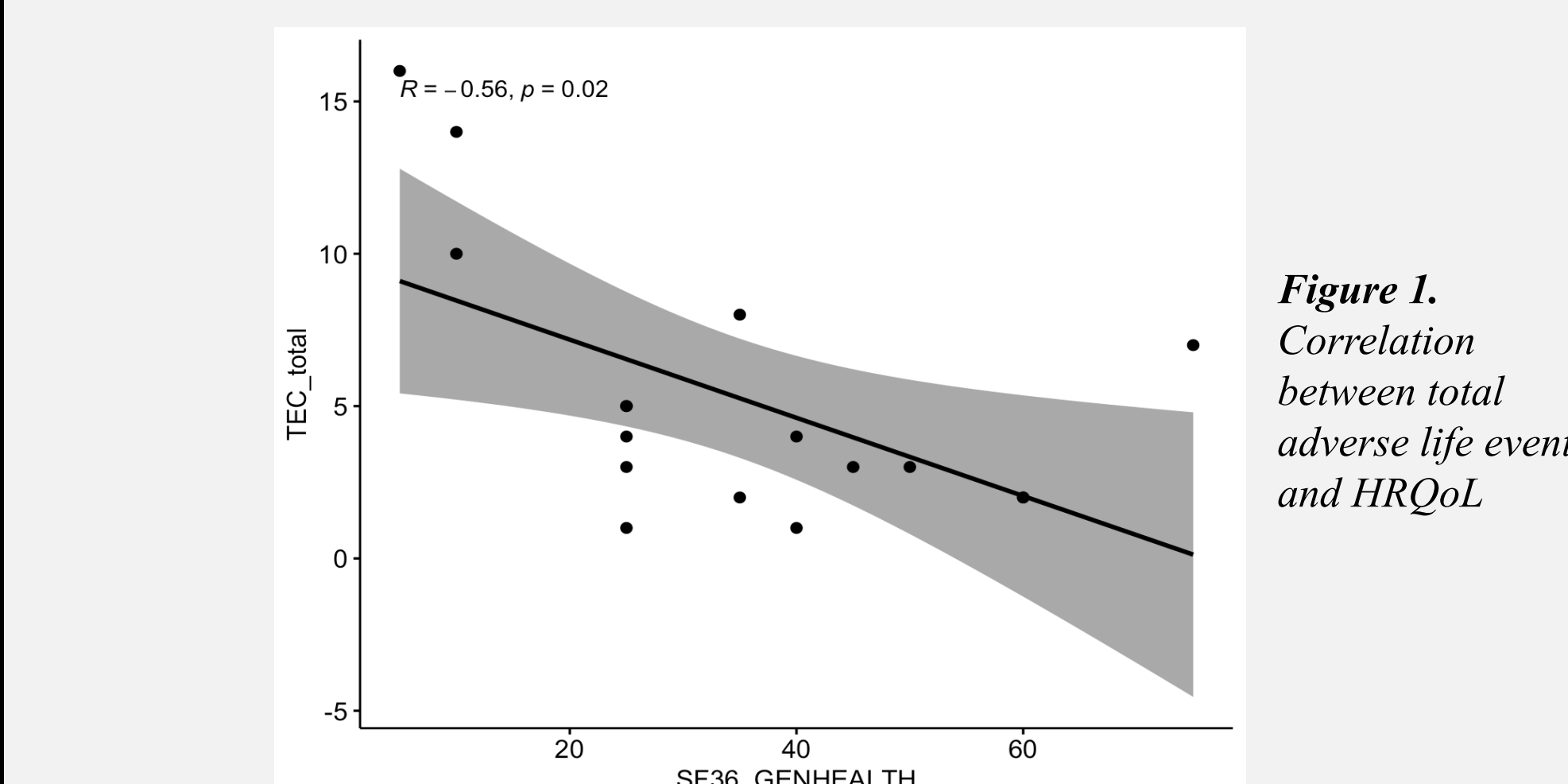


Figure 1. Correlation between total adverse life events and HRQoL

Work/social functioning (WSAS) impaired in FND group vs HCs ($p<.001$) and poorer work/social functioning associated with elevated depression scores ($p=.016$).

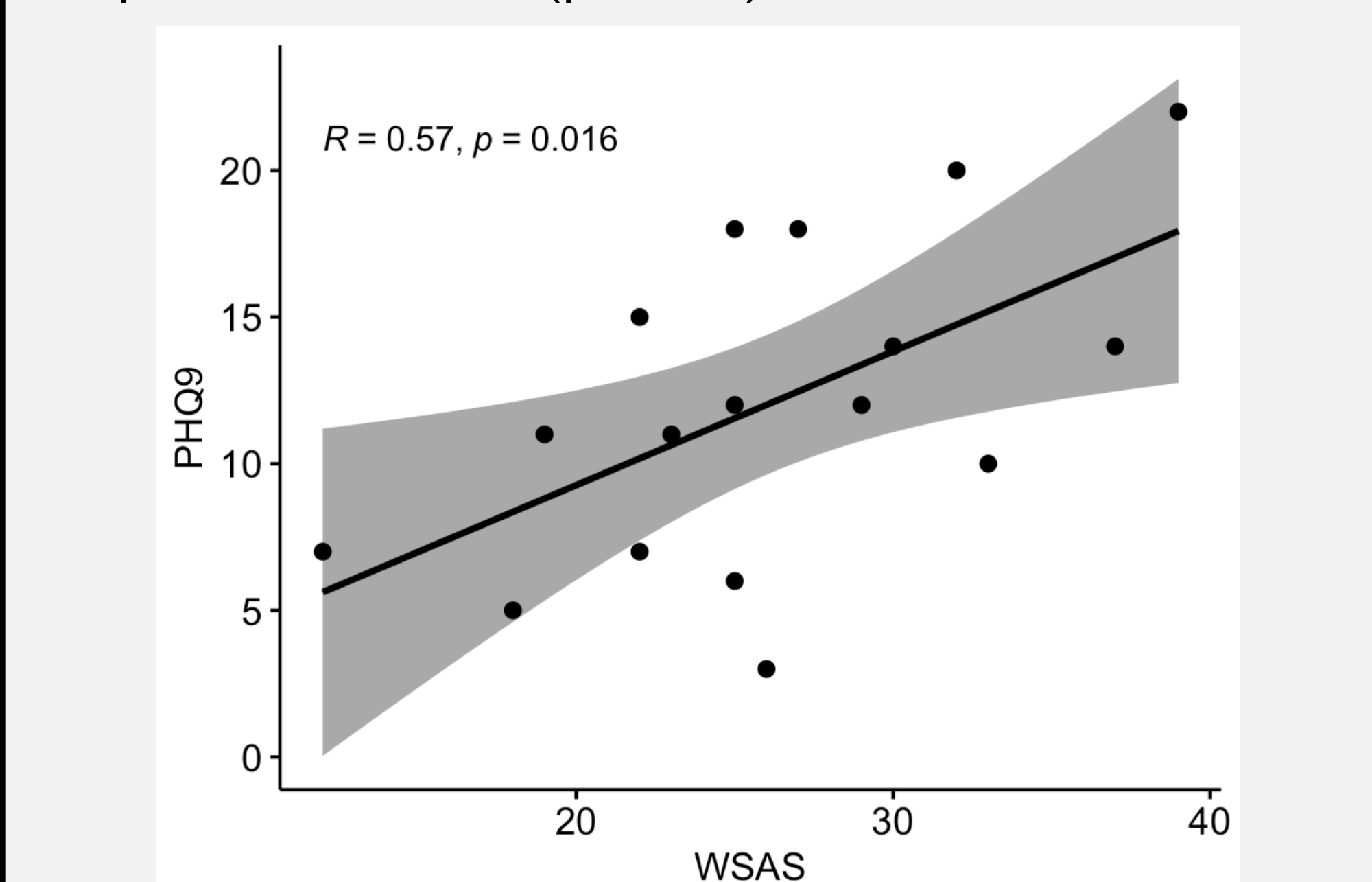


Figure 2. Correlation between depression and work/social functioning in FND group

Conclusions & future directions

- Individuals with FND report diverse biopsychosocial aetiological factors.
- Alexithymia, dissociation, emotional distress, and physical symptoms are possible predisposing and/or perpetuating factors.
- Somatoform dissociation, anxiety and adverse experiences may be related to HRQoL in FND.
- Our future research will examine PPP factors in common FND subgroups.

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