

Looking at the bright side of work: an intervention using positive psychology interventions

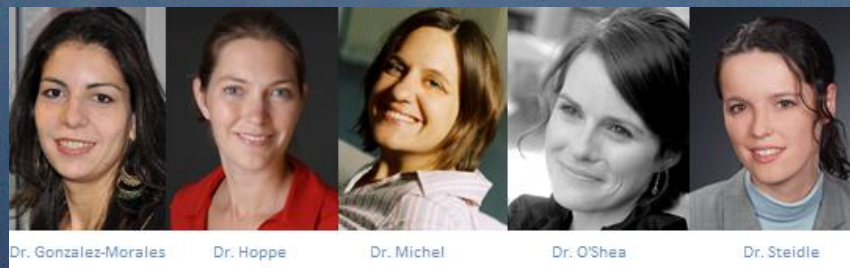
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*Alphabetical order,
all authors contributed
equally

How do you feel when you start work?

....When you arrive home after work?



Which day of the week is today?

There are lots of good things in our lives that we can be happy about. It doesn't matter if these things seem to be small and ordinary in importance. These good things can refer to little events like a smile or someone offering you a helping hand, or to bigger events like participating in a productive and successful meeting at work.

Your exercise is to think about one good thing that happened to you today, while you were at work. This good thing does not necessarily need to be linked to your work tasks, but it is important that it is connected to your workplace in some way. For instance, if a colleague compliments you, this would be a good thing suitable for the exercise. However, an enjoyable conversation with your partner on the phone would not be a suitable event for this exercise since this conversation is not related to your work.

Please, find a keyword that best describes your positive event at work for today and type it in:



Please lean back and relax for a moment. If you want to, you can close your eyes. Allow yourself to explore your thoughts and keep an open mind while you engage in this activity.

Please, try to concentrate on your breath. As you inhale and exhale, keep count of the number of seconds it takes you to inhale and exhale, do this for three full breaths to allow yourself to focus on the present moment.

Take your time to answer the following questions about the positive event in your head:

- **What happened exactly?**
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Please, replay this positive thing that happened to you in your mind as though you were rewinding a videotape and playing it back. Try to remember this situation as accurately and as detailed as possible.

- **Why did this positive thing happen?**
- **How did you feel about the positive thing?**

Once you have answered all questions in your mind, you can slowly open your eyes.

Psychological Resources

- ▶ Engaging in effortful activities depletes our store of available energy or psychological resources

(Baumeister, Muraven, & Tice, 2000).

- ▶ As a type of effortful action, daily work tasks deplete our resources, which may be exacerbated when an individual starts the workday with limited available resources.
- ▶ Psychological interventions may help to buffer against depletion or boost resources.....

....But how?

Research Question

- ▶ To what extent does performing a daily resource-based exercise buffer against depletion or boost resources?
 - ▶ Do they decrease fatigue levels?
 - ▶ Do they boost our energy?
 - ▶ Do they help our positive emotions?

Buffering against depletion vs. Boosting resources

Vigor

- ▶ High levels of energy and mental resilience
- ▶ the willingness to invest effort
- ▶ persistence
(Schaufeli, Gonzalez-Romá, & Bakker, 2002).
- ▶ Selective attention (Posner & Rothbard, 1986)
- ▶ Boost Resources: Enhance energy (vigor)

Fatigue

- ▶ A state of being tired
 - ▶ (mental, emotional, physical)
- ▶ Emotional fatigue
 - ▶ People experience a sense of depletion and feel drained
(Barnes & Van Dyne, 2009)
- ▶ Buffer against depletion:
Reduce experienced fatigue

Theoretical underpinnings

- ▶ **Ego-depletion and strength model of self-control** (Baumeister, 2002)
 - ▶ Self-control depends on a limited resource akin to energy or strength
 - ▶ Acts of self-control, choice and volition deplete this resource
 - ▶ We try to conserve our resources after any depletion
- ▶ **Reservoir model of fatigue** (Barnes & Van Dyne, 2009)
 - ▶ Emotional demands deplete emotional resources and lead to emotional fatigue

Theoretical underpinnings

- ▶ **Broaden-and-Build-Theory** (Fredrickson, 2001)

“Experiences of positive emotions broaden people's momentary thought action repertoires, which in turn serves to build their enduring personal resources”

- ▶ **Positive events at work → positive emotions → positive outcomes**

- ▶ **Capitalization** (Langston, 1994)

Seeking advantage from positive events by marking and enhancing them in some way

- ▶ **Positive thinking → positive emotions and vigor**

Interventions to enhance psychological resources in the workplace

▶ Positive activities

- ▶ simple, intentional, and regular practices
- ▶ Aim to mimic healthy thoughts and behaviors associated with naturally happy people

(Lyobormirsky & Layous, 2013).

▶ a narrative/thinking pattern develops

- ▶ structures the thought patterns of the individual and helps give meaning and understanding to emotions

(Pennebaker & Seagal, 1999).

Mechanisms for buffering vs. boosting resources

Reappraisal

- ▶ How an individual interprets a work event (e.g. as a stressor or not)
(Lazarus & Folkman, 1984)
- ▶ a form of cognitive change
- ▶ involves changing a situations meaning in a way that alters its emotional impact
(Gross & Thompson, 2007).

Savoring the Positive

- ▶ The regulation of positive emotions
- ▶ Prolonging and increasing positive emotional experiences
(Bryant, 1989, 2007)

An additional mechanism: Mindfulness

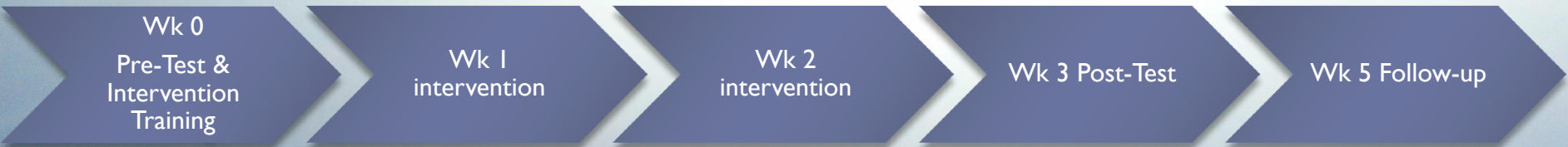
▶ Self-regulation of **attention**

- ▶ Focused attention, novelty appreciation and open ended expectations (Ritchie & Bryant, 2012)
- ▶ Being able to shift attention or focus away from unpleasant emotions/experiences has benefits for the self (Muraven, 2005)
- ▶ Directed attention as a buffer against depletion when using similar resources related to both executive functioning and self-regulation (Kaplan & Berman, 2010)

An additional mechanism: Mindfulness

- ▶ A mode of awareness
 - ▶ Fosters **awareness** of thoughts feeling and emotions, without judgment or ruminative thought (Bishop et al., 2004)
- ▶ Related to emotional exhaustion (negatively) and job satisfaction (positively) on a daily level (Hulsheger et al, 2013)

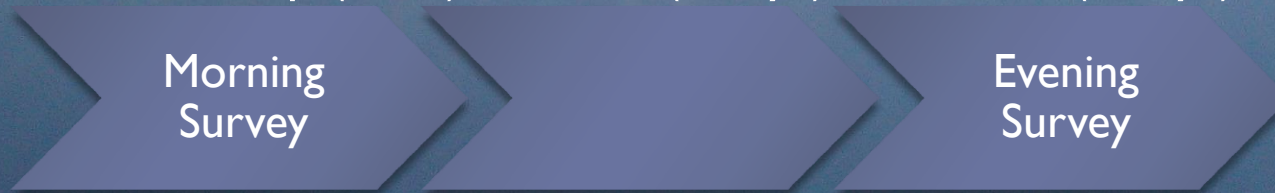
Intervention design



Daily: Experimental Group: Week 1 (5 days) & Week 2 (5 days)



Daily: Control Group (N =): Week 1 (5 days) & Week 2 (5 days)



Pre – post intervention results

- No significant differences pre-post intervention, nor follow-up
 - Work engagement
 - Burnout
 - Job satisfaction
 - Life satisfaction
- Currently exploring potential interactions:
 - Ability to savor
 - Meditation/yoga practice
 - Mindfulness (trait)



Method: Measures

	Source	No. items	α (am)	α (pm)
Vigor	Bakker & Xanthopoulou (2009); Demerouti, Bakker, Sonnentag, & Fullagar, (2012) Today at work I feel bursting with energy (1-5 agreement)	3	.821-.841	.850-.867
Fatigue	Van Hooff, Geurts, Kompier, & Taris (2007) How fatigued do you currently feel? 1 = Not at all tired, 5 = Very tired	1	-	-
Perceived benefit	How do you feel after completing this exercise? 1 = I feel a lot worse, 5 = I feel a lot better	1	-	-

English-Speaking Sample

- ▶ Participants performed exercises for 10 working days
- ▶ 959 observations from 104 participants
 - ▶ average per participant 9.52 (sd=1.64), listwise missing

	Control	Positive Thing	Act of Kindness	Reappraisal	Total
CANADA	72	116	77	193	458
IRELAND	139	120	128	114	501
Total	211	236	205	307	959

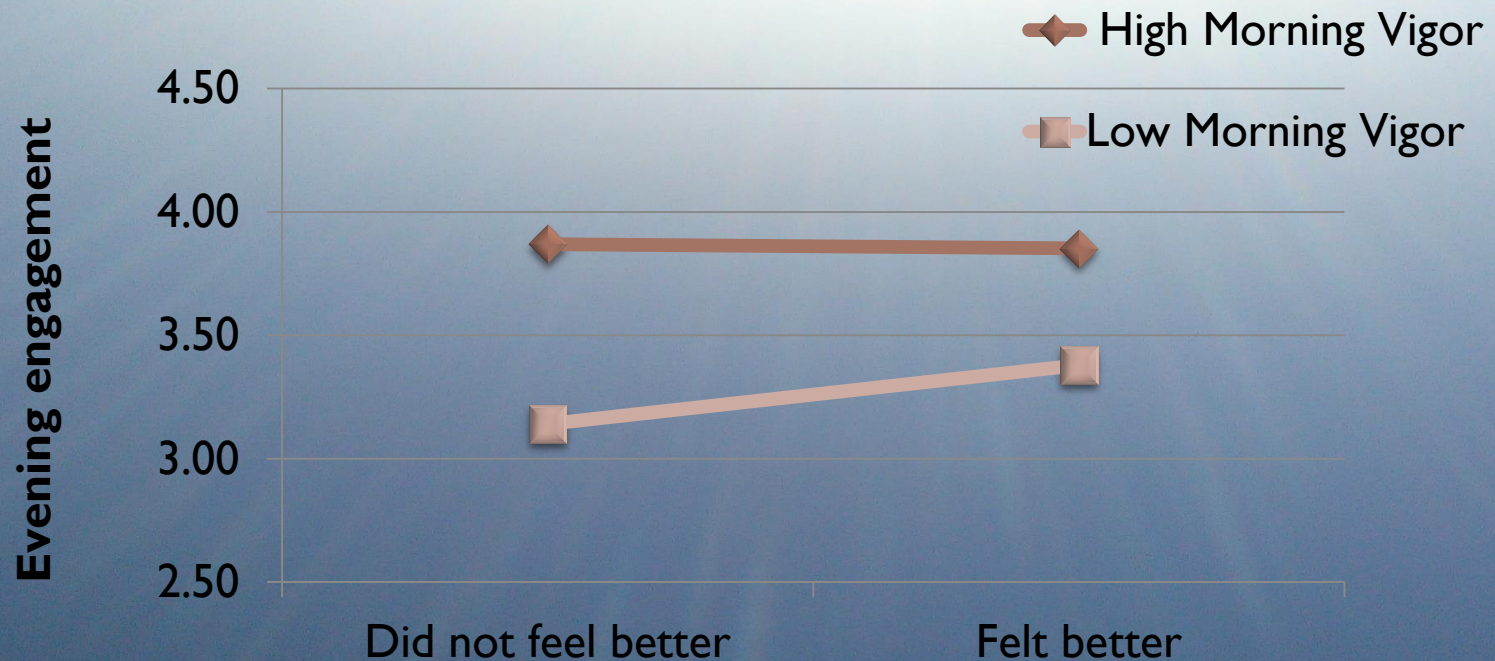
- ▶ Data collected from Canadian and Irish employees
 - ▶ All working 'regular hours' (i.e. no shift work)
 - ▶ Majority working in administration roles
 - ▶ No significant country differences

Results: Evening Engagement

	Value	Std. Error	df	t	p
Intercept	3.556	0.115	580	30.766	0.000
Country	0.027	0.164	86	0.165	0.869
Gender	0.096	0.172	86	0.555	0.579
Fatigue (am)	-0.121	0.032	580	-0.368	0.000
Vigor (am)	0.322	0.032	580	7.931	0.000
FeelBetter	0.102	0.051	580	2.002	0.045
Vigor(am)* feelbetter	-0.147	0.065	580	-2.251	0.024

Moderating effect of intervention

Evening Engagement



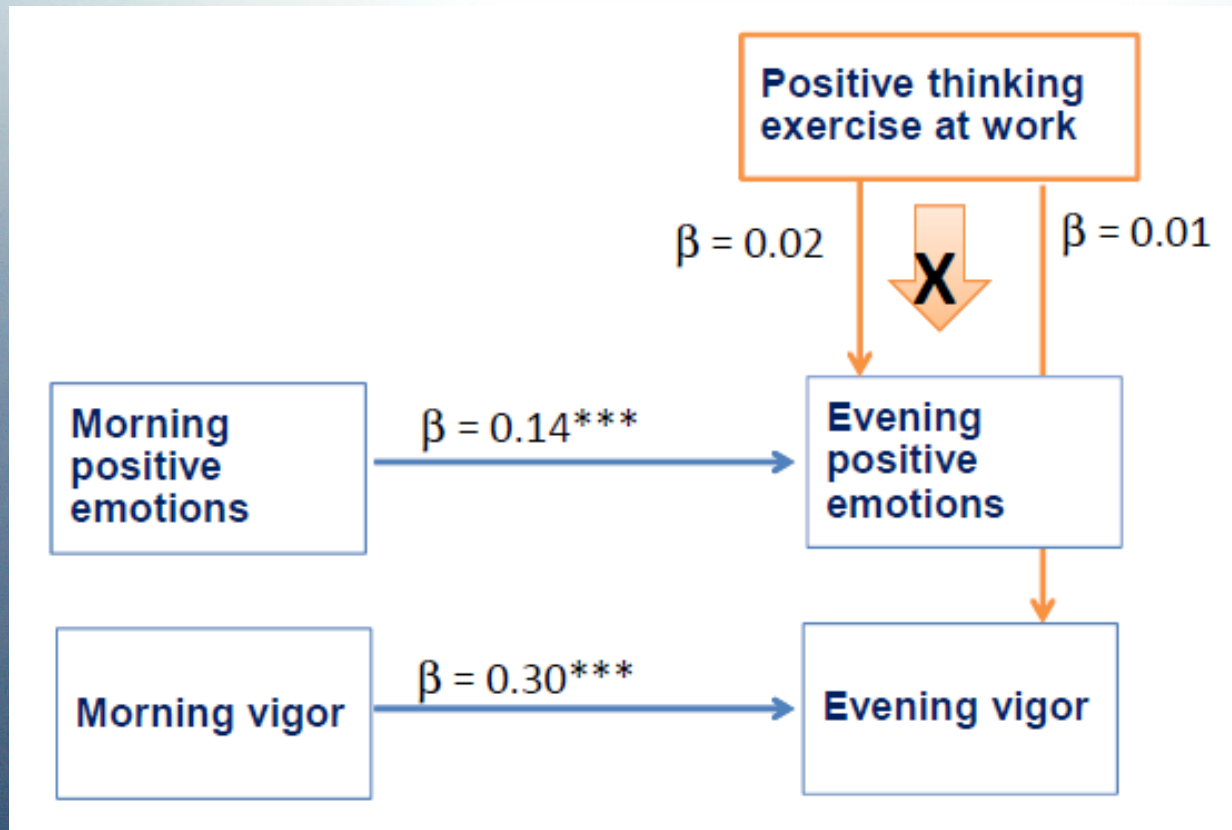
Results: Evening Fatigue

	Value	Std. Error	df	t	p
Intercept	2.740	0.122	574	22.44	0.000
Country	0.131	0.173	86	0.755999	0.452
Gender	0.023	0.180	86	0.125782	0.900
Vigor (am)	-0.126	0.056	574	-2.26	0.024
Fatigue (am)	0.213	0.045	574	4.70	0.000
FeelBetter	-0.067	0.070	574	-0.959	0.338
Fatigue(am)* feelbetter	-0.058	0.071	574	-0.816	0.415

German-speaking sample

- ▶ 61 office workers in Germany
- ▶ Part or full time employees (worked five days per week)
- ▶ fixed work hours
- ▶ 69% women
- ▶ 43 years-old on average (SD = 9.4)
- ▶ 30 positive events, 31 control
- ▶ n = 594 daily measurements

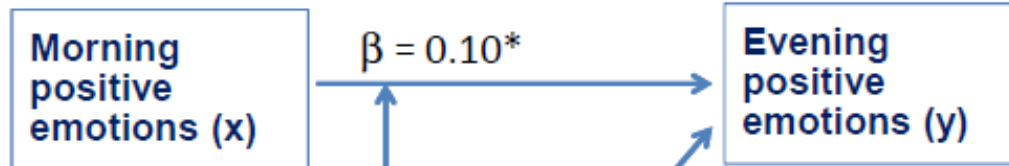
Positive thinking and control group (n=61)



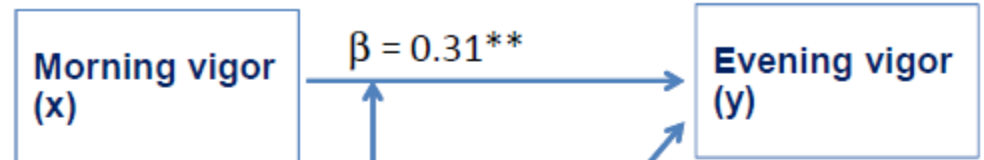
Only experimental group

n = 290 daily measurements

$$y = b_0 + b_1 * x + b_2 * m + b_3 * x * m$$

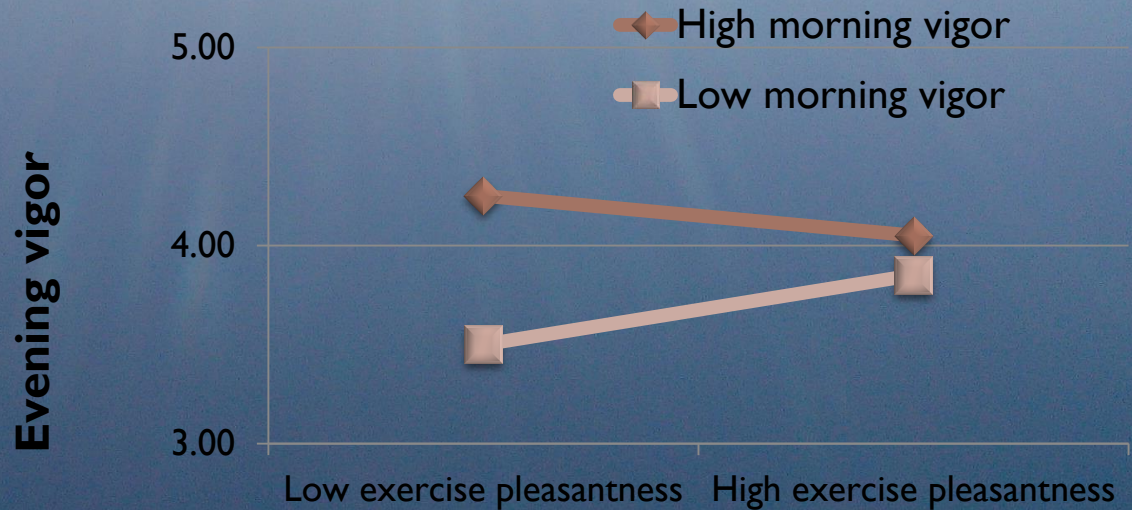
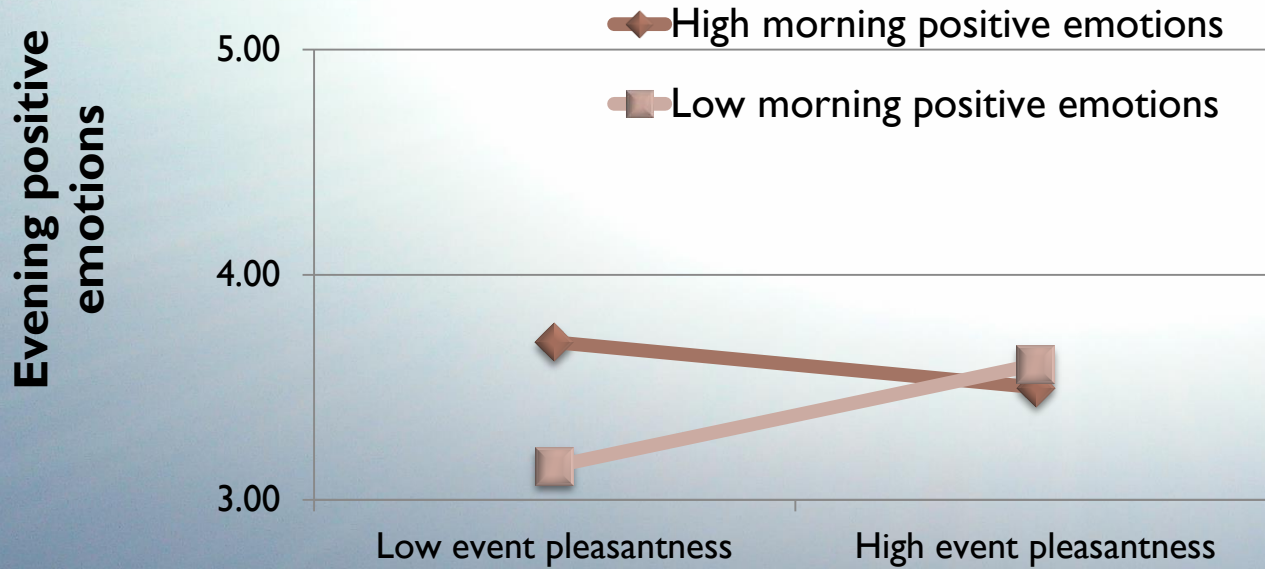


- **Event pleasantness (m)**
- x** Exercise pleasantness
- x** Time spent for exercise



- x** Event pleasantness
- **Exercise pleasantness (m)**
- x** Time spent for exercise





On days with lower levels of positive emotions and vigor in the morning, employees benefited from the intervention IF the event or exercise were evaluated positively.



Discussion

- ▶ ***Resource-based exercises***

- ▶ Boost resources

- ▶ May not buffer against the daily depletion of resources

- ▶ Perceived benefit experienced by participants can boost our morning energy and increase it until the end of our working day.

- ▶ ***Implications for theory:***

- ▶ Buffering against depletion employs different mechanisms than boosting energy

- ▶ Energy and fatigue are distinct resources

1. Implications

- ▶ The role of awareness/consciousness/mindfulness
 - ▶ Not an automatic process; Conscious awareness of perceived benefit seems to be important
- ▶ Implications for self-selection and interest

2. How did participants benefit from the intervention?

- ▶ Boosted resources, but did not buffer depletion
 - ▶ BUT: If have high vigor not a big difference

3. Challenges?

- ▶ Completing diaries at correct times
 - ▶ Issues of compliance
- ▶ How frequently and for how long do people need to do an intervention in order for it to have an effect? (Layous & Lyubormirsky, 2013)
- ▶ In the future:
 - ▶ Exit interviews – challenges faced with participants; understand how felt, what was complicated for them

4. What are questions and implications for future research and implementation?

- ▶ Self-selection and Goal Commitment:
 - ▶ Would this work with employees who are told to do it by an organisation?
 - ▶ Would it work for those with severe occupational well-being impairments?

Toolkit:

- ▶ Benefits of focusing on one method vs.
- ▶ Using a combination of methods that individuals can choose between



Dr. Gonzalez-Morales



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```

> tmod<-aov(NIGVIGOR~as.factor(SUBJECT),data=LABSCENTER,na.action=na.omit)
> ICC1(tmod)
[1] 0.4247083      VIGOR
> ICC2(tmod)
[1] 0.852328      VIGOR

VIGOR
> null.model<-lme(NIGVIGOR~1,random=~1|SUBJECT,data=LABSCENTER,na.action=na.omit)
> VarCorr(null.model)
SUBJECT = pdLogChol(1)
      Variance StdDev
(Intercept) 0.4281333 0.6543190
Residual    0.5878742 0.7667295
> null.model2<-gls(NIGVIGOR~1,data=LABSCENTER,na.action=na.omit)
> anova(null.model,null.model2)
      Model df   AIC   BIC logLik Test L.Ratio p-value
null.model  1 3 1978.650 1992.601 -986.325
null.model2 2 2 2213.951 2223.252 -1104.976 1 vs 2 237.3012 <.0001
THERE IS VARIANCE AMONG THE SUBJECT INTERCEPTS

FATIGUE
> null.model<-lme(NIGFATI~1,random=~1|SUBJECT,data=LABSCENTER,na.action=na.omit)
> VarCorr(null.model)
SUBJECT = pdLogChol(1)
      Variance StdDev
(Intercept) 0.4311773 0.6566410
Residual    0.9047165 0.9511659
> null.model2<-gls(NIGFATI~1,data=LABSCENTER,na.action=na.omit)
> anova(null.model,null.model2)
      Model df   AIC   BIC logLik Test L.Ratio p-value
null.model  1 3 2261.155 2275.083 -1127.578
null.model2 2 2 2416.212 2425.497 -1206.106 1 vs 2 157.0564 <.0001
THERE IS VARIANCE AMONGT THE SUBJECT INTERCEPTS

> tmod<-aov(NIGFATI~as.factor(SUBJECT),data=LABSCENTER,na.a
> ICC1(tmod)
[1] 0.3306482      FATIGUE
> ICC2(tmod)
[1] 0.793051      FATIGUE

> VarCorr(null.modelvigor)
SUBJECT = pdLogChol(1)
      Variance StdDev
(Intercept) 0.4281333 0.6543190
Residual    0.5878742 0.7667295
> VarCorr(modelvigor4)
SUBJECT = pdLogChol(1)
      Variance StdDev
(Intercept) 0.4801675 0.6929412
Residual    0.4325275 0.6576683
EXPLAINED VARIANCE
0.264206

> VarCorr(null.modelfati)
SUBJECT = pdLogChol(1)
      Variance StdDev
(Intercept) 0.4311773 0.6566410
Residual    0.9047165 0.9511659
> VarCorr(modelfati4)
SUBJECT = pdLogChol(1)
      Variance StdDev
(Intercept) 0.4813811 0.6938163
Residual    0.8080009 0.8988887
EXPLAINED VARIANCE
0.106886

```

