

# Can We Reduce Symptoms of Stress among Recently Divorced Danes?

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# Rationale

## Divorce

Ranked in a top 5 most stressful life events  
(Holmes and Rahe, 1967)

Correlated with numerous adverse health outcomes  
(Cohen, Kessler & Gordon 1997; Danese & McEwen, 2012; Nielsen, Davidsen, Hviid & Wohlfart, 2014; Sutin, Costa, Wethington & Eaton, 2010)

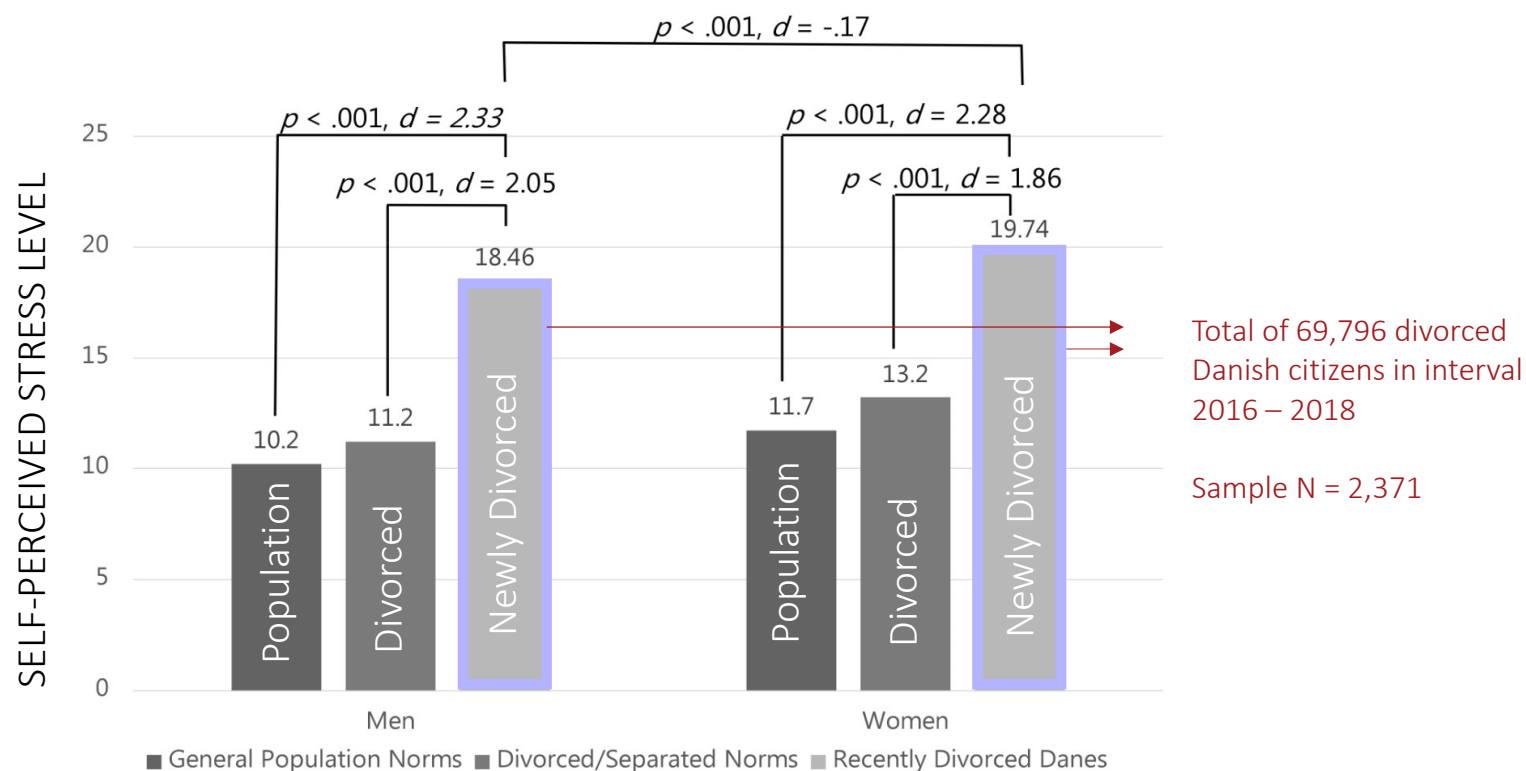
With prevalence of 50%  
(Centers for Disease Control and Prevention, 2016; Eurostat, 2015; Statistics Denmark, 2017)



Public health concern

## Cross-sectional Findings

Our cross-sectional findings on 2,371 recently divorced Danes showed that both men and women scored significantly higher on the levels of stress than both the Danish national norms for general population and the norms for divorced/separated population.



## Study Aim

Evidence-based digital intervention



### Current study:

- 1<sup>st</sup> longitudinal RCT digital post-divorce intervention study

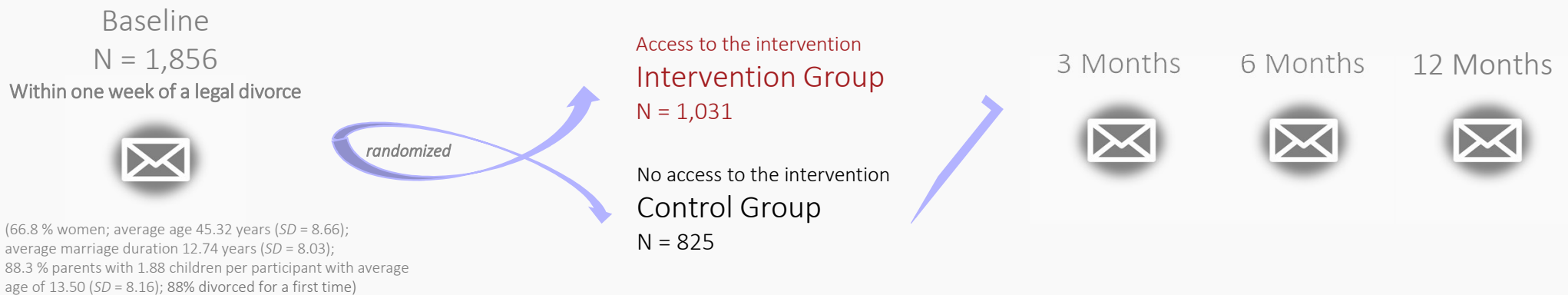
→ **Research Question:** Could the online intervention reduce self-perceived stress 12 months after a divorce?



## Method

Longitudinal **When Marriage Fails** RCT intervention study 2015-2018 of *Cooperation after Divorce* digital intervention

### Procedure. Danish State Administration



### Participants. Recently divorced Danish citizens

Sample representativeness. Compared to people who divorced in that period in a general population (Statistics Denmark) – study sample has more women, more highly educated individuals with lower number of previous divorces.

## Measures. PSS - The Perceived Stress Scale

(Cohen, S., Kamarck, T., Mermelstein, R., 1983)

- To assess the self-perceived stress levels and compare to nationally norm data:

In the last month, how often have you:

1. been upset because of something that happened unexpectedly?
2. felt that you were unable to control the important things in your life?
3. felt nervous and "stressed"?
4. confident about your ability to handle your personal problems?
5. felt that things were going your way?
6. found that you could not cope with all the things that you had to do?
7. been able to control irritations in your life?
8. felt that you were on top of things?
9. been angered because of things that were outside of your control?
10. felt difficulties were piling up so high that you could not overcome them?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

## Data Analyses. Multi-group curve-of-factors latent growth curve modeling (LGCM)

- To assess whether stress levels changed over time as a function of the intervention – *rate of mean change over time (slope)*

QUESTION: Do estimated trajectories of change in stress levels over time differ for control and intervention group?

## Analyses & Results

Figure 2. Conceptual Curve-of-Factors Latent Growth Curve Model

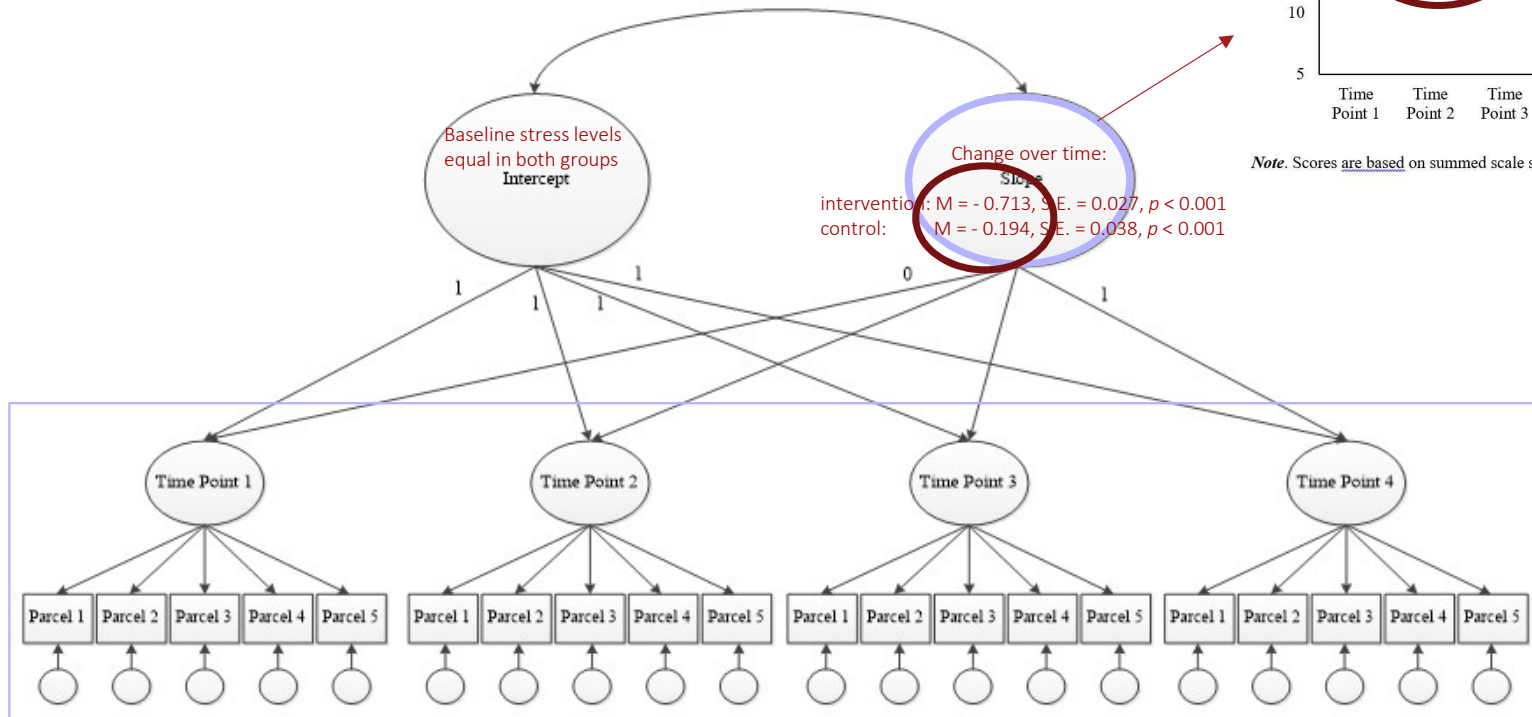
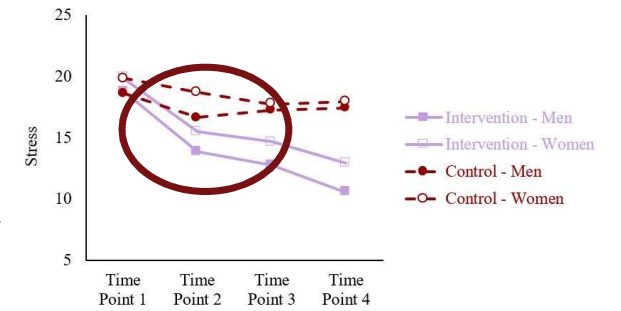


Figure 3. Trajectories in Stress Scores by Group and Gender



Note. Scores are based on summed scale scores, averaged by condition and gender.

intervention:  $M = -0.713, S.E. = 0.027, p < 0.001$   
 control:  $M = -0.194, S.E. = 0.038, p < 0.001$

stress scores

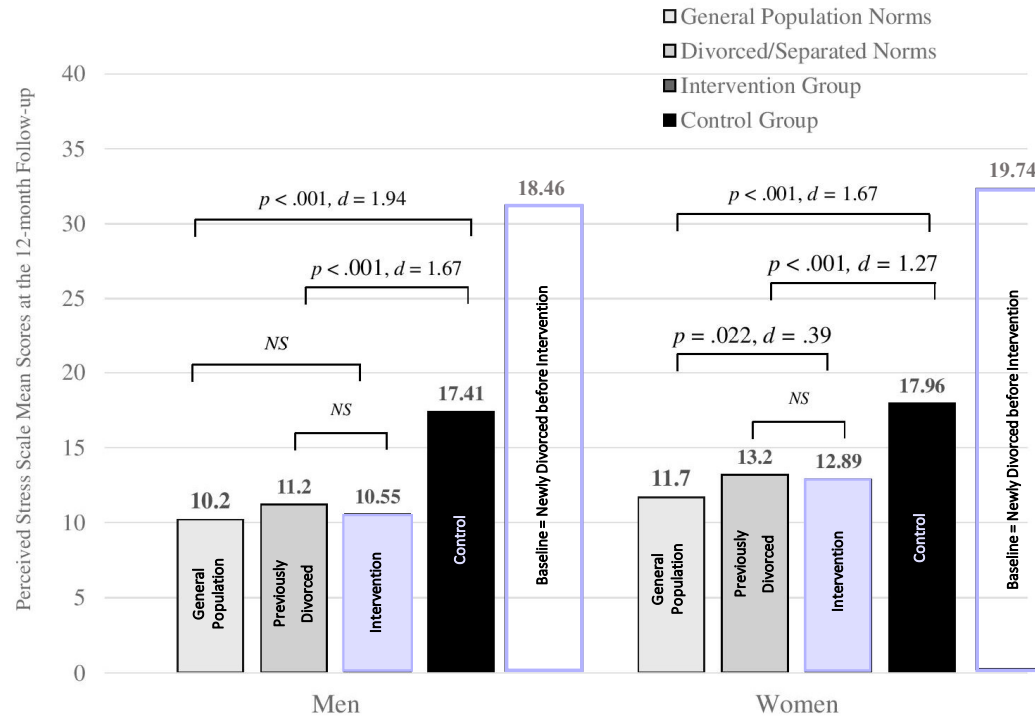
### Limitations

- Self-selection bias
- Attrition rate & attrition bias

### Discussion & Conclusion

- The online intervention **DOES** reduce stress among newly divorced individuals
- The present intervention implemented in April this year

### SELF-PERCEIVED STRESS LEVEL





## References

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Thank you for your attention.

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