



# Chronotype, Ostracism, & Coping in Young Adults

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## Background / Context

There are known biological, sociological, and psychological differences between chronotypes. Chronotype is a trait that describes an individual's sleep-wake tendencies with the two main types being morning and evening types (Roenneberg, 2012). Ostracism is a psychosocial stressor that occurs when someone is being rejected in a social situation (Williams, 2007). Positive reframing (PR) is a well known coping strategy where one reappraises a stressor they are experiencing into a more positive light (Folkman, 2000). Self-compassion (SC) can also be considered as a form of coping where an individual is kinder to themselves and approaches a situation in a more mindful manner (Neff, 2003). Both strategies have been found to aid in emotional and self-regulation.

According to Williams' (2009) Temporal Need-Threat Model of Ostracism, there are three stages that transpire following an experience of ostracism: intermediate, coping, and long-term. It is predicted that SC and PR coping strategies would occur during the coping stage and benefit recovering from ostracism by reducing psychological distress and evening chronotypes will report higher levels of psychological distress.

## Research Questions

- Is there a difference in mental health measures between chronotypes post ostracism recall?
- Will the coping conditions containing both SC and PR result in the best outcomes for mental health post ostracism recall?
- Is there an interaction between chronotype and coping condition?

## Methods/Procedure

- **Participants:**
  - N = 272; Ages 18-25 (M = 23.4 years)
  - Recruited American young adults online via Amazon MTurk; all who completed online study received \$0.50 (U.S.)
- **Materials:**
  - Consent form
  - Chronotype scale (rMEQ)
  - Ostracism scenario manipulation
  - PR and SC coping prompts
  - 10 mental health scales (psychological flexibility, self-esteem, rumination, well-being, life satisfaction, mood, needs, self-compassion, stress, anxiety)
- **Procedure:**
  - Participants who provided consent asked to recall and type in a past experience of ostracism.
  - They were then randomly assigned to engage in one of five coping conditions (written prompts):
    - Self-compassion/positive reframing
    - Positive reframing/self-compassion
    - Self-compassion
    - Positive reframing
    - Control (no instructions to cope)
  - Proceeded to answer the same 10 scales that measure aspects of mental health.

## Results

- **As predicted, evening chronotypes experienced overall higher levels of psychological distress** than morning types in over half of the mental health measures after recalling a past experience of ostracism.

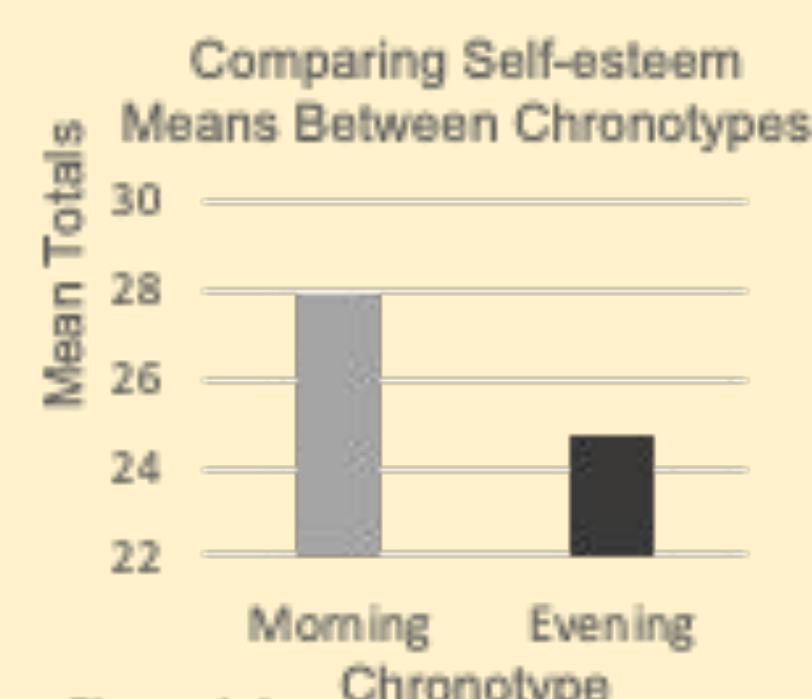


Figure 1.1

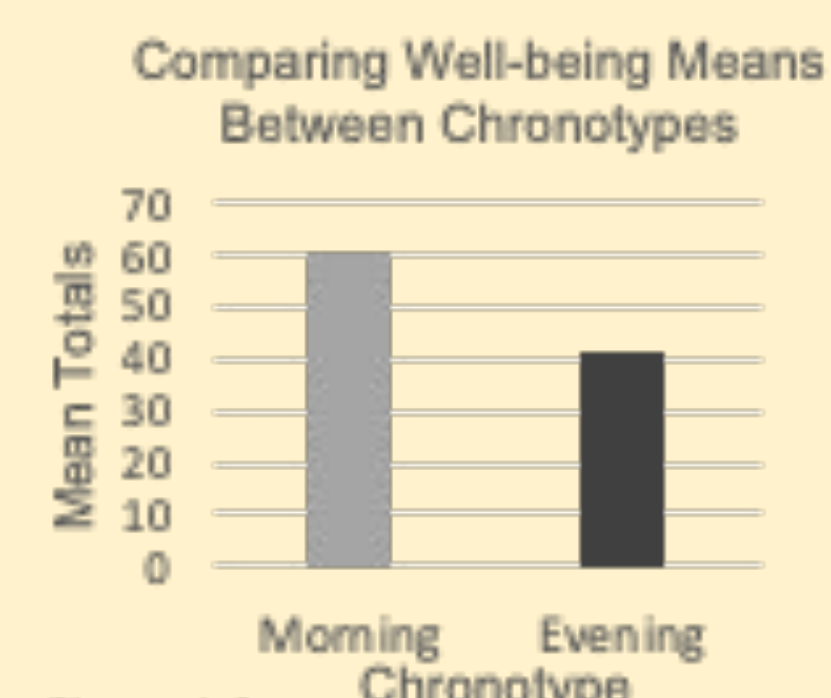


Figure 1.2

- The **positive reframing/self-compassion (PR/SC)** coping condition resulted in the **least favorable** mental health outcomes.

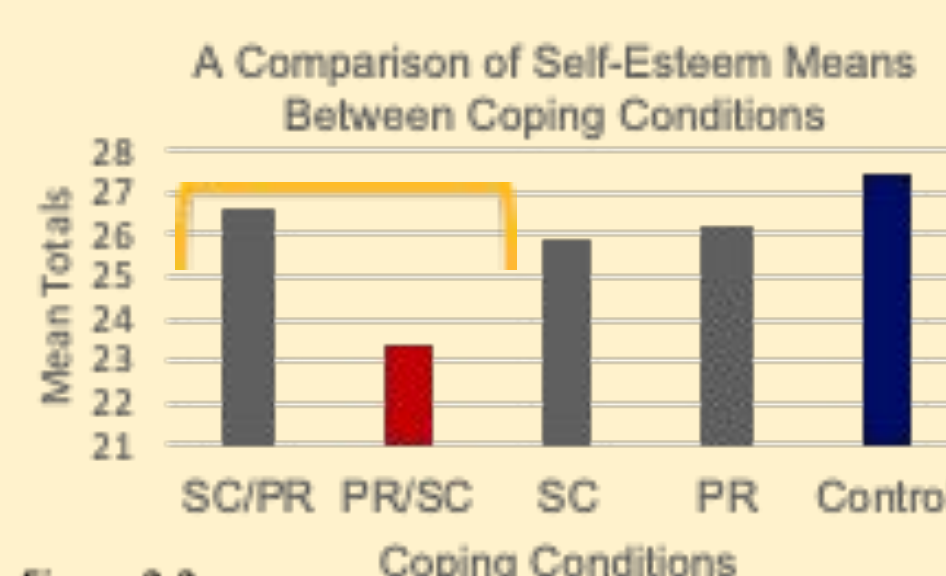


Figure 2.3

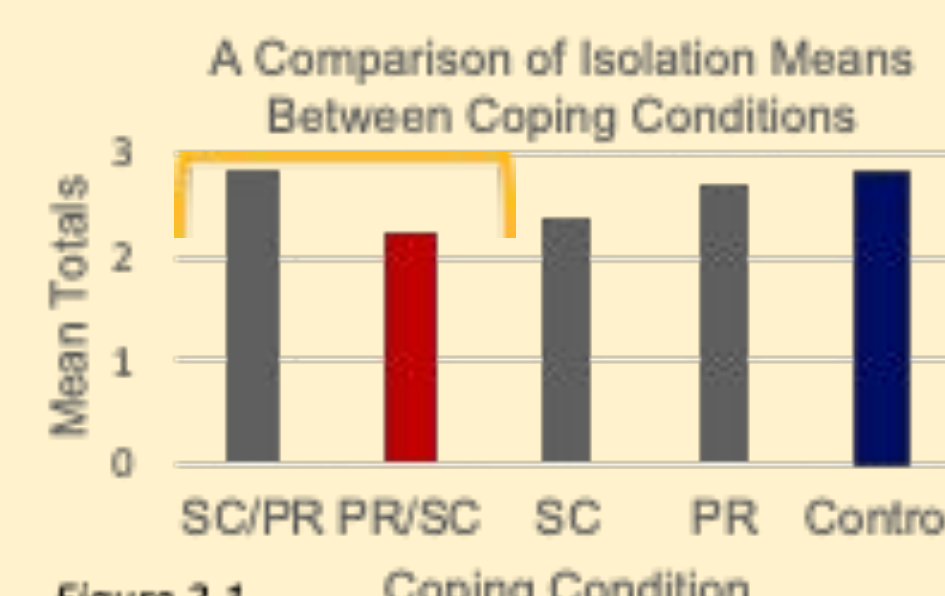


Figure 2.1

- The **control condition** demonstrated the **most favorable** outcomes in mental health.
- **Self-compassion before positive reframing (SC/PR) reduced more psychological distress than when reversed (PR/SC).**
- No interaction between chronotype and coping condition was found.

## Discussion

SC may serve better as a preparatory strategy to PR, where being in a self-compassionate state makes it easier to see a stressful situation in a positive light than when the order is reversed.

The history effect may serve as a possible explanation to the favorable results of the control condition where the current pandemic has heightened the stress levels of American young adults, thus influencing their responses and overall study outcome.

It is important to focus on the young adult population in understanding what preventative health measures should be taken to ensure their future health and wellbeing.

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## References

Available upon request.