Examining associations between age of onset of screen time, current screen time use, facial emotion recognition, and endogenous variables

> Helen Halpern PSY 497

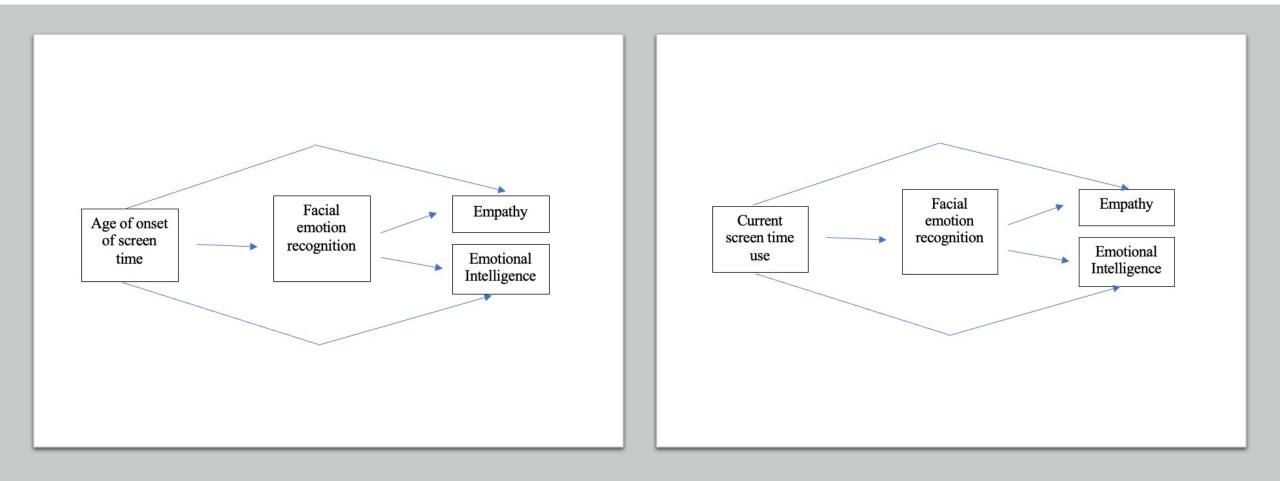
> > Dr. Kirnan

The College of New Jersey

### Lit review

- The higher (or lower) one's empathic concern for others, the more (or less) accurate they are in the recognition of others' emotions (Israelashvili, et al., 2020)
- EQ guides individuals through social interactions, allowing them to retrieve socially relevant information that then influences their reactions based upon how they feel (Cayanan & Castronuevo, 2015)
- Screen dependency beginning at young ages is not unique to the United States (Atkin, et al., 2014; Bucksch, et al., 2016; Leatherdale, 2011).
- Very little is known about the role of prolonged screen time in young individuals' abilities to accurately and efficiently identify and respond to facial expressions of emotions

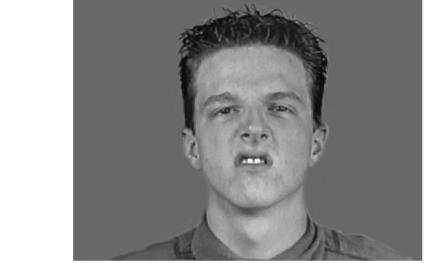
# Hypotheses



#### Measures

- A set of measures to quantify screen time across age and devices
- Wong & Law's (2002) scale of EQ
- Toronto Empathy Questionnaire (Spreng, et al., 2009)
- Montreal Set of Facial Displays of Emotion (MSFDE) (Beaupré, et al., 2000)

## Examples from MSFDE (Beaupré, 2000)



The above picture best represents which of the following emotions?

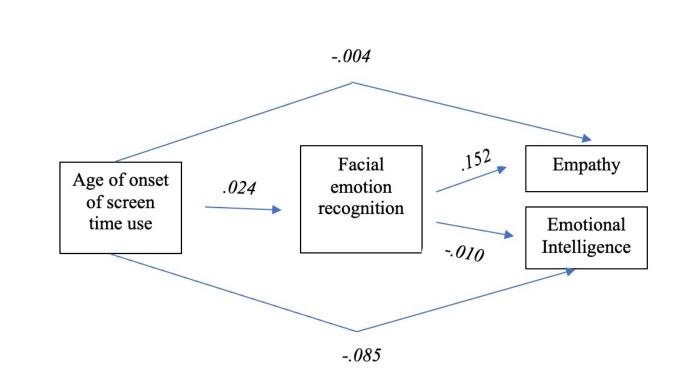
O Joy	
,	
O Sadness	
O Fear	
O Disgust	
O No distinct emotion	



The above picture best represents which of the following emotions?

- O Anger O Joy O Sadness O Fear
- O Disgust
- O No distinct emotion





*Figure 1*. Path analysis model examining age of onset of screen time use, total facial emotion recognition, and endogenous variables. Path analysis shows nonsignificant associations between the variables.

#### Results con't

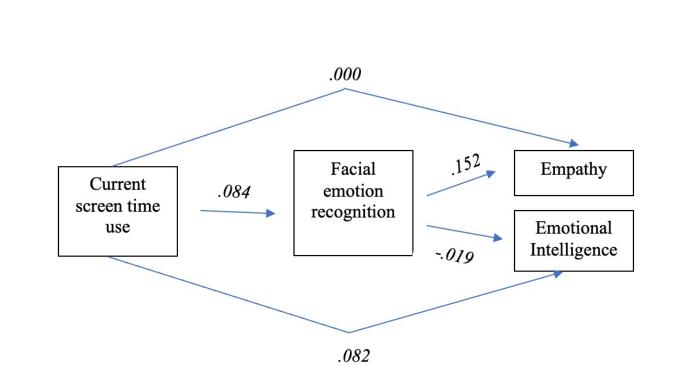


Figure 2. Path analysis model examining current screen time use, total facial emotion

recognition, and endogenous variables. Path analysis shows nonsignificant associations between the variables.

#### Results con't

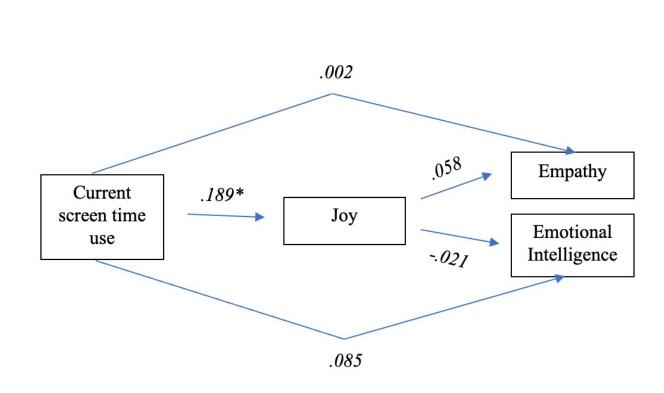


Figure 3. Path analysis model examining current screen time use, total facial emotion

recognition, and endogenous variables. Path analysis shows associations between current screen

time use and recognition of joy. \*p < .05.

#### Results con't

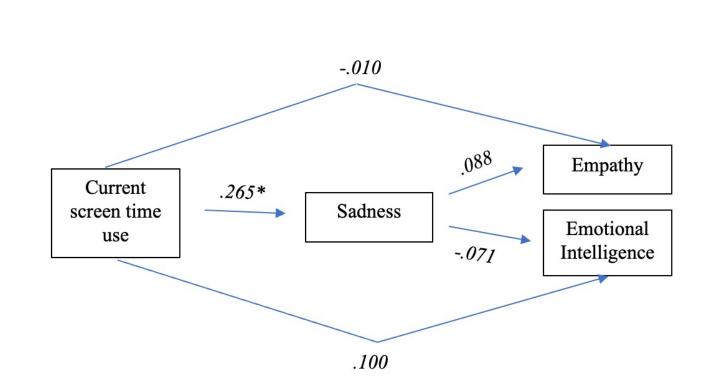


Figure 4. Path analysis model examining current screen time use, total facial emotion

recognition, and endogenous variables. Path analysis shows associations between current sc

time use and recognition of sadness. \*p < .05.

### Discussion

- No prior research to support the findings
- Insignificance may be due to ceiling effects and/or increased screen time use during the pandemic
- False positivity published on social media may predict better identification of the sub score of joy
- Future researchers should build on this research while employing the entire MSFDE

# Questions?