

INTRODUCTION

- There are observed differences in the prevalence and comorbidity for most common mental disorders among African American (AA) and European American (EA) youths
- Recent conceptualizations of psychopathology suggest that mental disorders are organized hierarchically and are continuous in nature
 - Internalizing (e.g., depression, anxiety)
 - Externalizing (e.g., antisocial, conduct disorder)
 - General mental health (*p* factor, Caspi et al., 2014)
- However, it is still unclear whether the hierarchical factor structure is fully invariant to racial-ethnic status
 - Only one study has provided supporting evidence for a shared structure across adults in five ethnic groups in the U.S., using DSM-IV diagnoses (Eaton et al., 2013).

AIMS

- **Aim 1:** What is the optimal factor structure of psychopathology in AA and EA youths?
- **Aim 2:** Does the same factor structure generalize across AA and EA youths?

METHOD

- Philadelphia Neurodevelopmental Cohort (PNC), 8-21 years of age
 - AA: n = 3088; EA: n = 5147
- Diagnoses of 13 DSM-5 mental disorders
 - Computerized structured interview adapted from K-SADS
- Confirmatory Factor Analysis (CFA)
 - 1) *One factor* model, 2) *Two factor* (i.e., internalizing and externalizing) model, 3) *Three factor* (i.e., distress, fear, and externalizing), 4) *Bifactor two factor* (i.e., internalizing, externalizing, general factor), 5) *Bifactor three factor* (i.e., distress, fear, and externalizing, and general factor).
- Multi-group CFA:
 - Factorial invariance was tested by comparing unconstrained and constrained models
 - Constraints were placed for factor loadings and item thresholds (per each disorder)

RESULTS

Table 1. CFA fit statistics for EA and AA subgroups

Models	CFI		TLI		RMSEA	
	AA	EA	AA	EA	AA	EA
One Factor	.763	.768	.726	.732	.046	.040
Two Factor	.968	.955	.961	.945	.018	.019
Three Factor	.974	.965	.968	.955	.016	.017
Bifactor Two Factor	.984	.976	.977	.965	.014	.015
Bifactor Three Factor	.981	.972	.972	.959	.015	.016

Table 2. Multigroup CFA fit statistics

Model	CFI	TLI	RMSEA	Chi-square Test of Model Fit		Chi-Square Contribution from Group	
				AA	EA	AA	EA
Unconstrained	.980	.970	.014	228.665	93.589	135.077	
Constrained	.976	.970	.014	271.744	124.300	147.444	

Figure 1: Bifactor two factor model for African Americans (AAs)

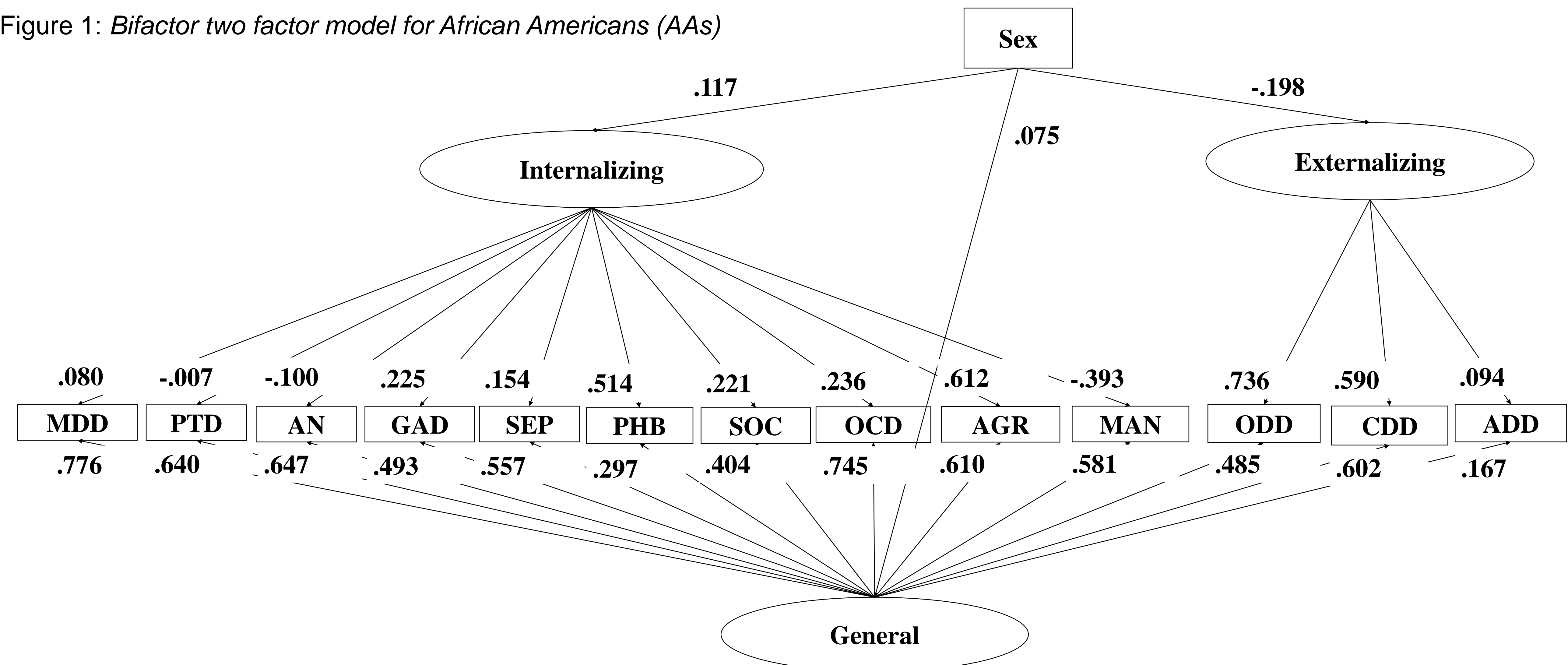
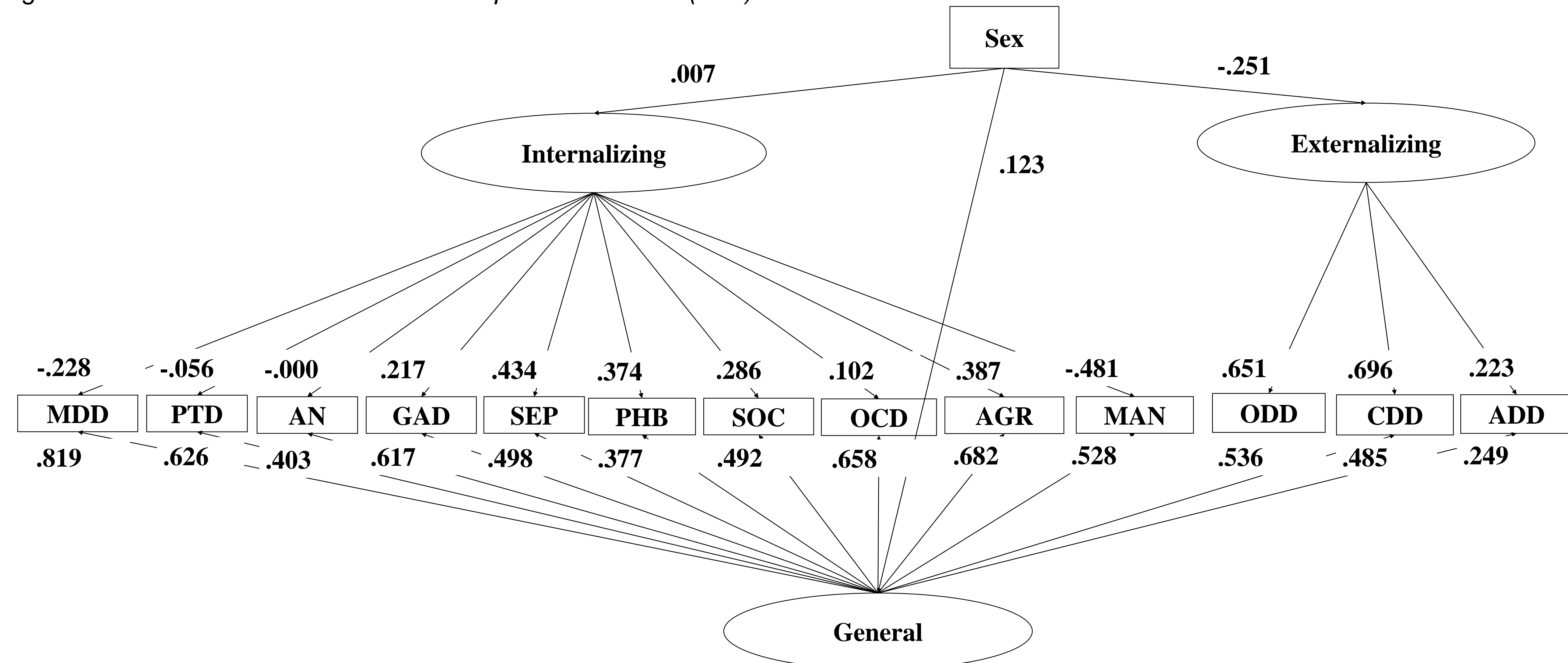


Figure 2: Bifactor two factor model for European Americans (EAs)



CONCLUSIONS

- **Aim 1:** A general factor model, with internalizing and externalizing subfactors, fit the data best in both AA and EA youths in PNC.
 - Consistent with prior research, a general factor accounts for a substantial portion of phenotypic covariation among disorders.
- **Aim 2:** Factorial invariance was detected, suggesting an equivalent factor structure for psychopathology for AA and EA youths in PNC.
 - Despite differences in prevalence rates, racial-ethnic status does not affect the underlying structure of psychopathology in so far as EA and AA subgroups is concerned.
- **Future directions**
 - A need to replicate the hierarchical factor model of psychopathology to other racial-ethnic subgroups.
 - Identify etiological mechanisms (e.g., genetic and environmental risk and protective factors) for mental disorders based on hierarchical conceptualizations of psychopathology, taking into account potential differences across race-ethnicity.