SUPPLEMENTARY MATERIALS FOR

Achievement Goal Perception:

**An Interpersonal Approach to Achievement Goals**

Effects of Priors

Regularizing priors were specified for all model parameters. This class of priors deemphasizes unreasonable parameter values and reduces the risk of overfitting relative to less informative or uninformative priors (McElreath, 2020). Regularizing priors also help to limit the number of divergent transitions and facilitate the sampling of particularly complex parameter spaces (Stan Development Team, 2022), as is the case with MSRM. To examine prior influence, the following set of weaker regularizing priors was specified for comparison with the original:

Parameters	Original	Weaker
Shared effects	Normal(0, 0.5)	Normal(0, 1)
Standard deviations	Exponential(1)	Exponential(0.5)
Cholesky factors	LKJ(8)	LKJ(6)

The resulting marginal posterior densities were nearly identical for all focal parameters (i.e., variances, correlations, shared effects) when comparing the original (solid lines) and weaker (dotted lines) priors (see figures below for detailed comparisons). The one exception concerns the predictive associations between target effects and downstream outcomes, for which the updated marginal posterior densities were wider and further away from zero.
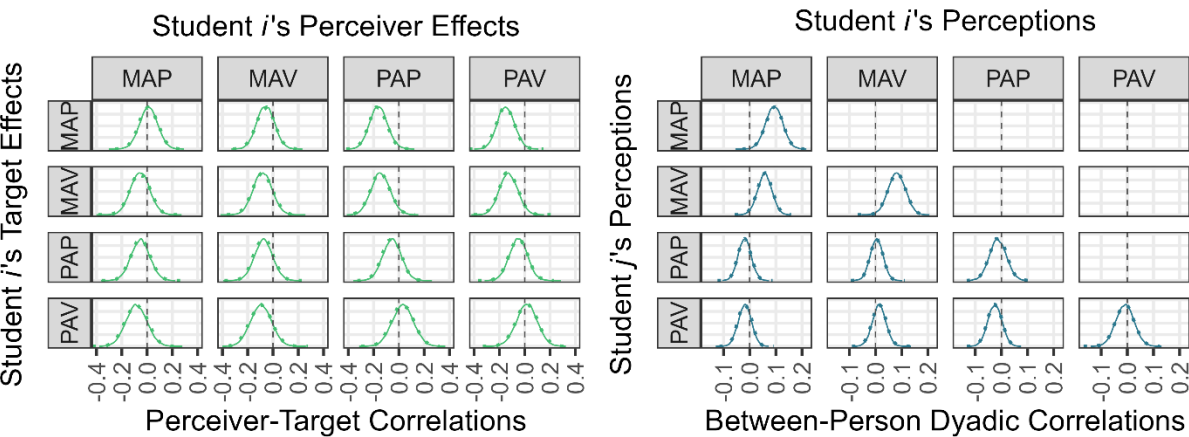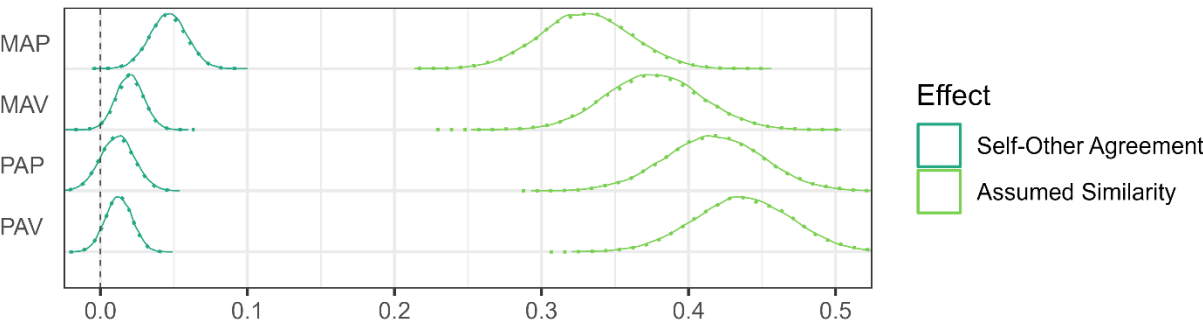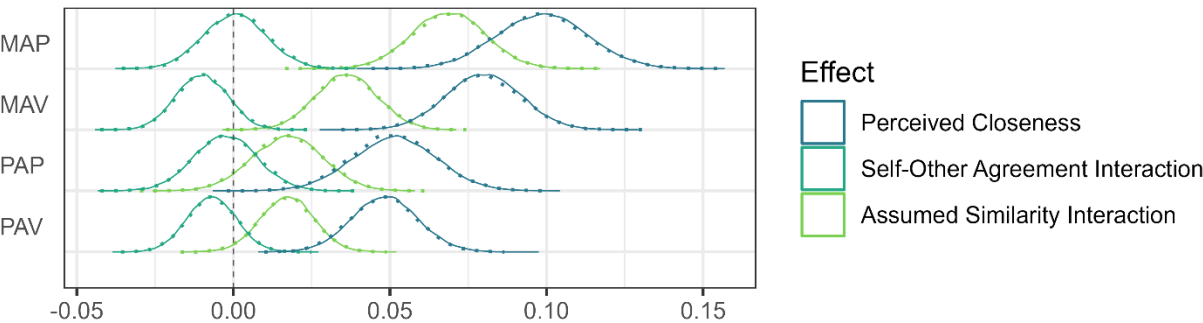
Variances
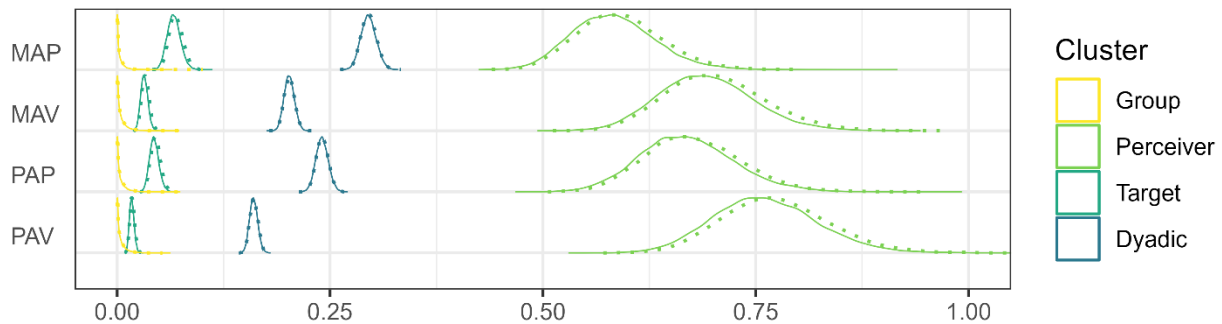
Correlations between goals
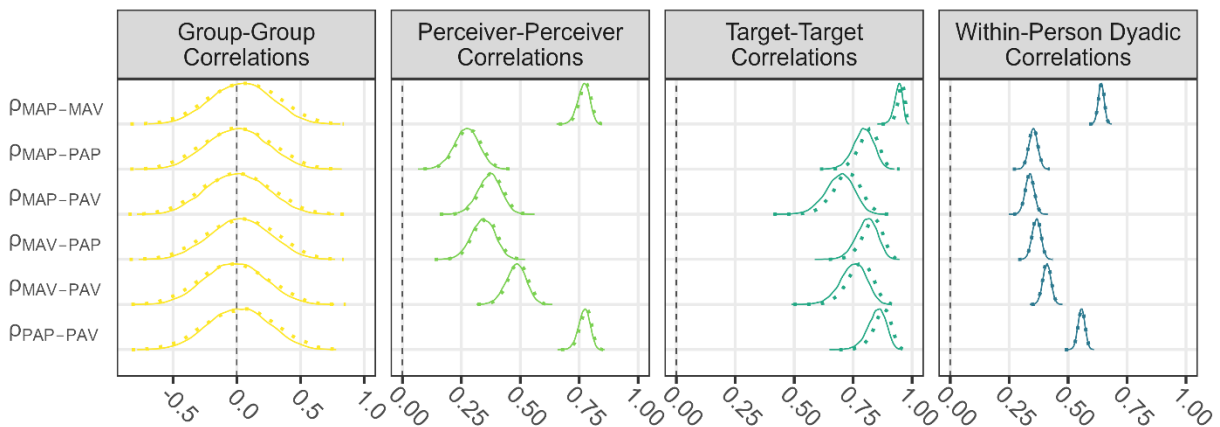
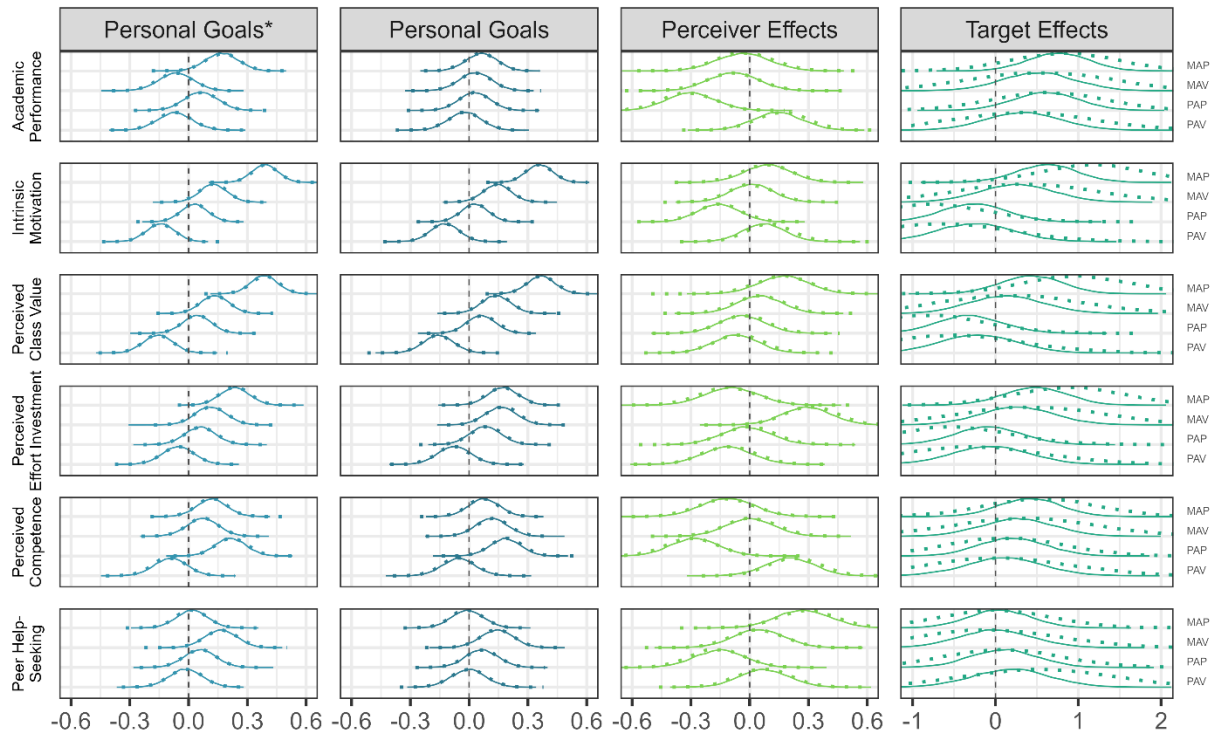## Correlations between perceivers

Personal goal effects

Perceived closeness effect and interactions

Based on the 89% *pd* threshold used in the manuscript, there were only three changes to reported findings: (1) academic performance was not positively predicted by the target effect for PAP goals; (2) perceived class value was positively predicted by the target effect for MAP goals; and (3) perceived effort investment was positively predicted by the target effect for MAP goals. See table below for a comparison of *pd* values among target effects for each achievement goal with each downstream outcome.

Outcome	Goal	Original	Weaker		Outcome	Goal	Original	Weaker
	MAP	98.0%	90.3%			MAP	89.4%	90.5%
Academic Performance	MAV	88.2%	73.7%		Perceived Effort Investment	MAV	72.4%	69.0%
	PAP	93.8%	82.7%			PAP	58.2%	76.9%
	PAV	77.0%	65.9%			PAV	54.7%	62.9%
	MAP	95.2%	96.7%			MAP	86.4%	79.1%
Intrinsic Motivation	MAV	71.9%	66.3%		Perceived Competence	MAV	73.0%	65.4%
	PAP	74.6%	87.2%			PAP	69.4%	56.3%
	PAV	70.0%	78.4%			PAV	59.3%	51.6%
	MAP	87.4%	93.2%			MAP	55.2%	50.0%
Perceived Class Value	MAV	61.4%	58.3%		Peer Help-Seeking	MAV	50.1%	54.4%
	PAP	78.5%	88.2%			PAP	59.6%	55.0%
	PAV	67.1%	73.1%			PAV	65.9%	72.2%