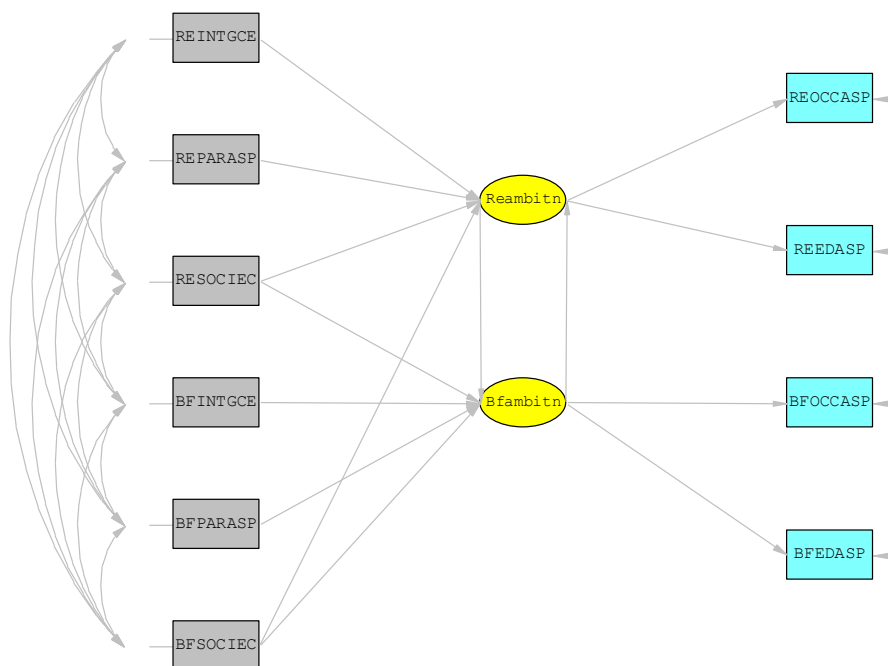


## Peer influences on ambition data

The data are scores for the occupational aspiration, the educational aspiration, the intelligence, the socio-economic status, and the parental aspiration of 329 students and their best friends at a Michigan high school used in a study by Duncan, Haller, and Portes (1971). The corresponding data file is **PEERS.LSF**, and the first few observations are depicted below.

	REINTGCE	REPARASP	RESOCIEC	REOCCASP	REEDASP	BFINTGCE	BFPARASP	BFSOCIEC	BFOCCASP
1	-0.159	-0.191	1.338	0.106	0.764	0.696	1.162	0.199	-0.536
2	0.624	-0.503	0.409	-1.018	0.004	-0.492	0.392	0.648	1.159
3	-0.427	-0.349	-1.425	-0.794	-0.724	-0.151	1.008	-2.476	0.124
4	-0.150	1.249	0.356	-0.436	0.011	-0.923	-0.395	-1.509	-1.252
5	0.537	0.673	-1.394	0.697	1.094	-0.101	-0.353	0.523	1.522
6	-0.509	0.857	0.780	0.104	-0.553	-1.191	-0.601	0.033	-0.458
7	-1.680	-0.234	-0.508	-1.240	-1.268	0.302	0.047	-1.796	0.944
8	-0.866	-1.236	1.250	-0.955	-0.418	-0.041	-0.490	0.378	-0.229
9	0.924	-0.948	-0.559	0.243	0.257	0.999	-0.020	-0.040	0.351
10	0.509	-0.607	1.740	1.038	-0.128	1.070	-0.619	1.192	1.266

The theoretical model is a Multiple Indicators, Multiple Causes (MIMIC) model that suggests that the respondent's parental aspiration, intelligence, and socio-economic status along with the best friend's socio-economic status are causes of the respondent's ambition and that the best friend's parental aspiration, intelligence, and socio-economic status along with the respondent's socio-economic status are causes of the best friend's ambition. A path diagram for this model is shown in the image below.



The SIMPLIS syntax file to fit the theoretical model above to the student data is shown in the image below.

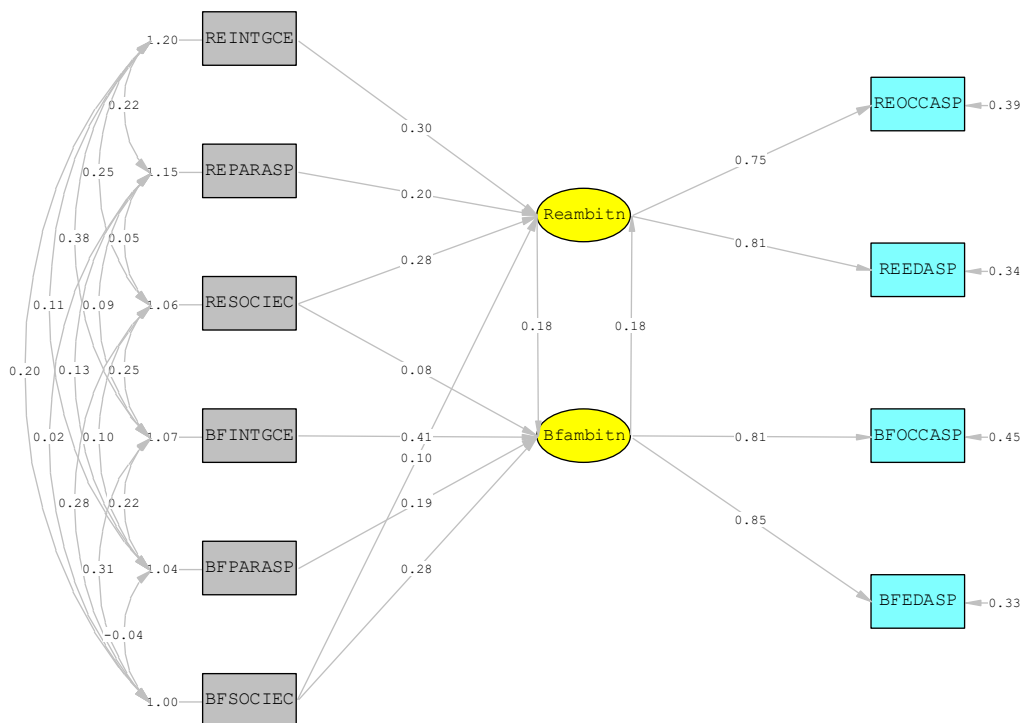
```

PEERS.SPL
Raw Data from File PEERS.LSF
Latent Variables
Reambitn Bfambitn
Relationships
REOCCASP REEDASP = Reambitn
BFOCCASP BFEDASP = Bfambitn
Reambitn = Bfambitn REPARASP REINTGCE RESOCIEC BFSOCIEC
Bfambitn = Reambitn RESOCIEC BFSOCIEC BFINTGCE BFPARASP
Robust Estimation
Options: SO SS SC RS MI EF
Path Diagram
End of Problem

```

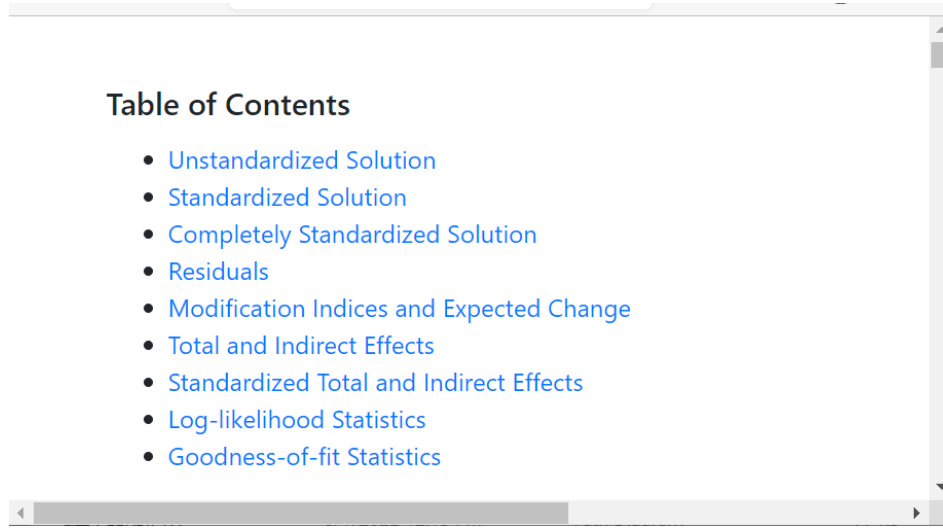
- Line 1 specifies the data file.
- Lines 2 to 3 specify the labels for the latent variables of the model.
- Lines 4 to 8 specify the theoretical model.
- Line 9 specifies robust maximum likelihood estimation.
- Line 10 requests that all the factor loadings for the two endogenous latent variables are estimated by constraining their variances to be equal to unity (SO option), the standardized solution (SS option), the completely standardized solution (SC option), the residuals, normalized residuals, standardized residuals (RS option), the modification indices (MI option), and the total and indirect effects (EF option).
- Line 11 requests a path diagram of the model.
- Line 12 indicates that no more SIMPLIS commands are to be processed.

If this SPL file is opened in LISREL and the **Run LISREL** icon is clicked, the following path diagram is obtained.



Chi-Square=26.54, df=16, P-value=0.04693, RMSEA=0.045

The corresponding output file, **PEERS.OUT**, is opened in a separate window. [The HTML tables for the results listed in PEERS.OUT are provided in the HTML file PEERS.HTML](#). The table of contents for the HTML tables is shown in the image below.



**Table of Contents**

- [Unstandardized Solution](#)
- [Standardized Solution](#)
- [Completely Standardized Solution](#)
- [Residuals](#)
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- [Total and Indirect Effects](#)
- [Standardized Total and Indirect Effects](#)
- [Log-likelihood Statistics](#)
- [Goodness-of-fit Statistics](#)

## References

Duncan, O.D., Haller, A.O. & Portes, A. (1971). *Peer Influences on Aspirations, a Reinterpretation*. In H.M. Blalock (Ed.), *Causal Models in the Social Sciences*, pp. 219-244. Aldine Atherton, Inc.