

## Factor Analysis

### C.1 Case 1—Music

#### C.1.1 Undirected Network

##### C.1.1.1 Independent Variables

## Factor Analysis

### Notes

Output Created		26-MAR-2015 15:17:16
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.

Syntax		FACTOR /VARIABLES Nodes Edges_ud Den_ud CC_ud /MISSING LISTWISE /ANALYSIS Nodes Edges_ud Den_ud CC_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.20
	Maximum Memory	3008 (2.938K) bytes
	Required	

**Correlation Matrix**

		Nodes	Edges_ud	Den_ud	CC_ud
Correlation	Nodes	1.000	.989	-.888	-.088
	Edges_ud	.989	1.000	-.870	-.022
	Den_ud	-.888	-.870	1.000	.004
	CC_ud	-.088	-.022	.004	1.000
Sig. (1-tailed)	Nodes		.000	.000	.205
	Edges_ud	.000		.000	.418
	Den_ud	.000	.000		.483
	CC_ud	.205	.418	.483	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.607
Bartlett's Test of Sphericity	Approx. Chi-Square
	493.211
	df
	6
	Sig.
	.000

### Communalities

	Initial	Extraction
Nodes	1.000	.978
Edges_ud	1.000	.964
Den_ud	1.000	.894
CC_ud	1.000	1.000

Extraction Method: Principal

Component Analysis.

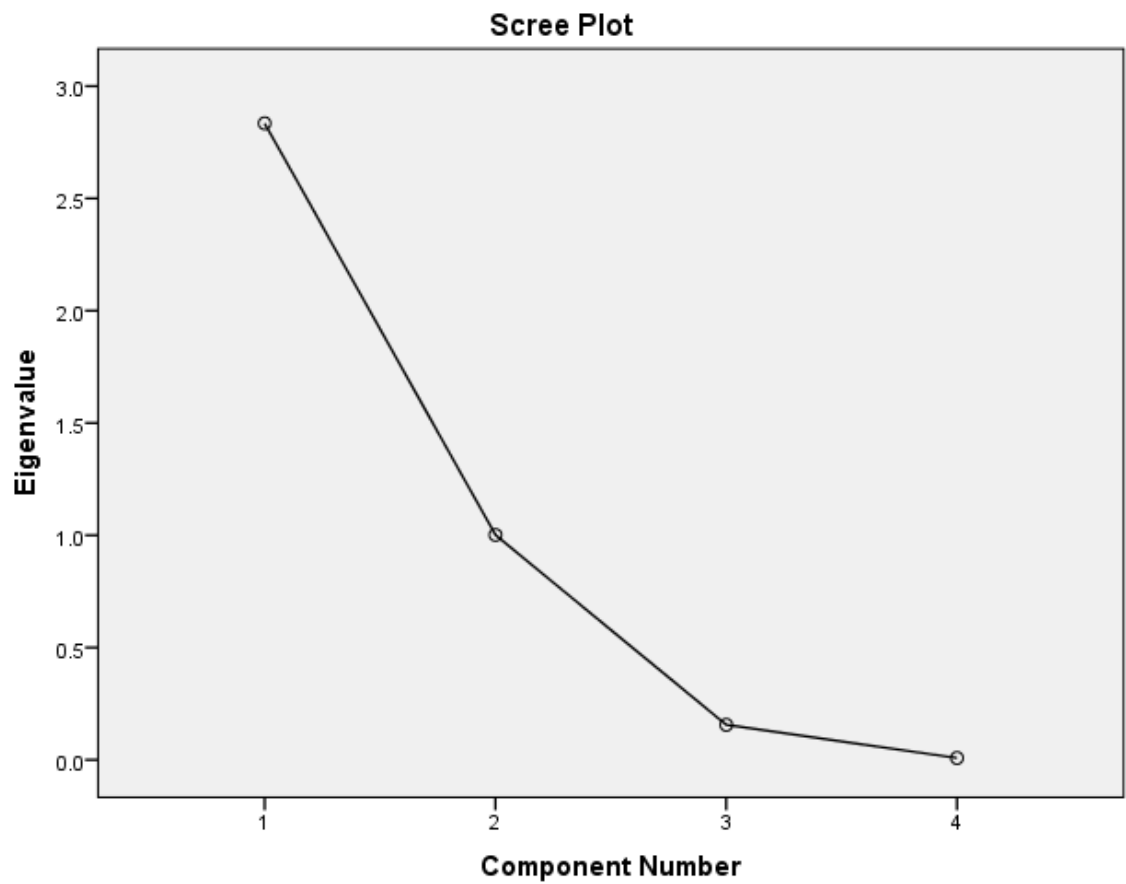
### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.834	70.856	70.856	2.834	70.856
2	1.002	25.039	95.895	1.002	25.039
3	.156	3.900	99.794		
4	.008	.206	100.000		

### Total Variance Explained

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.856	2.831	70.774	70.774
2	95.895	1.005	25.121	95.895
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.988	-.030
Edges_ud	.981	.035
Den_ud	-.944	-.059
CC_ud	-.061	.998

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.986	-.071
Edges_ud	.982	-.006
Den_ud	-.945	-.019
CC_ud	-.019	1.000

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.999	-.042
2	.042	.999

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 15:17:32	
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Nodes Edges_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.994	2

### C.1.1.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:18:15
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpudN PL_TspudN S_ud R_ud SMSP_ud /MISSING LISTWISE /ANALYSIS PL_TpudN PL_TspudN S_ud R_ud SMSP_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes



### Correlation Matrix

		PL_TpudN	PL_TspudN	S_ud	R_ud	SMSP_ud
Correlation	PL_TpudN	1.000	.155	-.065	-.186	.232
	PL_TspudN	.155	1.000	.135	-.068	.098
	S_ud	-.065	.135	1.000	.479	.322
	R_ud	-.186	-.068	.479	1.000	.467
	SMSP_ud	.232	.098	.322	.467	1.000
Sig. (1-tailed)	PL_TpudN		.071	.269	.039	.014
	PL_TspudN	.071		.101	.261	.179
	S_ud	.269	.101		.000	.001
	R_ud	.039	.261	.000		.000
	SMSP_ud	.014	.179	.001	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.520
Bartlett's Test of Sphericity	Approx. Chi-Square
	67.600
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpudN	1.000	.877
PL_TspudN	1.000	.944
S_ud	1.000	.673
R_ud	1.000	.789
SMSP_ud	1.000	.776

Extraction Method: Principal  
Component Analysis.

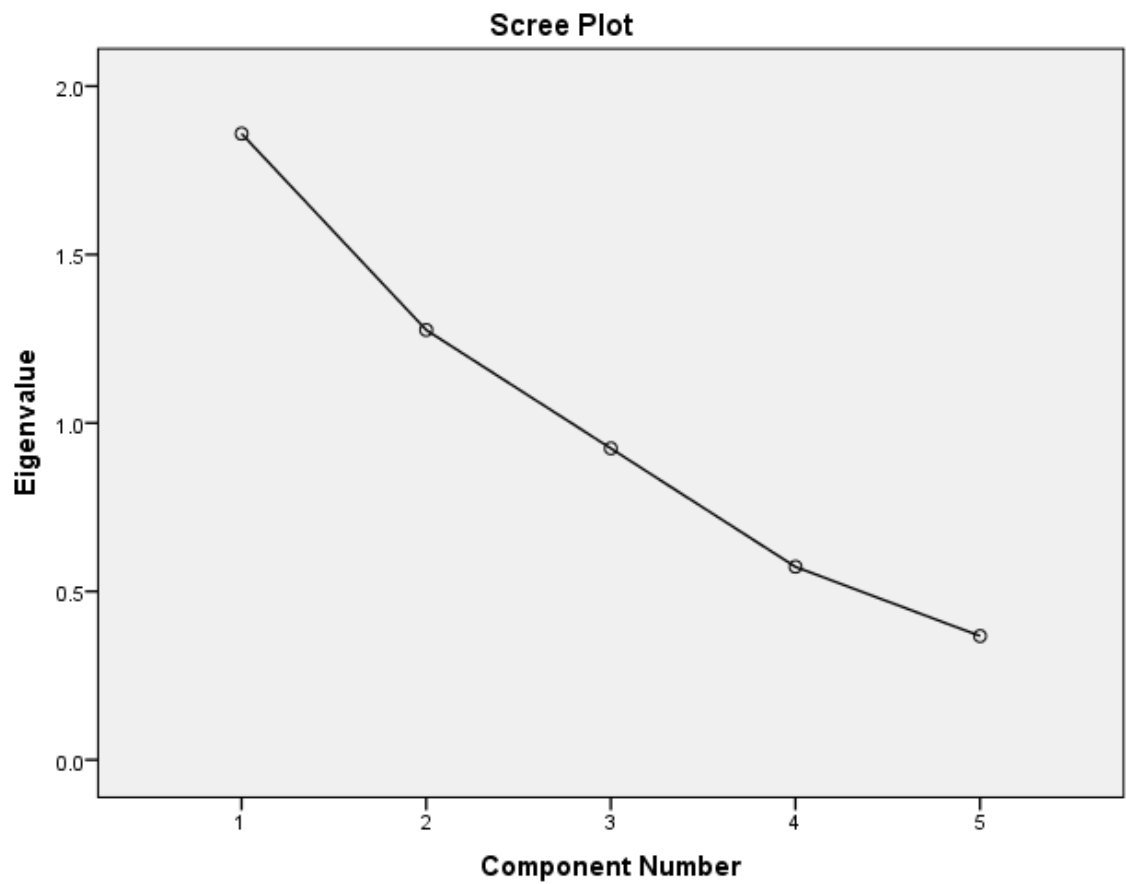
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.859	37.178	37.178	1.859	37.178
2	1.276	25.522	62.699	1.276	25.522
3	.925	18.490	81.189	.925	18.490
4	.573	11.461	92.650		
5	.367	7.350	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	37.178	1.845	36.899	36.899
2	62.699	1.170	23.402	60.301
3	81.189	1.044	20.889	81.189
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpudN	-.010	.834	-.427
PL_TspudN	.139	.619	.735
S_ud	.767	-.071	.283
R_ud	.828	-.310	-.082
SMSP_ud	.752	.310	-.339

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpudN	-.127	.921	.114
PL_TspudN	.027	.103	.966
S_ud	.762	-.132	.273
R_ud	.868	-.113	-.154
SMSP_ud	.703	.531	-.027

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.988	.113	.104
2	-.152	.815	.559
3	-.022	-.568	.823

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 15:18:34
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES= S_ud R_ud SMSP_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

	N	%
Cases Valid	91	100.0
Excluded <sup>a</sup>	0	.0
Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.286	3

RELIABILITY

```
/VARIABLES=PL_TpudN SMSP_ud  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### C.1.1.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 15:19:03
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /MISSING LISTWISE /ANALYSIS GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory	
	Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_ud	Tpaths_ud	TSpaths_ud	AvgPL_ud	AvgGL_ud
Correlation	GD_ud	1.000	.949	-.005	.999	.191
	Tpaths_ud	.949	1.000	.112	.955	.200
	TSpaths_ud	-.005	.112	1.000	-.003	.461
	AvgPL_ud	.999	.955	-.003	1.000	.194
	AvgGL_ud	.191	.200	.461	.194	1.000
Sig. (1-tailed)	GD_ud		.000	.482	.000	.035
	Tpaths_ud	.000		.145	.000	.029
	TSpaths_ud	.482	.145		.489	.000
	AvgPL_ud	.000	.000	.489		.033
	AvgGL_ud	.035	.029	.000	.033	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.623
Bartlett's Test of Sphericity	Approx. Chi-Square
	783.779
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_ud	1.000	.989
Tpaths_ud	1.000	.954
TSpaths_ud	1.000	.759
AvgPL_ud	1.000	.993
AvgGL_ud	1.000	.723

Extraction Method: Principal  
Component Analysis.



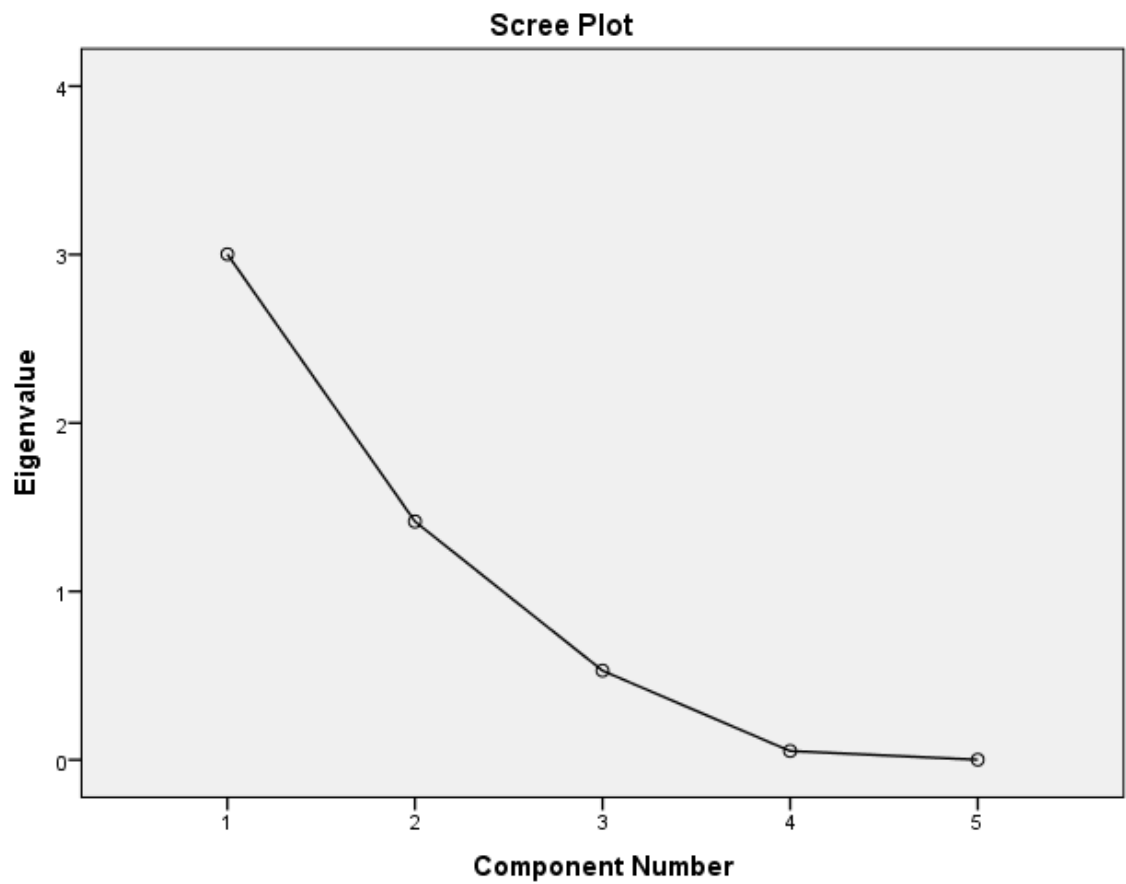
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.002	60.041	60.041	3.002	60.041
2	1.415	28.305	88.346	1.415	28.305
3	.529	10.588	98.934		
4	.052	1.044	99.978		
5	.001	.022	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	60.041	2.946	58.921	58.921
2	88.346	1.471	29.425	88.346
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.983	-.149
Tpaths_ud	.974	-.066
TSpaths_ud	.123	.862
AvgPL_ud	.986	-.147
AvgGL_ud	.315	.790

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.994	.038
Tpaths_ud	.969	.119
TSpaths_ud	-.041	.870
AvgPL_ud	.996	.041
AvgGL_ud	.161	.835

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.982	.188
2	-.188	.982

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 15:19:24
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_ud Tpaths_ud AvgPL_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.989	3

RELIABILITY

```
/VARIABLES=TSpaths_ud AvgGL_ud  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.517	2

#### C.1.1.4 Dependent Variables

### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:20:16
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
Missing Value Handling	N of Rows in Working Data File	91
	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /MISSING LISTWISE /ANALYSIS ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.16
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECud	PL_EVCudN	EVCud_TpudN	EVCud_TSpudN
Correlation	ECud	1.000	.054	.087	-.045
	PL_EVCudN	.054	1.000	-.111	.200
	EVCud_TpudN	.087	-.111	1.000	.061
	EVCud_TSpudN	-.045	.200	.061	1.000
Sig. (1-tailed)	ECud		.304	.205	.334
	PL_EVCudN	.304		.148	.029
	EVCud_TpudN	.205	.148		.282
	EVCud_TSpudN	.334	.029	.282	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.429
Bartlett's Test of Sphericity Approx. Chi-Square	6.732
df	6
Sig.	.346

### Communalities

	Initial	Extraction
ECud	1.000	.922
PL_EVCudN	1.000	.735
EVCud_TpudN	1.000	.859
EVCud_TSpudN	1.000	.778

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

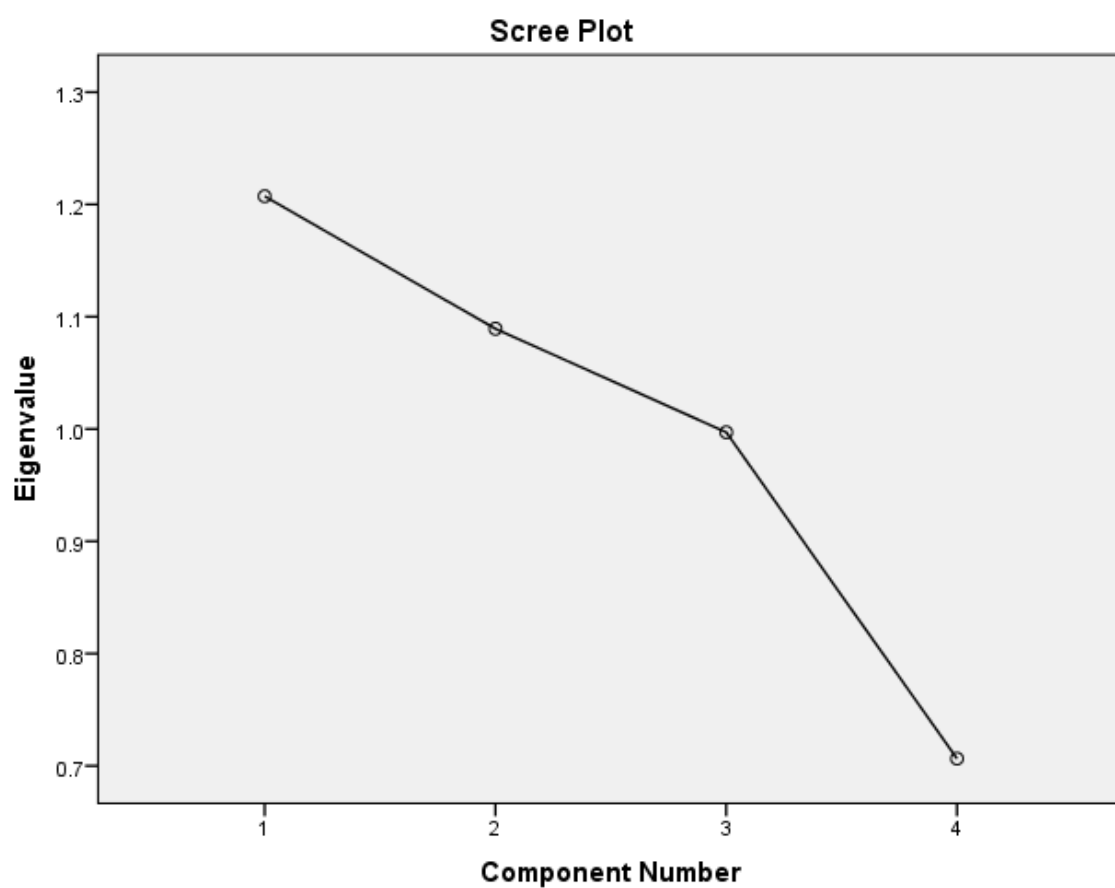
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.207	30.182	30.182	1.207	30.182
2	1.089	27.232	57.413	1.089	27.232
3	.997	24.927	82.340	.997	24.927
4	.706	17.660	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	30.182	1.195	29.885	29.885
2	57.413	1.068	26.702	56.587
3	82.340	1.030	25.753	82.340
4				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	-.046	.642	.712
PL_EVCudN	.801	.028	.305
EVCud_TpudN	-.237	.777	-.445
EVCud_TSpudN	.712	.269	-.445

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	-.015	.096	.955
PL_EVCudN	.725	-.379	.257
EVCud_TpudN	.023	.920	.110
EVCud_TSpudN	.818	.262	-.200

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 7 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.959	-.282	-.005
2	.229	.768	.599
3	-.165	-.575	.801

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 15:20:33	
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.082	4

## C.1.2 Directed Network

### C.1.2.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 14:59:28
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	
	File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16

Elapsed Time	00:00:00.20
Maximum Memory Required	4248 (4.148K) bytes

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.988	.044	-.888	-.139
	Edges_d	.988	1.000	.066	-.870	-.123
	Reciprocity	.044	.066	1.000	-.075	-.005
	Den_d	-.888	-.870	-.075	1.000	.148
	CC_d	-.139	-.123	-.005	.148	1.000
Sig. (1-tailed)	Nodes		.000	.341	.000	.094
	Edges_d	.000		.266	.000	.122
	Reciprocity	.341	.266		.239	.480
	Den_d	.000	.000	.239		.081
	CC_d	.094	.122	.480	.081	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.693
Bartlett's Test of Sphericity	Approx. Chi-Square
	472.256
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.976
Edges_d	1.000	.964
Reciprocity	1.000	1.000
Den_d	1.000	.893
CC_d	1.000	1.000

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.868	57.356	57.356	2.868	57.356
2	.997	19.938	77.294	.997	19.938
3	.968	19.362	96.657	.968	19.362
4	.157	3.134	99.791		
5	.010	.209	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	57.356	2.826	56.528	56.528
2	77.294	1.005	20.098	76.626
3	96.657	1.002	20.031	96.657
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.984	-.030	.086
Edges_d	.977	-.003	.093
Reciprocity	.096	.956	-.279
Den_d	-.943	-.002	-.053
CC_d	-.213	.288	.934

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.986	-.060	.007
Edges_d	.981	-.044	.030
Reciprocity	.036	-.001	.999
Den_d	-.941	.076	-.044
CC_d	-.079	.997	-.001

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.989	-.134	.061
2	-.020	.289	.957
3	.146	.948	-.283

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 15:00:03	
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d Reciprocity Den_d CC_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.994	2

### C.1.2.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:00:57
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpdN PL_TSpdN S_d R_d SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpdN PL_TSpdN S_d R_d SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(4) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.18
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpdN	PL_TSpdN	S_d	R_d	SMSP_d
Correlation	PL_TpdN	1.000	.151	.192	.191	-.018
	PL_TSpdN	.151	1.000	.090	.204	.148
	S_d	.192	.090	1.000	.466	.021
	R_d	.191	.204	.466	1.000	.070
	SMSP_d	-.018	.148	.021	.070	1.000
Sig. (1-tailed)	PL_TpdN		.076	.034	.035	.431
	PL_TSpdN	.076		.197	.026	.080
	S_d	.034	.197		.000	.423
	R_d	.035	.026	.000		.254
	SMSP_d	.431	.080	.423	.254	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.578
Bartlett's Test of Sphericity	Approx. Chi-Square
	33.243
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpdN	1.000	.999
PL_TSpdN	1.000	.982
S_d	1.000	.765
R_d	1.000	.735
SMSP_d	1.000	1.000

Extraction Method: Principal  
Component Analysis.

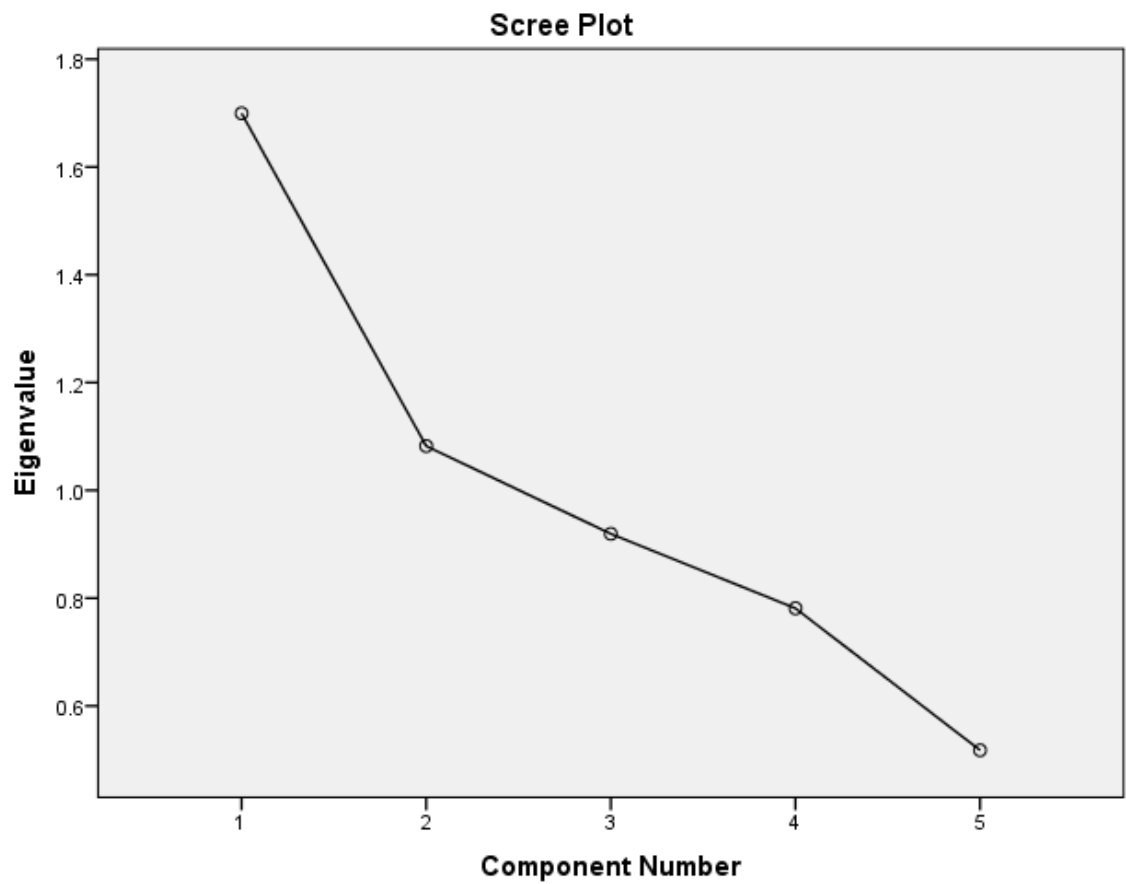
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.700	33.991	33.991	1.700	33.991
2	1.082	21.644	55.635	1.082	21.644
3	.919	18.386	74.021	.919	18.386
4	.781	15.622	89.643	.781	15.622
5	.518	10.357	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	33.991	1.467	29.338	29.338
2	55.635	1.016	20.320	49.657
3	74.021	1.001	20.022	69.679
4	89.643	.998	19.964	89.643
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpdN	.517	-.183	.660	.512
PL_TSpdN	.478	.526	.427	-.543
S_d	.737	-.299	-.365	.024
R_d	.791	-.115	-.279	-.137
SMSP_d	.189	.818	-.299	.453

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 4 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpdN	.124	.074	-.014	.989
PL_TSpdN	.088	.982	.074	.074
S_d	.867	-.059	-.003	.105
R_d	.832	.195	.041	.059
SMSP_d	.027	.073	.997	-.013

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3	4
1	.828	.372	.145	.393
2	-.286	.515	.788	-.177
3	-.475	.450	-.311	.689
4	-.084	-.628	.510	.582

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



## Reliability

Notes		
Output Created		26-MAR-2015 15:01:15
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_TpdN PL_TSpdN S_d R_d SMSP_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.167	2

### C.1.2.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 15:01:57
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.18
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.764	.515	.960	.683
	Tpaths_d	.764	1.000	.752	.847	.560
	TSpaths_d	.515	.752	1.000	.591	.626
	AvgPL_d	.960	.847	.591	1.000	.686
	AvgGL_d	.683	.560	.626	.686	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.727
Bartlett's Test of Sphericity	Approx. Chi-Square
	500.813
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_d	1.000	.970
Tpaths_d	1.000	.824
TSpaths_d	1.000	.968
AvgPL_d	1.000	.974
AvgGL_d	1.000	.661

Extraction Method: Principal  
Component Analysis.

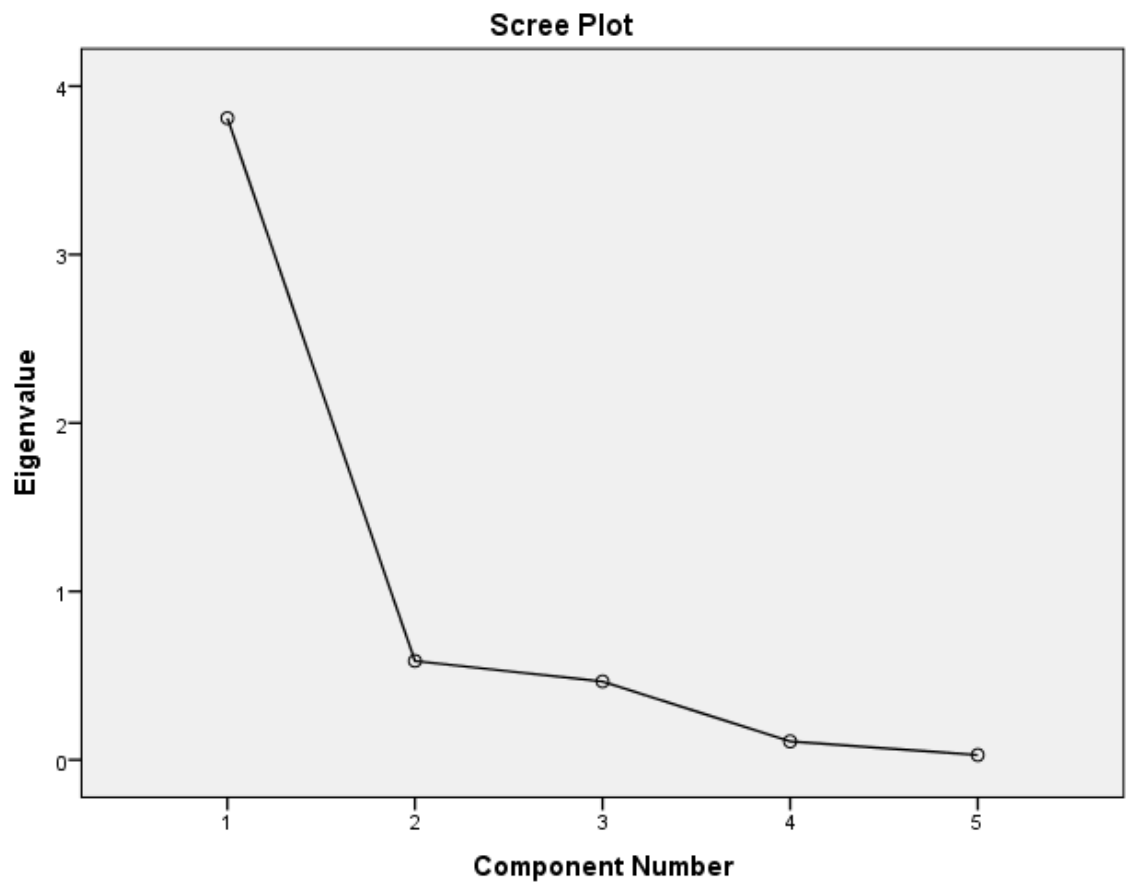
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.810	76.200	76.200	3.810	76.200
2	.587	11.737	87.936	.587	11.737
3	.465	9.302	97.239		
4	.109	2.187	99.425		
5	.029	.575	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	76.200	2.572	51.441	51.441
2	87.936	1.825	36.495	87.936
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.909	-.379
Tpaths_d	.904	.080
TSpaths_d	.787	.590
AvgPL_d	.946	-.283
AvgGL_d	.807	.094

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.948	.266
Tpaths_d	.660	.623
TSpaths_d	.252	.951
AvgPL_d	.918	.364
AvgGL_d	.576	.574

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.785	.620
2	-.620	.785

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 15:02:20
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

	N	%
Cases Valid	91	100.0
Excluded <sup>a</sup>	0	.0
Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.897	5

### C.1.2.4 Dependent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:03:09
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /MISSING LISTWISE /ANALYSIS ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECd	PL_EVCdN	EVCd_TpdN	EVCd_TSpdN
Correlation	ECd	1.000	-.100	-.058	-.009
	PL_EVCdN	-.100	1.000	.285	.075
	EVCd_TpdN	-.058	.285	1.000	.717
	EVCd_TSpdN	-.009	.075	.717	1.000
Sig. (1-tailed)	ECd		.173	.292	.465
	PL_EVCdN	.173		.003	.239
	EVCd_TpdN	.292	.003		.000
	EVCd_TSpdN	.465	.239	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.474
Bartlett's Test of Sphericity Approx. Chi-Square	75.082
df	6
Sig.	.000

### Communalities

	Initial	Extraction
ECd	1.000	1.000
PL_EVCdN	1.000	.990
EVCd_TpdN	1.000	.870
EVCd_TSpdN	1.000	.888

Extraction Method: Principal Component Analysis.

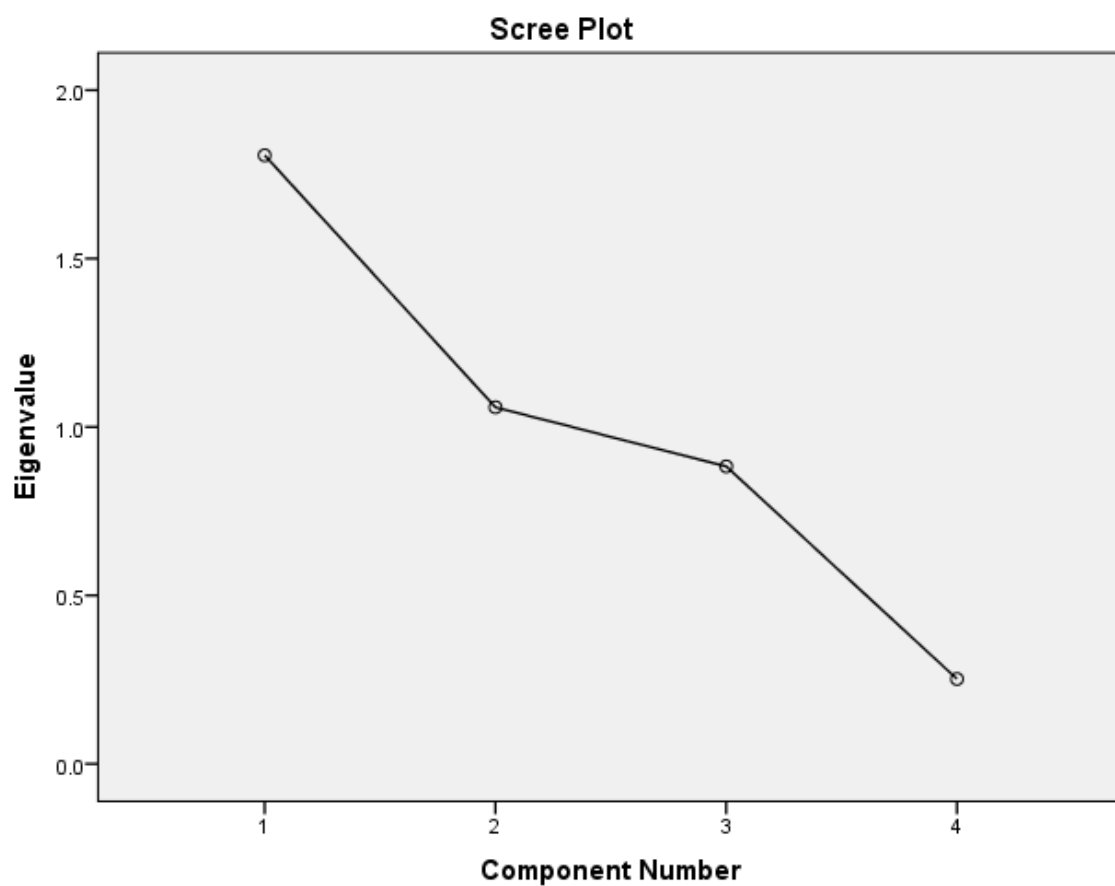
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.807	45.165	45.165	1.807	45.165
2	1.058	26.462	71.627	1.058	26.462
3	.883	22.076	93.702	.883	22.076
4	.252	6.298	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	45.165	1.709	42.734	42.734
2	71.627	1.038	25.940	68.675
3	93.702	1.001	25.028	93.702
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECd	-.129	.810	.572
PL_EVCdN	.424	-.555	.708
EVCd_TpdN	.928	.093	-.029
EVCd_TSpdN	.865	.294	-.230

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECd	-.016	-.048	.999
PL_EVCdN	.097	.989	-.050
EVCd_TpdN	.902	.235	-.036
EVCd_TSpdN	.941	-.051	.007

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.938	.332	-.099
2	.277	-.549	.789
3	-.208	.767	.607

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 15:04:23
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES= EVCd_TpdN EVCd_TSpdN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.779	2

```
RELIABILITY  
  /VARIABLES=ECd PL_EVCdN  
  /SCALE('ALL VARIABLES') ALL  
  /MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha <sup>a</sup>	N of Items
-.222	2

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.



## C.1.3 Consumption Network

### C.1.3.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 14:50:29
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16

Elapsed Time	00:00:00.16
Maximum Memory Required	4248 (4.148K) bytes

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.988	.044	-.888	-.139
	Edges_d	.988	1.000	.066	-.870	-.123
	Reciprocity	.044	.066	1.000	-.075	-.005
	Den_d	-.888	-.870	-.075	1.000	.148
	CC_d	-.139	-.123	-.005	.148	1.000
Sig. (1-tailed)	Nodes		.000	.341	.000	.094
	Edges_d	.000		.266	.000	.122
	Reciprocity	.341	.266		.239	.480
	Den_d	.000	.000	.239		.081
	CC_d	.094	.122	.480	.081	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.693
Bartlett's Test of Sphericity    Approx. Chi-Square	472.256
df	10
Sig.	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.976
Edges_d	1.000	.964
Reciprocity	1.000	1.000
Den_d	1.000	.893
CC_d	1.000	1.000

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.868	57.356	57.356	2.868	57.356
2	.997	19.938	77.294	.997	19.938
3	.968	19.362	96.657	.968	19.362
4	.157	3.134	99.791		
5	.010	.209	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	57.356	2.826	56.528	56.528
2	77.294	1.005	20.098	76.626
3	96.657	1.002	20.031	96.657
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.984	-.030	.086
Edges_d	.977	-.003	.093
Reciprocity	.096	.956	-.279
Den_d	-.943	-.002	-.053
CC_d	-.213	.288	.934

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.986	-.060	.007
Edges_d	.981	-.044	.030
Reciprocity	.036	-.001	.999
Den_d	-.941	.076	-.044
CC_d	-.079	.997	-.001

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.989	-.134	.061
2	-.020	.289	.957
3	.146	.948	-.283

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 14:50:45	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.994	2

### C.1.3.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 14:51:37
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpinN PL_TSpinN S_con R_con SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpinN PL_TSpinN S_con R_con SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes



**Correlation Matrix**

		PL_TpinN	PL_TSpinN	S_con	R_con	SMSP_d
Correlation	PL_TpinN	1.000	.321	-.262	-.347	.045
	PL_TSpinN	.321	1.000	-.250	-.466	.357
	S_con	-.262	-.250	1.000	.524	-.108
	R_con	-.347	-.466	.524	1.000	-.138
	SMSP_d	.045	.357	-.108	-.138	1.000
Sig. (1-tailed)	PL_TpinN		.001	.006	.000	.335
	PL_TSpinN	.001		.008	.000	.000
	S_con	.006	.008		.000	.154
	R_con	.000	.000	.000		.097
	SMSP_d	.335	.000	.154	.097	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.653
Bartlett's Test of Sphericity	Approx. Chi-Square
	77.695
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
PL_TpinN	1.000	.885
PL_TSpinN	1.000	.706
S_con	1.000	.838
R_con	1.000	.740
SMSP_d	1.000	.858

Extraction Method: Principal  
Component Analysis.

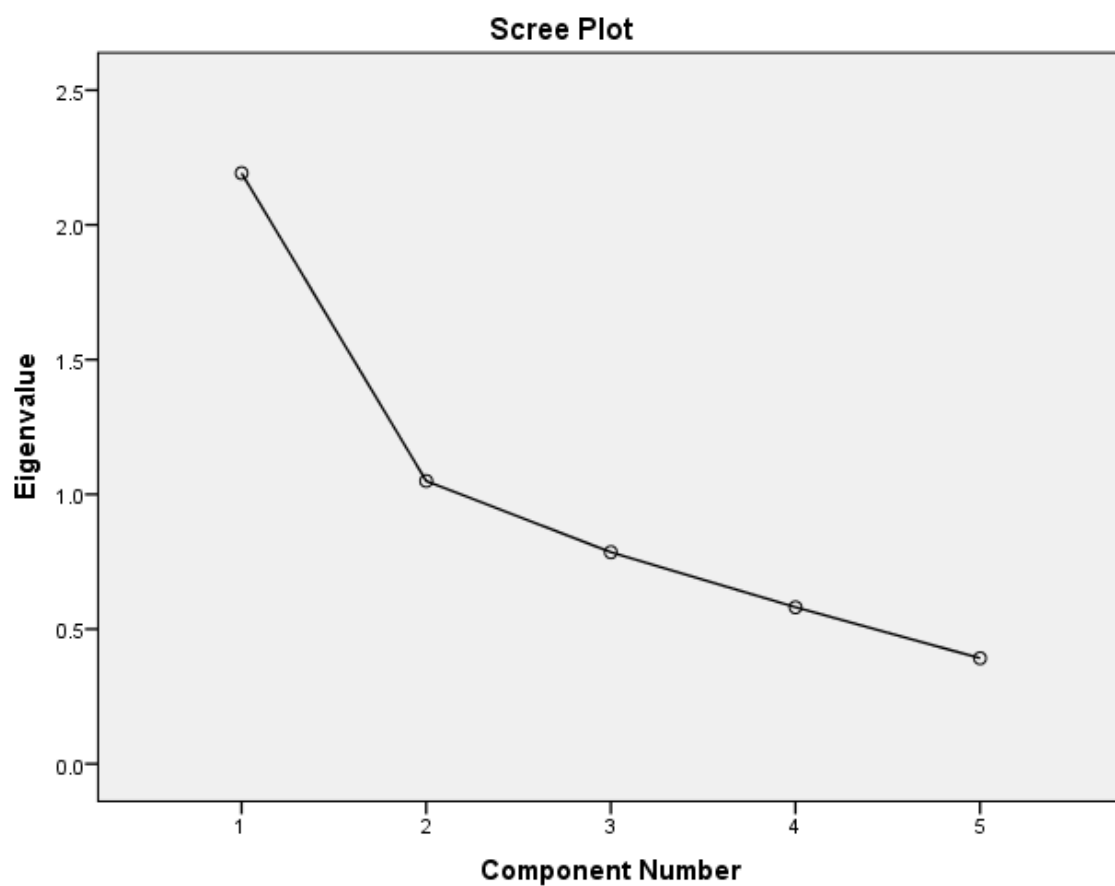
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.192	43.842	43.842	2.192	43.842
2	1.050	20.994	64.835	1.050	20.994
3	.785	15.706	80.541	.785	15.706
4	.581	11.619	92.160		
5	.392	7.840	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	43.842	1.534	30.680	30.680
2	64.835	1.294	25.881	56.561
3	80.541	1.199	23.980	80.541
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	.601	-.306	.656
PL_TSpinN	.742	.336	.207
S_con	-.680	.334	.513
R_con	-.810	.210	.197
SMSP_d	.401	.829	-.099

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	-.155	-.002	.928
PL_TSpinN	-.277	.638	.472
S_con	.914	-.026	-.035
R_con	.773	-.191	-.326
SMSP_d	-.028	.922	-.086

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	-.711	.463	.530
2	.380	.886	-.264
3	.592	-.014	.806

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 14:51:57	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S_con R_con /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.04

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.088	2

RELIABILITY

```
/VARIABLES=PL_TSpinN SMSP_d  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.175	2

### C.1.3.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 14:52:45
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.764	.515	.960	.683
	Tpaths_d	.764	1.000	.752	.847	.560
	TSpaths_d	.515	.752	1.000	.591	.626
	AvgPL_d	.960	.847	.591	1.000	.686
	AvgGL_d	.683	.560	.626	.686	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.727
Bartlett's Test of Sphericity	Approx. Chi-Square
	500.813
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.970
Tpaths_d	1.000	.824
TSpaths_d	1.000	.968
AvgPL_d	1.000	.974
AvgGL_d	1.000	.661

Extraction Method: Principal  
Component Analysis.



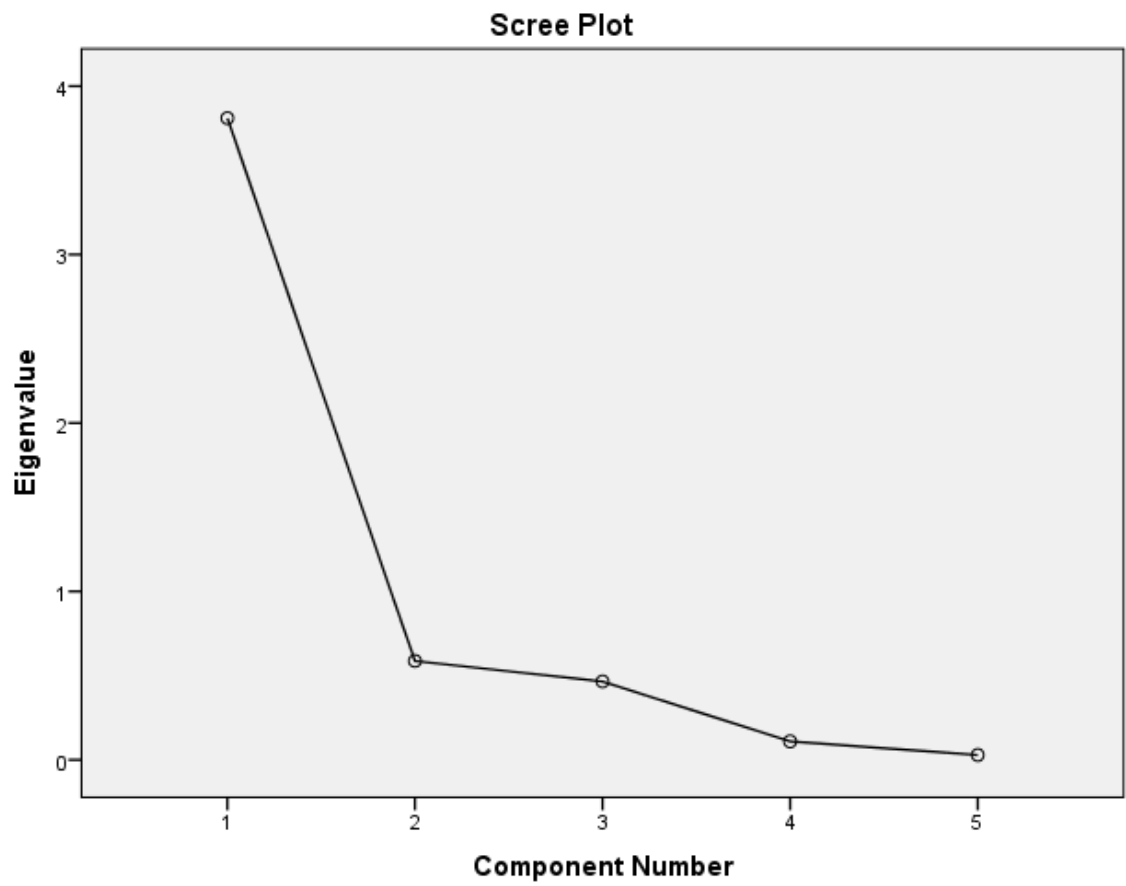
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.810	76.200	76.200	3.810	76.200
2	.587	11.737	87.936	.587	11.737
3	.465	9.302	97.239		
4	.109	2.187	99.425		
5	.029	.575	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	76.200	2.572	51.441	51.441
2	87.936	1.825	36.495	87.936
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.909	-.379
Tpaths_d	.904	.080
TSpaths_d	.787	.590
AvgPL_d	.946	-.283
AvgGL_d	.807	.094

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.948	.266
Tpaths_d	.660	.623
TSpaths_d	.252	.951
AvgPL_d	.918	.364
AvgGL_d	.576	.574

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.785	.620
2	-.620	.785

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 14:53:04
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.920	4

RELIABILITY

```
/VARIABLES=Tpaths_d AvgGL_d TSpats_d  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.730	3

### C.1.3.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 14:53:26
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /MISSING LISTWISE /ANALYSIS ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.16
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECin	PL_EVCinN	EVCin_TpinN	EVCin_TSpinN
Correlation	ECin	1.000	.107	-.153	.156
	PL_EVCinN	.107	1.000	.066	-.079
	EVCin_TpinN	-.153	.066	1.000	.336
	EVCin_TSpinN	.156	-.079	.336	1.000
Sig. (1-tailed)	ECin		.156	.074	.070
	PL_EVCinN	.156		.268	.229
	EVCin_TpinN	.074	.268		.001
	EVCin_TSpinN	.070	.229	.001	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.367
Bartlett's Test of Sphericity Approx. Chi-Square	20.432
df	6
Sig.	.002

### Communalities

	Initial	Extraction
ECin	1.000	.897
PL_EVCinN	1.000	.960
EVCin_TpinN	1.000	.815
EVCin_TSpinN	1.000	.811

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

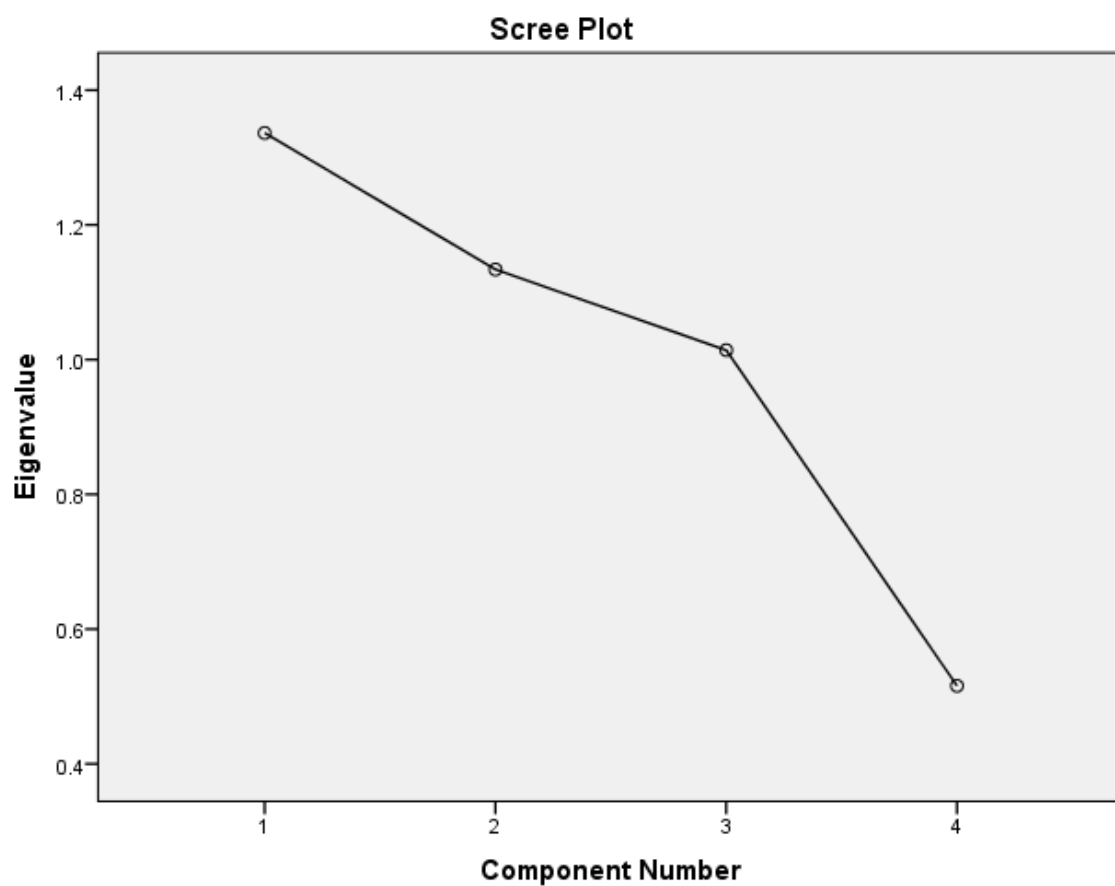
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.336	33.410	33.410	1.336	33.410
2	1.134	28.346	61.756	1.134	28.346
3	1.014	25.351	87.106	1.014	25.351
4	.516	12.894	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	33.410	1.336	33.401	33.401
2	61.756	1.113	27.834	61.235
3	87.106	1.035	25.872	87.106
4				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECin	.000	.898	-.303
PL_EVCinN	-.034	.479	.854
EVCin_TpinN	.813	-.213	.329
EVCin_TSpinN	.821	.231	-.291

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECin	-.003	.942	.095
PL_EVCinN	-.002	.083	.976
EVCin_TpinN	.822	-.325	.185
EVCin_TSpinN	.813	.336	-.196

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.999	.006	-.033
2	.008	.910	.414
3	.032	-.414	.910

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 14:53:48	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=EVCin_TpinN EVCin_TSpinN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.397	2

## C.1.4 Propagation Network

### C.1.4.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:08:28
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.988	.044	-.888	-.139
	Edges_d	.988	1.000	.066	-.870	-.123
	Reciprocity	.044	.066	1.000	-.075	-.005
	Den_d	-.888	-.870	-.075	1.000	.148
	CC_d	-.139	-.123	-.005	.148	1.000
Sig. (1-tailed)	Nodes		.000	.341	.000	.094
	Edges_d	.000		.266	.000	.122
	Reciprocity	.341	.266		.239	.480
	Den_d	.000	.000	.239		.081
	CC_d	.094	.122	.480	.081	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.693
Bartlett's Test of Sphericity	Approx. Chi-Square
	472.256
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.976
Edges_d	1.000	.964
Reciprocity	1.000	1.000
Den_d	1.000	.893
CC_d	1.000	1.000

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.868	57.356	57.356	2.868	57.356
2	.997	19.938	77.294	.997	19.938
3	.968	19.362	96.657	.968	19.362
4	.157	3.134	99.791		
5	.010	.209	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	57.356	2.826	56.528	56.528
2	77.294	1.005	20.098	76.626
3	96.657	1.002	20.031	96.657
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.984	-.030	.086
Edges_d	.977	-.003	.093
Reciprocity	.096	.956	-.279
Den_d	-.943	-.002	-.053
CC_d	-.213	.288	.934

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.986	-.060	.007
Edges_d	.981	-.044	.030
Reciprocity	.036	-.001	.999
Den_d	-.941	.076	-.044
CC_d	-.079	.997	-.001

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.989	-.134	.061
2	-.020	.289	.957
3	.146	.948	-.283

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 15:09:01
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.994	2

### C.1.4.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:09:48
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(4) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpoutN	PL_TSpoutN	S_pro	R_pro	SMSP_d
Correlation	PL_TpoutN	1.000	.306	.044	.194	.011
	PL_TSpoutN	.306	1.000	-.070	.142	-.080
	S_pro	.044	-.070	1.000	.193	-.057
	R_pro	.194	.142	.193	1.000	.083
	SMSP_d	.011	-.080	-.057	.083	1.000
Sig. (1-tailed)	PL_TpoutN		.002	.339	.033	.459
	PL_TSpoutN	.002		.255	.089	.225
	S_pro	.339	.255		.034	.295
	R_pro	.033	.089	.034		.217
	SMSP_d	.459	.225	.295	.217	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.508
Bartlett's Test of Sphericity	Approx. Chi-Square
	19.025
	df
	10
	Sig.
	.040

### Communalities

	Initial	Extraction
PL_TpoutN	1.000	.856
PL_TSpoutN	1.000	.713
S_pro	1.000	.899
R_pro	1.000	.945
SMSP_d	1.000	.943

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.452	29.041	29.041	1.452	29.041
2	1.132	22.642	51.683	1.132	22.642
3	1.044	20.873	72.556	1.044	20.873
4	.728	14.560	87.116	.728	14.560
5	.644	12.884	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	29.041	1.267	25.335	25.335
2	51.683	1.040	20.806	46.142
3	72.556	1.028	20.569	66.711
4	87.116	1.020	20.406	87.116
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpoutN	.744	-.188	.075	.511
PL_TSpoutN	.667	-.492	-.058	-.149
S_pro	.239	.765	-.398	.314
R_pro	.629	.460	.146	-.562
SMSP_d	-.015	.241	.925	.173

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 4 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpoutN	.902	.166	.119	-.013
PL_TSpoutN	.666	-.343	-.262	.289
S_pro	.023	.933	-.081	.147
R_pro	.093	.142	.080	.954
SMSP_d	-.001	-.071	.966	.075

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 6 iterations.

**Component Transformation Matrix**

Component	1	2	3	4
1	.813	.144	-.048	.563
2	-.386	.794	.278	.379
3	.031	-.368	.921	.127
4	.435	.462	.270	-.724

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



## Reliability

### Notes

Output Created	26-MAR-2015 15:10:51	
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_TSpoutN R_pro /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.062	2

### C.1.4.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 15:11:41
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.764	.515	.960	.683
	Tpaths_d	.764	1.000	.752	.847	.560
	TSpaths_d	.515	.752	1.000	.591	.626
	AvgPL_d	.960	.847	.591	1.000	.686
	AvgGL_d	.683	.560	.626	.686	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.727
Bartlett's Test of Sphericity	Approx. Chi-Square
	500.813
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.970
Tpaths_d	1.000	.824
TSpaths_d	1.000	.968
AvgPL_d	1.000	.974
AvgGL_d	1.000	.661

Extraction Method: Principal  
Component Analysis.

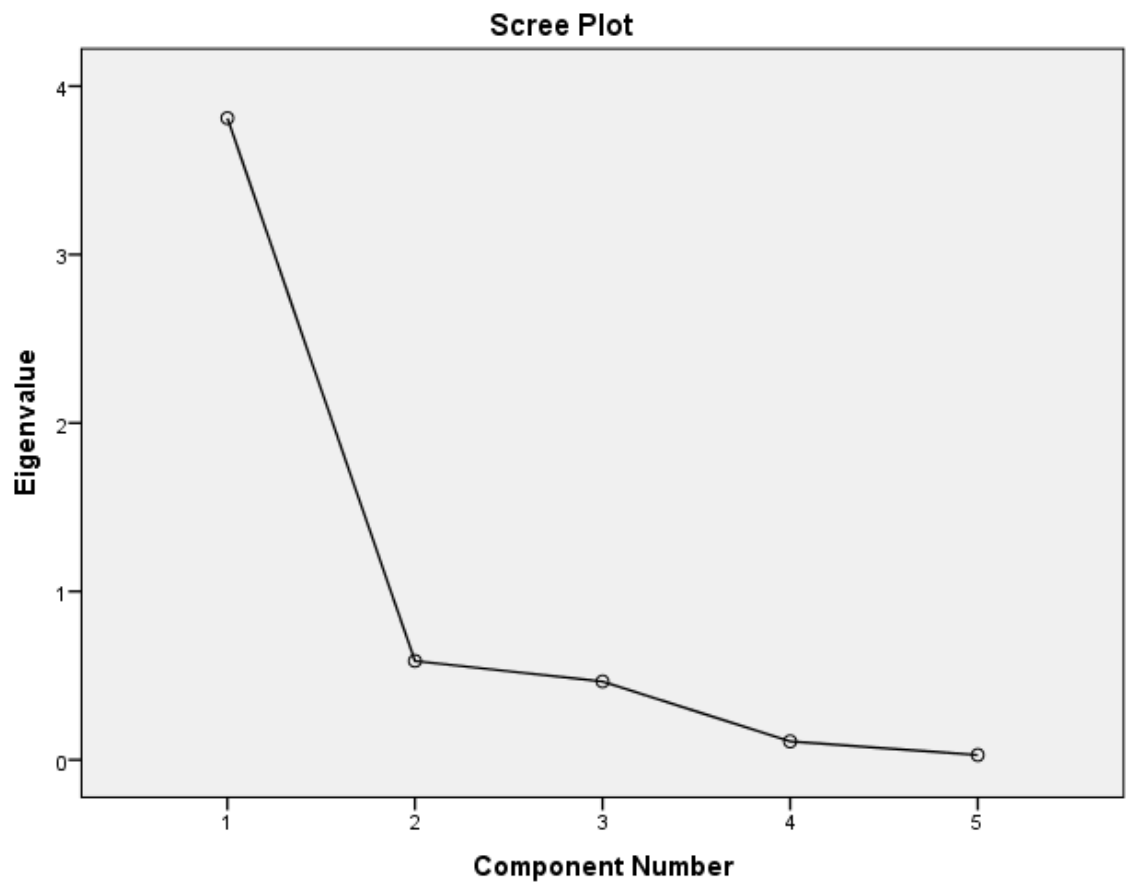
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.810	76.200	76.200	3.810	76.200
2	.587	11.737	87.936	.587	11.737
3	.465	9.302	97.239		
4	.109	2.187	99.425		
5	.029	.575	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	76.200	2.572	51.441	51.441
2	87.936	1.825	36.495	87.936
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.909	-.379
Tpaths_d	.904	.080
TSpaths_d	.787	.590
AvgPL_d	.946	-.283
AvgGL_d	.807	.094

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.948	.266
Tpaths_d	.660	.623
TSpaths_d	.252	.951
AvgPL_d	.918	.364
AvgGL_d	.576	.574

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.785	.620
2	-.620	.785

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 15:12:11
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.920	4

#### C.1.4.4 Dependent Variables

### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:13:01
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Missing Value Handling	
	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /MISSING LISTWISE /ANALYSIS ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.18
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		ECout	PL_EVCoutN	EVCout_Tpout N	EVCout_TSpou tN
Correlation	ECout	1.000	.013	-.195	-.157
	PL_EVCoutN	.013	1.000	.196	.132
	EVCout_TpoutN	-.195	.196	1.000	.749
	EVCout_TSpoutN	-.157	.132	.749	1.000
Sig. (1-tailed)	ECout		.453	.032	.069
	PL_EVCoutN	.453		.031	.105
	EVCout_TpoutN	.032	.031		.000
	EVCout_TSpoutN	.069	.105	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.538
Bartlett's Test of Sphericity    Approx. Chi-Square	79.367
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
ECout	1.000	1.000
PL_EVCoutN	1.000	.999
EVCout_TpoutN	1.000	.873
EVCout_TSpoutN	1.000	.881

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.879	46.974	46.974	1.879	46.974
2	1.013	25.322	72.296	1.013	25.322
3	.861	21.522	93.819	.861	21.522
4	.247	6.181	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	46.974	1.743	43.580	43.580
2	72.296	1.006	25.140	68.721
3	93.819	1.004	25.098	93.819
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECout	-.358	.686	.633
PL_EVCoutN	.334	.736	-.588
EVCout_TpoutN	.916	.013	.184
EVCout_TSpoutN	.894	-.014	.285

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECout	-.103	.012	.994
PL_EVCoutN	.096	.995	.012
EVCout_TpoutN	.920	.122	-.110
EVCout_TSpoutN	.937	.032	-.054

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.931	.249	-.267
2	-.001	.732	.681
3	.365	-.634	.681

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 15:13:26
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES= EVCout_TpoutN EVCout_TSpoutN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.817	2



## C.2 Case 2—Entertainment

### C.2.1 Undirected Network

#### C.2.1.1 Independent Variables

### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:58:39
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_ud Den_ud CC_ud /MISSING LISTWISE /ANALYSIS Nodes Edges_ud Den_ud CC_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19

Elapsed Time	00:00:00.20
Maximum Memory Required	3008 (2.938K) bytes

#### Correlation Matrix

		Nodes	Edges_ud	Den_ud	CC_ud
Correlation	Nodes	1.000	.999	-.573	-.176
	Edges_ud	.999	1.000	-.576	-.171
	Den_ud	-.573	-.576	1.000	.433
	CC_ud	-.176	-.171	.433	1.000
Sig. (1-tailed)	Nodes		.000	.000	.048
	Edges_ud	.000		.000	.052
	Den_ud	.000	.000		.000
	CC_ud	.048	.052	.000	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.605
Bartlett's Test of Sphericity	Approx. Chi-Square
	574.078
	df
	6
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.973
Edges_ud	1.000	.975
Den_ud	1.000	.724
CC_ud	1.000	.914

Extraction Method: Principal  
Component Analysis.

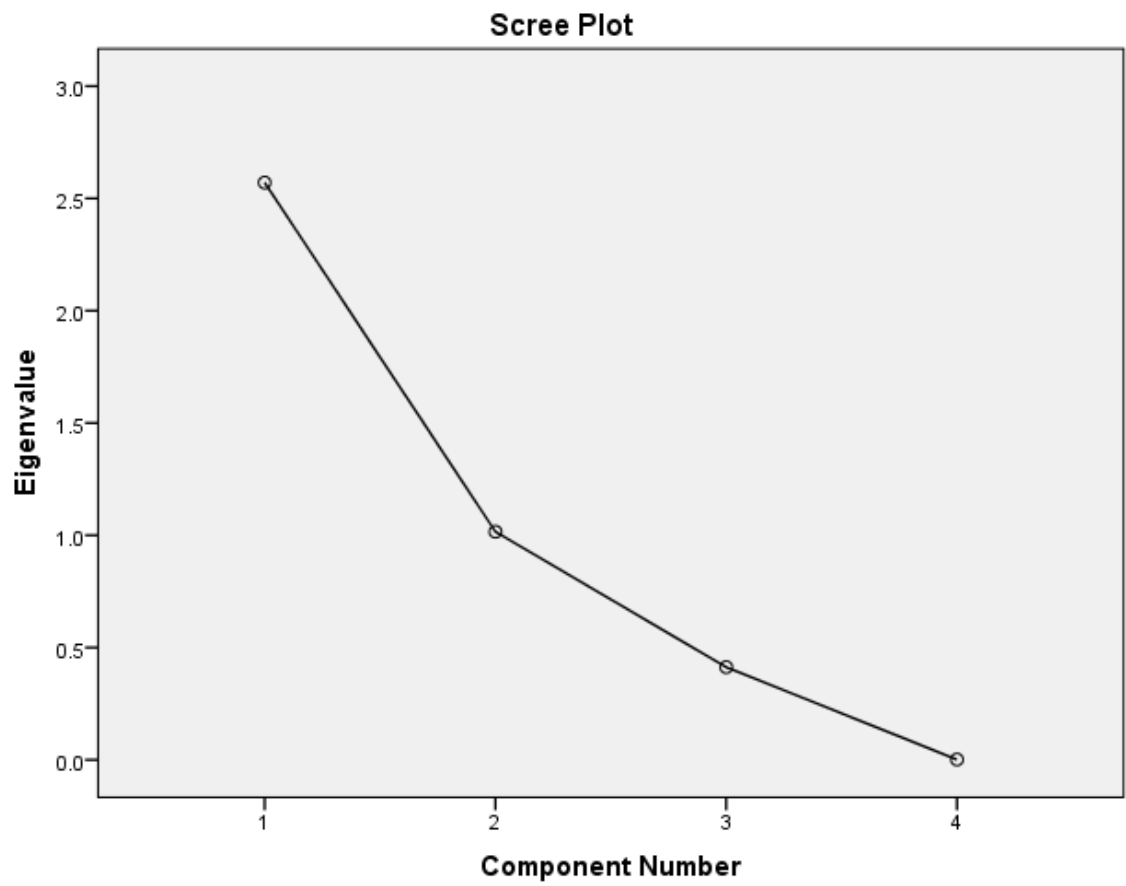
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.570	64.261	64.261	2.570	64.261
2	1.016	25.392	89.652	1.016	25.392
3	.413	10.314	99.966		
4	.001	.034	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	64.261	2.298	57.445	57.445
2	89.652	1.288	32.208	89.652
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.934	.317
Edges_ud	.934	.320
Den_ud	-.801	.286
CC_ud	-.427	.855

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.981	-.104
Edges_ud	.983	-.101
Den_ud	-.608	.595
CC_ud	-.030	.955

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.908	-.419
2	.419	.908

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		29-MAR-2015 12:32:21
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's	
Alpha	N of Items
.999	2

### Notes

Output Created	29-MAR-2015 12:32:45	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Den_ud CC_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.389	2



## C.2.1.2 Network Structure Variables (MV1)

### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:59:43
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /MISSING LISTWISE /ANALYSIS PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpudN	PL_TSpudN	S_ud	R_ud	SMSP_ud
Correlation	PL_TpudN	1.000	.100	.390	.530	.466
	PL_TSpudN	.100	1.000	.004	.380	.119
	S_ud	.390	.004	1.000	.579	.275
	R_ud	.530	.380	.579	1.000	.301
	SMSP_ud	.466	.119	.275	.301	1.000
Sig. (1-tailed)	PL_TpudN		.173	.000	.000	.000
	PL_TSpudN	.173		.486	.000	.131
	S_ud	.000	.486		.000	.004
	R_ud	.000	.000	.000		.002
	SMSP_ud	.000	.131	.004	.002	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.594
Bartlett's Test of Sphericity	Approx. Chi-Square
	111.242
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpudN	1.000	.691
PL_TSpudN	1.000	.959
S_ud	1.000	.848
R_ud	1.000	.849
SMSP_ud	1.000	.866

Extraction Method: Principal  
Component Analysis.

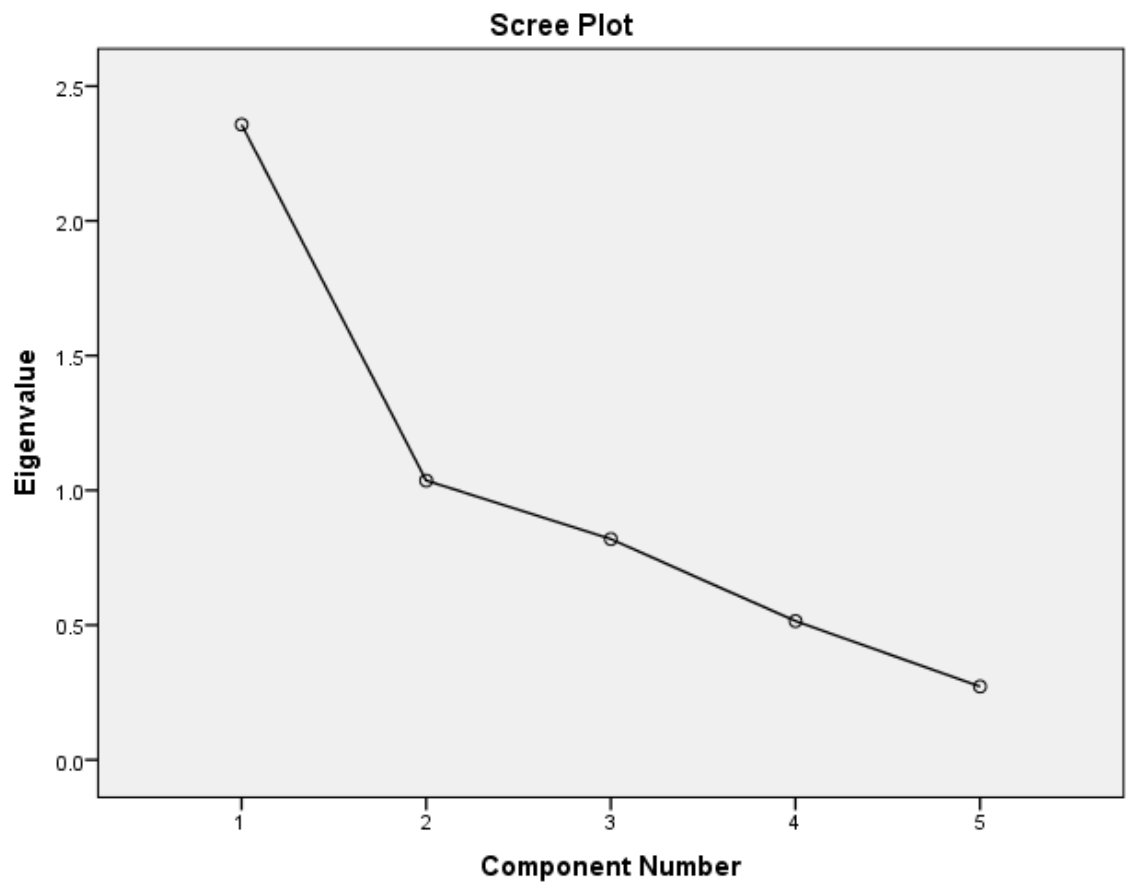
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.357	47.149	47.149	2.357	47.149
2	1.036	20.725	67.873	1.036	20.725
3	.819	16.384	84.258	.819	16.384
4	.515	10.300	94.557		
5	.272	5.443	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	47.149	1.657	33.147	33.147
2	67.873	1.404	28.077	61.223
3	84.258	1.152	23.034	84.258
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpudN	.779	-.203	.209
PL_TSpudN	.352	.910	.089
S_ud	.714	-.299	-.498
R_ud	.848	.203	-.298
SMSP_ud	.631	-.193	.656

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpudN	.471	.683	.055
PL_TSpudN	.042	.050	.977
S_ud	.904	.136	-.112
R_ud	.783	.241	.422
SMSP_ud	.068	.926	.057

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.735	.609	.297
2	-.175	-.254	.951
3	-.655	.751	.080

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		29-MAR-2015 12:54:00
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S_ud R_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.402	2

**Notes**

Output Created	29-MAR-2015 12:54:36	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_TpudN SMSP_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

**Scale: ALL VARIABLES**

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.432	2



### C.2.1.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 14:00:28
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /MISSING LISTWISE /ANALYSIS GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.19
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_ud	Tpaths_ud	TSpaths_ud	AvgPL_ud	AvgGL_ud
Correlation	GD_ud	1.000	.928	.380	.999	.907
	Tpaths_ud	.928	1.000	.676	.933	.898
	TSpaths_ud	.380	.676	1.000	.389	.535
	AvgPL_ud	.999	.933	.389	1.000	.912
	AvgGL_ud	.907	.898	.535	.912	1.000
Sig. (1-tailed)	GD_ud		.000	.000	.000	.000
	Tpaths_ud	.000		.000	.000	.000
	TSpaths_ud	.000	.000		.000	.000
	AvgPL_ud	.000	.000	.000		.000
	AvgGL_ud	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.669
Bartlett's Test of Sphericity	Approx. Chi-Square
	1144.852
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_ud	1.000	.918
Tpaths_ud	1.000	.971
TSpaths_ud	1.000	.380
AvgPL_ud	1.000	.925
AvgGL_ud	1.000	.910

Extraction Method: Principal  
Component Analysis.

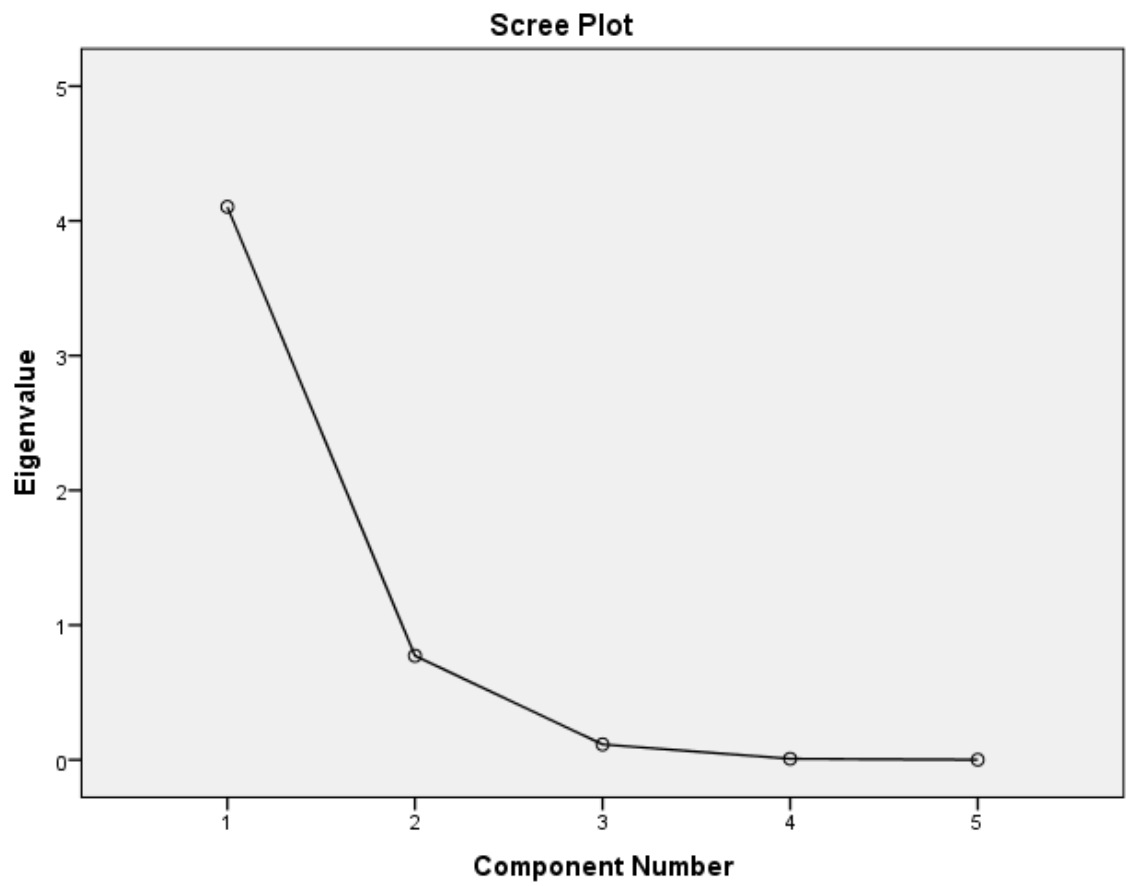
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.104	82.086	82.086	4.104	82.086
2	.773	15.451	97.537		
3	.115	2.291	99.828		
4	.008	.157	99.985		
5	.001	.015	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	82.086
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_ud	.958
Tpaths_ud	.986
TSpaths_ud	.616
AvgPL_ud	.962
AvgGL_ud	.954

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 1 components extracted.

**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created		26-MAR-2015 14:00:48
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

	N	%
Cases Valid	91	100.0
Excluded <sup>a</sup>	0	.0
Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.937	5

### C.2.1.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 14:01:35
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /MISSING LISTWISE /ANALYSIS ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	3008 (2.938K) bytes



### Correlation Matrix

		ECud	PL_EVCudN	EVCud_TpudN	EVCud_TSpudN
Correlation	ECud	1.000	.102	-.027	.083
	PL_EVCudN	.102	1.000	.257	.011
	EVCud_TpudN	-.027	.257	1.000	-.166
	EVCud_TSpudN	.083	.011	-.166	1.000
Sig. (1-tailed)	ECud		.167	.400	.216
	PL_EVCudN	.167		.007	.458
	EVCud_TpudN	.400	.007		.058
	EVCud_TSpudN	.216	.458	.058	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.480
Bartlett's Test of Sphericity Approx. Chi-Square	10.423
df	6
Sig.	.108

### Communalities

	Initial	Extraction
ECud	1.000	.980
PL_EVCudN	1.000	.738
EVCud_TpudN	1.000	.677
EVCud_TSpudN	1.000	.923

Extraction Method: Principal Component Analysis.

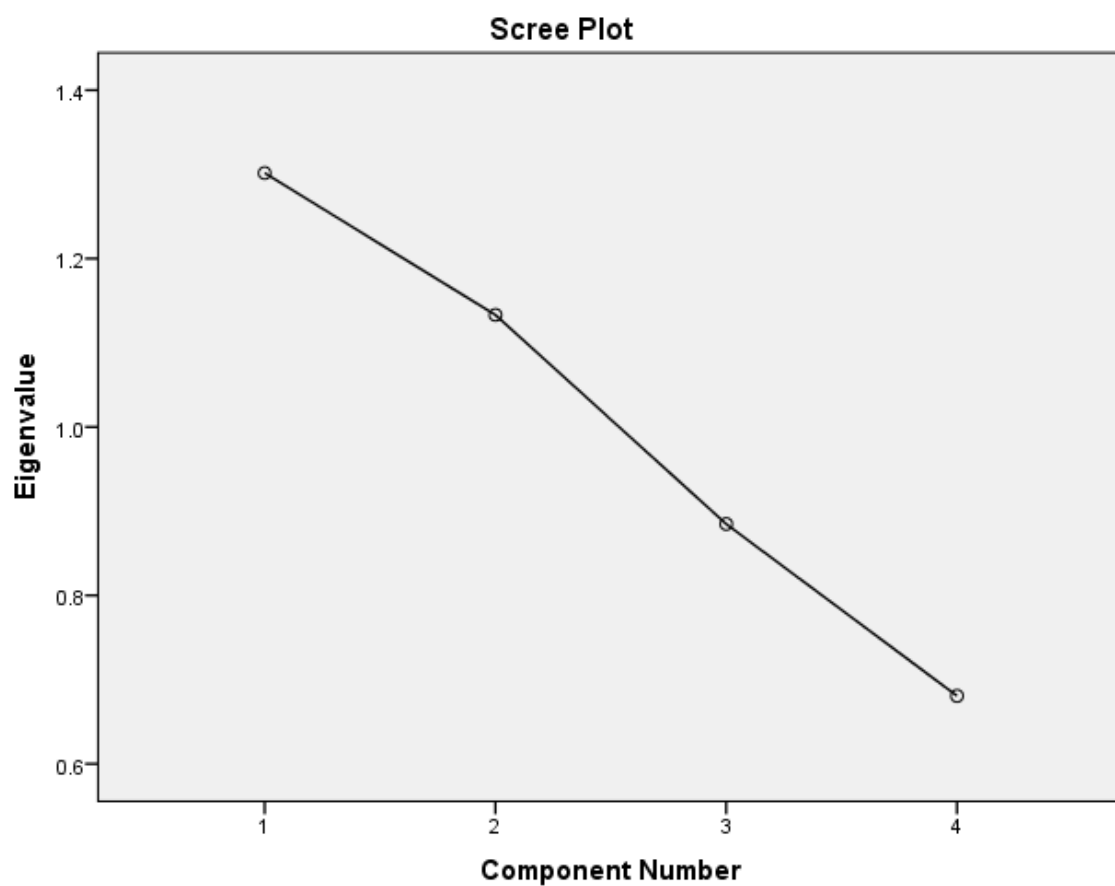
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.302	32.538	32.538	1.302	32.538
2	1.133	28.326	60.864	1.133	28.326
3	.885	22.119	82.983	.885	22.119
4	.681	17.017	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	32.538	1.252	31.300	31.300
2	60.864	1.051	26.283	57.582
3	82.983	1.016	25.401	82.983
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	.051	.741	-.655
PL_EVCudN	.692	.429	.273
EVCud_TpudN	.809	-.100	.112
EVCud_TSpudN	-.406	.625	.607

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	.028	.025	.989
PL_EVCudN	.826	.184	.148
EVCud_TpudN	.754	-.308	-.121
EVCud_TSpudN	-.033	.960	.022

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.919	-.392	.035
2	.246	.642	.726
3	.307	.658	-.687

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	29-MAR-2015 12:58:20	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_EVCudN EVCud_TpudN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.387	2

## C.2.2 Directed Network

### C.2.2.1 Independent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 13:43:05
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	
	File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19

Elapsed Time	00:00:00.21
Maximum Memory Required	4248 (4.148K) bytes

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.999	-.029	-.572	.024
	Edges_d	.999	1.000	-.020	-.576	.036
	Reciprocity	-.029	-.020	1.000	.027	.372
	Den_d	-.572	-.576	.027	1.000	-.099
	CC_d	.024	.036	.372	-.099	1.000
Sig. (1-tailed)	Nodes		.000	.391	.000	.411
	Edges_d	.000		.427	.000	.366
	Reciprocity	.391	.427		.399	.000
	Den_d	.000	.000	.399		.176
	CC_d	.411	.366	.000	.176	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.596
Bartlett's Test of Sphericity	Approx. Chi-Square
	567.100
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.953
Edges_d	1.000	.954
Reciprocity	1.000	.960
Den_d	1.000	.673
CC_d	1.000	.939



Extraction Method: Principal  
Component Analysis.

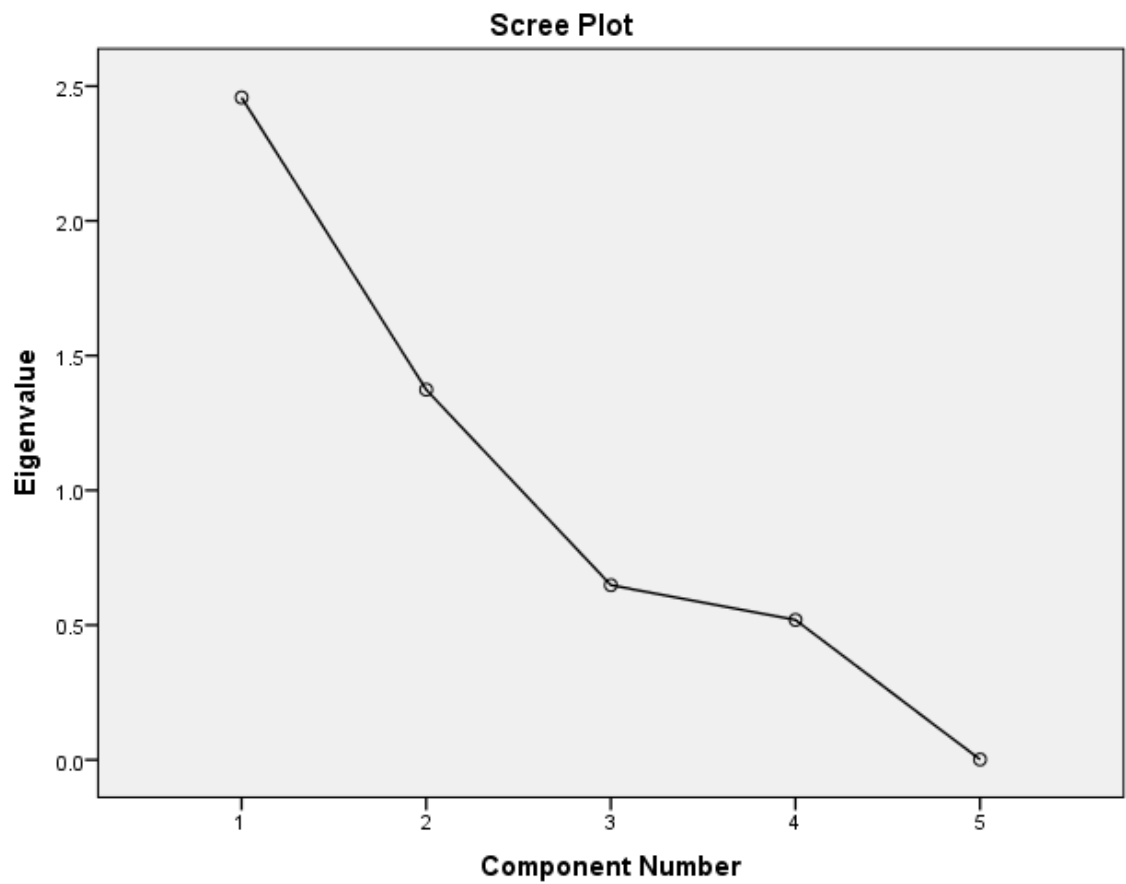
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.458	49.156	49.156	2.458	49.156
2	1.373	27.469	76.624	1.373	27.469
3	.648	12.966	89.590	.648	12.966
4	.519	10.383	99.973		
5	.001	.027	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	49.156	2.449	48.982	48.982
2	76.624	1.021	20.427	69.409
3	89.590	1.009	20.181	89.590
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.964	-.047	.146
Edges_d	.966	-.033	.143
Reciprocity	-.025	.827	.524
Den_d	-.766	-.035	.291
CC_d	.085	.827	-.498

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.973	-.069	.049
Edges_d	.973	-.057	.057
Reciprocity	-.019	.217	.955
Den_d	-.745	-.282	.198
CC_d	.025	.942	.228

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.997	.069	-.022
2	-.034	.709	.704
3	.064	-.702	.709

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 13:43:20	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.999	2

## C.2.2.2 Network Structure Variables (MV1)

### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:43:42
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpdN PL_TSpdN S_d R_d SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpdN PL_TSpdN S_d R_d SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpdN	PL_TSpdN	S_d	R_d	SMSP_d
Correlation	PL_TpdN	1.000	.748	.474	.603	-.010
	PL_TSpdN	.748	1.000	.541	.664	-.215
	S_d	.474	.541	1.000	.906	-.080
	R_d	.603	.664	.906	1.000	-.067
	SMSP_d	-.010	-.215	-.080	-.067	1.000
Sig. (1-tailed)	PL_TpdN		.000	.000	.000	.462
	PL_TSpdN	.000		.000	.000	.020
	S_d	.000	.000		.000	.225
	R_d	.000	.000	.000		.264
	SMSP_d	.462	.020	.225	.264	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.664
Bartlett's Test of Sphericity Approx. Chi-Square		291.222
df		10
Sig.		.000

### Communalities

	Initial	Extraction
PL_TpdN	1.000	.662
PL_TSpdN	1.000	.756
S_d	1.000	.735
R_d	1.000	.864
SMSP_d	1.000	.987

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

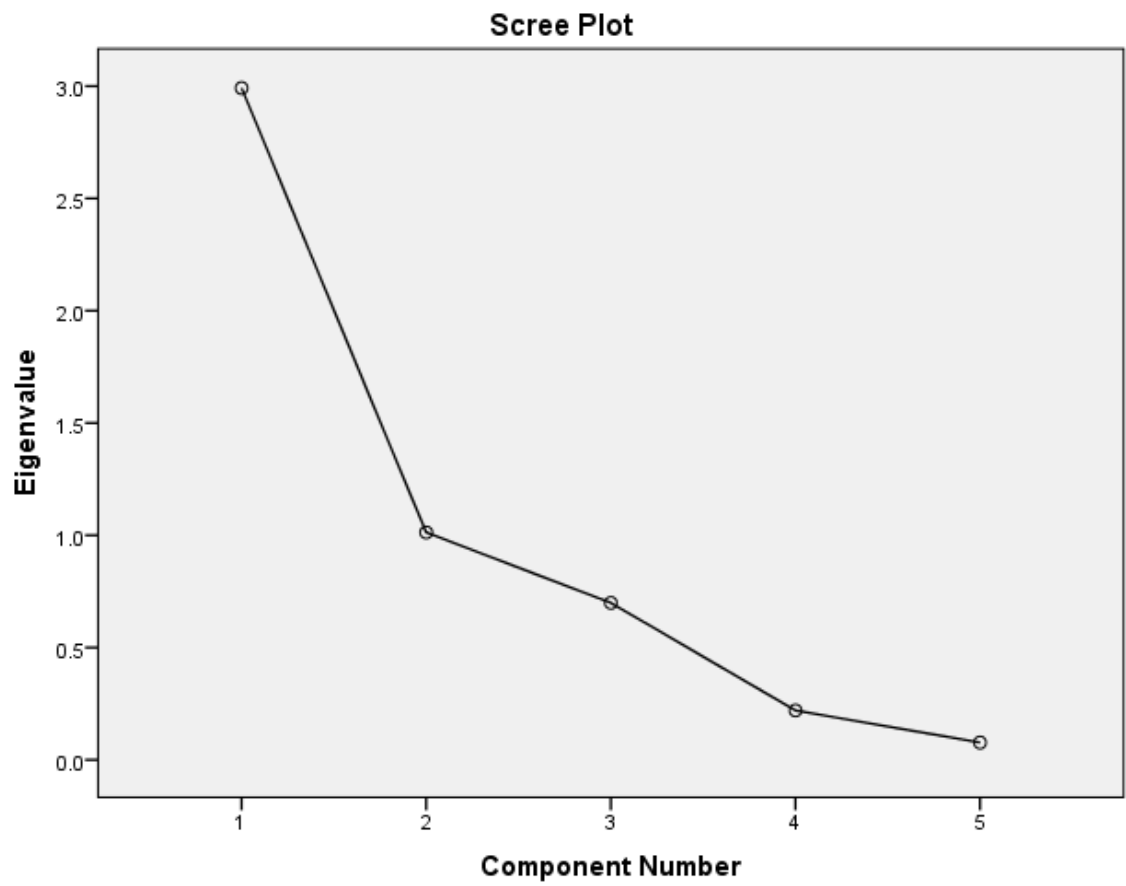
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.991	59.826	59.826	2.991	59.826
2	1.013	20.254	80.080	1.013	20.254
3	.699	13.983	94.064		
4	.220	4.396	98.460		
5	.077	1.540	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	59.826	2.963	59.262	59.262
2	80.080	1.041	20.818	80.080
3				
4				
5				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpdN	.806	.113
PL_TSpdN	.859	-.133
S_d	.852	.097
R_d	.923	.109
SMSP_d	-.162	.980

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpdN	.814	.016
PL_TSpdN	.837	-.235
S_d	.857	-.006
R_d	.929	-.002
SMSP_d	-.044	.993

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.993	-.119
2	.119	.993

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		30-MAR-2015 09:45:32
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_TpdN PL_TSpdN S_d R_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.747	4

### C.2.2.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:44:24
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.663	.641	.755	.765
	Tpaths_d	.663	1.000	.988	.850	.820
	TSpaths_d	.641	.988	1.000	.785	.796
	AvgPL_d	.755	.850	.785	1.000	.944
	AvgGL_d	.765	.820	.796	.944	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.548
Bartlett's Test of Sphericity	Approx. Chi-Square
	900.053
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.683
Tpaths_d	1.000	.893
TSpaths_d	1.000	.848
AvgPL_d	1.000	.896
AvgGL_d	1.000	.892

Extraction Method: Principal  
Component Analysis.

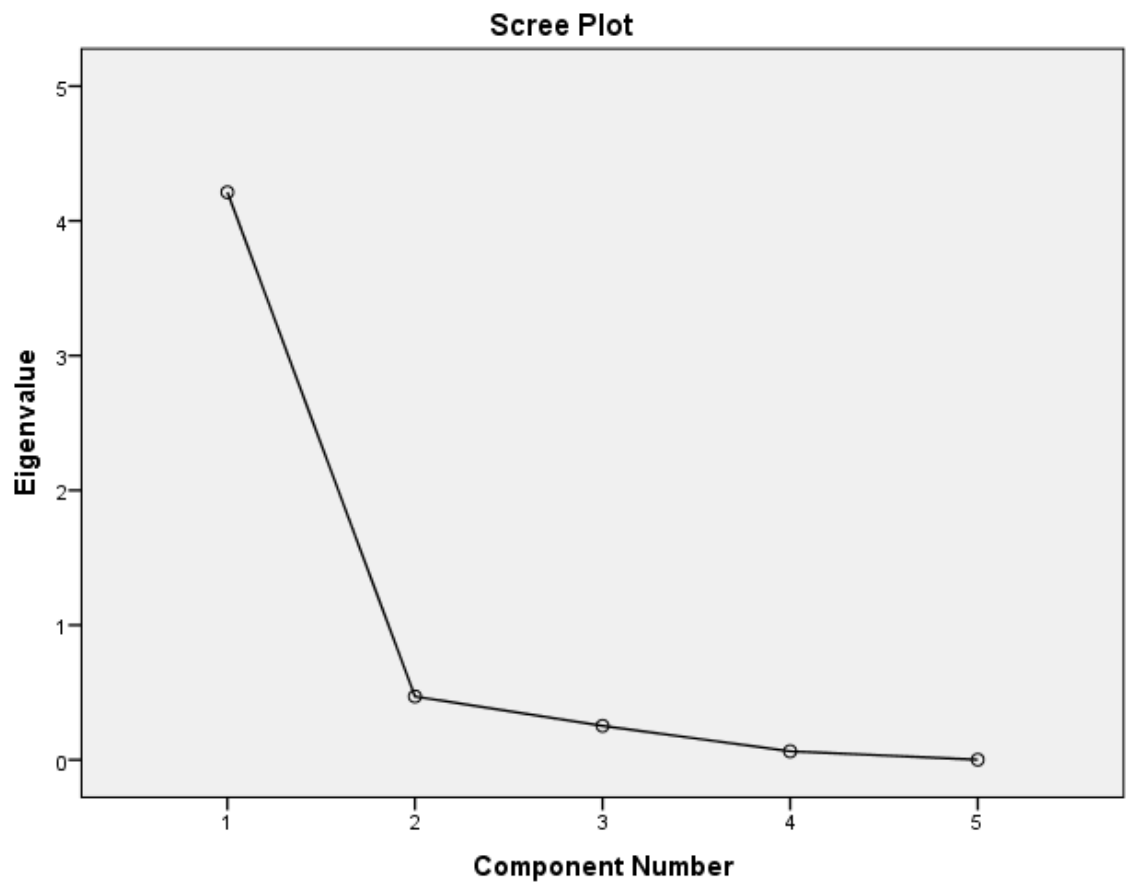
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.213	84.251	84.251	4.213	84.251
2	.470	9.408	93.659		
3	.252	5.050	98.709		
4	.063	1.270	99.979		
5	.001	.021	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	84.251
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.826
Tpaths_d	.945
TSpaths_d	.921
AvgPL_d	.947
AvgGL_d	.944

Extraction Method: Principal  
Component Analysis.<sup>a</sup>

a. 1 components extracted.



**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created	26-MAR-2015 13:44:44	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.923	5

### C.2.2.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 13:45:05
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Missing Value Handling	
	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /MISSING LISTWISE /ANALYSIS ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		ECd	PL_EVCdN	EVCd_TpdN	EVCd_TSpdN
Correlation	ECd	1.000	-.412	.002	.029
	PL_EVCdN	-.412	1.000	-.165	-.172
	EVCd_TpdN	.002	-.165	1.000	.952
	EVCd_TSpdN	.029	-.172	.952	1.000
Sig. (1-tailed)	ECd		.000	.493	.391
	PL_EVCdN	.000		.059	.051
	EVCd_TpdN	.493	.059		.000
	EVCd_TSpdN	.391	.051	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.509
Bartlett's Test of Sphericity Approx. Chi-Square	227.311
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
ECd	1.000	.733
PL_EVCdN	1.000	.704
EVCd_TpdN	1.000	.973
EVCd_TSpdN	1.000	.971

Extraction Method: Principal Component Analysis.

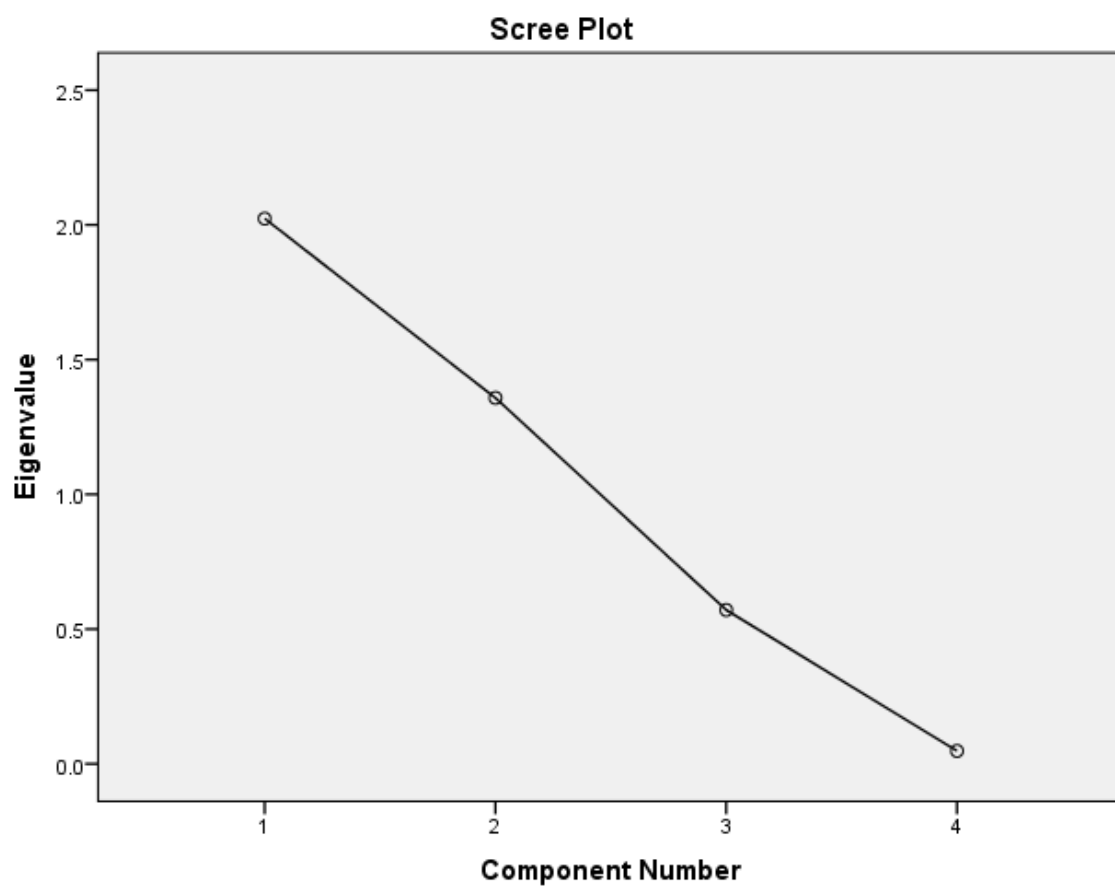
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.023	50.585	50.585	2.023	50.585
2	1.358	33.945	84.530	1.358	33.945
3	.571	14.272	98.802		
4	.048	1.198	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	50.585	1.968	49.207	49.207
2	84.530	1.413	35.323	84.530
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	.186	-.835
PL_EVCdN	-.391	.743
EVCd_TpdN	.956	.244
EVCd_TSpdN	.960	.222

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	-.062	.854
PL_EVCdN	-.160	-.824
EVCd_TpdN	.986	.042
EVCd_TSpdN	.983	.064

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.958	.288
2	.288	-.958

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



## Reliability

### Notes

Output Created		26-MAR-2015 13:45:25
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES= EVCd_TpdN EVCd_TSpdN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.975	2

## C.2.3 Consumption Network

### C.2.3.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:35:53
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17

Elapsed Time	00:00:00.20
Maximum Memory Required	4248 (4.148K) bytes

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.999	-.029	-.572	.024
	Edges_d	.999	1.000	-.020	-.576	.036
	Reciprocity	-.029	-.020	1.000	.027	.372
	Den_d	-.572	-.576	.027	1.000	-.099
	CC_d	.024	.036	.372	-.099	1.000
Sig. (1-tailed)	Nodes		.000	.391	.000	.411
	Edges_d	.000		.427	.000	.366
	Reciprocity	.391	.427		.399	.000
	Den_d	.000	.000	.399		.176
	CC_d	.411	.366	.000	.176	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.596
Bartlett's Test of Sphericity	Approx. Chi-Square
	567.100
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.953
Edges_d	1.000	.954
Reciprocity	1.000	.960
Den_d	1.000	.673
CC_d	1.000	.939

Extraction Method: Principal  
Component Analysis.

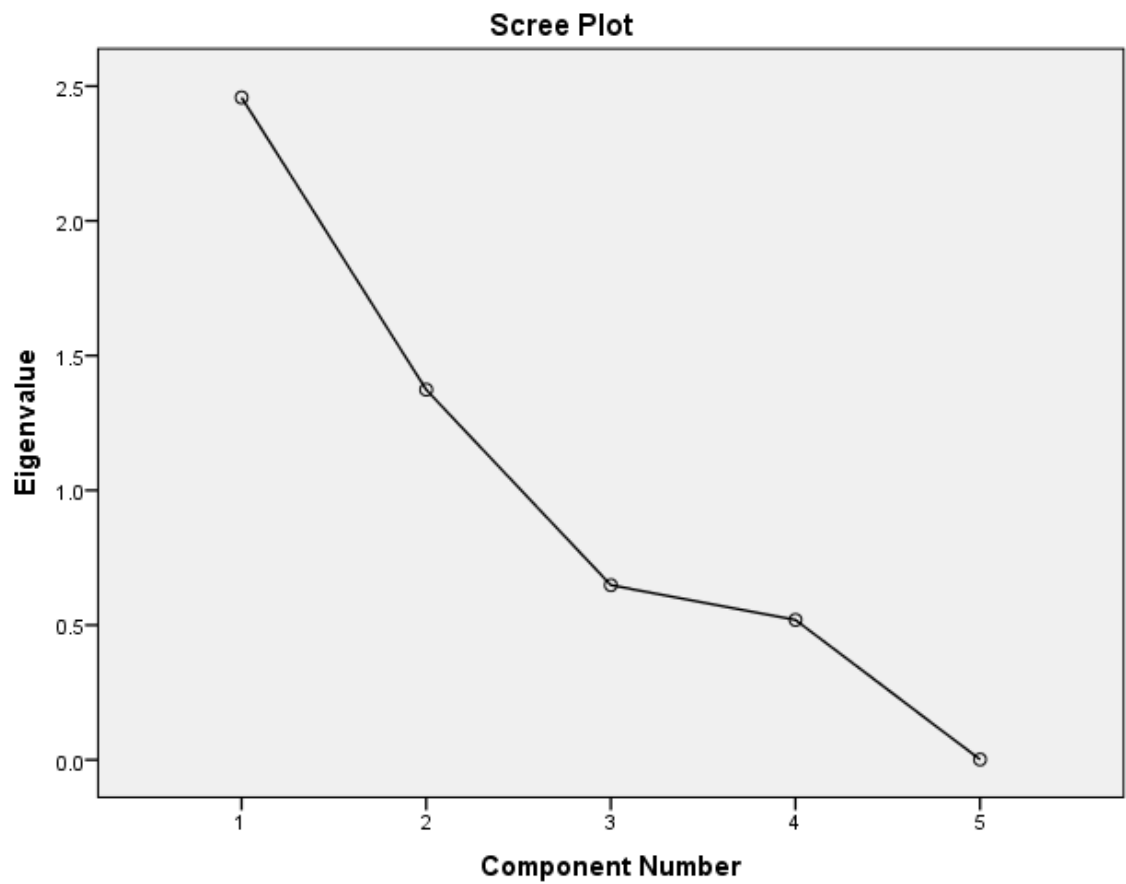
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.458	49.156	49.156	2.458	49.156
2	1.373	27.469	76.624	1.373	27.469
3	.648	12.966	89.590	.648	12.966
4	.519	10.383	99.973		
5	.001	.027	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	49.156	2.449	48.982	48.982
2	76.624	1.021	20.427	69.409
3	89.590	1.009	20.181	89.590
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.964	-.047	.146
Edges_d	.966	-.033	.143
Reciprocity	-.025	.827	.524
Den_d	-.766	-.035	.291
CC_d	.085	.827	-.498

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.973	-.069	.049
Edges_d	.973	-.057	.057
Reciprocity	-.019	.217	.955
Den_d	-.745	-.282	.198
CC_d	.025	.942	.228

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.997	.069	-.022
2	-.034	.709	.704
3	.064	-.702	.709

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 13:36:10	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.999	2

### C.2.3.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:37:03
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpinN PL_TSpinN S_con R_con SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpinN PL_TSpinN S_con R_con SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.21
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		PL_TpinN	PL_TSpinN	S_con	R_con	SMSP_d
Correlation	PL_TpinN	1.000	.866	.010	.083	-.020
	PL_TSpinN	.866	1.000	.167	.240	-.011
	S_con	.010	.167	1.000	.985	.186
	R_con	.083	.240	.985	1.000	.151
	SMSP_d	-.020	-.011	.186	.151	1.000
Sig. (1-tailed)	PL_TpinN		.000	.463	.217	.425
	PL_TSpinN	.000		.056	.011	.460
	S_con	.463	.056		.000	.039
	R_con	.217	.011	.000		.077
	SMSP_d	.425	.460	.039	.077	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.504
Bartlett's Test of Sphericity	Approx. Chi-Square
	462.156
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
PL_TpinN	1.000	.942
PL_TSpinN	1.000	.939
S_con	1.000	.994
R_con	1.000	.994
SMSP_d	1.000	1.000

Extraction Method: Principal  
Component Analysis.

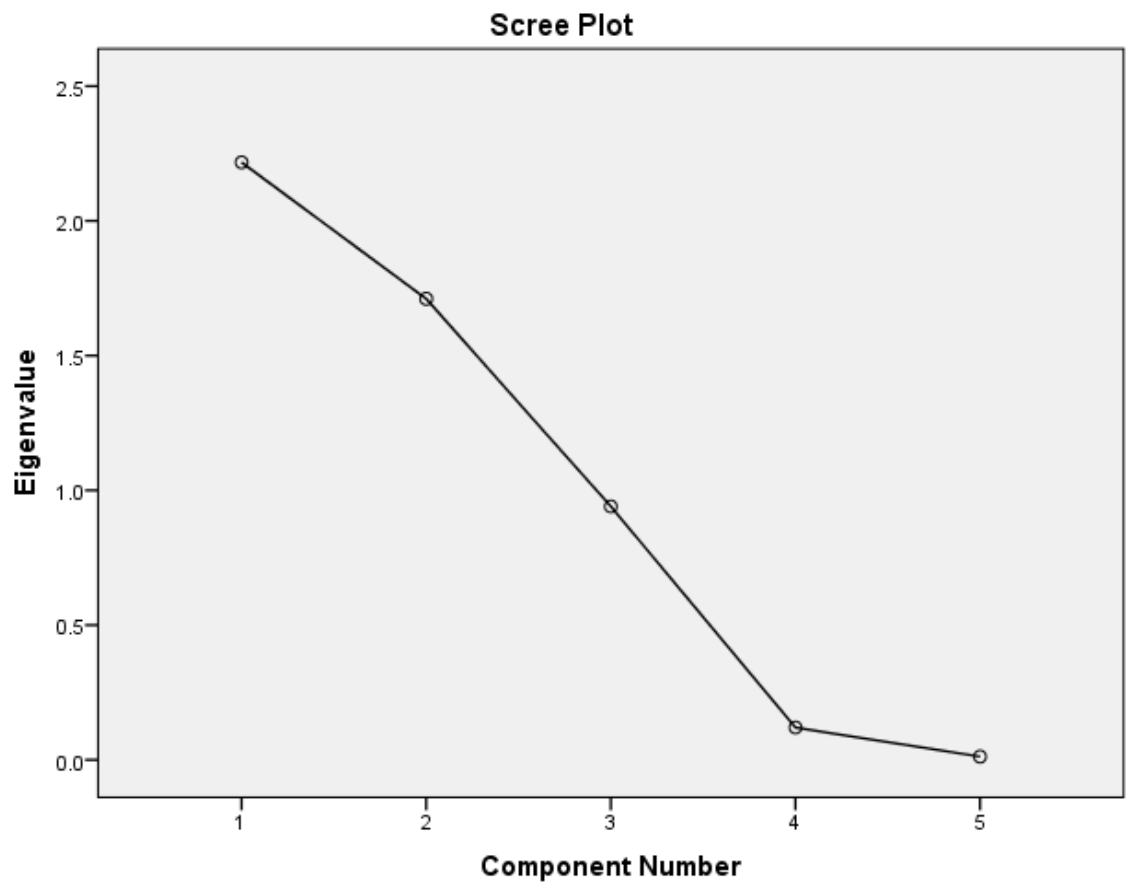
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.217	44.344	44.344	2.217	44.344
2	1.711	34.216	78.560	1.711	34.216
3	.940	18.805	97.365	.940	18.805
4	.120	2.397	99.762		
5	.012	.238	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	44.344	1.997	39.943	39.943
2	78.560	1.869	37.385	77.328
3	97.365	1.002	20.037	97.365
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	.535	.805	.086
PL_TSpinN	.665	.704	.034
S_con	.830	-.531	-.149
R_con	.867	-.460	-.175
SMSP_d	.219	-.270	.938

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	-.021	.970	-.004
PL_TSpinN	.150	.957	-.014
S_con	.992	.026	.090
R_con	.990	.102	.056
SMSP_d	.097	-.013	.995

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.808	.570	.149
2	-.538	.817	-.208
3	-.240	.088	.967

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		30-MAR-2015 13:23:29
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S_con R_con /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's	
Alpha	N of Items
.666	2

### Notes

Output Created	30-MAR-2015 13:24:01	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_TpinN PL_TSpinN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01



## Scale: ALL VARIABLES

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.928	2

### C.2.3.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:37:43
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.663	.641	.755	.765
	Tpaths_d	.663	1.000	.988	.850	.820
	TSpaths_d	.641	.988	1.000	.785	.796
	AvgPL_d	.755	.850	.785	1.000	.944
	AvgGL_d	.765	.820	.796	.944	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.548
Bartlett's Test of Sphericity	Approx. Chi-Square
	900.053
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.683
Tpaths_d	1.000	.893
TSpaths_d	1.000	.848
AvgPL_d	1.000	.896
AvgGL_d	1.000	.892

Extraction Method: Principal  
Component Analysis.

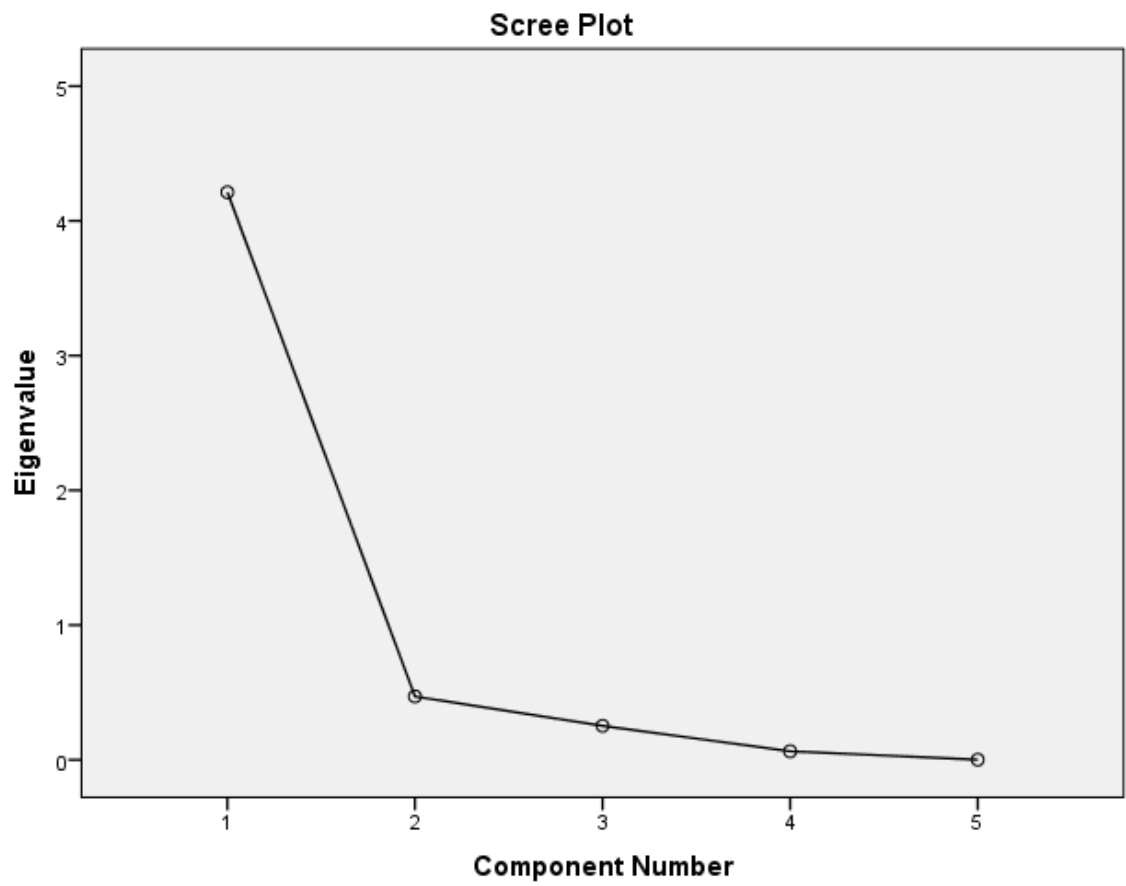
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.213	84.251	84.251	4.213	84.251
2	.470	9.408	93.659		
3	.252	5.050	98.709		
4	.063	1.270	99.979		
5	.001	.021	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	84.251
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.826
Tpaths_d	.945
TSpaths_d	.921
AvgPL_d	.947
AvgGL_d	.944

Extraction Method: Principal  
Component Analysis.<sup>a</sup>

a. 1 components extracted.

**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created	26-MAR-2015 13:38:08	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.923	5



### C.2.3.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 13:38:29
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /MISSING LISTWISE /ANALYSIS ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.20
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECin	PL_EVCinN	EVCin_TpinN	EVCin_TSpinN
Correlation	ECin	1.000	-.329	-.050	.051
	PL_EVCinN	-.329	1.000	.034	.005
	EVCin_TpinN	-.050	.034	1.000	.961
	EVCin_TSpinN	.051	.005	.961	1.000
Sig. (1-tailed)	ECin		.001	.318	.315
	PL_EVCinN	.001		.374	.479
	EVCin_TpinN	.318	.374		.000
	EVCin_TSpinN	.315	.479	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.448
Bartlett's Test of Sphericity Approx. Chi-Square	249.599
df	6
Sig.	.000

### Communalities

	Initial	Extraction
ECin	1.000	.669
PL_EVCinN	1.000	.661
EVCin_TpinN	1.000	.982
EVCin_TSpinN	1.000	.983

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.962	49.059	49.059	1.962	49.059
2	1.331	33.286	82.345	1.331	33.286
3	.673	16.826	99.171		
4	.033	.829	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	49.059	1.962	49.044	49.044
2	82.345	1.332	33.301	82.345
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	-.015	.818
PL_EVCinN	.046	-.811
EVCin_TpinN	.991	-.016
EVCin_TSpinN	.989	.066

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	.011	-.818
PL_EVCinN	.021	.812
EVCin_TpinN	.990	.047
EVCin_TSpinN	.991	-.035

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	1.000	.031
2	.031	-1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 13:38:50
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=EVCin_TpinN EVCin_TSpinN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.980	2

## C.2.4 Propagation Network

### C.2.4.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:49:30
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16



Elapsed Time	00:00:00.16
Maximum Memory Required	4248 (4.148K) bytes

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.999	-.029	-.572	.024
	Edges_d	.999	1.000	-.020	-.576	.036
	Reciprocity	-.029	-.020	1.000	.027	.372
	Den_d	-.572	-.576	.027	1.000	-.099
	CC_d	.024	.036	.372	-.099	1.000
Sig. (1-tailed)	Nodes		.000	.391	.000	.411
	Edges_d	.000		.427	.000	.366
	Reciprocity	.391	.427		.399	.000
	Den_d	.000	.000	.399		.176
	CC_d	.411	.366	.000	.176	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.596
Bartlett's Test of Sphericity	Approx. Chi-Square
	567.100
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.953
Edges_d	1.000	.954
Reciprocity	1.000	.960
Den_d	1.000	.673
CC_d	1.000	.939

Extraction Method: Principal  
Component Analysis.

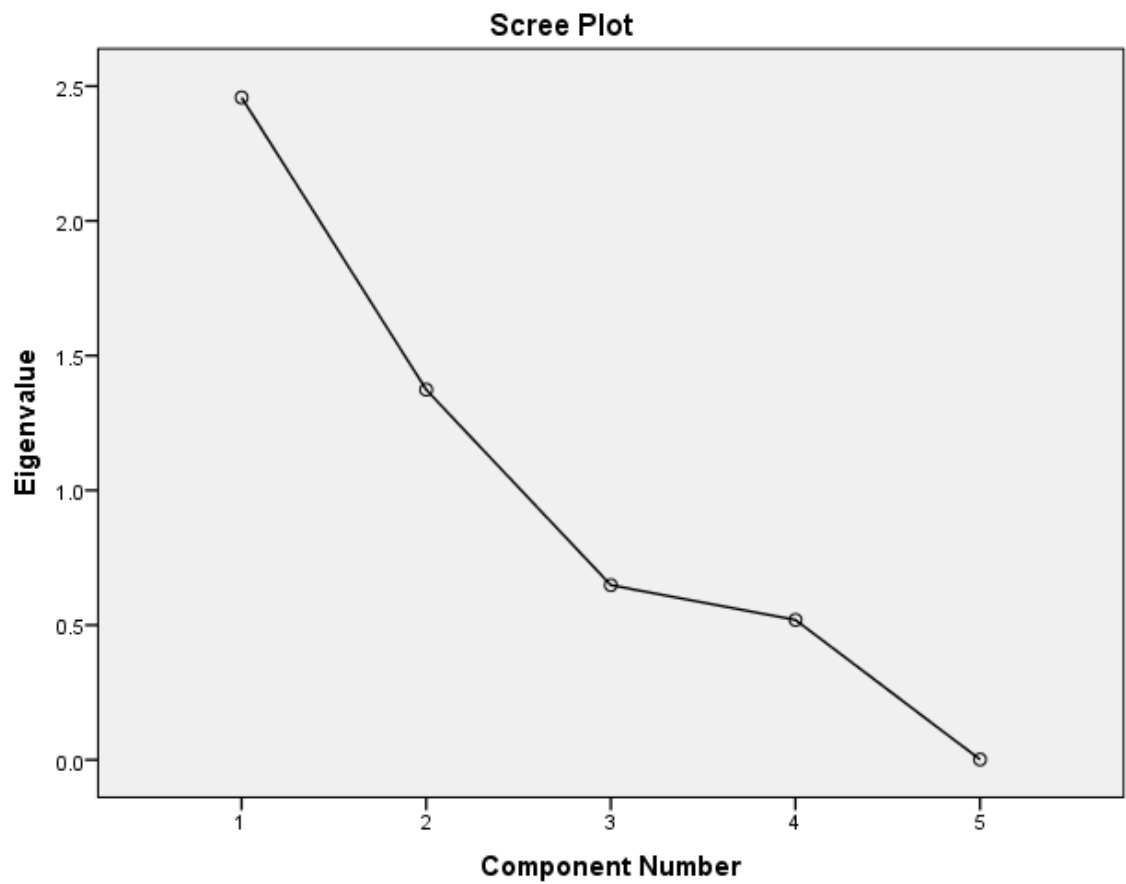
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.458	49.156	49.156	2.458	49.156
2	1.373	27.469	76.624	1.373	27.469
3	.648	12.966	89.590	.648	12.966
4	.519	10.383	99.973		
5	.001	.027	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	49.156	2.449	48.982	48.982
2	76.624	1.021	20.427	69.409
3	89.590	1.009	20.181	89.590
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.964	-.047	.146
Edges_d	.966	-.033	.143
Reciprocity	-.025	.827	.524
Den_d	-.766	-.035	.291
CC_d	.085	.827	-.498

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.973	-.069	.049
Edges_d	.973	-.057	.057
Reciprocity	-.019	.217	.955
Den_d	-.745	-.282	.198
CC_d	.025	.942	.228

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.997	.069	-.022
2	-.034	.709	.704
3	.064	-.702	.709

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 13:49:43	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.999	2

## C.2.4.2 Network Structure Variables (MV1)

### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:50:25
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.18
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpoutN	PL_TSpoutN	S_pro	R_pro	SMSP_d
Correlation	PL_TpoutN	1.000	.703	.100	.422	-.001
	PL_TSpoutN	.703	1.000	-.163	.461	.021
	S_pro	.100	-.163	1.000	.362	-.015
	R_pro	.422	.461	.362	1.000	-.075
	SMSP_d	-.001	.021	-.015	-.075	1.000
Sig. (1-tailed)	PL_TpoutN		.000	.173	.000	.498
	PL_TSpoutN	.000		.062	.000	.422
	S_pro	.173	.062		.000	.442
	R_pro	.000	.000	.000		.241
	SMSP_d	.498	.422	.442	.241	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.477
Bartlett's Test of Sphericity	Approx. Chi-Square
	117.597
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpoutN	1.000	.771
PL_TSpoutN	1.000	.890
S_pro	1.000	.909
R_pro	1.000	.735
SMSP_d	1.000	.996

Extraction Method: Principal Component Analysis.



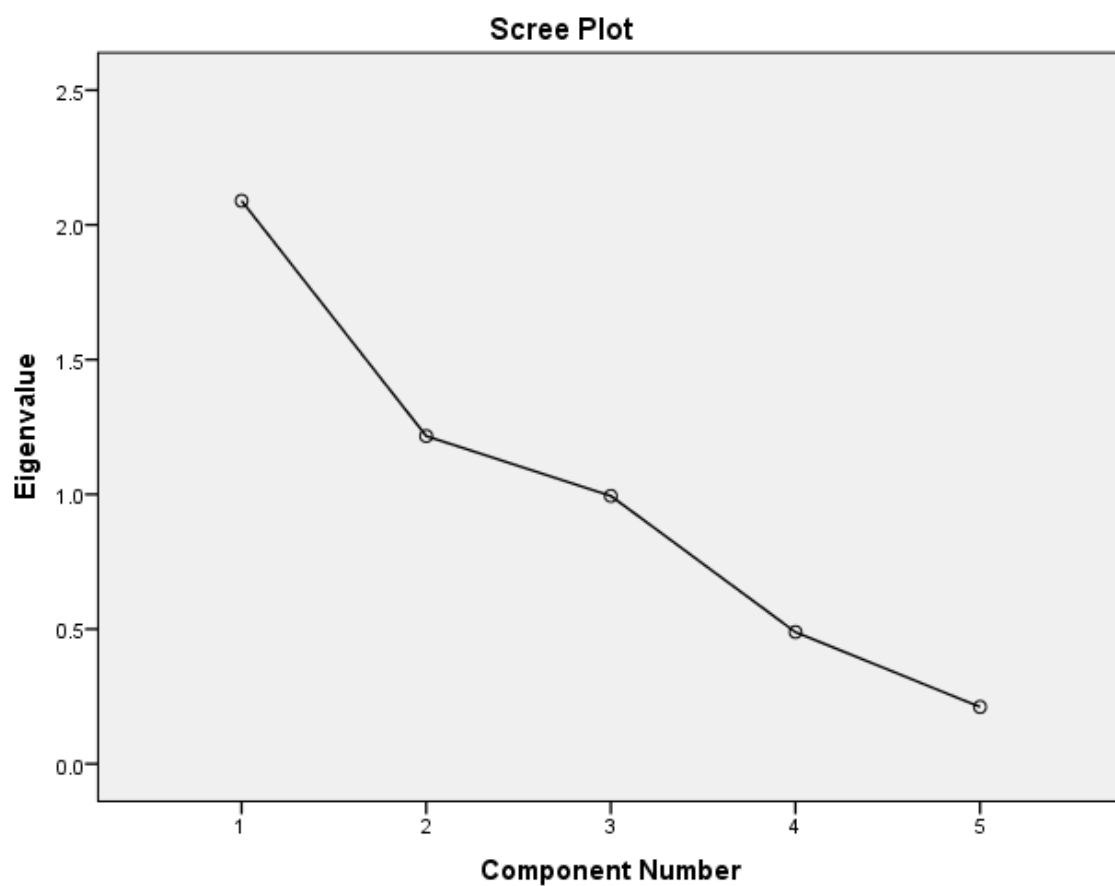
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.089	41.787	41.787	2.089	41.787
2	1.216	24.328	66.115	1.216	24.328
3	.994	19.884	85.999	.994	19.884
4	.489	9.779	95.778		
5	.211	4.222	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	41.787	2.010	40.209	40.209
2	66.115	1.282	25.644	65.853
3	85.999	1.007	20.146	85.999
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpoutN	.862	-.166	.016
PL_TSpoutN	.848	-.412	-.041
S_pro	.207	.901	.234
R_pro	.764	.388	.015
SMSP_d	-.039	-.238	.968

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpoutN	.871	.106	.017
PL_TSpoutN	.933	-.140	.017
S_pro	-.079	.950	.017
R_pro	.612	.591	-.105
SMSP_d	.006	-.013	.998

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.954	.297	-.042
2	-.299	.927	-.225
3	-.028	.227	.974

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 13:50:44	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_TpoutN PL_TSpoutN S_pro R_pro /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.684	3

## Reliability

### Notes

Output Created		30-MAR-2015 14:18:36
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Matrix Input	
	Definition of Missing	User-defined missing values are treated as missing.
Cases Used		Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=R_pro S_pro /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

**Scale: ALL VARIABLES**

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.129	2

### C.2.4.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 13:51:05
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.663	.641	.755	.765
	Tpaths_d	.663	1.000	.988	.850	.820
	TSpaths_d	.641	.988	1.000	.785	.796
	AvgPL_d	.755	.850	.785	1.000	.944
	AvgGL_d	.765	.820	.796	.944	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.548
Bartlett's Test of Sphericity	Approx. Chi-Square
	900.053
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.683
Tpaths_d	1.000	.893
TSpaths_d	1.000	.848
AvgPL_d	1.000	.896
AvgGL_d	1.000	.892

Extraction Method: Principal  
Component Analysis.



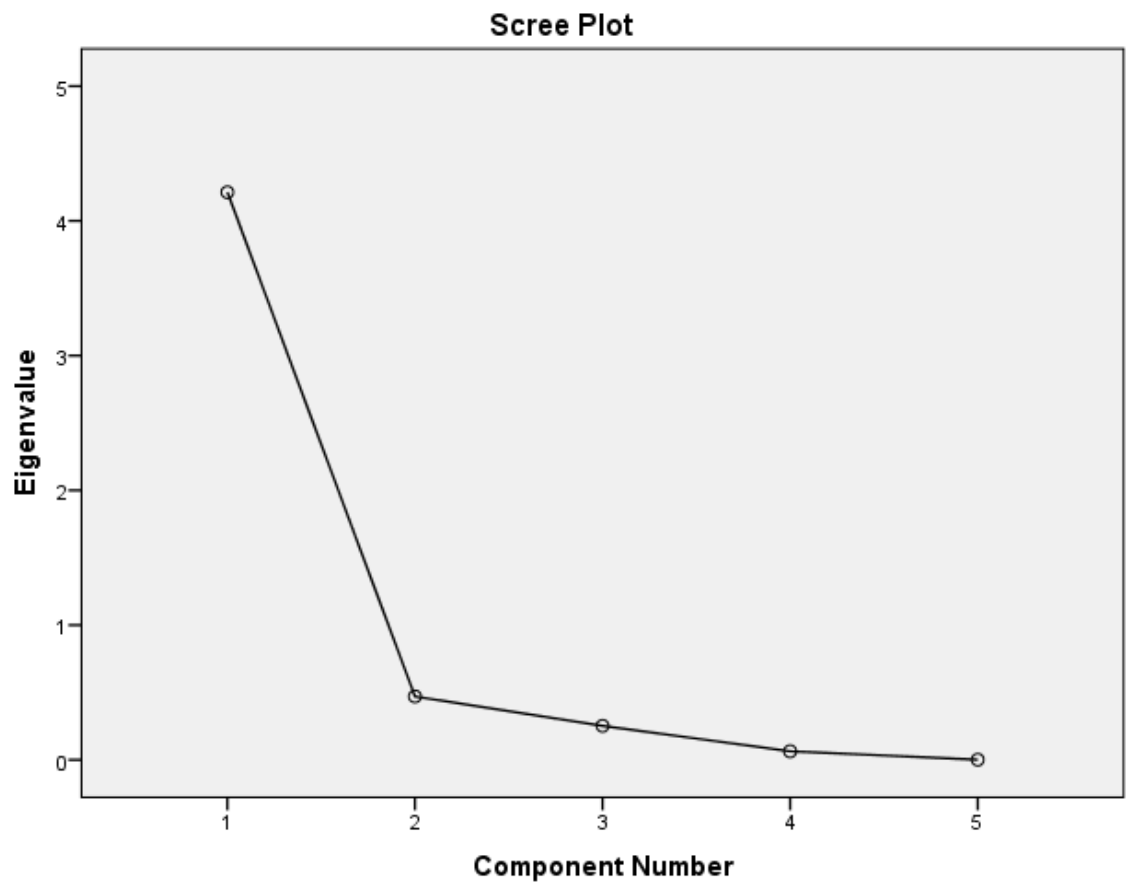
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.213	84.251	84.251	4.213	84.251
2	.470	9.408	93.659		
3	.252	5.050	98.709		
4	.063	1.270	99.979		
5	.001	.021	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	84.251
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.826
Tpaths_d	.945
TSpaths_d	.921
AvgPL_d	.947
AvgGL_d	.944

Extraction Method: Principal  
Component Analysis.<sup>a</sup>

a. 1 components extracted.

**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created	26-MAR-2015 13:52:44	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.923	5

## C.2.4.4 Dependent Variables

### Factor Analysis

Notes		
Output Created		26-MAR-2015 13:54:27
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /MISSING LISTWISE /ANALYSIS ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		ECout	PL_EVCoutN	EVCout_Tpout N	EVCout_TSpou tN
Correlation	ECout	1.000	-.425	-.293	-.298
	PL_EVCoutN	-.425	1.000	.073	.065
	EVCout_TpoutN	-.293	.073	1.000	.998
	EVCout_TSpoutN	-.298	.065	.998	1.000
Sig. (1-tailed)	ECout		.000	.002	.002
	PL_EVCoutN	.000		.245	.270
	EVCout_TpoutN	.002	.245		.000
	EVCout_TSpoutN	.002	.270	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.512
Bartlett's Test of Sphericity    Approx. Chi-Square	514.695
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
ECout	1.000	.703
PL_EVCoutN	1.000	.776
EVCout_TpoutN	1.000	.990
EVCout_TSpoutN	1.000	.992

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

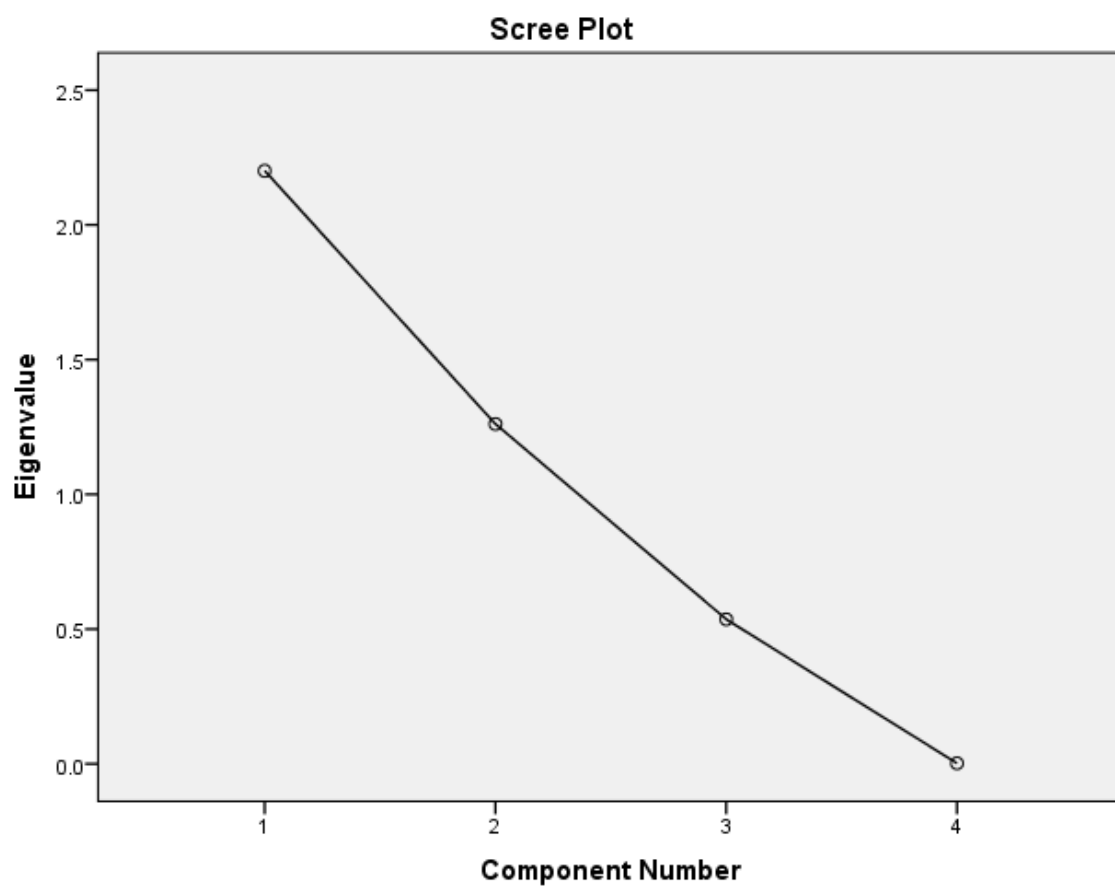
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.201	55.015	55.015	2.201	55.015
2	1.261	31.524	86.540	1.261	31.524
3	.536	13.412	99.952		
4	.002	.048	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	55.015	2.038	50.957	50.957
2	86.540	1.423	35.583	86.540
3				
4				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.573	.612
PL_EVCoutN	.311	-.824
EVCout_TpoutN	.942	.321
EVCout_TSpoutN	.942	.324

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.267	-.795
PL_EVCoutN	-.059	.879
EVCout_TpoutN	.990	.100
EVCout_TSpoutN	.991	.097

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.910	.416
2	.416	-.910

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 13:54:48
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES= EVCout_TpoutN EVCout_TSpoutN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

**Scale: ALL VARIABLES**

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.999	2

## C.3 Case 3—Comedy

### C.3.1 Undirected Network

#### C.3.1.1 Independent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 11:31:00
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_ud Den_ud CC_ud /MISSING LISTWISE /ANALYSIS Nodes Edges_ud Den_ud CC_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.

Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory	3008 (2.938K) bytes
	Required	

#### Correlation Matrix

		Nodes	Edges_ud	Den_ud	CC_ud
Correlation	Nodes	1.000	.991	-.850	-.119
	Edges_ud	.991	1.000	-.840	-.055
	Den_ud	-.850	-.840	1.000	.163
	CC_ud	-.119	-.055	.163	1.000
Sig. (1-tailed)	Nodes		.000	.000	.130
	Edges_ud	.000		.000	.302
	Den_ud	.000	.000		.062
	CC_ud	.130	.302	.062	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.636
Bartlett's Test of Sphericity Approx. Chi-Square		484.896
df		6
Sig.		.000

#### Communalities

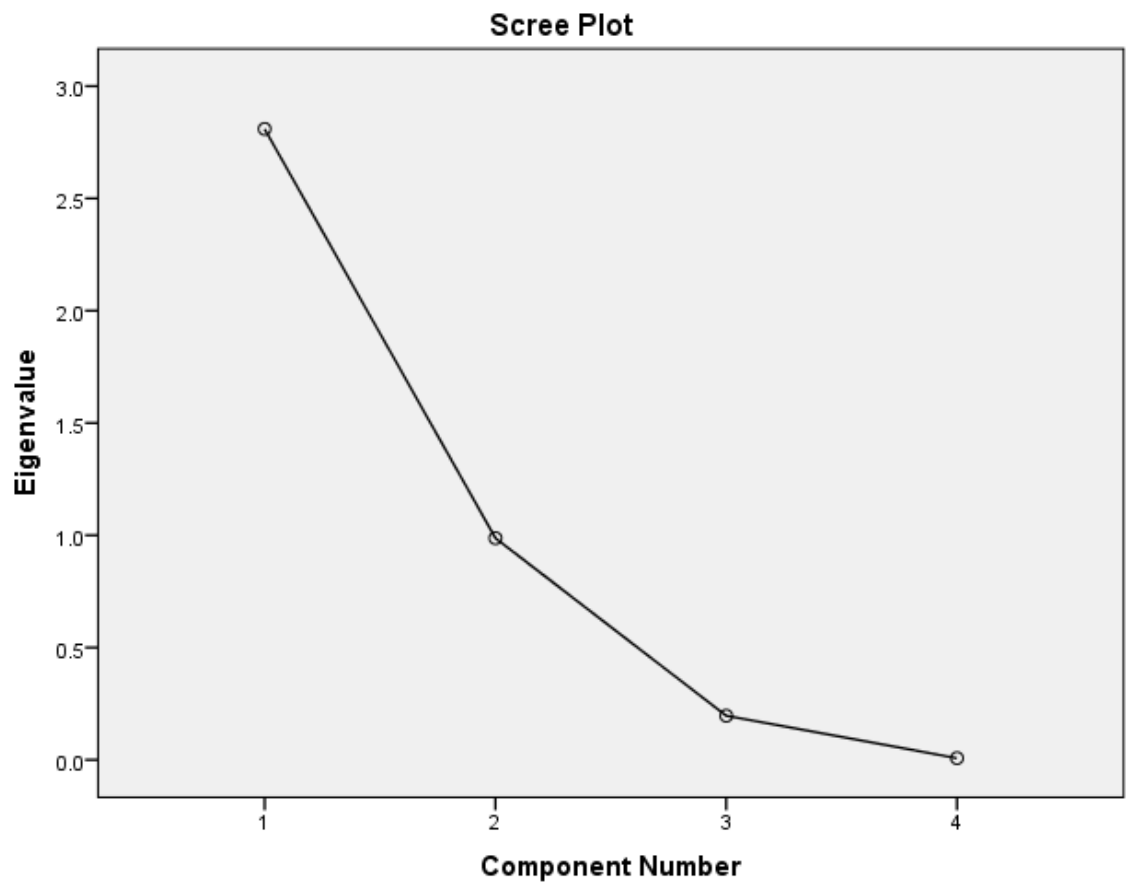
	Initial	Extraction
Nodes	1.000	.968
Edges_ud	1.000	.966
Den_ud	1.000	.864
CC_ud	1.000	.999

Extraction Method: Principal  
Component Analysis.

Total Variance Explained					
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.809	70.233	70.233	2.809	70.233
2	.987	24.678	94.910	.987	24.678
3	.196	4.906	99.816		
4	.007	.184	100.000		

Total Variance Explained				
Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.233	2.783	69.569	69.569
2	94.910	1.014	25.341	94.910
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.982	.063
Edges_ud	.974	.127
Den_ud	-.930	.011
CC_ud	-.178	.983

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.982	-.056
Edges_ud	.983	.009
Den_ud	-.921	.123
CC_ud	-.058	.998

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.993	-.121
2	.121	.993

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:31:14	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Nodes Edges_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.995	2

### C.3.1.2 Network Structure Variables (MV1)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 11:32:21
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /MISSING LISTWISE /ANALYSIS PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(4) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.21
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpudN	PL_TSpudN	S_ud	R_ud	SMSP_ud
Correlation	PL_TpudN	1.000	.060	.296	.435	.178
	PL_TSpudN	.060	1.000	-.050	.082	.066
	S_ud	.296	-.050	1.000	.620	.249
	R_ud	.435	.082	.620	1.000	.348
	SMSP_ud	.178	.066	.249	.348	1.000
Sig. (1-tailed)	PL_TpudN		.286	.002	.000	.046
	PL_TSpudN	.286		.319	.220	.268
	S_ud	.002	.319		.000	.009
	R_ud	.000	.220	.000		.000
	SMSP_ud	.046	.268	.009	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.645
Bartlett's Test of Sphericity	Approx. Chi-Square
	74.841
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpudN	1.000	.987
PL_TSpudN	1.000	.996
S_ud	1.000	.879
R_ud	1.000	.802
SMSP_ud	1.000	.996

Extraction Method: Principal  
Component Analysis.

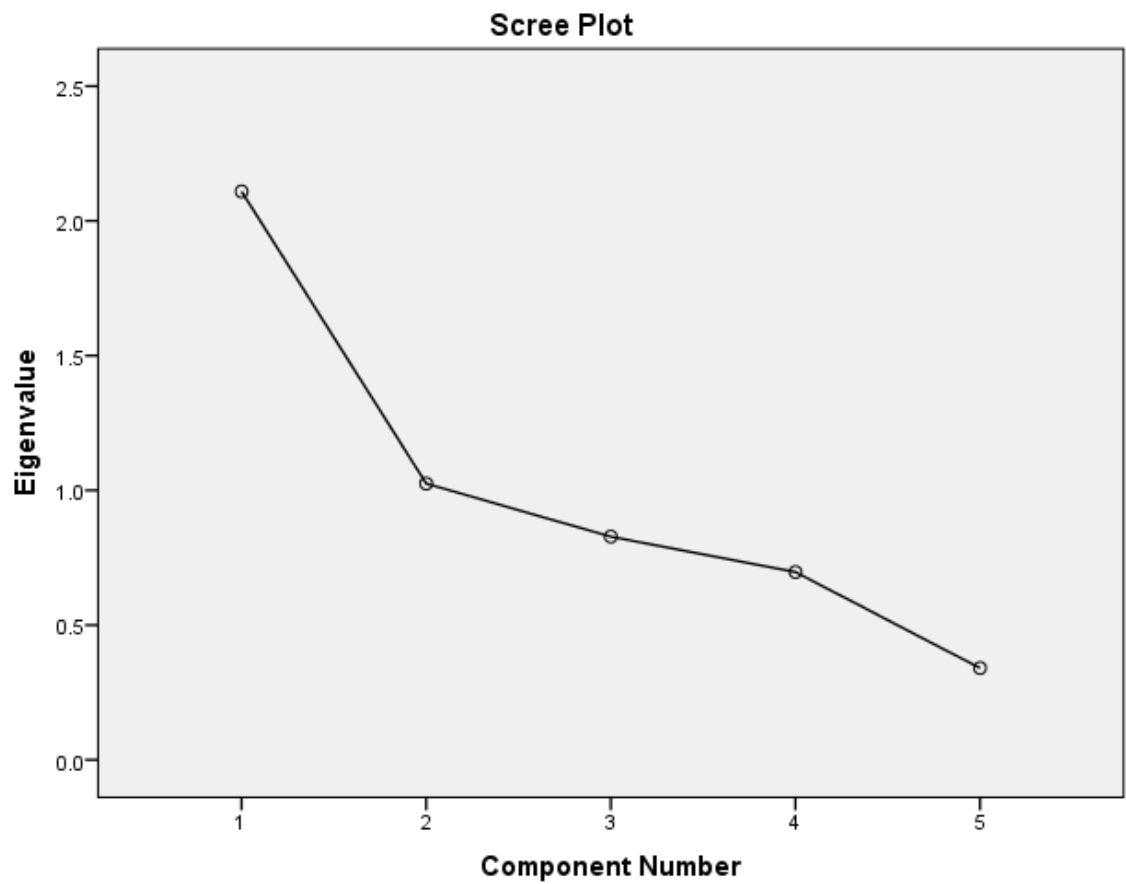
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.109	42.182	42.182	2.109	42.182
2	1.025	20.503	62.684	1.025	20.503
3	.828	16.564	79.249	.828	16.564
4	.697	13.937	93.186	.697	13.937
5	.341	6.814	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	42.182	1.585	31.697	31.697
2	62.684	1.044	20.881	52.577
3	79.249	1.020	20.391	72.968
4	93.186	1.011	20.218	93.186
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpudN	.645	.057	-.481	.580
PL_TSpudN	.097	.967	-.106	-.200
S_ud	.781	-.253	-.056	-.449
R_ud	.872	-.020	-.068	-.189
SMSP_ud	.559	.151	.760	.288

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 4 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpudN	.208	.969	.068	.025
PL_TSpudN	-.003	.027	.030	.997
S_ud	.930	.062	.067	-.074
R_ud	.804	.310	.221	.098
SMSP_ud	.170	.070	.980	.031

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3	4
1	.786	.467	.398	.075
2	-.211	.068	.155	.963
3	-.094	-.532	.833	-.118
4	-.574	.703	.351	-.232

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



## Reliability

Notes		
Output Created		26-MAR-2015 11:32:54
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S_ud R_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.442	2

### C.3.1.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:33:18
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /MISSING LISTWISE /ANALYSIS GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.20
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_ud	Tpaths_ud	TSpaths_ud	AvgPL_ud	AvgGL_ud
Correlation	GD_ud	1.000	.943	-.078	.996	.696
	Tpaths_ud	.943	1.000	.194	.958	.730
	TSpaths_ud	-.078	.194	1.000	-.066	.286
	AvgPL_ud	.996	.958	-.066	1.000	.697
	AvgGL_ud	.696	.730	.286	.697	1.000
Sig. (1-tailed)	GD_ud		.000	.232	.000	.000
	Tpaths_ud	.000		.032	.000	.000
	TSpaths_ud	.232	.032		.268	.003
	AvgPL_ud	.000	.000	.268		.000
	AvgGL_ud	.000	.000	.003	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.508
Bartlett's Test of Sphericity	Approx. Chi-Square
	929.833
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_ud	1.000	.983
Tpaths_ud	1.000	.954
TSpaths_ud	1.000	.970
AvgPL_ud	1.000	.988
AvgGL_ud	1.000	.764

Extraction Method: Principal  
Component Analysis.

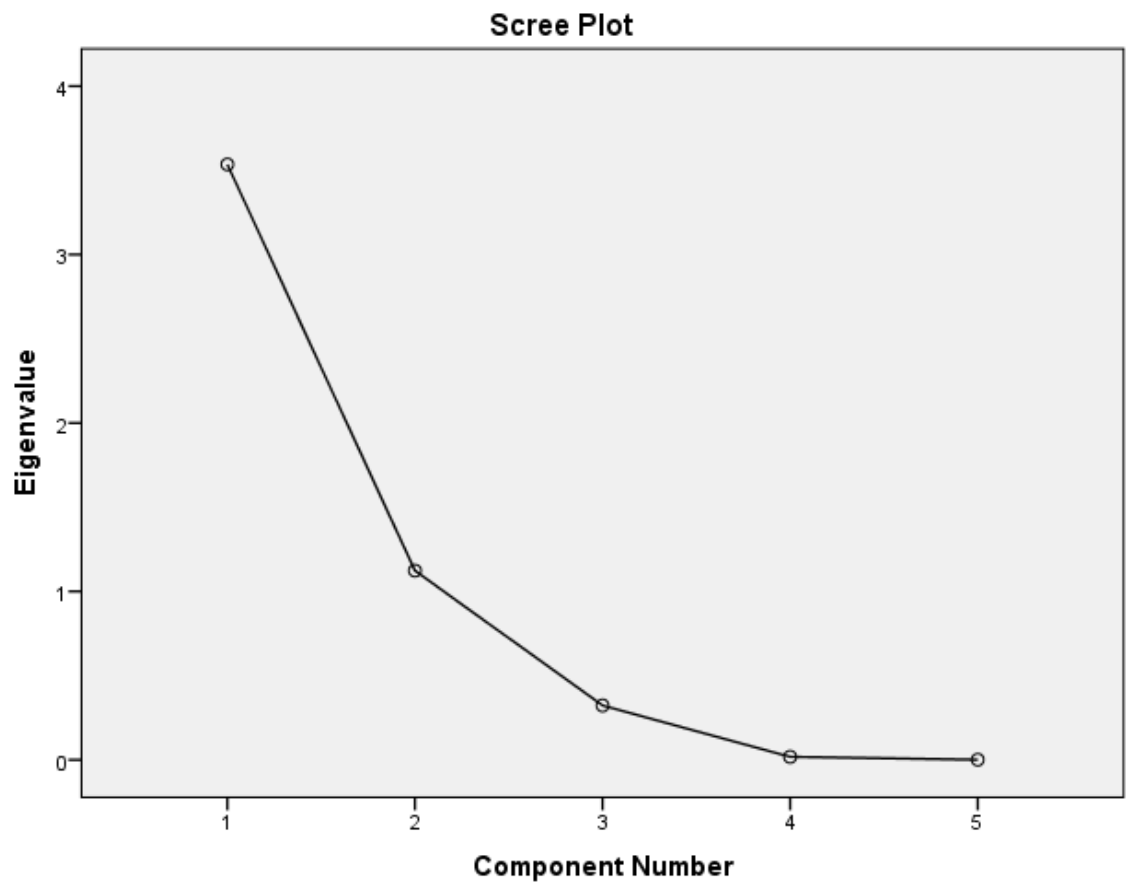
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.535	70.706	70.706	3.535	70.706
2	1.123	22.467	93.172	1.123	22.467
3	.323	6.454	99.626		
4	.018	.352	99.979		
5	.001	.021	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.706	3.511	70.223	70.223
2	93.172	1.147	22.949	93.172
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.969	-.210
Tpaths_ud	.975	.055
TSpaths_ud	.113	.978
AvgPL_ud	.974	-.199
AvgGL_ud	.827	.282

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.985	-.112
Tpaths_ud	.965	.153
TSpaths_ud	.015	.985
AvgPL_ud	.989	-.101
AvgGL_ud	.795	.363

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.995	.100
2	-.100	.995

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:33:37	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.937	4

### C.3.1.4 Dependent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:34:25
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECud PL_EVCud EVCud_TpudN EVCud_TSpudN /MISSING LISTWISE /ANALYSIS ECud PL_EVCud EVCud_TpudN EVCud_TSpudN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		ECud	PL_EVCud	EVCud_TpudN	EVCud_TSpudN
Correlation	ECud	1.000	.012	.116	.089
	PL_EVCud	.012	1.000	.257	.135
	EVCud_TpudN	.116	.257	1.000	-.008
	EVCud_TSpudN	.089	.135	-.008	1.000
Sig. (1-tailed)	ECud		.454	.136	.202
	PL_EVCud	.454		.007	.101
	EVCud_TpudN	.136	.007		.472
	EVCud_TSpudN	.202	.101	.472	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.475
Bartlett's Test of Sphericity    Approx. Chi-Square	9.814
df	6
Sig.	.133

**Communalities**

	Initial	Extraction
ECud	1.000	.940
PL_EVCud	1.000	.730
EVCud_TpudN	1.000	.741
EVCud_TSpudN	1.000	.912

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.327	33.163	33.163	1.327	33.163
2	1.022	25.542	58.705	1.022	25.542
3	.975	24.377	83.082	.975	24.377
4	.677	16.918	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	33.163	1.254	31.351	31.351
2	58.705	1.043	26.086	57.437
3	83.082	1.026	25.645	83.082
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	.384	.520	.723
PL_EVCud	.730	-.250	-.367
EVCud_TpudN	.703	-.421	.263
EVCud_TSpudN	.390	.715	-.499

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	.037	.082	.965
PL_EVCud	.782	.297	-.174
EVCud_TpudN	.800	-.211	.237
EVCud_TSpudN	.028	.951	.085

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.873	.354	.334
2	-.483	.722	.496
3	-.066	-.595	.801

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:34:53	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=ECud PL_EVCud EVCud_TpudN EVCud_TSpudN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.302	2



## C.3.2 Directed Network

### C.3.2.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:23:53
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working	91
	Data File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.17

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

**Correlation Matrix**

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.990	-.111	-.849	-.037
	Edges_d	.990	1.000	-.091	-.838	-.021
	Reciprocity	-.111	-.091	1.000	.209	.416
	Den_d	-.849	-.838	.209	1.000	.076
	CC_d	-.037	-.021	.416	.076	1.000
Sig. (1-tailed)	Nodes		.000	.148	.000	.364
	Edges_d	.000		.194	.000	.421
	Reciprocity	.148	.194		.023	.000
	Den_d	.000	.000	.023		.237
	CC_d	.364	.421	.000	.237	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.687
Bartlett's Test of Sphericity	Approx. Chi-Square
	481.590
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
Nodes	1.000	.967
Edges_d	1.000	.962
Reciprocity	1.000	.708
Den_d	1.000	.865
CC_d	1.000	.713

Extraction Method: Principal  
Component Analysis.

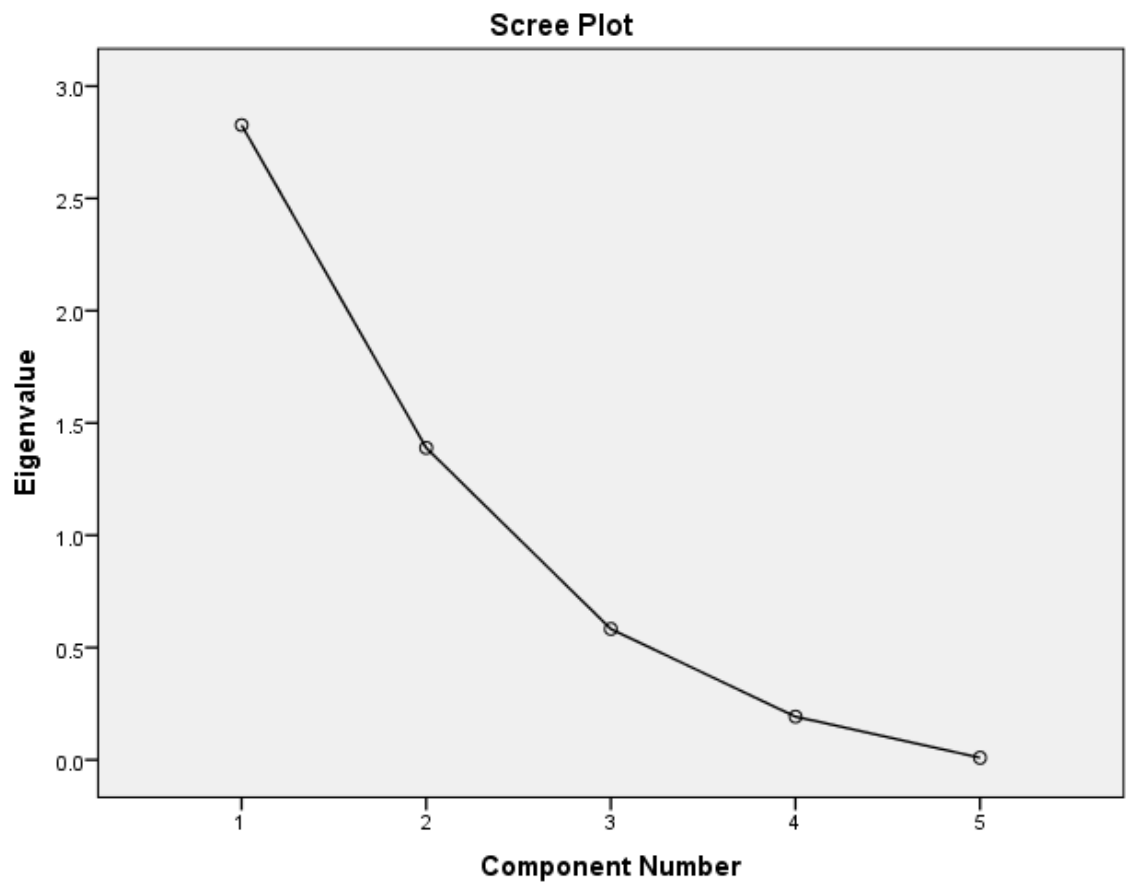
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.827	56.535	56.535	2.827	56.535
2	1.389	27.780	84.315	1.389	27.780
3	.583	11.653	95.969		
4	.192	3.846	99.815		
5	.009	.185	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	56.535	2.789	55.777	55.777
2	84.315	1.427	28.538	84.315
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.974	.133
Edges_d	.969	.153
Reciprocity	-.242	.806
Den_d	-.930	-.023
CC_d	-.125	.835

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.983	-.027
Edges_d	.981	-.006
Reciprocity	-.108	.835
Den_d	-.921	.128
CC_d	.013	.845

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.987	-.162
2	.162	.987

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:24:10	
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.995	2

RELIABILITY

```

/VARIABLES=Reciprocity CC_d
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.320	2

### C.3.2.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:24:31
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpdN PL_TSpdN S_d R_d SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpdN PL_TSpdN S_d R_d SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes



### Correlation Matrix

		PL_TpdN	PL_TSpdN	S_d	R_d	SMSP_d
Correlation	PL_TpdN	1.000	.938	.449	.644	.027
	PL_TSpdN	.938	1.000	.473	.629	.075
	S_d	.449	.473	1.000	.769	.128
	R_d	.644	.629	.769	1.000	.159
	SMSP_d	.027	.075	.128	.159	1.000
Sig. (1-tailed)	PL_TpdN		.000	.000	.000	.398
	PL_TSpdN	.000		.000	.000	.240
	S_d	.000	.000		.000	.113
	R_d	.000	.000	.000		.066
	SMSP_d	.398	.240	.113	.066	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.649
Bartlett's Test of Sphericity Approx. Chi-Square		318.459
df		10
Sig.		.000

### Communalities

	Initial	Extraction
PL_TpdN	1.000	.847
PL_TSpdN	1.000	.833
S_d	1.000	.623
R_d	1.000	.795
SMSP_d	1.000	.902

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.979	59.575	59.575	2.979	59.575
2	1.021	20.426	80.001	1.021	20.426
3	.741	14.828	94.829		
4	.200	4.009	98.838		
5	.058	1.162	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	59.575	2.944	58.879	58.879
2	80.001	1.056	21.122	80.001
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpdN	.886	-.248
PL_TSpdN	.891	-.199
S_d	.768	.180
R_d	.884	.116
SMSP_d	.167	.935

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpdN	.912	-.128
PL_TSpdN	.909	-.078
S_d	.737	.281
R_d	.860	.233
SMSP_d	.041	.949

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.991	.133
2	-.133	.991

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:24:54	
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_TpdN PL_TSpdN S_d R_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.761	4

### C.3.2.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:25:14
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.17
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.352	.278	.694	.626
	Tpaths_d	.352	1.000	.987	.674	.600
	TSpaths_d	.278	.987	1.000	.584	.573
	AvgPL_d	.694	.674	.584	1.000	.891
	AvgGL_d	.626	.600	.573	.891	1.000
Sig. (1-tailed)	GD_d		.000	.004	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.004	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.422
Bartlett's Test of Sphericity	Approx. Chi-Square
	889.169
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.834
Tpaths_d	1.000	.982
TSpaths_d	1.000	.982
AvgPL_d	1.000	.909
AvgGL_d	1.000	.846

Extraction Method: Principal  
Component Analysis.



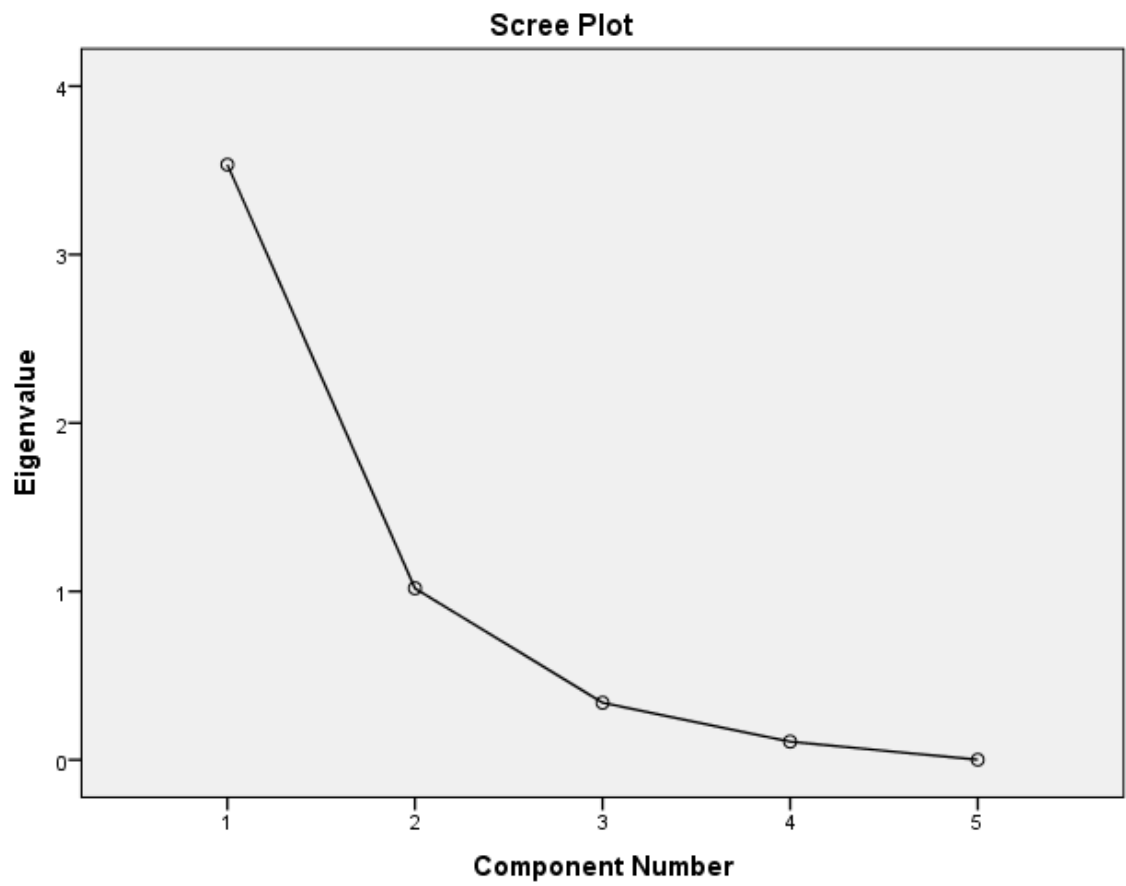
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.534	70.680	70.680	3.534	70.680
2	1.018	20.369	91.049	1.018	20.369
3	.339	6.781	97.830		
4	.108	2.164	99.994		
5	.000	.006	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.680	2.295	45.903	45.903
2	91.049	2.257	45.146	91.049
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.682	.607
Tpaths_d	.870	-.474
TSpaths_d	.826	-.548
AvgPL_d	.920	.250
AvgGL_d	.885	.250

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.912	.046
Tpaths_d	.287	.949
TSpaths_d	.204	.970
AvgPL_d	.831	.467
AvgGL_d	.806	.443

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.712	.702
2	.702	-.712

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	30-MAR-2015 22:33:58	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=GD_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.813	3

```

RELIABILITY
/VARIABLES=Tpaths_d TSpats_d
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

```

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.991	2

### C.3.2.4 Dependent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:26:47
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /MISSING LISTWISE /ANALYSIS ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECd	PL_EVCdN	EVCd_TpdN	EVCd_TSpdN
Correlation	ECd	1.000	-.504	.577	.584
	PL_EVCdN	-.504	1.000	-.530	-.540
	EVCd_TpdN	.577	-.530	1.000	.999
	EVCd_TSpdN	.584	-.540	.999	1.000
Sig. (1-tailed)	ECd		.000	.000	.000
	PL_EVCdN	.000		.000	.000
	EVCd_TpdN	.000	.000		.000
	EVCd_TSpdN	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.662
Bartlett's Test of Sphericity Approx. Chi-Square	677.664
df	6
Sig.	.000

### Communalities

	Initial	Extraction
ECd	1.000	.681
PL_EVCdN	1.000	.842
EVCd_TpdN	1.000	.994
EVCd_TSpdN	1.000	.994

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

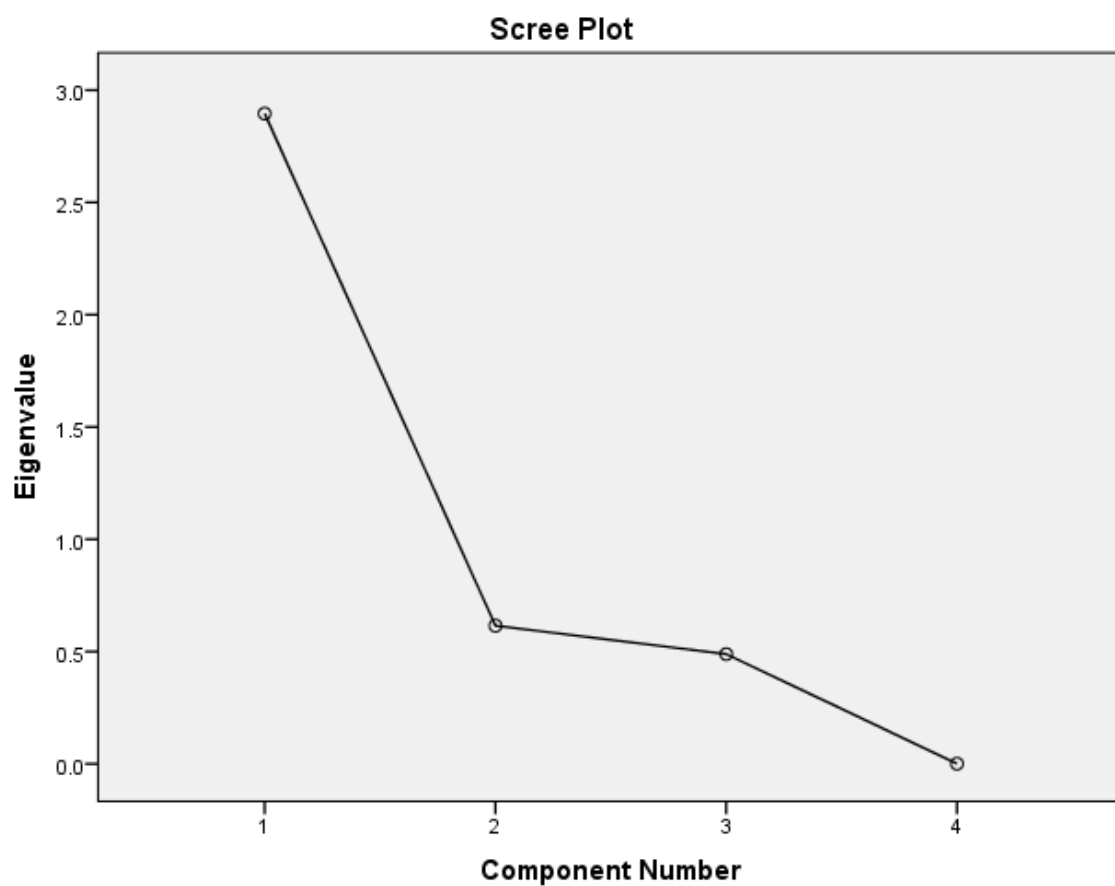
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.895	72.386	72.386	2.895	72.386
2	.615	15.382	87.768	.615	15.382
3	.489	12.219	99.987		
4	.001	.013	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	72.386	1.994	49.856	49.856
2	87.768	1.516	37.912	87.768
3				
4				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	.770	-.295
PL_EVCdN	-.735	.550
EVCd_TpdN	.936	.343
EVCd_TSpdN	.941	.330

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	.414	.714
PL_EVCdN	-.226	-.890
EVCd_TpdN	.943	.322
EVCd_TSpdN	.939	.335

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.778	.629
2	.629	-.778

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:27:06	
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES= EVCd_TpdN EVCd_TSpdN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
1.000	2

### C.3.3 Consumption Network

#### C.3.3.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 10:42:19
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.21

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.990	-.111	-.849	-.037
	Edges_d	.990	1.000	-.091	-.838	-.021
	Reciprocity	-.111	-.091	1.000	.209	.416
	Den_d	-.849	-.838	.209	1.000	.076
	CC_d	-.037	-.021	.416	.076	1.000
Sig. (1-tailed)	Nodes		.000	.148	.000	.364
	Edges_d	.000		.194	.000	.421
	Reciprocity	.148	.194		.023	.000
	Den_d	.000	.000	.023		.237
	CC_d	.364	.421	.000	.237	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.687
Bartlett's Test of Sphericity	Approx. Chi-Square
	481.590
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.967
Edges_d	1.000	.962
Reciprocity	1.000	.708
Den_d	1.000	.865
CC_d	1.000	.713

Extraction Method: Principal  
Component Analysis.

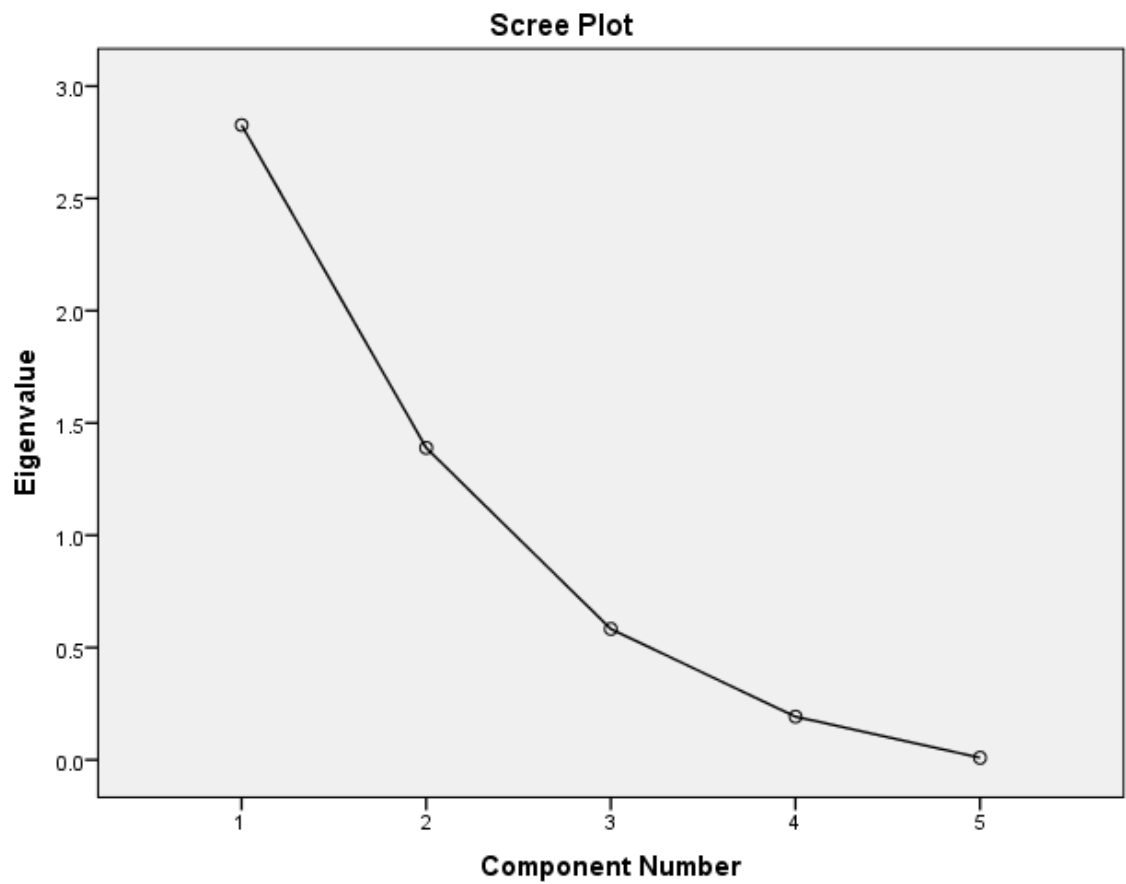
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.827	56.535	56.535	2.827	56.535
2	1.389	27.780	84.315	1.389	27.780
3	.583	11.653	95.969		
4	.192	3.846	99.815		
5	.009	.185	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	56.535	2.789	55.777	55.777
2	84.315	1.427	28.538	84.315
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.974	.133
Edges_d	.969	.153
Reciprocity	-.242	.806
Den_d	-.930	-.023
CC_d	-.125	.835

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.983	-.027
Edges_d	.981	-.006
Reciprocity	-.108	.835
Den_d	-.921	.128
CC_d	.013	.845

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.987	-.162
2	.162	.987

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 10:42:45	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.995	2

```
RELIABILITY  
  /VARIABLES=Reciprocity CC_d  
  /SCALE('ALL VARIABLES') ALL  
  /MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.320	2

### C.3.3.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 10:45:00
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpinN PL_TSpinN S_con R_con SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpinN PL_TSpinN S_con R_con SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		PL_TpinN	PL_TSpinN	S_con	R_con	SMSP_d
Correlation	PL_TpinN	1.000	.808	.224	.430	.075
	PL_TSpinN	.808	1.000	.259	.370	-.026
	S_con	.224	.259	1.000	.372	.127
	R_con	.430	.370	.372	1.000	.138
	SMSP_d	.075	-.026	.127	.138	1.000
Sig. (1-tailed)	PL_TpinN		.000	.017	.000	.241
	PL_TSpinN	.000		.007	.000	.403
	S_con	.017	.007		.000	.114
	R_con	.000	.000	.000		.097
	SMSP_d	.241	.403	.114	.097	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.603
Bartlett's Test of Sphericity	Approx. Chi-Square
	130.215
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
PL_TpinN	1.000	.903
PL_TSpinN	1.000	.881
S_con	1.000	.847
R_con	1.000	.605
SMSP_d	1.000	.991

Extraction Method: Principal  
Component Analysis.

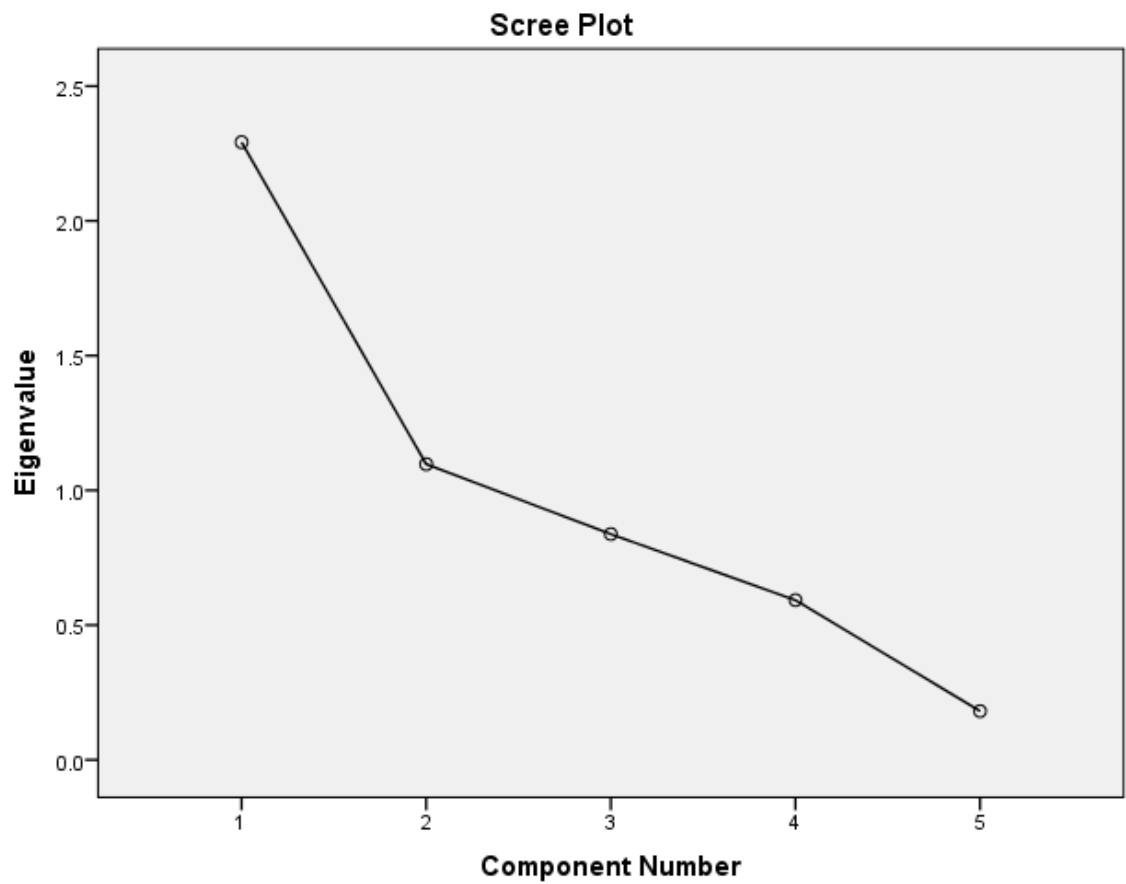
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.292	45.836	45.836	2.292	45.836
2	1.097	21.943	67.779	1.097	21.943
3	.838	16.755	84.534	.838	16.755
4	.592	11.847	96.381		
5	.181	3.619	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	45.836	1.892	37.831	37.831
2	67.779	1.323	26.451	64.282
3	84.534	1.013	20.252	84.534
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	.869	-.268	.277
PL_TSpinN	.850	-.358	.175
S_con	.540	.432	-.607
R_con	.705	.247	-.216
SMSP_d	.161	.806	.561

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	.936	.151	.067
PL_TSpinN	.921	.168	-.067
S_con	.049	.919	.018
R_con	.406	.649	.139
SMSP_d	.000	.083	.992

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.833	.541	.117
2	-.419	.477	.773
3	.362	-.693	.624

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## **Reliability**



### Notes

Output Created		26-MAR-2015 10:45:33
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY
		/VARIABLES=PL_TpinN
		PL_TSpinN
		/SCALE('ALL VARIABLES') ALL
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

### Scale: ALL VARIABLES

#### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.893	2

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.100	2

### C.3.3.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 10:49:29
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.352	.278	.694	.626
	Tpaths_d	.352	1.000	.987	.674	.600
	TSpaths_d	.278	.987	1.000	.584	.573
	AvgPL_d	.694	.674	.584	1.000	.891
	AvgGL_d	.626	.600	.573	.891	1.000
Sig. (1-tailed)	GD_d		.000	.004	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.004	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.422
Bartlett's Test of Sphericity	Approx. Chi-Square
	889.169
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.997
Tpaths_d	1.000	.997
TSpaths_d	1.000	.993
AvgPL_d	1.000	.941
AvgGL_d	1.000	.963

Extraction Method: Principal  
Component Analysis.

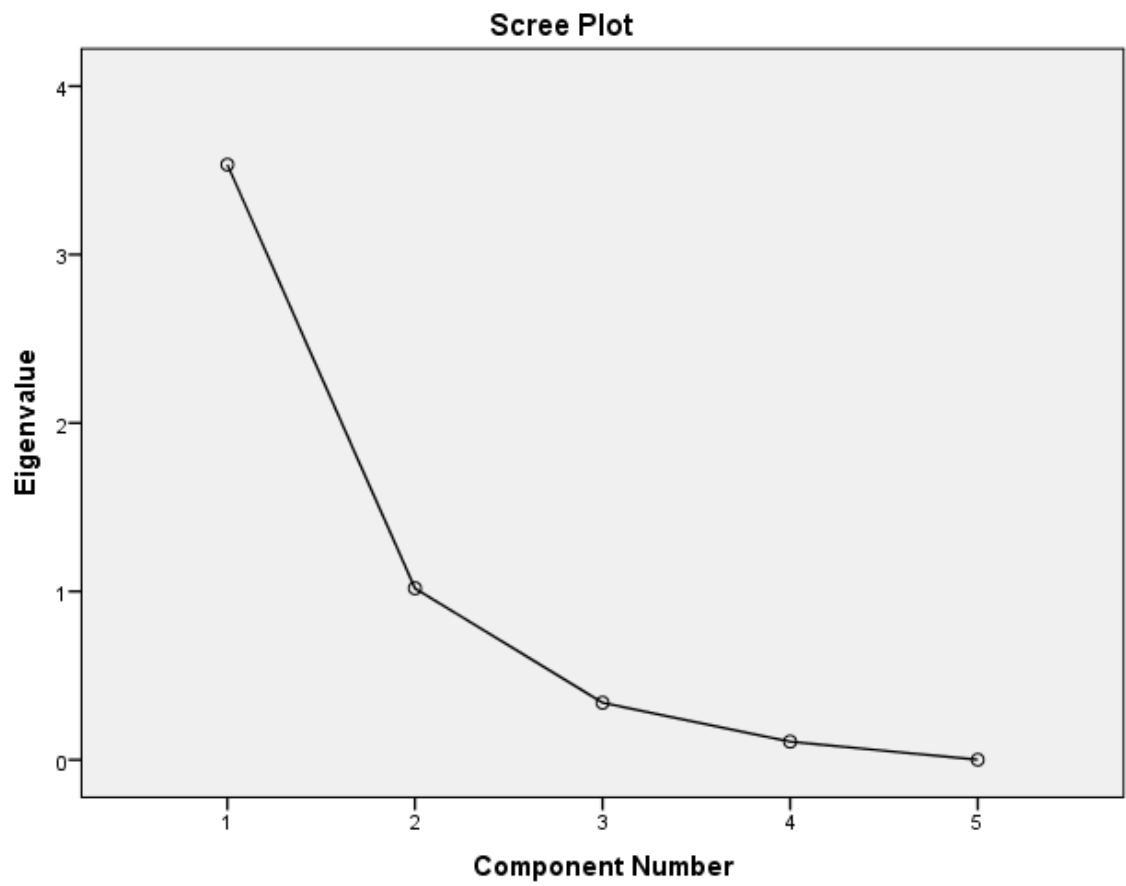
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.534	70.680	70.680	3.534	70.680
2	1.018	20.369	91.049	1.018	20.369
3	.339	6.781	97.830	.339	6.781
4	.108	2.164	99.994		
5	.000	.006	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.680	2.049	40.981	40.981
2	91.049	1.698	33.954	74.935
3	97.830	1.145	22.895	97.830
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
GD_d	.682	.607	.405
Tpaths_d	.870	-.474	.120
TSpaths_d	.826	-.548	.106
AvgPL_d	.920	.250	-.180
AvgGL_d	.885	.250	-.342

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
GD_d	.109	.356	.927
Tpaths_d	.937	.307	.154
TSpaths_d	.958	.264	.081
AvgPL_d	.377	.792	.414
AvgGL_d	.315	.883	.290

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.653	.633	.416
2	-.717	.338	.610
3	.245	-.696	.675

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 10:50:04
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
	Missing Value Handling	Definition of Missing
Cases Used		User-defined missing values are treated as missing. Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Tpaths_d TSpats_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

### Scale: ALL VARIABLES

#### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.991	2

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.916	2

### C.3.3.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 10:51:51
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /MISSING LISTWISE /ANALYSIS ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.18
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		ECin	PL_EVCinN	EVCin_TpinN	EVCin_TSpinN
Correlation	ECin	1.000	-.362	.580	.588
	PL_EVCinN	-.362	1.000	-.154	-.162
	EVCin_TpinN	.580	-.154	1.000	1.000
	EVCin_TSpinN	.588	-.162	1.000	1.000
Sig. (1-tailed)	ECin		.000	.000	.000
	PL_EVCinN	.000		.073	.062
	EVCin_TpinN	.000	.073		.000
	EVCin_TSpinN	.000	.062	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.561
Bartlett's Test of Sphericity Approx. Chi-Square	745.820
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
ECin	1.000	.688
PL_EVCinN	1.000	.932
EVCin_TpinN	1.000	.965
EVCin_TSpinN	1.000	.967

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.556	63.894	63.894	2.556	63.894
2	.997	24.926	88.821	.997	24.926
3	.447	11.175	99.995		
4	.000	.005	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	63.894	2.376	59.409	59.409
2	88.821	1.176	29.412	88.821
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	.796	-.234
PL_EVCinN	-.377	.889
EVCin_TpinN	.942	.281
EVCin_TSpinN	.945	.271

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	.670	-.490
PL_EVCinN	-.053	.964
EVCin_TpinN	.981	-.055
EVCin_TSpinN	.981	-.065

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.941	-.339
2	.339	.941

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 10:52:14
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=ECin EVCin_TpinN EVCin_TSpinN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.880	3



## C.3.4 Propagation Network

### C.3.4.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:12:55
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.18

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.990	-.111	-.849	-.037
	Edges_d	.990	1.000	-.091	-.838	-.021
	Reciprocity	-.111	-.091	1.000	.209	.416
	Den_d	-.849	-.838	.209	1.000	.076
	CC_d	-.037	-.021	.416	.076	1.000
Sig. (1-tailed)	Nodes		.000	.148	.000	.364
	Edges_d	.000		.194	.000	.421
	Reciprocity	.148	.194		.023	.000
	Den_d	.000	.000	.023		.237
	CC_d	.364	.421	.000	.237	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.687
Bartlett's Test of Sphericity	Approx. Chi-Square
	481.590
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.967
Edges_d	1.000	.962
Reciprocity	1.000	.708
Den_d	1.000	.865
CC_d	1.000	.713

Extraction Method: Principal  
Component Analysis.

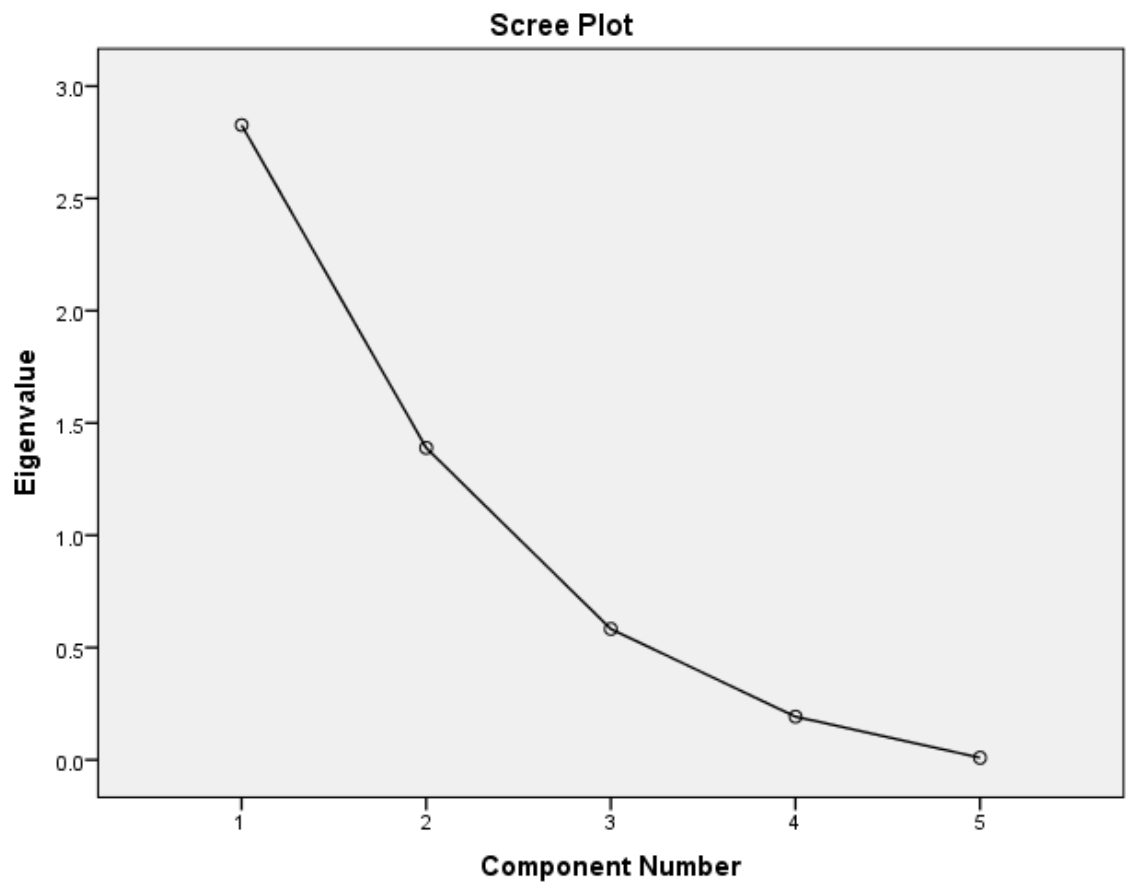
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.827	56.535	56.535	2.827	56.535
2	1.389	27.780	84.315	1.389	27.780
3	.583	11.653	95.969		
4	.192	3.846	99.815		
5	.009	.185	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	56.535	2.789	55.777	55.777
2	84.315	1.427	28.538	84.315
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.974	.133
Edges_d	.969	.153
Reciprocity	-.242	.806
Den_d	-.930	-.023
CC_d	-.125	.835

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.983	-.027
Edges_d	.981	-.006
Reciprocity	-.108	.835
Den_d	-.921	.128
CC_d	.013	.845

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.987	-.162
2	.162	.987

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:13:14	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.995	2

### C.3.4.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:14:27
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.17
	Maximum Memory Required	4248 (4.148K) bytes



### Correlation Matrix

		PL_TpoutN	PL_TSpoutN	S_pro	R_pro	SMSP_d
Correlation	PL_TpoutN	1.000	.559	.156	.379	.028
	PL_TSpoutN	.559	1.000	.179	.499	.082
	S_pro	.156	.179	1.000	.636	.008
	R_pro	.379	.499	.636	1.000	.072
	SMSP_d	.028	.082	.008	.072	1.000
Sig. (1-tailed)	PL_TpoutN		.000	.070	.000	.396
	PL_TSpoutN	.000		.045	.000	.220
	S_pro	.070	.045		.000	.470
	R_pro	.000	.000	.000		.249
	SMSP_d	.396	.220	.470	.249	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.590
Bartlett's Test of Sphericity	Approx. Chi-Square
	109.586
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpoutN	1.000	.773
PL_TSpoutN	1.000	.779
S_pro	1.000	.892
R_pro	1.000	.836
SMSP_d	1.000	.997

Extraction Method: Principal Component Analysis.

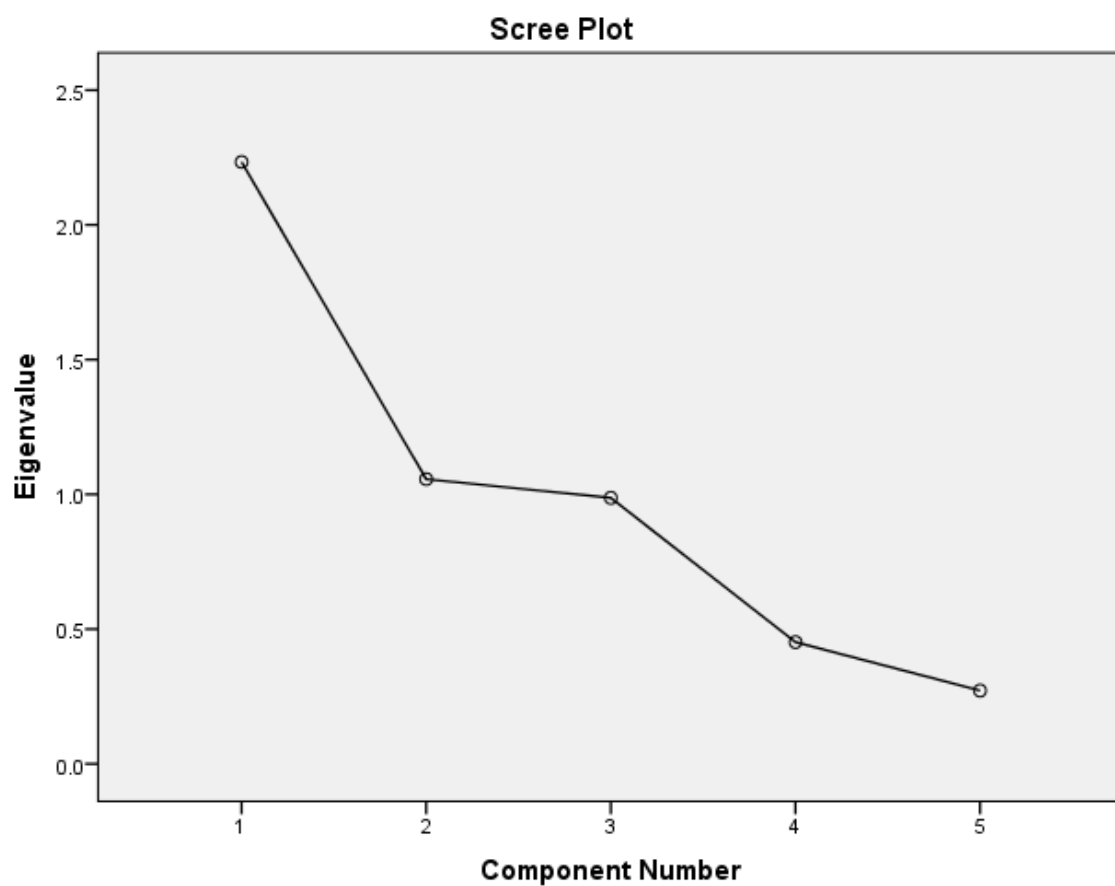
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.233	44.663	44.663	2.233	44.663
2	1.056	21.128	65.791	1.056	21.128
3	.987	19.740	85.531	.987	19.740
4	.452	9.034	94.565		
5	.272	5.435	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	44.663	1.678	33.566	33.566
2	65.791	1.592	31.849	65.415
3	85.531	1.006	20.116	85.531
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpoutN	.694	.465	-.272
PL_TSpoutN	.764	.415	-.153
S_pro	.642	-.670	.175
R_pro	.860	-.295	.094
SMSP_d	.121	.363	.922

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpoutN	.874	.085	-.025
PL_TSpoutN	.858	.192	.074
S_pro	.007	.945	-.018
R_pro	.420	.810	.060
SMSP_d	.030	.015	.998

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.731	.677	.089
2	.611	-.707	.356
3	-.305	.206	.930

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:14:50	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.714	2

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.203	2

### C.3.4.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 11:15:14
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.352	.278	.694	.626
	Tpaths_d	.352	1.000	.987	.674	.600
	TSpaths_d	.278	.987	1.000	.584	.573
	AvgPL_d	.694	.674	.584	1.000	.891
	AvgGL_d	.626	.600	.573	.891	1.000
Sig. (1-tailed)	GD_d		.000	.004	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.004	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.422
Bartlett's Test of Sphericity	Approx. Chi-Square
	889.169
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.834
Tpaths_d	1.000	.982
TSpaths_d	1.000	.982
AvgPL_d	1.000	.909
AvgGL_d	1.000	.846

Extraction Method: Principal  
Component Analysis.



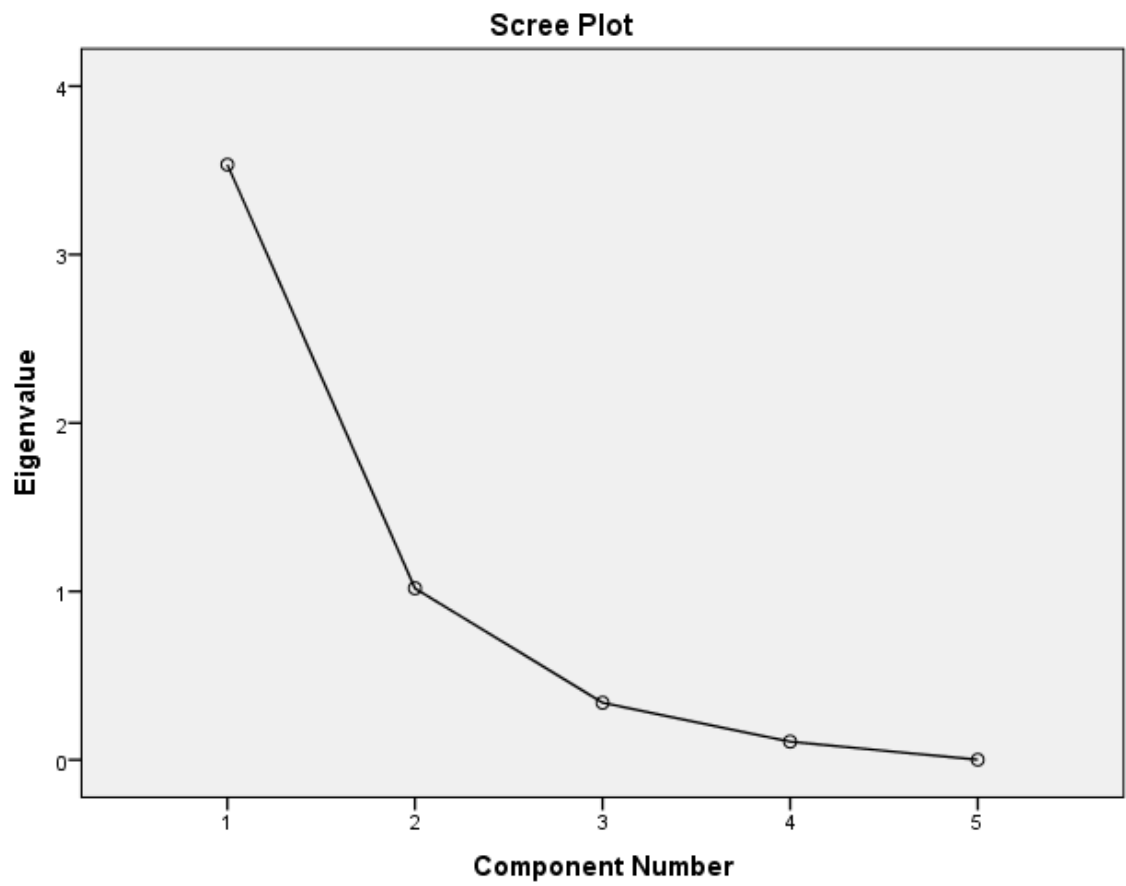
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.534	70.680	70.680	3.534	70.680
2	1.018	20.369	91.049	1.018	20.369
3	.339	6.781	97.830		
4	.108	2.164	99.994		
5	.000	.006	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.680	2.295	45.903	45.903
2	91.049	2.257	45.146	91.049
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.682	.607
Tpaths_d	.870	-.474
TSpaths_d	.826	-.548
AvgPL_d	.920	.250
AvgGL_d	.885	.250

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.912	.046
Tpaths_d	.287	.949
TSpaths_d	.204	.970
AvgPL_d	.831	.467
AvgGL_d	.806	.443

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.712	.702
2	.702	-.712

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:15:35	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.813	3

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.991	2

### C.3.4.4 Dependent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 11:16:06
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /MISSING LISTWISE /ANALYSIS ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.16
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		ECout	PL_EVCoutN	EVCout_Tpout N	EVCout_TSpou tN
Correlation	ECout	1.000	-.678	-.040	-.026
	PL_EVCoutN	-.678	1.000	.060	.048
	EVCout_TpoutN	-.040	.060	1.000	.989
	EVCout_TSpoutN	-.026	.048	.989	1.000
Sig. (1-tailed)	ECout		.000	.352	.404
	PL_EVCoutN	.000		.286	.327
	EVCout_TpoutN	.352	.286		.000
	EVCout_TSpoutN	.404	.327	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.501
Bartlett's Test of Sphericity    Approx. Chi-Square	393.949
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
ECout	1.000	.839
PL_EVCoutN	1.000	.839
EVCout_TpoutN	1.000	.995
EVCout_TSpoutN	1.000	.995

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.012	50.307	50.307	2.012	50.307
2	1.655	41.375	91.683	1.655	41.375
3	.322	8.055	99.737		
4	.011	.263	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	50.307	1.989	49.737	49.737
2	91.683	1.678	41.946	91.683
3				
4				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.241	.884
PL_EVCoutN	.264	-.877
EVCout_TpoutN	.972	.222
EVCout_TSpoutN	.969	.236

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.009	-.916
PL_EVCoutN	.034	.915
EVCout_TpoutN	.997	.031
EVCout_TSpoutN	.997	.016

Extraction Method: Principal Component  
Analysis.

Rotation Method: Varimax with Kaiser  
Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.968	.253
2	.253	-.968

Extraction Method: Principal  
Component Analysis.

Rotation Method: Varimax with Kaiser  
Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 11:16:26	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=EVCout_TpoutN EVCout_TSpoutN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.995	2

## C.4 Case 4—Sports

### C.4.1 Undirected Network

#### C.4.1.1 Independent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:51:34
Comments		
Input	Active Dataset	DataSet17
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_ud Den_ud CC_ud /MISSING LISTWISE /ANALYSIS Nodes Edges_ud Den_ud CC_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.

Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory	3008 (2.938K) bytes
	Required	

#### Correlation Matrix

		Nodes	Edges_ud	Den_ud	CC_ud
Correlation	Nodes	1.000	.999	-.430	-.092
	Edges_ud	.999	1.000	-.436	-.062
	Den_ud	-.430	-.436	1.000	.178
	CC_ud	-.092	-.062	.178	1.000
Sig. (1-tailed)	Nodes		.000	.000	.193
	Edges_ud	.000		.000	.281
	Den_ud	.000	.000		.045
	CC_ud	.193	.281	.045	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.343
Bartlett's Test of Sphericity	Approx. Chi-Square
	661.279
	df
	6
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	1.000
Edges_ud	1.000	1.000
Den_ud	1.000	1.000
CC_ud	1.000	1.000

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.313	57.837	57.837	2.313	57.837
2	1.019	25.467	83.304	1.019	25.467
3	.667	16.687	99.991	.667	16.687
4	.000	.009	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	57.837	1.980	49.496	49.496
2	83.304	1.017	25.424	74.920
3	99.991	1.003	25.071	99.991
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.959	.174	.223
Edges_ud	.958	.201	.204
Den_ud	-.660	.258	.706
CC_ud	-.202	.939	-.279

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.980	-.193	-.046
Edges_ud	.979	-.203	-.015
Den_ud	-.245	.965	.091
CC_ud	-.031	.083	.996

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.884	-.446	-.138
2	.270	.248	.930
3	.381	.860	-.339

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:51:45	
Comments		
Input	Active Dataset	DataSet17
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Nodes Edges_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.998	2

### C.4.1.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:52:21
Comments		
Input	Active Dataset	DataSet17
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /MISSING LISTWISE /ANALYSIS PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpudN	PL_TSpudN	S_ud	R_ud	SMSP_ud
Correlation	PL_TpudN	1.000	.263	.270	.427	.383
	PL_TSpudN	.263	1.000	.134	.404	.153
	S_ud	.270	.134	1.000	.673	.580
	R_ud	.427	.404	.673	1.000	.528
	SMSP_ud	.383	.153	.580	.528	1.000
Sig. (1-tailed)	PL_TpudN		.006	.005	.000	.000
	PL_TSpudN	.006		.102	.000	.074
	S_ud	.005	.102		.000	.000
	R_ud	.000	.000	.000		.000
	SMSP_ud	.000	.074	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.696
Bartlett's Test of Sphericity	Approx. Chi-Square
	136.178
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpudN	1.000	.973
PL_TSpudN	1.000	.957
S_ud	1.000	.850
R_ud	1.000	.803
SMSP_ud	1.000	.708

Extraction Method: Principal  
Component Analysis.

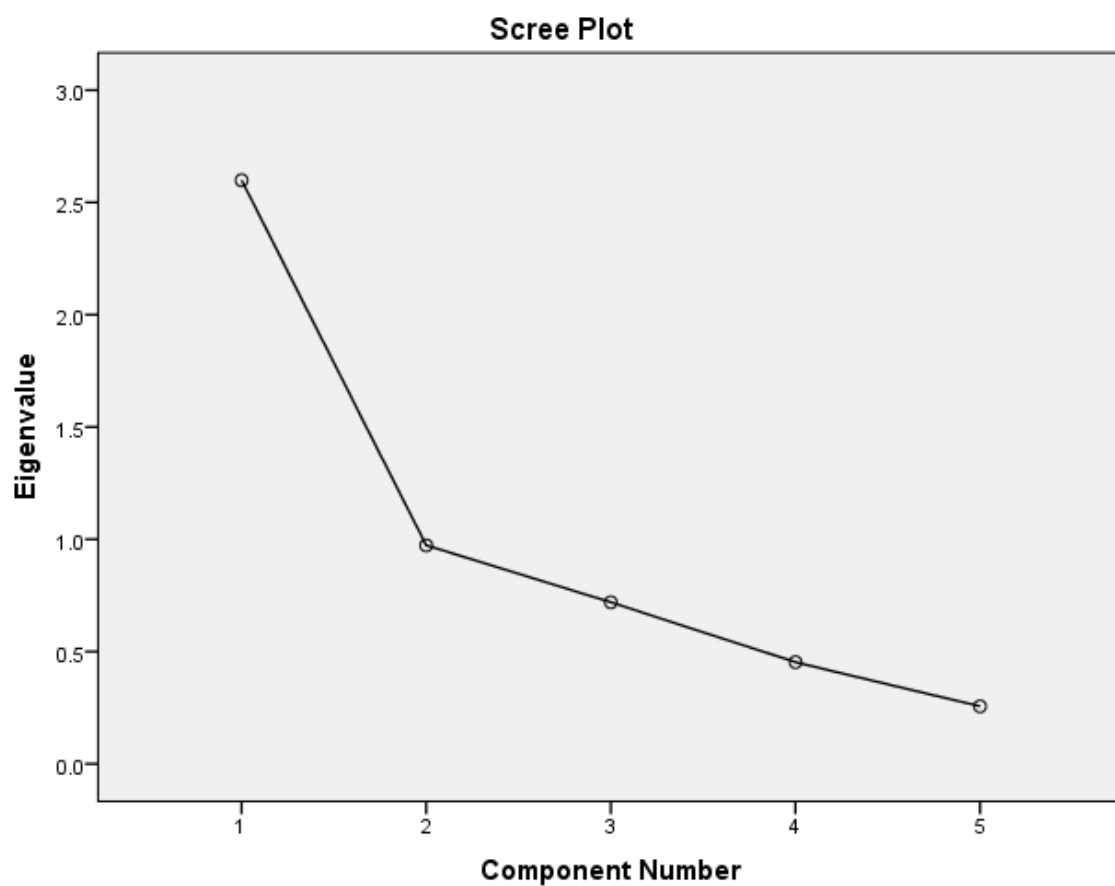
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.599	51.974	51.974	2.599	51.974
2	.973	19.458	71.432	.973	19.458
3	.720	14.390	85.823	.720	14.390
4	.453	9.057	94.879		
5	.256	5.121	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	51.974	2.078	41.552	41.552
2	71.432	1.134	22.687	64.238
3	85.823	1.079	21.584	85.823
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpudN	.629	.262	.713
PL_TSpudN	.464	.802	-.314
S_ud	.793	-.395	-.254
R_ud	.874	.029	-.197
SMSP_ud	.771	-.322	.092

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpudN	.201	.150	.954
PL_TSpudN	.083	.967	.122
S_ud	.920	.053	.022
R_ud	.766	.415	.210
SMSP_ud	.772	-.035	.332

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.831	.354	.428
2	-.484	.840	.245
3	-.273	-.411	.870

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.



## Reliability

### Notes

Output Created		26-MAR-2015 16:52:37
Comments		
Input	Active Dataset	DataSet17
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES= S_ud R_ud SMSP_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

	N	%
Cases Valid	91	100.0
Excluded <sup>a</sup>	0	.0
Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.473	3

### C.4.1.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:53:17
Comments		
Input	Active Dataset	DataSet17
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /MISSING LISTWISE /ANALYSIS GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.15

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

#### Correlation Matrix

		GD_ud	Tpaths_ud	TSpaths_ud	AvgPL_ud	AvgGL_ud
Correlation	GD_ud	1.000	.950	.139	.999	.810
	Tpaths_ud	.950	1.000	.399	.956	.787
	TSpaths_ud	.139	.399	1.000	.150	.300
	AvgPL_ud	.999	.956	.150	1.000	.815
	AvgGL_ud	.810	.787	.300	.815	1.000
Sig. (1-tailed)	GD_ud		.000	.095	.000	.000
	Tpaths_ud	.000		.000	.000	.000
	TSpaths_ud	.095	.000		.077	.002
	AvgPL_ud	.000	.000	.077		.000
	AvgGL_ud	.000	.000	.002	.000	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.575
Bartlett's Test of Sphericity	Approx. Chi-Square
	1022.145
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
GD_ud	1.000	.985
Tpaths_ud	1.000	.959
TSpaths_ud	1.000	.998
AvgPL_ud	1.000	.988
AvgGL_ud	1.000	.793

Extraction Method: Principal  
Component Analysis.

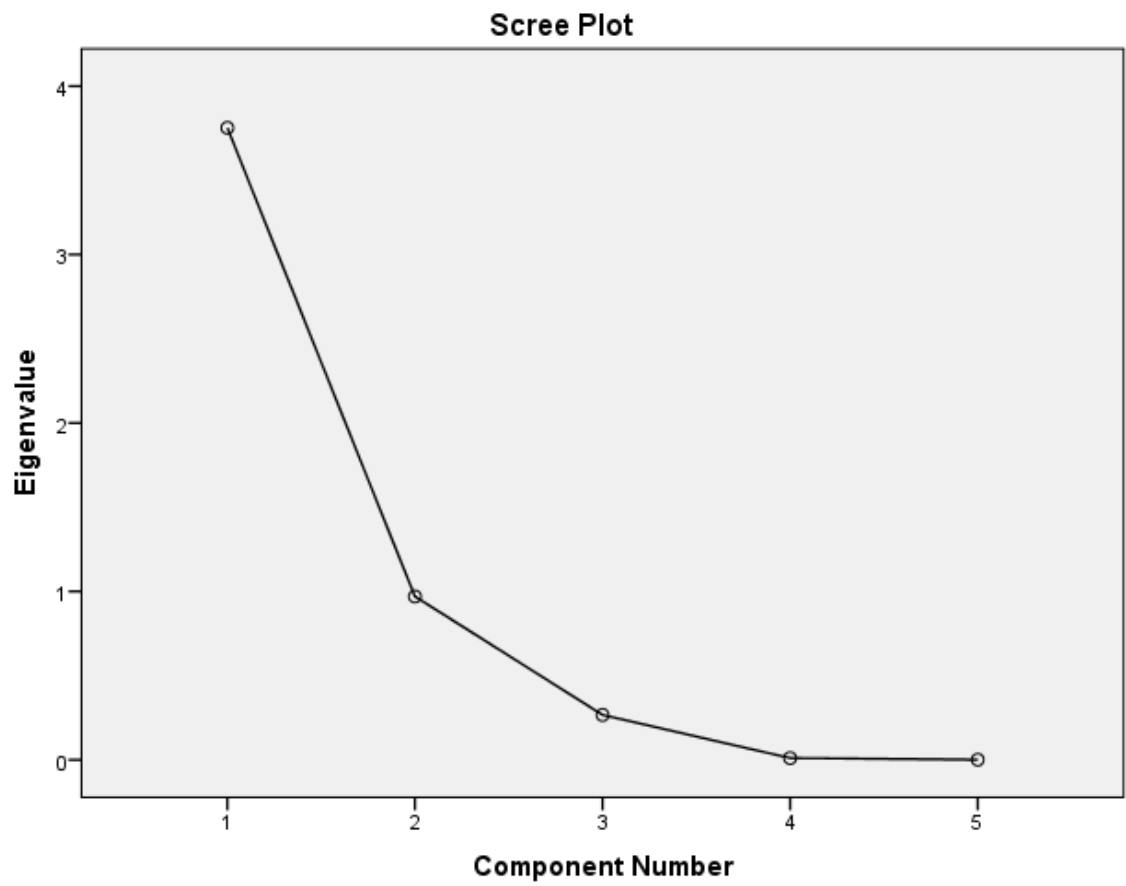
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.752	75.043	75.043	3.752	75.043
2	.970	19.394	94.436	.970	19.394
3	.267	5.334	99.770		
4	.011	.213	99.984		
5	.001	.016	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	75.043	3.608	72.155	72.155
2	94.436	1.114	22.281	94.436
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.970	-.210
Tpaths_ud	.977	.064
TSpaths_ud	.341	.939
AvgPL_ud	.974	-.199
AvgGL_ud	.890	.017

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.992	.016
Tpaths_ud	.937	.285
TSpaths_ud	.118	.992
AvgPL_ud	.993	.028
AvgGL_ud	.863	.219

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.974	.228
2	-.228	.974

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 16:53:34
Comments		
Input	Active Dataset	DataSet17
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_ud Tpaths_ud AvgPL_ud AvgGL_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.965	4

### C.4.1.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:54:17
Comments		
Input	Active Dataset	DataSet17
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /MISSING LISTWISE /ANALYSIS ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.14
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECud	PL_EVCudN	EVCud_TpudN	EVCud_TSpudN
Correlation	ECud	1.000	-.203	-.147	-.032
	PL_EVCudN	-.203	1.000	.118	.146
	EVCud_TpudN	-.147	.118	1.000	-.060
	EVCud_TSpudN	-.032	.146	-.060	1.000
Sig. (1-tailed)	ECud		.027	.083	.380
	PL_EVCudN	.027		.134	.083
	EVCud_TpudN	.083	.134		.287
	EVCud_TSpudN	.380	.083	.287	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.534
Bartlett's Test of Sphericity Approx. Chi-Square	8.790
df	6
Sig.	.186

### Communalities

	Initial	Extraction
ECud	1.000	.847
PL_EVCudN	1.000	.575
EVCud_TpudN	1.000	.969
EVCud_TSpudN	1.000	.850

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.335	33.364	33.364	1.335	33.364
2	1.078	26.939	60.303	1.078	26.939
3	.828	20.708	81.011	.828	20.708
4	.760	18.989	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	33.364	1.139	28.484	28.484
2	60.303	1.082	27.061	55.545
3	81.011	1.019	25.466	81.011
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	-.688	.160	.590
PL_EVCudN	.723	.229	.003
EVCud_TpudN	.504	-.582	.614
EVCud_TSpudN	.292	.813	.322

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	.917	.082	-.012
PL_EVCudN	-.541	.484	.218
EVCud_TpudN	-.069	-.039	.981
EVCud_TSpudN	.047	.916	-.091

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	-.781	.406	.475
2	.094	.828	-.553
3	.617	.388	.685

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## C.4.2 Directed Network

### C.4.2.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:39:55
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

#### Correlation Matrix

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.999	-.072	-.430	-.009
	Edges_d	.999	1.000	-.058	-.437	.004
	Reciprocity	-.072	-.058	1.000	.011	.487
	Den_d	-.430	-.437	.011	1.000	.047
	CC_d	-.009	.004	.487	.047	1.000
Sig. (1-tailed)	Nodes		.000	.248	.000	.466
	Edges_d	.000		.293	.000	.487
	Reciprocity	.248	.293		.457	.000
	Den_d	.000	.000	.457		.330
	CC_d	.466	.487	.000	.330	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.532
Bartlett's Test of Sphericity	Approx. Chi-Square
	611.680
	df
	10
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.996
Edges_d	1.000	.996
Reciprocity	1.000	.763
Den_d	1.000	.980
CC_d	1.000	.763

Extraction Method: Principal  
Component Analysis.



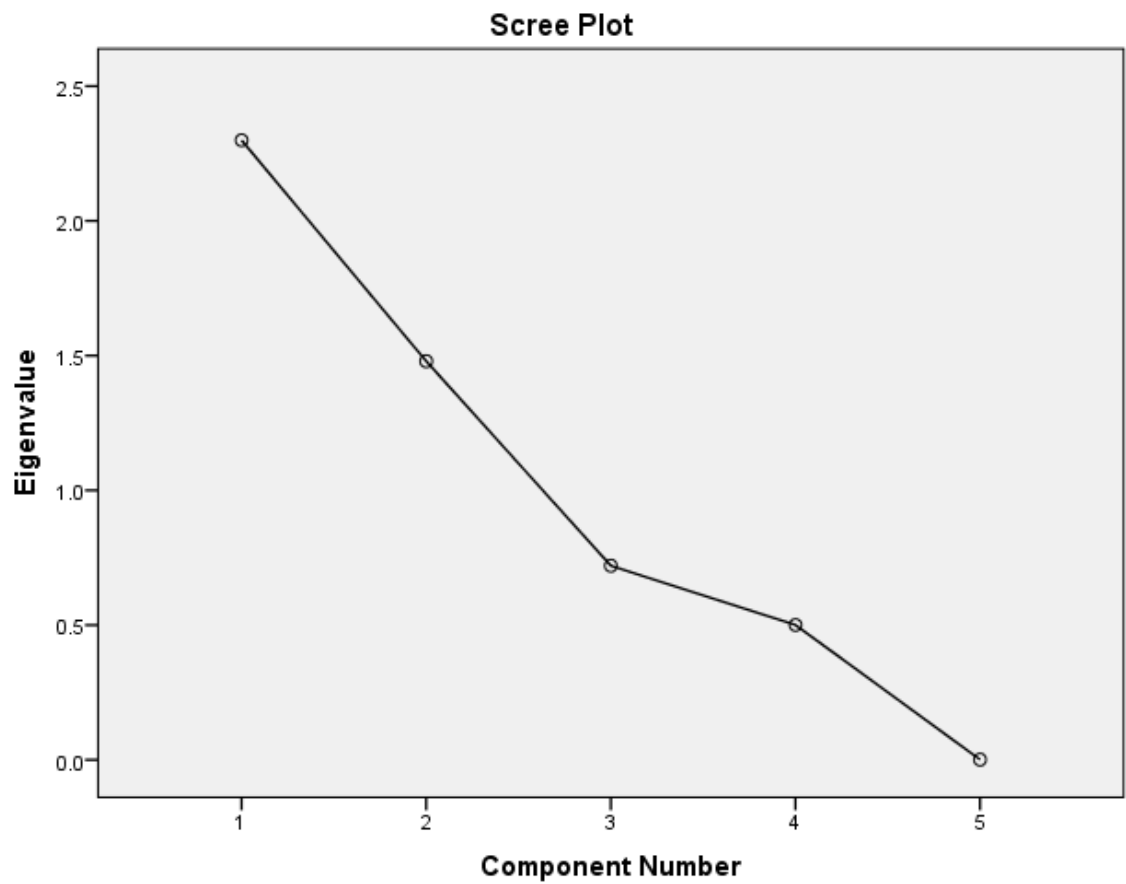
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.299	45.984	45.984	2.299	45.984
2	1.479	29.585	75.569	1.479	29.585
3	.720	14.408	89.976	.720	14.408
4	.500	10.009	99.985		
5	.001	.015	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	45.984	2.008	40.153	40.153
2	75.569	1.487	29.740	69.892
3	89.976	1.004	20.084	89.976
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.963	.071	.250
Edges_d	.964	.087	.243
Reciprocity	-.131	.852	-.145
Den_d	-.647	-.039	.749
CC_d	-.076	.860	.132

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.981	-.026	-.184
Edges_d	.979	-.011	-.191
Reciprocity	-.100	.862	-.102
Den_d	-.269	.016	.953
CC_d	.068	.862	.125

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.901	-.098	-.423
2	.093	.995	-.031
3	.424	-.012	.905

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 16:40:06
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
	Missing Value Handling	Definition of Missing
Cases Used		User-defined missing values are treated as missing. Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.997	2

RELIABILITY

```
/VARIABLES=Reciprocity CC_d  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.342	2

### C.4.2.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:40:25
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpdN PL_TSpdN S_d R_d SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpdN PL_TSpdN S_d R_d SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpdN	PL_TSpdN	S_d	R_d	SMSP_d
Correlation	PL_TpdN	1.000	.702	.411	.655	.053
	PL_TSpdN	.702	1.000	.431	.622	.047
	S_d	.411	.431	1.000	.827	.412
	R_d	.655	.622	.827	1.000	.273
	SMSP_d	.053	.047	.412	.273	1.000
Sig. (1-tailed)	PL_TpdN		.000	.000	.000	.309
	PL_TSpdN	.000		.000	.000	.330
	S_d	.000	.000		.000	.000
	R_d	.000	.000	.000		.004
	SMSP_d	.309	.330	.000	.004	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.684
Bartlett's Test of Sphericity	Approx. Chi-Square
	245.615
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpdN	1.000	.789
PL_TSpdN	1.000	.779
S_d	1.000	.803
R_d	1.000	.871
SMSP_d	1.000	.819

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

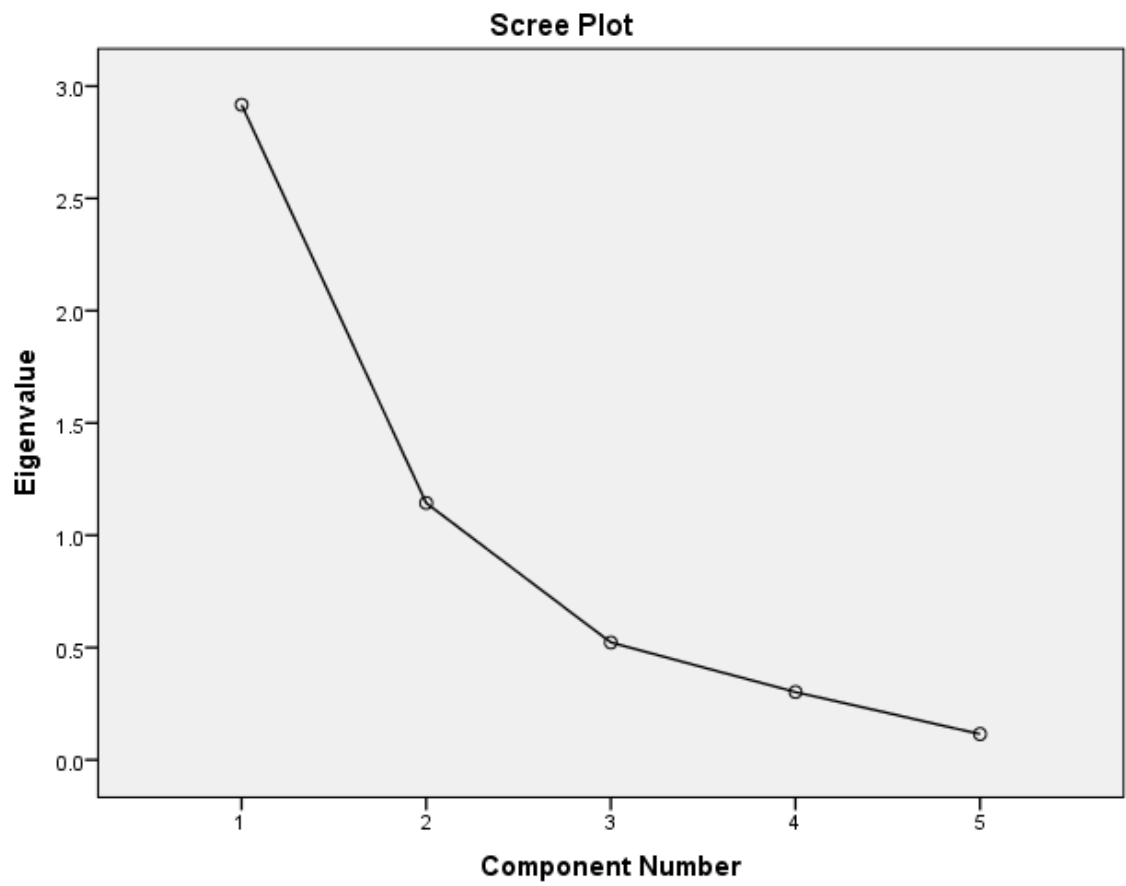
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.917	58.343	58.343	2.917	58.343
2	1.144	22.872	81.215	1.144	22.872
3	.523	10.455	91.670		
4	.302	6.035	97.705		
5	.115	2.295	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	58.343	2.531	50.614	50.614
2	81.215	1.530	30.600	81.215
3				
4				
5				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpdN	.793	-.400
PL_TSpdN	.786	-.400
S_d	.824	.353
R_d	.932	.053
SMSP_d	.351	.834

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpdN	.888	.016
PL_TSpdN	.882	.013
S_d	.564	.696
R_d	.799	.481
SMSP_d	-.079	.902

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.884	.467
2	-.467	.884

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 16:40:42
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_TpdN PL_TSpdN S_d R_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

	N	%
Cases Valid	91	100.0
Excluded <sup>a</sup>	0	.0
Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.704	4

RELIABILITY

```
/VARIABLES=S_d SMSP_d  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.094	2

### C.4.2.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:41:01
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.14
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.666	.488	.846	.790
	Tpaths_d	.666	1.000	.926	.809	.834
	TSpaths_d	.488	.926	1.000	.565	.708
	AvgPL_d	.846	.809	.565	1.000	.900
	AvgGL_d	.790	.834	.708	.900	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.576
Bartlett's Test of Sphericity	Approx. Chi-Square
	702.450
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_d	1.000	.714
Tpaths_d	1.000	.892
TSpaths_d	1.000	.671
AvgPL_d	1.000	.852
AvgGL_d	1.000	.897

Extraction Method: Principal  
Component Analysis.

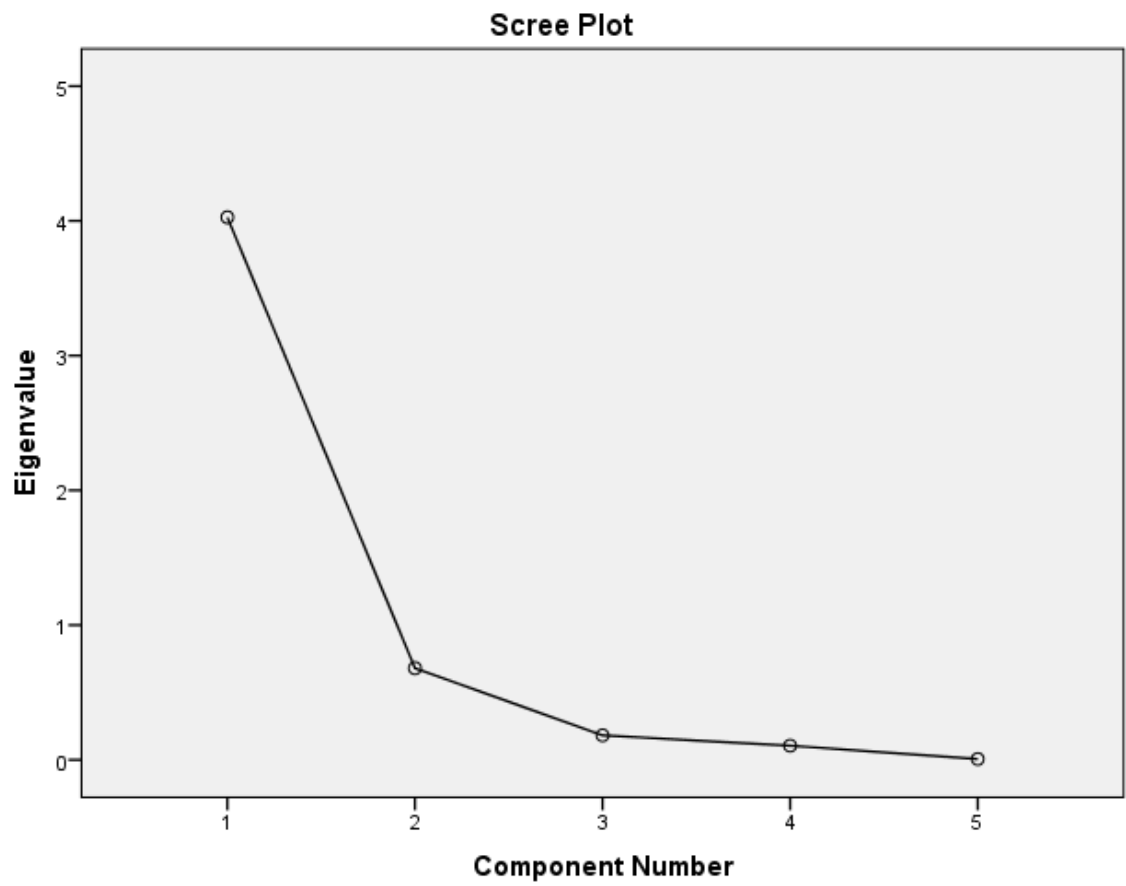
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.027	80.530	80.530	4.027	80.530
2	.680	13.606	94.136		
3	.182	3.638	97.774		
4	.105	2.101	99.875		
5	.006	.125	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	80.530
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.845
Tpaths_d	.945
TSpaths_d	.819
AvgPL_d	.923
AvgGL_d	.947

Extraction Method: Principal  
Component Analysis.<sup>a</sup>

a. 1 components extracted.



**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

Notes		
Output Created		26-MAR-2015 16:41:21
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.875	5

### C.4.2.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:41:56
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Missing Value Handling	
	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /MISSING LISTWISE /ANALYSIS ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECd	PL_EVCdN	EVCd_TpdN	EVCd_TSpdN
Correlation	ECd	1.000	-.400	.056	.099
	PL_EVCdN	-.400	1.000	-.259	-.329
	EVCd_TpdN	.056	-.259	1.000	.968
	EVCd_TSpdN	.099	-.329	.968	1.000
Sig. (1-tailed)	ECd		.000	.298	.175
	PL_EVCdN	.000		.007	.001
	EVCd_TpdN	.298	.007		.000
	EVCd_TSpdN	.175	.001	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.517
Bartlett's Test of Sphericity Approx. Chi-Square	275.247
df	6
Sig.	.000

### Communalities

	Initial	Extraction
ECd	1.000	.768
PL_EVCdN	1.000	.686
EVCd_TpdN	1.000	.974
EVCd_TSpdN	1.000	.980

Extraction Method: Principal Component Analysis.

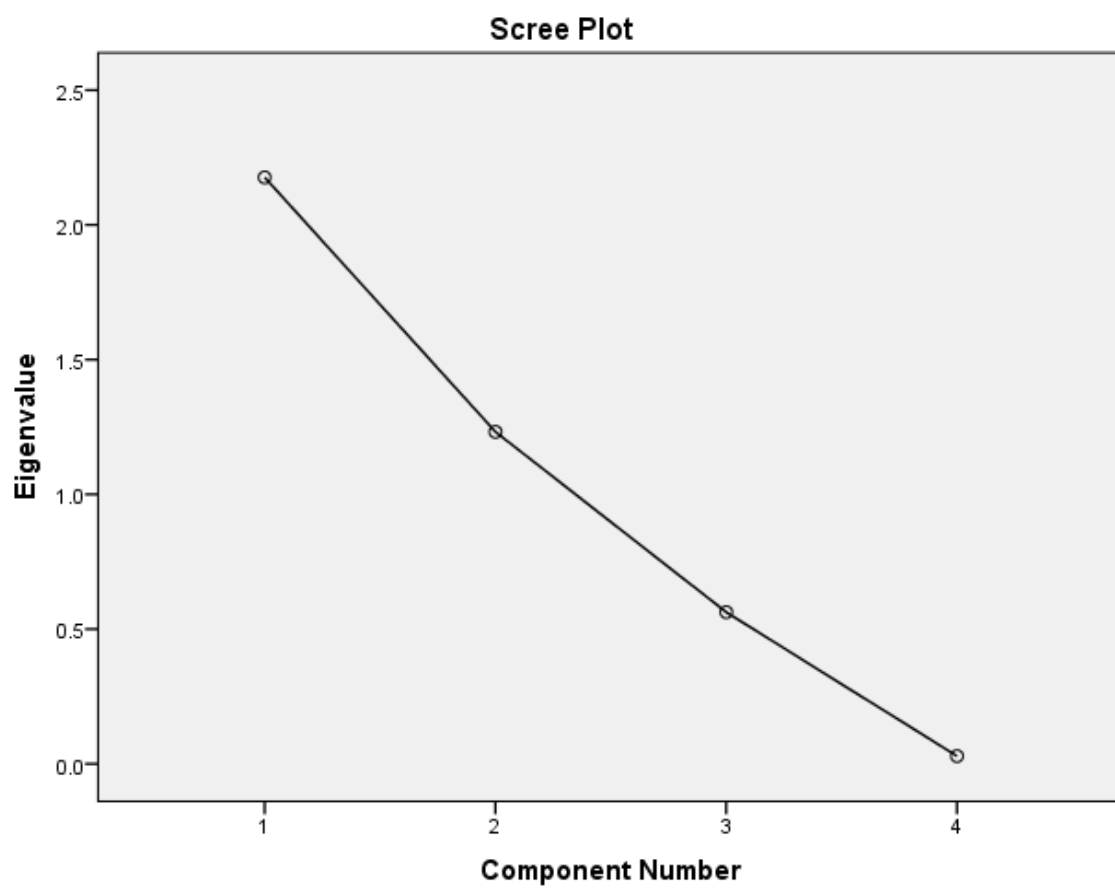
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.176	54.406	54.406	2.176	54.406
2	1.232	30.801	85.206	1.232	30.801
3	.563	14.072	99.279		
4	.029	.721	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	54.406	2.007	50.172	50.172
2	85.206	1.401	35.034	85.206
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	.320	-.816
PL_EVCdN	-.576	.596
EVCd_TpdN	.921	.356
EVCd_TSpdN	.946	.292

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	-.056	.874
PL_EVCdN	-.269	-.783
EVCd_TpdN	.985	.068
EVCd_TSpdN	.981	.136

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.906	.423
2	.423	-.906

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



## Reliability

### Notes

Output Created	26-MAR-2015 16:42:15	
Comments		
Input	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.984	2

## C.4.3 Consumption Network

### C.4.3.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:33:26
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

**Correlation Matrix**

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.999	-.072	-.430	-.009
	Edges_d	.999	1.000	-.058	-.437	.004
	Reciprocity	-.072	-.058	1.000	.011	.487
	Den_d	-.430	-.437	.011	1.000	.047
	CC_d	-.009	.004	.487	.047	1.000
Sig. (1-tailed)	Nodes		.000	.248	.000	.466
	Edges_d	.000		.293	.000	.487
	Reciprocity	.248	.293		.457	.000
	Den_d	.000	.000	.457		.330
	CC_d	.466	.487	.000	.330	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.532
Bartlett's Test of Sphericity	Approx. Chi-Square
	611.680
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
Nodes	1.000	.996
Edges_d	1.000	.996
Reciprocity	1.000	.763
Den_d	1.000	.980
CC_d	1.000	.763

Extraction Method: Principal  
Component Analysis.

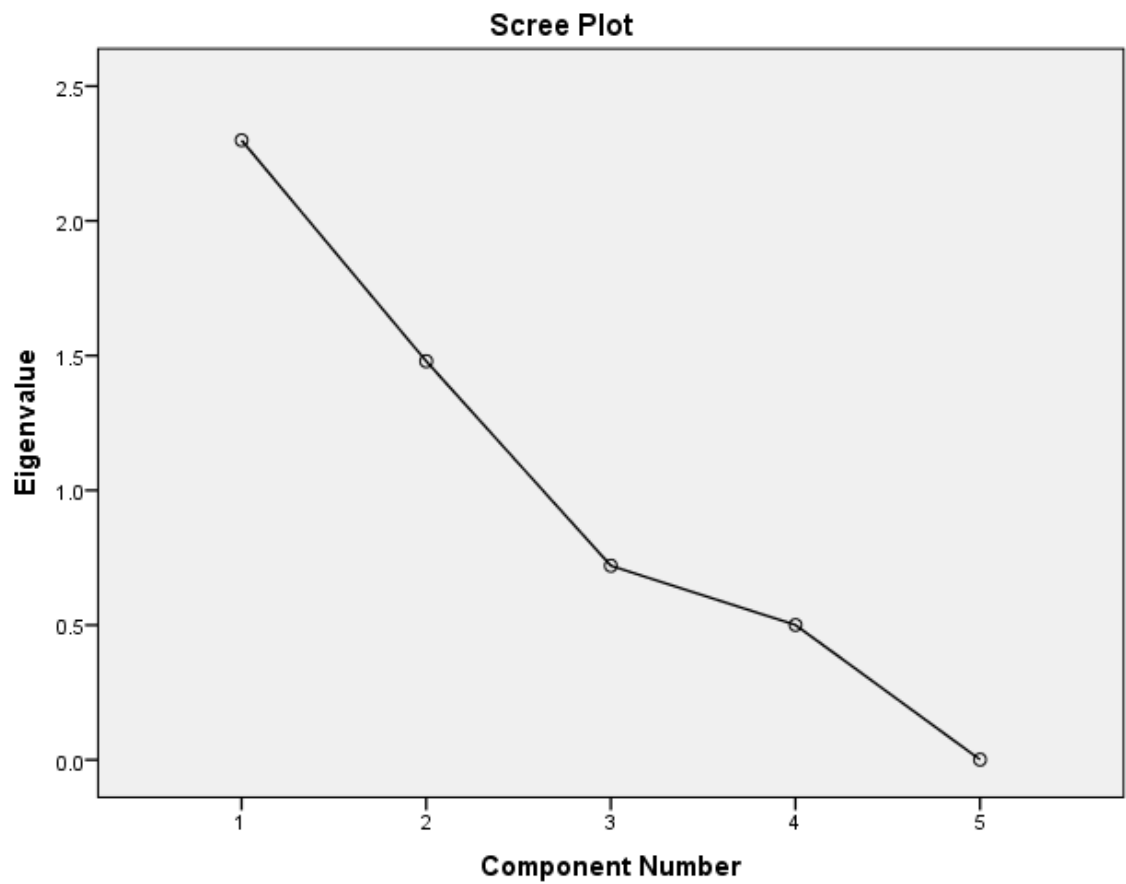
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.299	45.984	45.984	2.299	45.984
2	1.479	29.585	75.569	1.479	29.585
3	.720	14.408	89.976	.720	14.408
4	.500	10.009	99.985		
5	.001	.015	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	45.984	2.008	40.153	40.153
2	75.569	1.487	29.740	69.892
3	89.976	1.004	20.084	89.976
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.963	.071	.250
Edges_d	.964	.087	.243
Reciprocity	-.131	.852	-.145
Den_d	-.647	-.039	.749
CC_d	-.076	.860	.132

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.981	-.026	-.184
Edges_d	.979	-.011	-.191
Reciprocity	-.100	.862	-.102
Den_d	-.269	.016	.953
CC_d	.068	.862	.125

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.901	-.098	-.423
2	.093	.995	-.031
3	.424	-.012	.905

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:33:42	
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



### Reliability Statistics

Cronbach's Alpha	N of Items
.997	2

RELIABILITY

```
/VARIABLES=Reciprocity CC_d  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.342	2

### C.4.3.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:34:22
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpinN PL_TSpinN S_con R_con SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpinN PL_TSpinN S_con R_con SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		PL_TpinN	PL_TSpinN	S_con	R_con	SMSP_d
Correlation	PL_TpinN	1.000	.779	.082	.177	.057
	PL_TSpinN	.779	1.000	.094	.185	.076
	S_con	.082	.094	1.000	.988	-.028
	R_con	.177	.185	.988	1.000	.006
	SMSP_d	.057	.076	-.028	.006	1.000
Sig. (1-tailed)	PL_TpinN		.000	.219	.047	.297
	PL_TSpinN	.000		.187	.040	.237
	S_con	.219	.187		.000	.396
	R_con	.047	.040	.000		.476
	SMSP_d	.297	.237	.396	.476	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.478
Bartlett's Test of Sphericity    Approx. Chi-Square	467.325
df	10
Sig.	.000

**Communalities**

	Initial	Extraction
PL_TpinN	1.000	.890
PL_TSpinN	1.000	.889
S_con	1.000	.997
R_con	1.000	.997
SMSP_d	1.000	1.000

Extraction Method: Principal  
Component Analysis.

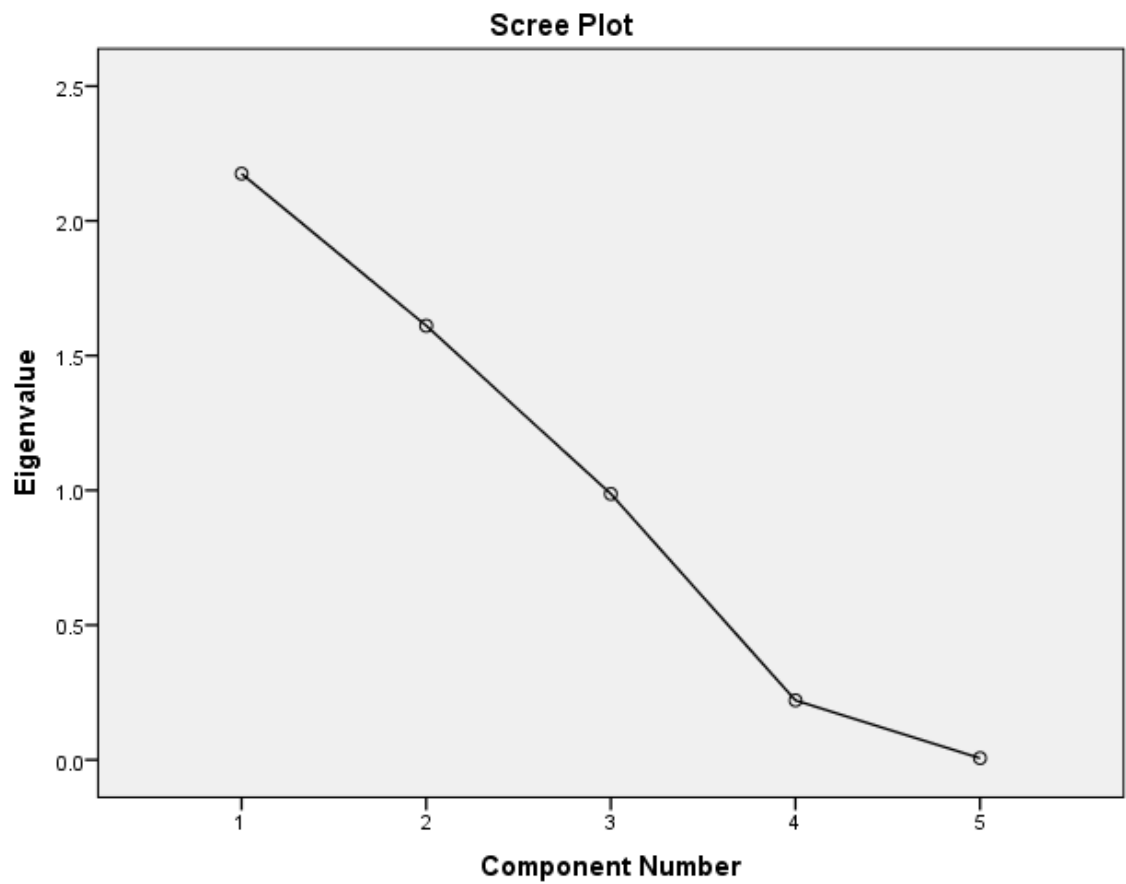
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.175	43.503	43.503	2.175	43.503
2	1.611	32.219	75.722	1.611	32.219
3	.987	19.737	95.459	.987	19.737
4	.221	4.415	99.874		
5	.006	.126	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	43.503	1.987	39.743	39.743
2	75.722	1.785	35.702	75.444
3	95.459	1.001	20.015	95.459
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	.591	.728	-.108
PL_TSpinN	.600	.723	-.083
S_con	.829	-.556	.028
R_con	.881	-.468	.044
SMSP_d	.052	.178	.983

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpinN	.061	.941	.017
PL_TSpinN	.073	.939	.041
S_con	.998	.023	-.021
R_con	.991	.121	.010
SMSP_d	-.008	.040	.999

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.818	.574	.036
2	-.572	.808	.141
3	.052	-.136	.989

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:34:39	
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES= S_con R_con /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.417	2

RELIABILITY

```
/VARIABLES=PL_TpinN PL_TSpinN  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.875	2



### C.4.3.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:35:01
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

**Correlation Matrix**

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.666	.488	.846	.790
	Tpaths_d	.666	1.000	.926	.809	.834
	TSpaths_d	.488	.926	1.000	.565	.708
	AvgPL_d	.846	.809	.565	1.000	.900
	AvgGL_d	.790	.834	.708	.900	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.576
Bartlett's Test of Sphericity		Approx. Chi-Square
df		10
Sig.		.000

**Communalities**

	Initial	Extraction
GD_d	1.000	.714
Tpaths_d	1.000	.892
TSpaths_d	1.000	.671
AvgPL_d	1.000	.852
AvgGL_d	1.000	.897

Extraction Method: Principal  
Component Analysis.

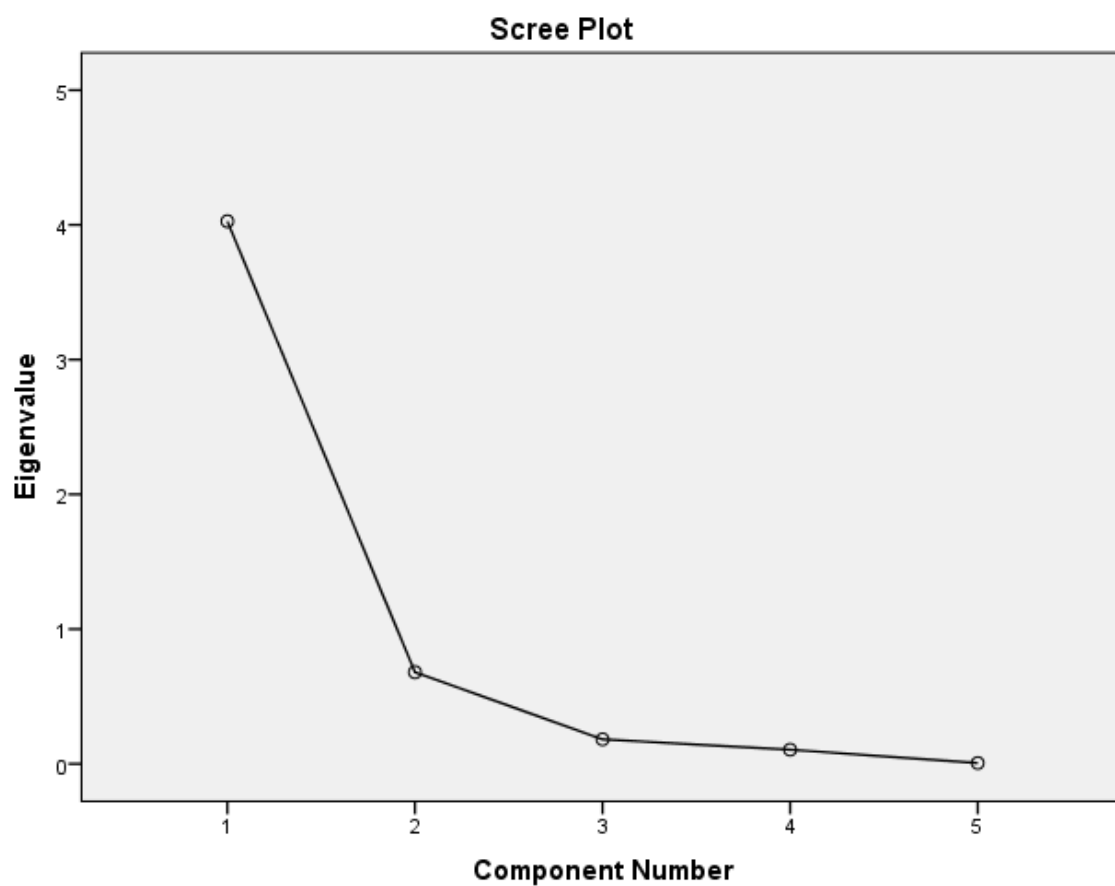
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.027	80.530	80.530	4.027	80.530
2	.680	13.606	94.136		
3	.182	3.638	97.774		
4	.105	2.101	99.875		
5	.006	.125	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	80.530
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.845
Tpaths_d	.945
TSpaths_d	.819
AvgPL_d	.923
AvgGL_d	.947

Extraction Method: Principal  
Component Analysis.<sup>a</sup>

a. 1 components extracted.

**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created	26-MAR-2015 16:35:18	
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.875	5

### C.4.3.4 Dependent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:35:32
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /MISSING LISTWISE /ANALYSIS ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	3008 (2.938K) bytes



**Correlation Matrix**

		ECin	PL_EVCinN	EVCin_TpinN	EVCin_TSpinN
Correlation	ECin	1.000	-.390	.270	.325
	PL_EVCinN	-.390	1.000	.065	.019
	EVCin_TpinN	.270	.065	1.000	.982
	EVCin_TSpinN	.325	.019	.982	1.000
Sig. (1-tailed)	ECin		.000	.005	.001
	PL_EVCinN	.000		.270	.430
	EVCin_TpinN	.005	.270		.000
	EVCin_TSpinN	.001	.430	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.511
Bartlett's Test of Sphericity Approx. Chi-Square	326.579
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
ECin	1.000	.716
PL_EVCinN	1.000	.787
EVCin_TpinN	1.000	.975
EVCin_TSpinN	1.000	.979

Extraction Method: Principal Component Analysis.

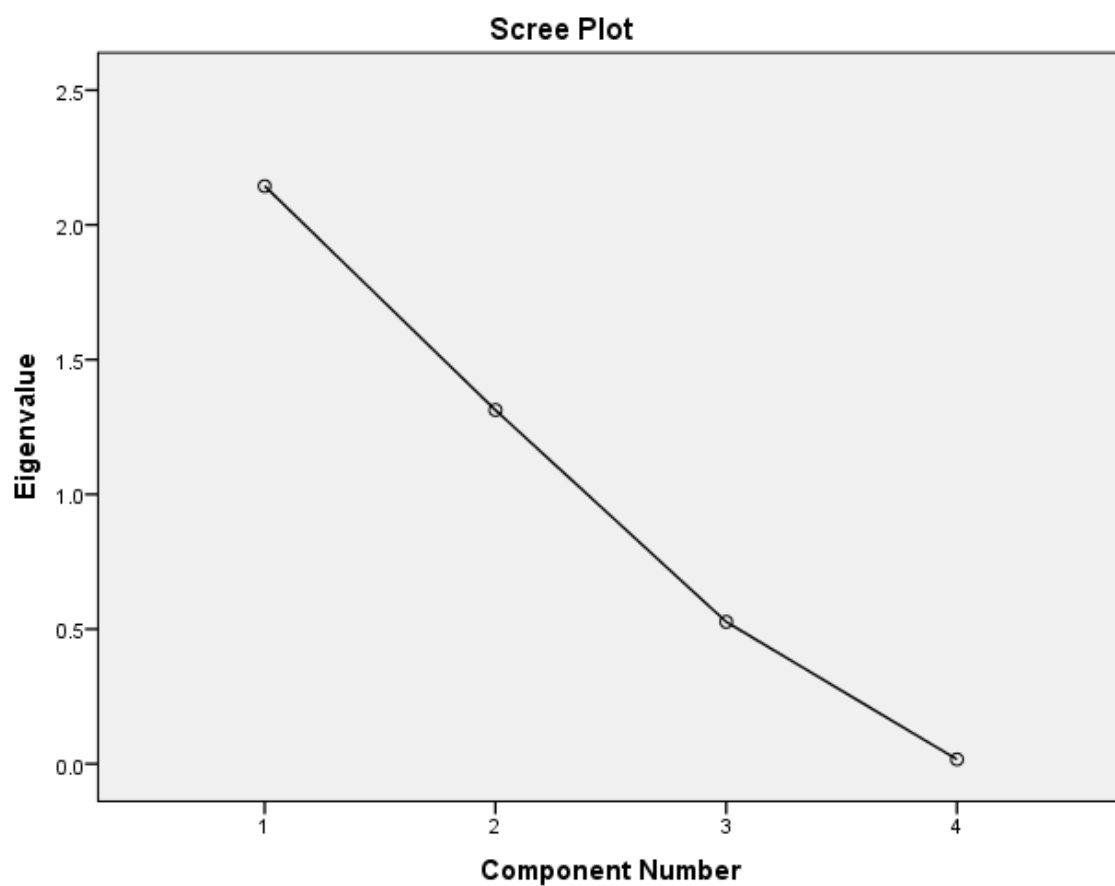
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.144	53.598	53.598	2.144	53.598
2	1.313	32.822	86.420	1.313	32.822
3	.527	13.171	99.591		
4	.016	.409	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	53.598	2.071	51.783	51.783
2	86.420	1.385	34.636	86.420
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	.539	-.653
PL_EVCinN	-.114	.880
EVCin_TpinN	.951	.265
EVCin_TSpinN	.968	.206

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	.322	.783
PL_EVCinN	.151	-.874
EVCin_TpinN	.987	.028
EVCin_TSpinN	.985	.089

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.955	.296
2	.296	-.955

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 16:35:50
Comments		
Input	Active Dataset	DataSet14
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=ECin EVCin_TpinN EVCin_TSpinN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.792	3

## C.4.4 Propagation Network

### C.4.4.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:45:49
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d CC_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d CC_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.17

Maximum Memory Required	4248 (4.148K) bytes
----------------------------	---------------------

**Correlation Matrix**

		Nodes	Edges_d	Reciprocity	Den_d	CC_d
Correlation	Nodes	1.000	.999	-.072	-.430	-.009
	Edges_d	.999	1.000	-.058	-.437	.004
	Reciprocity	-.072	-.058	1.000	.011	.487
	Den_d	-.430	-.437	.011	1.000	.047
	CC_d	-.009	.004	.487	.047	1.000
Sig. (1-tailed)	Nodes		.000	.248	.000	.466
	Edges_d	.000		.293	.000	.487
	Reciprocity	.248	.293		.457	.000
	Den_d	.000	.000	.457		.330
	CC_d	.466	.487	.000	.330	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.532
Bartlett's Test of Sphericity	Approx. Chi-Square
	611.680
	df
	10
	Sig.
	.000

**Communalities**

	Initial	Extraction
Nodes	1.000	.996
Edges_d	1.000	.996
Reciprocity	1.000	.763
Den_d	1.000	.980
CC_d	1.000	.763

Extraction Method: Principal  
Component Analysis.



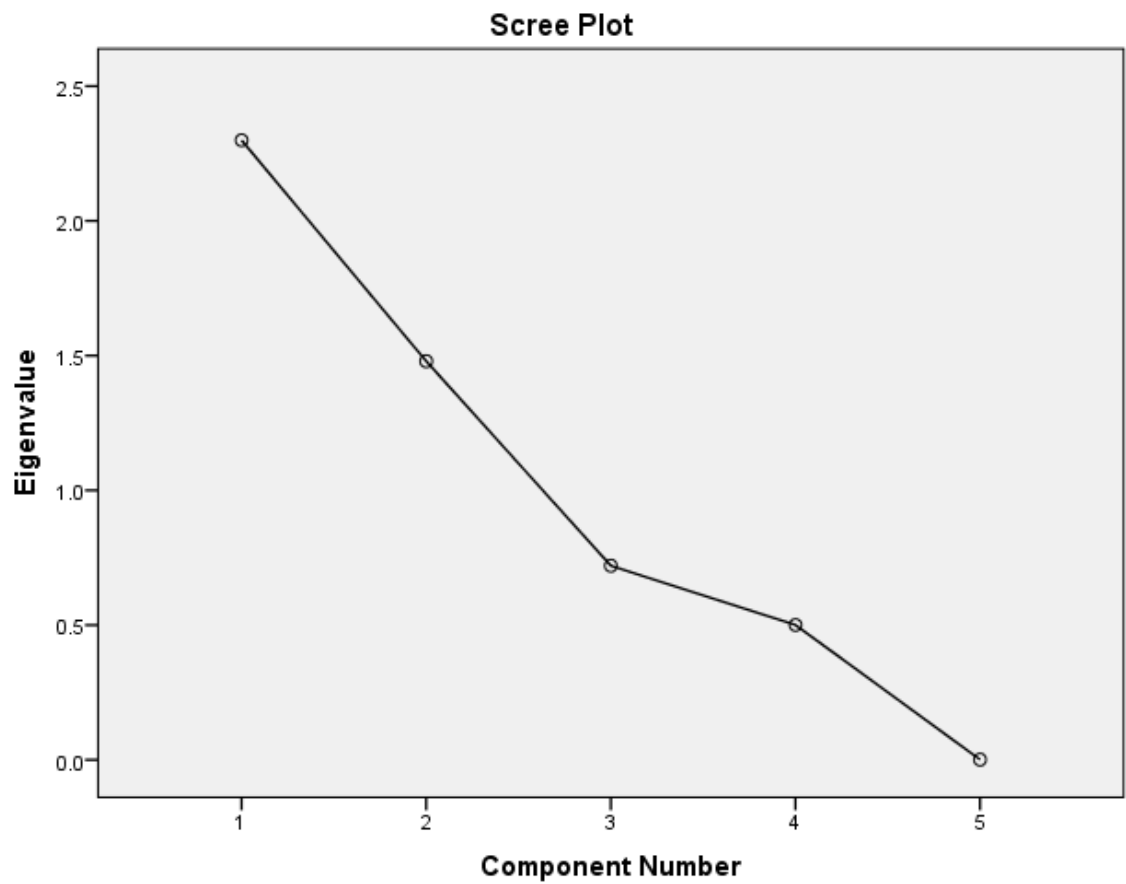
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.299	45.984	45.984	2.299	45.984
2	1.479	29.585	75.569	1.479	29.585
3	.720	14.408	89.976	.720	14.408
4	.500	10.009	99.985		
5	.001	.015	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	45.984	2.008	40.153	40.153
2	75.569	1.487	29.740	69.892
3	89.976	1.004	20.084	89.976
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.963	.071	.250
Edges_d	.964	.087	.243
Reciprocity	-.131	.852	-.145
Den_d	-.647	-.039	.749
CC_d	-.076	.860	.132

Extraction Method: Principal Component

Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Nodes	.981	-.026	-.184
Edges_d	.979	-.011	-.191
Reciprocity	-.100	.862	-.102
Den_d	-.269	.016	.953
CC_d	.068	.862	.125

Extraction Method: Principal Component

Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.901	-.098	-.423
2	.093	.995	-.031
3	.424	-.012	.905

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:46:00	
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.997	2

RELIABILITY

```
/VARIABLES=Reciprocity CC_d  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.342	2

### C.4.4.2 Network Structure Variables (MV1)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:46:40
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /MISSING LISTWISE /ANALYSIS PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.13
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpoutN	PL_TSpoutN	S_pro	R_pro	SMSP_d
Correlation	PL_TpoutN	1.000	.686	.168	.422	-.032
	PL_TSpoutN	.686	1.000	.175	.434	-.015
	S_pro	.168	.175	1.000	.784	.307
	R_pro	.422	.434	.784	1.000	.267
	SMSP_d	-.032	-.015	.307	.267	1.000
Sig. (1-tailed)	PL_TpoutN		.000	.056	.000	.380
	PL_TSpoutN	.000		.049	.000	.443
	S_pro	.056	.049		.000	.002
	R_pro	.000	.000	.000		.005
	SMSP_d	.380	.443	.002	.005	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.597
Bartlett's Test of Sphericity	Approx. Chi-Square
	180.514
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
PL_TpoutN	1.000	.839
PL_TSpoutN	1.000	.841
S_pro	1.000	.933
R_pro	1.000	.908
SMSP_d	1.000	1.000

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

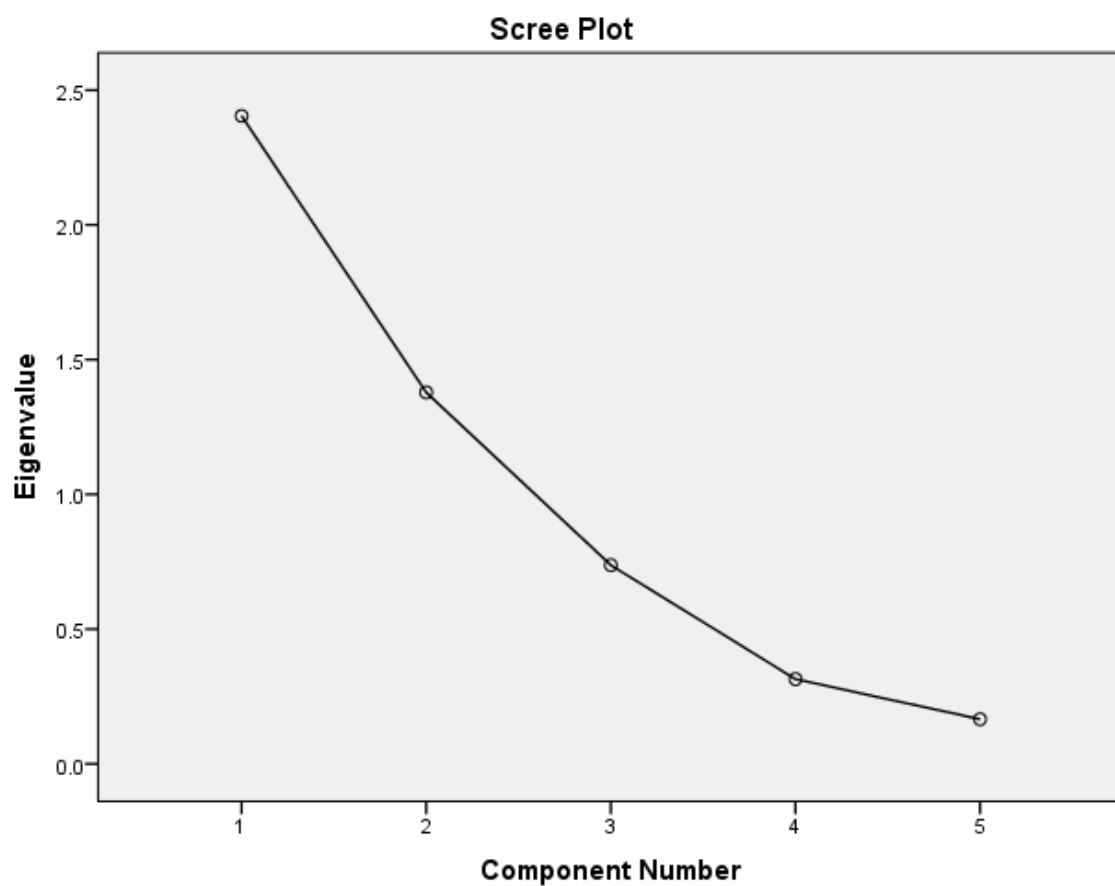
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.405	48.091	48.091	2.405	48.091
2	1.378	27.567	75.658	1.378	27.567
3	.737	14.747	90.405	.737	14.747
4	.314	6.287	96.692		
5	.165	3.308	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	48.091	1.767	35.334	35.334
2	75.658	1.748	34.967	70.301
3	90.405	1.005	20.104	90.405
4				
5				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpoutN	.692	-.573	.180
PL_TSpoutN	.702	-.556	.196
S_pro	.735	.509	-.364
R_pro	.893	.238	-.232
SMSP_d	.307	.652	.693

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
PL_TpoutN	.905	.139	-.032
PL_TSpoutN	.905	.146	-.008
S_pro	.026	.955	.141
R_pro	.357	.874	.128
SMSP_d	-.033	.176	.984

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.661	.722	.205
2	-.686	.470	.556
3	.305	-.508	.806

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:47:00	
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_TpoutN PL_TSpoutN S_pro R_pro /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.527	4

RELIABILITY

```
/VARIABLES=S_pro SMSP_d  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.250	2

### C.4.4.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:47:22
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.666	.488	.846	.790
	Tpaths_d	.666	1.000	.926	.809	.834
	TSpaths_d	.488	.926	1.000	.565	.708
	AvgPL_d	.846	.809	.565	1.000	.900
	AvgGL_d	.790	.834	.708	.900	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.576
Bartlett's Test of Sphericity	Approx. Chi-Square
	702.450
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_d	1.000	.714
Tpaths_d	1.000	.892
TSpaths_d	1.000	.671
AvgPL_d	1.000	.852
AvgGL_d	1.000	.897

Extraction Method: Principal  
Component Analysis.

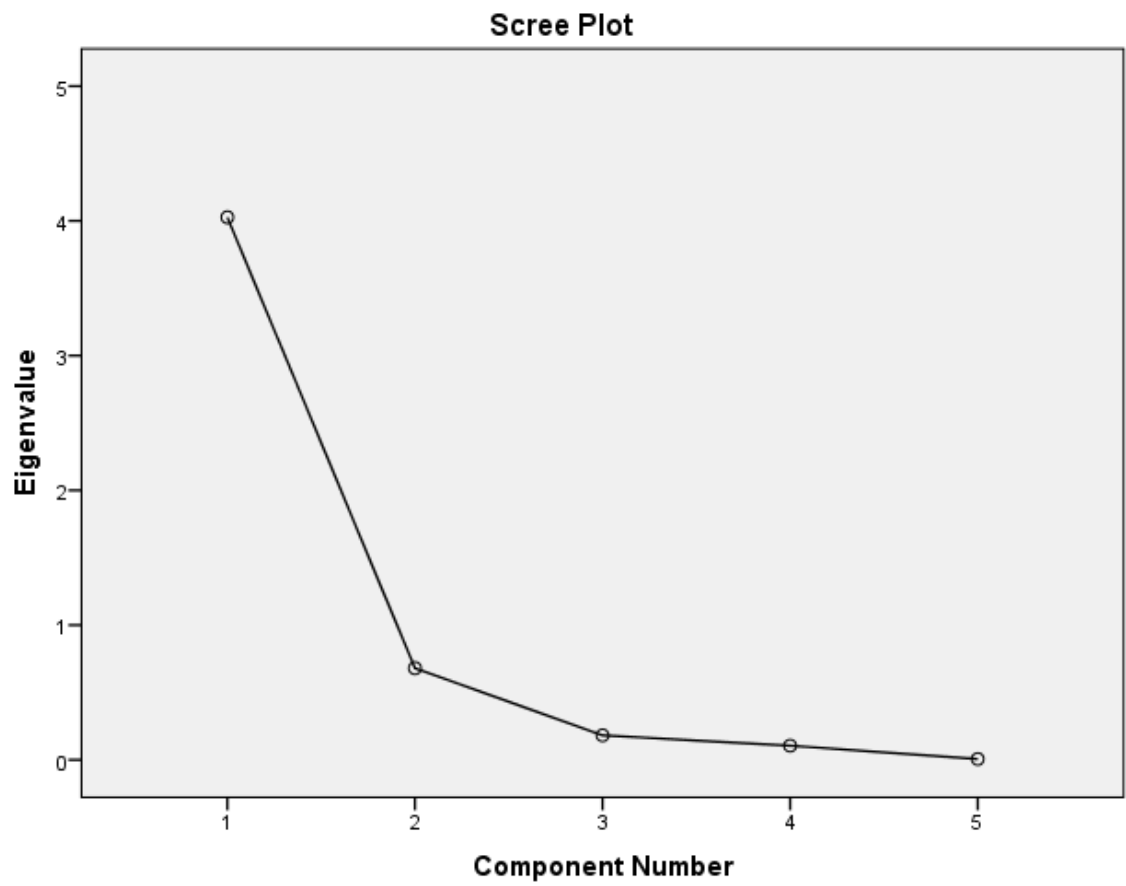
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.027	80.530	80.530	4.027	80.530
2	.680	13.606	94.136		
3	.182	3.638	97.774		
4	.105	2.101	99.875		
5	.006	.125	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	80.530
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.845
Tpaths_d	.945
TSpaths_d	.819
AvgPL_d	.923
AvgGL_d	.947

Extraction Method: Principal  
Component Analysis.<sup>a</sup>

a. 1 components extracted.



**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created	26-MAR-2015 16:47:42	
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.875	5

#### C.4.4.4 Dependent Variables

#### Factor Analysis

##### Notes

Output Created	26-MAR-2015 16:47:58	
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax	FACTOR /VARIABLES ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /MISSING LISTWISE /ANALYSIS ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.	
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECout	PL_EVCoutN	EVCout_Tpout N	EVCout_TSpou tN
Correlation	ECout	1.000	-.513	-.224	-.218
	PL_EVCoutN	-.513	1.000	.127	.123
	EVCout_TpoutN	-.224	.127	1.000	.971
	EVCout_TSpoutN	-.218	.123	.971	1.000
Sig. (1-tailed)	ECout		.000	.017	.019
	PL_EVCoutN	.000		.115	.122
	EVCout_TpoutN	.017	.115		.000
	EVCout_TSpoutN	.019	.122	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.528
Bartlett's Test of Sphericity    Approx. Chi-Square	281.556
df	6
Sig.	.000

### Communalities

	Initial	Extraction
ECout	1.000	.750
PL_EVCoutN	1.000	.772
EVCout_TpoutN	1.000	.984
EVCout_TSpoutN	1.000	.984

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.161	54.023	54.023	2.161	54.023
2	1.329	33.235	87.257	1.329	33.235
3	.480	12.008	99.266		
4	.029	.734	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	54.023	1.974	49.340	49.340
2	87.257	1.517	37.917	87.257
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.541	.676
PL_EVCoutN	.437	-.762
EVCout_TpoutN	.917	.379
EVCout_TSpoutN	.915	.384

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.156	-.852
PL_EVCoutN	.023	.878
EVCout_TpoutN	.987	.101
EVCout_TSpoutN	.987	.096

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.880	.475
2	.475	-.880

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.



## Reliability

### Notes

Output Created	26-MAR-2015 16:48:13	
Comments		
Input	Active Dataset	DataSet16
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.526	4

## C.5 Case 6—Sports

### C.5.1 Undirected Network

#### C.5.1.1 Independent Variables

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:18:06
Comments		
Input	Active Dataset	DataSet12
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_ud Den_ud CC_ud /MISSING LISTWISE /ANALYSIS Nodes Edges_ud Den_ud CC_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.

Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.20
	Maximum Memory	3008 (2.938K) bytes
	Required	

#### Correlation Matrix

		Nodes	Edges_ud	Den_ud	CC_ud
Correlation	Nodes	1.000	.965	-.920	-.084
	Edges_ud	.965	1.000	-.835	-.007
	Den_ud	-.920	-.835	1.000	.177
	CC_ud	-.084	-.007	.177	1.000
Sig. (1-tailed)	Nodes		.000	.000	.215
	Edges_ud	.000		.000	.475
	Den_ud	.000	.000		.046
	CC_ud	.215	.475	.046	

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.594
Bartlett's Test of Sphericity	Approx. Chi-Square
	436.907
	df
	6
	Sig.
	.000

#### Communalities

	Initial	Extraction
Nodes	1.000	.987
Edges_ud	1.000	.940
Den_ud	1.000	.908
CC_ud	1.000	.997

Extraction Method: Principal  
Component Analysis.

Total Variance Explained					
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.827	70.679	70.679	2.827	70.679
2	1.005	25.120	95.800	1.005	25.120
3	.152	3.800	99.600		
4	.016	.400	100.000		

Total Variance Explained				
Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.679	2.810	70.249	70.249
2	95.800	1.022	25.550	95.800
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.992	.060
Edges_ud	.959	.144
Den_ud	-.951	.060
CC_ud	-.141	.988

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.993	-.037
Edges_ud	.968	.050
Den_ud	-.941	.153
CC_ud	-.044	.997

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.995	-.097
2	.097	.995

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 16:18:17
Comments		
Input	Active Dataset	DataSet12
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.977	2

### C.5.1.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:19:02
Comments		
Input	Active Dataset	DataSet12
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /MISSING LISTWISE /ANALYSIS PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(4) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		PL_TpudN	PL_TSpudN	S_ud	R_ud	SMSP_ud
Correlation	PL_TpudN	1.000	-.065	.037	-.087	.002
	PL_TSpudN	-.065	1.000	-.169	.340	.117
	S_ud	.037	-.169	1.000	.239	.157
	R_ud	-.087	.340	.239	1.000	.178
	SMSP_ud	.002	.117	.157	.178	1.000
Sig. (1-tailed)	PL_TpudN		.269	.362	.205	.491
	PL_TSpudN	.269		.055	.000	.134
	S_ud	.362	.055		.011	.069
	R_ud	.205	.000	.011		.046
	SMSP_ud	.491	.134	.069	.046	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.437
Bartlett's Test of Sphericity	Approx. Chi-Square
	28.738
	df
	10
	Sig.
	.001

### Communalities

	Initial	Extraction
PL_TpudN	1.000	.998
PL_TSpudN	1.000	.830
S_ud	1.000	.872
R_ud	1.000	.814
SMSP_ud	1.000	.997

Extraction Method: Principal  
Component Analysis.

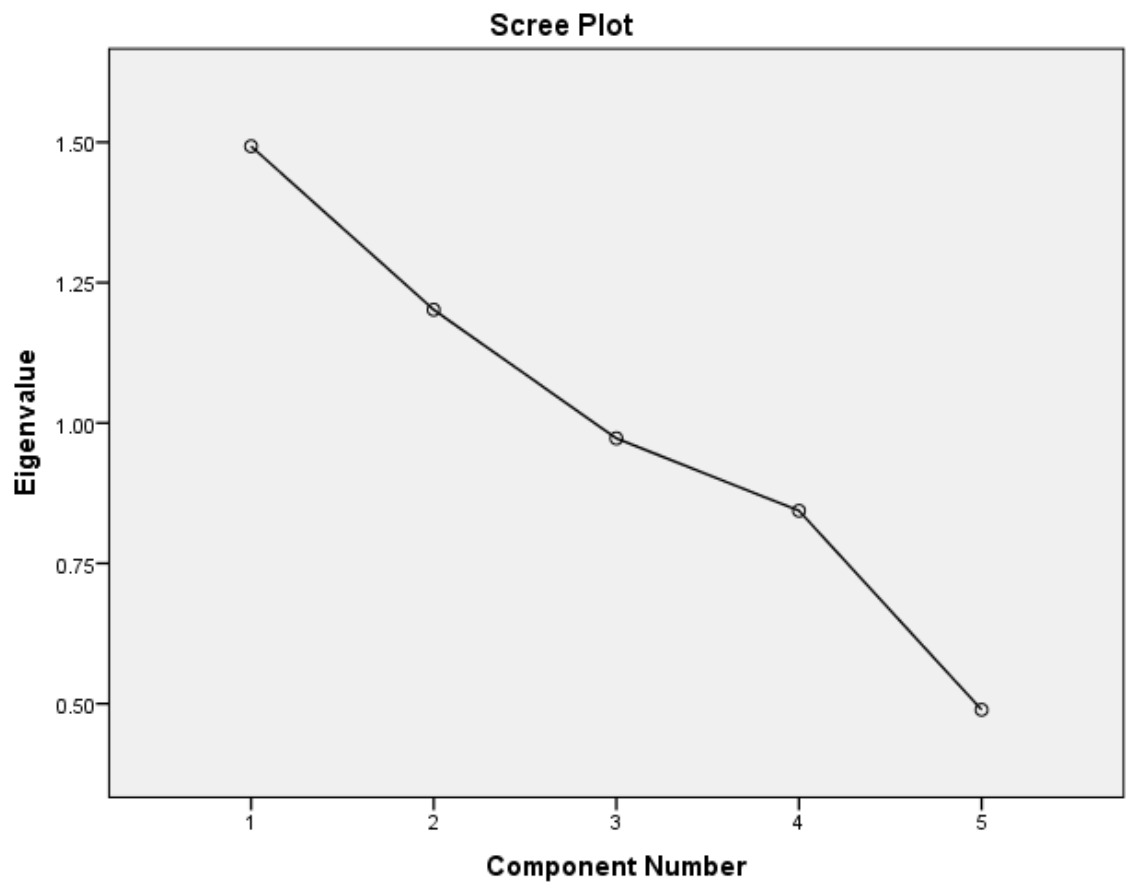
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.493	29.859	29.859	1.493	29.859
2	1.202	24.032	53.891	1.202	24.032
3	.973	19.452	73.344	.973	19.452
4	.844	16.874	90.217	.844	16.874
5	.489	9.783	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	29.859	1.332	26.632	26.632
2	53.891	1.175	23.502	50.134
3	73.344	1.003	20.068	70.202
4	90.217	1.001	20.016	90.217
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpudN	-.195	.346	.892	.208
PL_TSpudN	.601	-.611	.293	.104
S_ud	.351	.796	-.229	.249
R_ud	.818	.006	-.032	.380
SMSP_ud	.549	.274	.192	-.764

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 4 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PL_TpudN	-.044	.022	.998	.001
PL_TSpudN	.848	-.319	-.001	.094
S_ud	-.035	.927	.032	.096
R_ud	.775	.452	-.084	.045
SMSP_ud	.089	.091	.001	.990

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

**Component Transformation Matrix**

Component	1	2	3	4
1	.796	.368	-.169	.449
2	-.443	.806	.310	.241
3	.215	-.292	.910	.200
4	.351	.361	.217	-.836

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:19:21	
Comments		
Input	Active Dataset	DataSet12
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_TSpudN R_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.076	2



### C.5.1.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:20:04
Comments		
Input	Active Dataset	DataSet12
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /MISSING LISTWISE /ANALYSIS GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_ud	Tpaths_ud	TSpaths_ud	AvgPL_ud	AvgGL_ud
Correlation	GD_ud	1.000	.974	.463	.997	.679
	Tpaths_ud	.974	1.000	.583	.980	.660
	TSpaths_ud	.463	.583	1.000	.461	.622
	AvgPL_ud	.997	.980	.461	1.000	.682
	AvgGL_ud	.679	.660	.622	.682	1.000
Sig. (1-tailed)	GD_ud		.000	.000	.000	.000
	Tpaths_ud	.000		.000	.000	.000
	TSpaths_ud	.000	.000		.000	.000
	AvgPL_ud	.000	.000	.000		.000
	AvgGL_ud	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.450
Bartlett's Test of Sphericity	Approx. Chi-Square
	1035.487
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_ud	1.000	.994
Tpaths_ud	1.000	.968
TSpaths_ud	1.000	.919
AvgPL_ud	1.000	.999
AvgGL_ud	1.000	.761

Extraction Method: Principal  
Component Analysis.

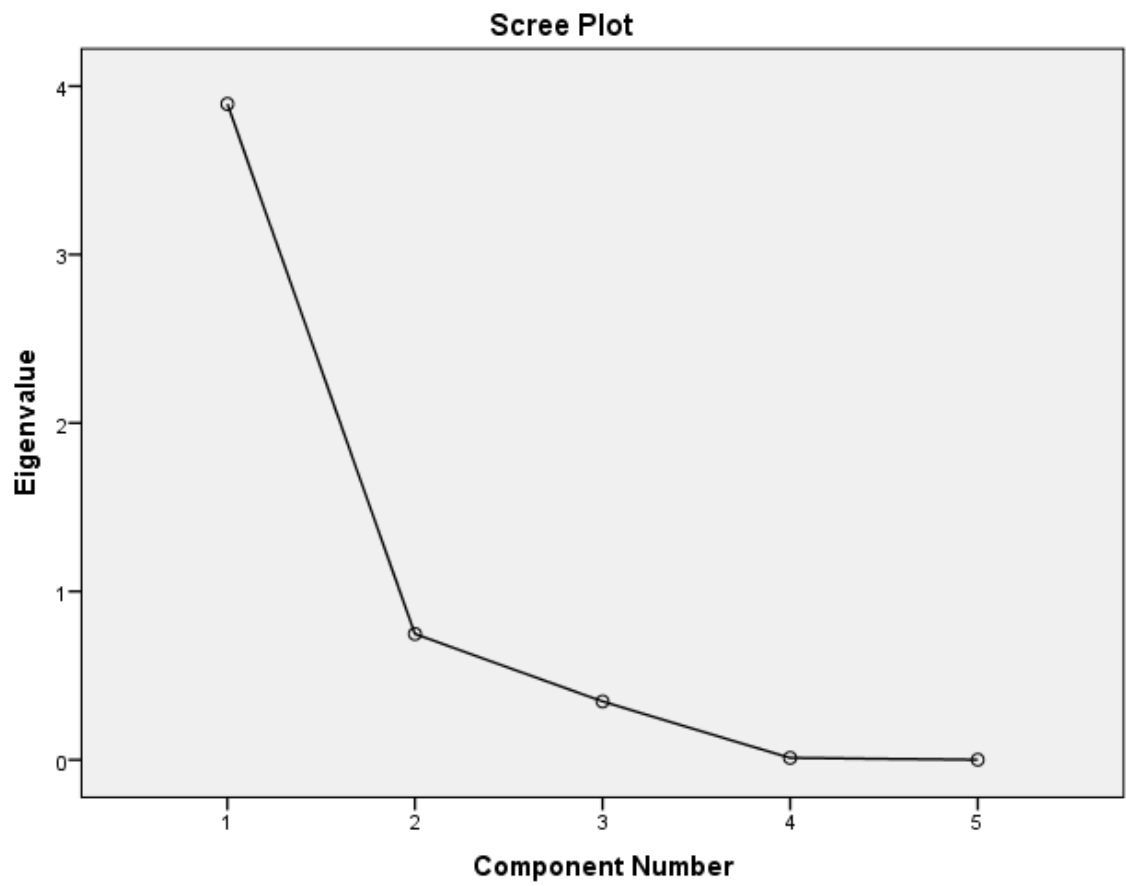
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.894	77.882	77.882	3.894	77.882
2	.747	14.945	92.827	.747	14.945
3	.347	6.935	99.763		
4	.011	.225	99.987		
5	.001	.013	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	77.882	2.976	59.521	59.521
2	92.827	1.665	33.306	92.827
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.956	-.283
Tpaths_ud	.969	-.172
TSpaths_ud	.676	.680
AvgPL_ud	.958	-.285
AvgGL_ud	.817	.307

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_ud	.958	.278
Tpaths_ud	.908	.378
TSpaths_ud	.202	.937
AvgPL_ud	.960	.278
AvgGL_ud	.521	.700

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.842	.540
2	-.540	.842

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:20:20	
Comments		
Input	Active Dataset	DataSet12
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.912	5

### C.5.1.4 Dependent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:20:59
Comments		
Input	Active Dataset	DataSet12
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /MISSING LISTWISE /ANALYSIS ECud PL_EVCudN EVCud_TpudN EVCud_TSpudN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(3) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.17
	Maximum Memory Required	3008 (2.938K) bytes



### Correlation Matrix

		ECud	PL_EVCudN	EVCud_TpudN	EVCud_TSpudN
Correlation	ECud	1.000	-.200	-.117	.034
	PL_EVCudN	-.200	1.000	-.234	.086
	EVCud_TpudN	-.117	-.234	1.000	-.161
	EVCud_TSpudN	.034	.086	-.161	1.000
Sig. (1-tailed)	ECud		.029	.134	.373
	PL_EVCudN	.029		.013	.209
	EVCud_TpudN	.134	.013		.063
	EVCud_TSpudN	.373	.209	.063	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.455
Bartlett's Test of Sphericity Approx. Chi-Square	13.818
df	6
Sig.	.032

### Communalities

	Initial	Extraction
ECud	1.000	.834
PL_EVCudN	1.000	.753
EVCud_TpudN	1.000	.788
EVCud_TSpudN	1.000	.998

Extraction Method: Principal Component Analysis.

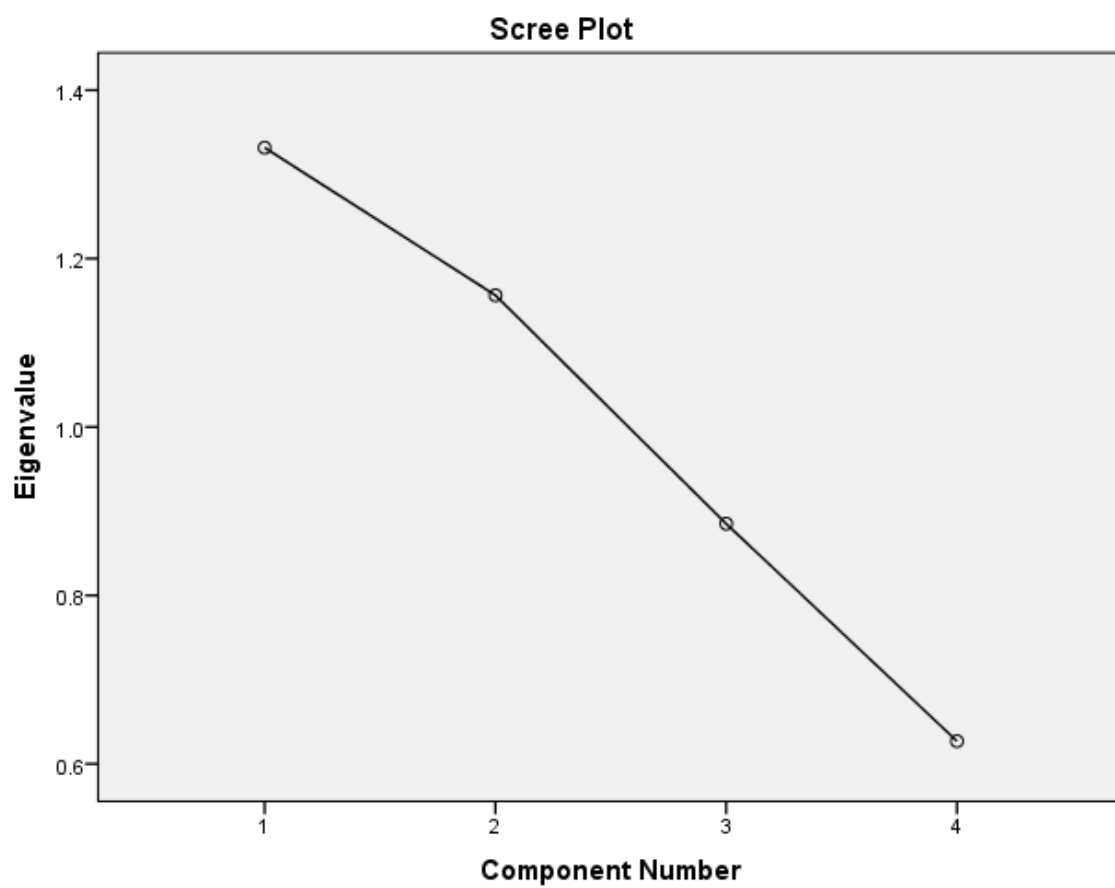
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.332	33.289	33.289	1.332	33.289
2	1.156	28.910	62.200	1.156	28.910
3	.885	22.127	84.327	.885	22.127
4	.627	15.673	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	33.289	1.221	30.525	30.525
2	62.200	1.148	28.694	59.219
3	84.327	1.004	25.108	84.327
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	-.126	.871	-.245
PL_EVCudN	.721	-.423	-.232
EVCud_TpudN	-.721	-.346	.386
EVCud_TSpudN	.525	.315	.789

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ECud	.063	.911	.006
PL_EVCudN	.716	-.491	.006
EVCud_TpudN	-.836	-.276	-.115
EVCud_TSpudN	.081	.004	.996

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 4 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.866	-.201	.458
2	.057	.950	.308
3	-.496	-.241	.834

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## C.5.2 Directed Network

### C.5.2.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:26:05
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.16

Maximum Memory Required	3008 (2.938K) bytes
----------------------------	---------------------

**Correlation Matrix**

		Nodes	Edges_d	Reciprocity	Den_d
Correlation	Nodes	1.000	.999	.878	-.438
	Edges_d	.999	1.000	.896	-.417
	Reciprocity	.878	.896	1.000	-.244
	Den_d	-.438	-.417	-.244	1.000
Sig. (1-tailed)	Nodes		.000	.000	.000
	Edges_d	.000		.000	.000
	Reciprocity	.000	.000		.010
	Den_d	.000	.000	.010	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.520
Bartlett's Test of Sphericity	Approx. Chi-Square
	828.381
	df
	6
	Sig.
	.000

**Communalities**

	Initial	Extraction
Nodes	1.000	.974
Edges_d	1.000	.983
Reciprocity	1.000	.924
Den_d	1.000	.996

Extraction Method: Principal  
Component Analysis.

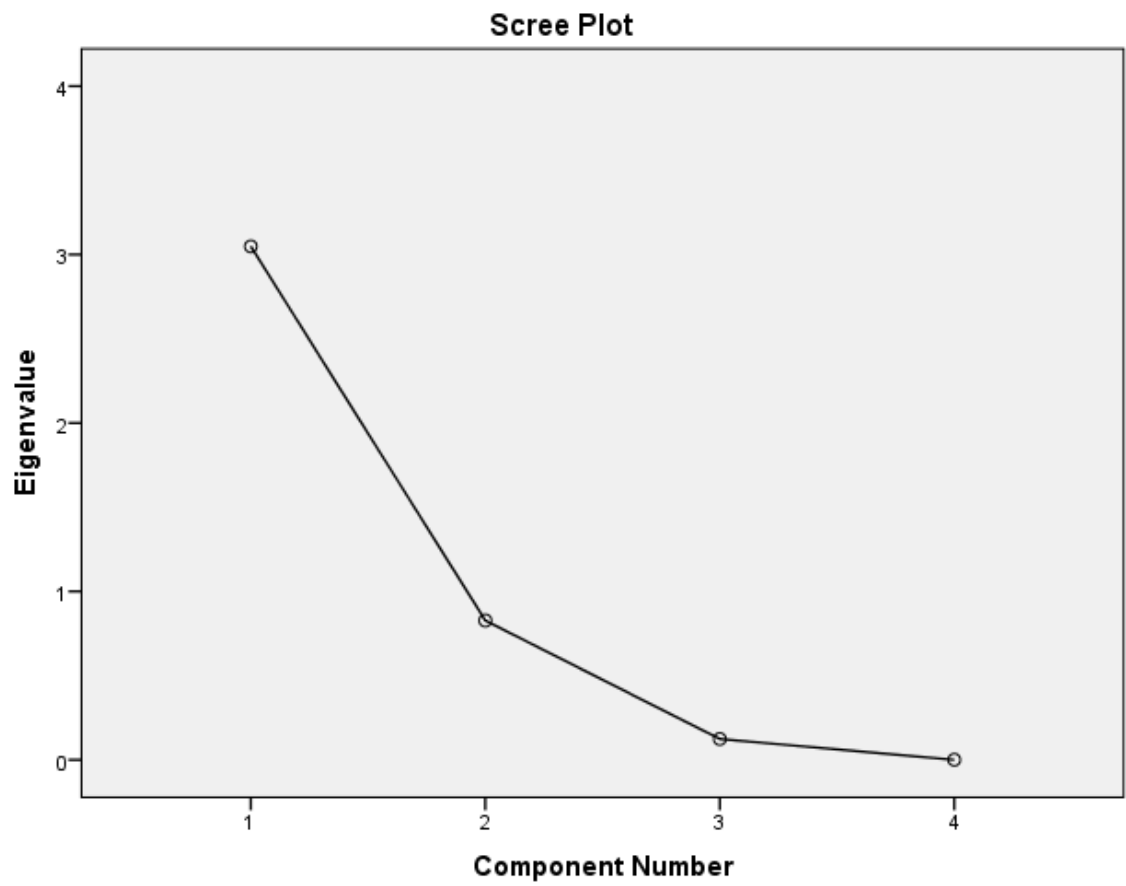
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.049	76.218	76.218	3.049	76.218
2	.827	20.685	96.903	.827	20.685
3	.124	3.091	99.994		
4	.000	.006	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	76.218	2.765	69.113	69.113
2	96.903	1.112	27.790	96.903
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.984	.075
Edges_d	.986	.102
Reciprocity	.915	.294
Den_d	-.520	.851

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.946	-.282
Edges_d	.957	-.257
Reciprocity	.960	-.053
Den_d	-.181	.981

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.934	-.358
2	.358	.934

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 16:26:23
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=Nodes Edges_d Reciprocity /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

**Case Processing Summary**

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.072	3

## C.5.2.2 Network Structure Variables (MV1)

### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:28:25
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpdN PL_TSpdN S_d R_d /MISSING LISTWISE /ANALYSIS PL_TpdN PL_TSpdN S_d R_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		PL_TpdN	PL_TSpdN	S_d	R_d
Correlation	PL_TpdN	1.000	.995	.639	.646
	PL_TSpdN	.995	1.000	.622	.629
	S_d	.639	.622	1.000	.984
	R_d	.646	.629	.984	1.000
Sig. (1-tailed)	PL_TpdN		.000	.000	.000
	PL_TSpdN	.000		.000	.000
	S_d	.000	.000		.000
	R_d	.000	.000	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.649
Bartlett's Test of Sphericity    Approx. Chi-Square	753.429
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
PL_TpdN	1.000	.826
PL_TSpdN	1.000	.809
S_d	1.000	.808
R_d	1.000	.814

Extraction Method: Principal  
Component Analysis.

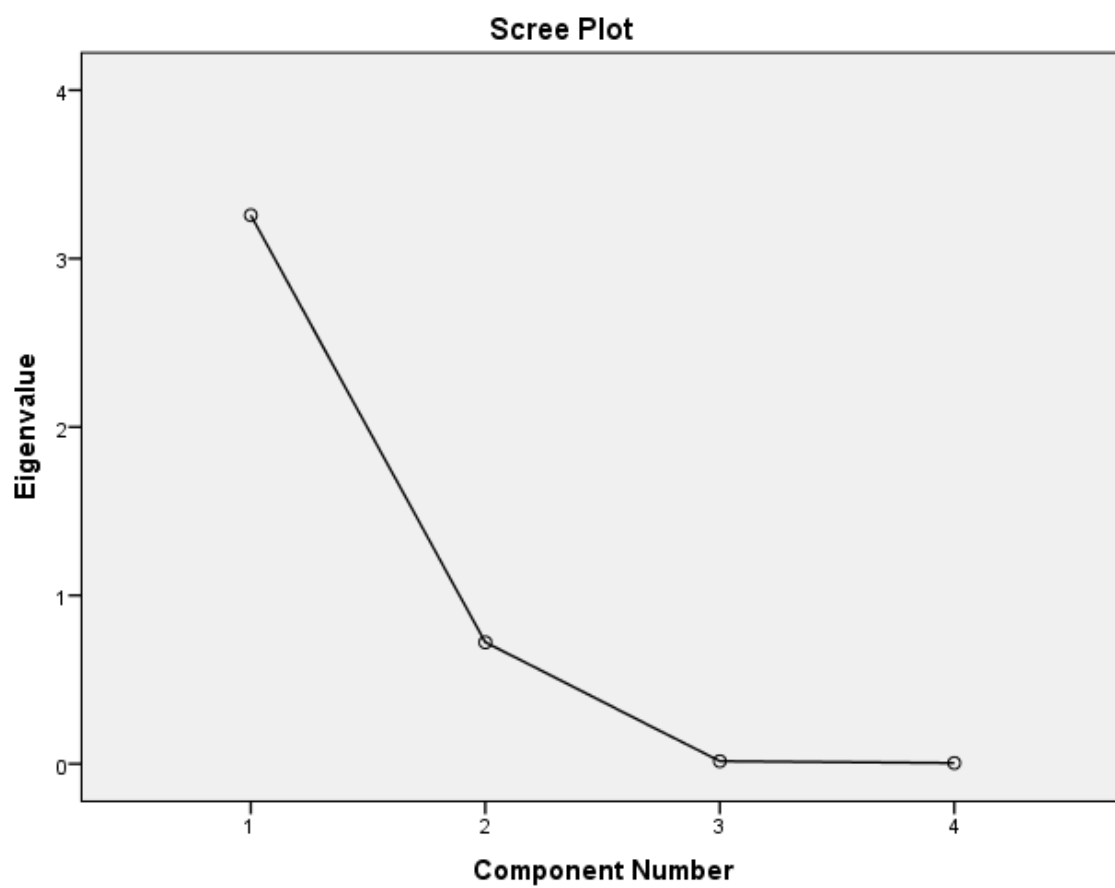
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	3.257	81.435	81.435	3.257	81.435
2	.722	18.042	99.477		
3	.016	.397	99.874		
4	.005	.126	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	81.435
2	
3	
4	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
PL_TpdN	.909
PL_TSpdN	.900
S_d	.899
R_d	.902

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 1 components extracted.

**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.



## Reliability

Notes		
Output Created		26-MAR-2015 16:28:41
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_TpdN PL_TSpdN S_d R_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.872	4

### C.5.2.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:29:06
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.769	.738	.911	.881
	Tpaths_d	.769	1.000	.974	.895	.689
	TSpaths_d	.738	.974	1.000	.823	.729
	AvgPL_d	.911	.895	.823	1.000	.828
	AvgGL_d	.881	.689	.729	.828	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.493
Bartlett's Test of Sphericity	Approx. Chi-Square
	1262.517
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_d	1.000	.946
Tpaths_d	1.000	.998
TSpaths_d	1.000	.967
AvgPL_d	1.000	.930
AvgGL_d	1.000	.927

Extraction Method: Principal  
Component Analysis.

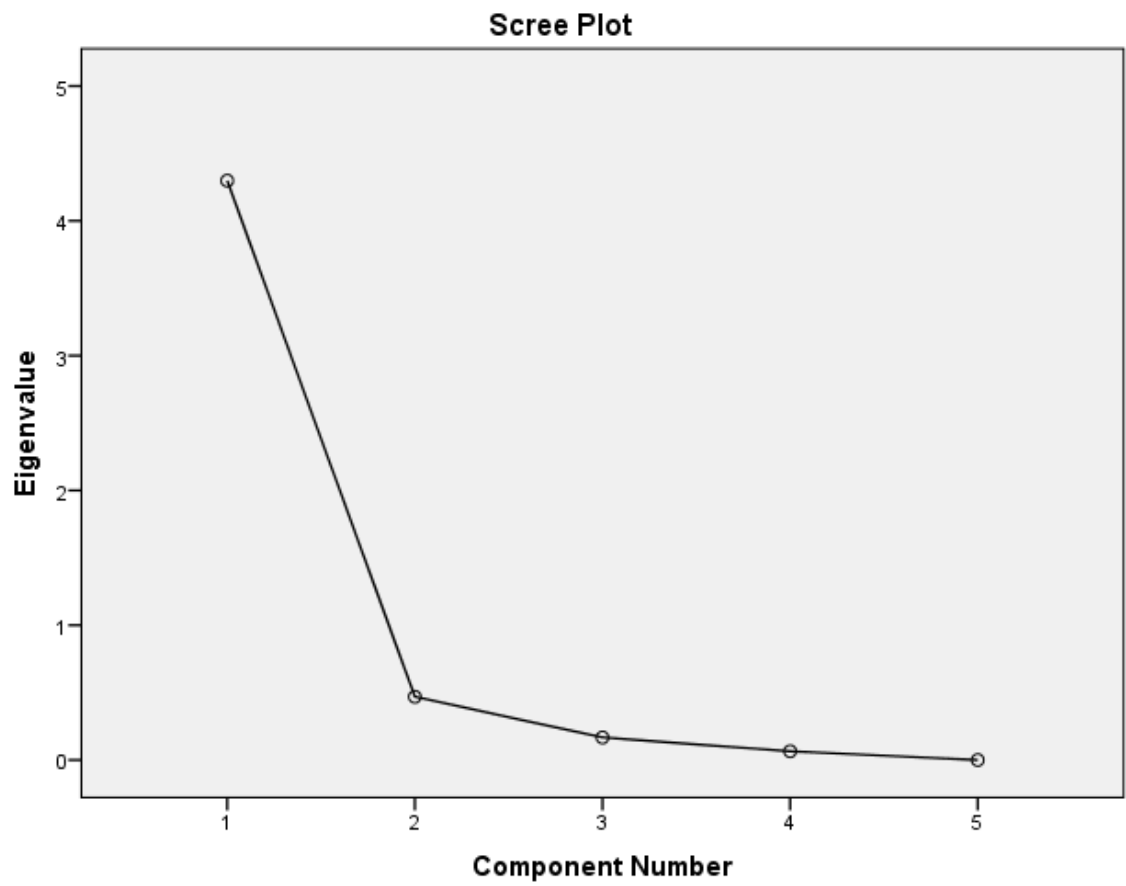
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.298	85.958	85.958	4.298	85.958
2	.469	9.387	95.345	.469	9.387
3	.168	3.353	98.698		
4	.065	1.302	100.000		
5	2.460E-5	.000	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	85.958	2.411	48.222	48.222
2	95.345	2.356	47.123	95.345
3				
4				
5				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.927	.294
Tpaths_d	.935	-.351
TSpaths_d	.920	-.347
AvgPL_d	.963	.048
AvgGL_d	.888	.371

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
GD_d	.866	.442
Tpaths_d	.419	.907
TSpaths_d	.412	.893
AvgPL_d	.719	.642
AvgGL_d	.893	.360

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.712	.702
2	.702	-.712

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 16:29:20
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



### Reliability Statistics

Cronbach's Alpha	N of Items
.863	3

```
RELIABILITY  
  /VARIABLES=Tpaths_d TSpaths_d AvgPL_d  
  /SCALE('ALL VARIABLES') ALL  
  /MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.941	3

## C.5.2.4 Dependent Variables

### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:29:37
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /MISSING LISTWISE /ANALYSIS ECd PL_EVCdN EVCd_TpdN EVCd_TSpdN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

**Correlation Matrix**

		ECd	PL_EVCdN	EVCd_TpdN	EVCd_TSpdN
Correlation	ECd	1.000	-.404	-.374	-.356
	PL_EVCdN	-.404	1.000	.276	.243
	EVCd_TpdN	-.374	.276	1.000	.979
	EVCd_TSpdN	-.356	.243	.979	1.000
Sig. (1-tailed)	ECd		.000	.000	.000
	PL_EVCdN	.000		.004	.010
	EVCd_TpdN	.000	.004		.000
	EVCd_TSpdN	.000	.010	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.578
Bartlett's Test of Sphericity    Approx. Chi-Square	313.695
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
ECd	1.000	.661
PL_EVCdN	1.000	.762
EVCd_TpdN	1.000	.985
EVCd_TSpdN	1.000	.987

Extraction Method: Principal Component Analysis.

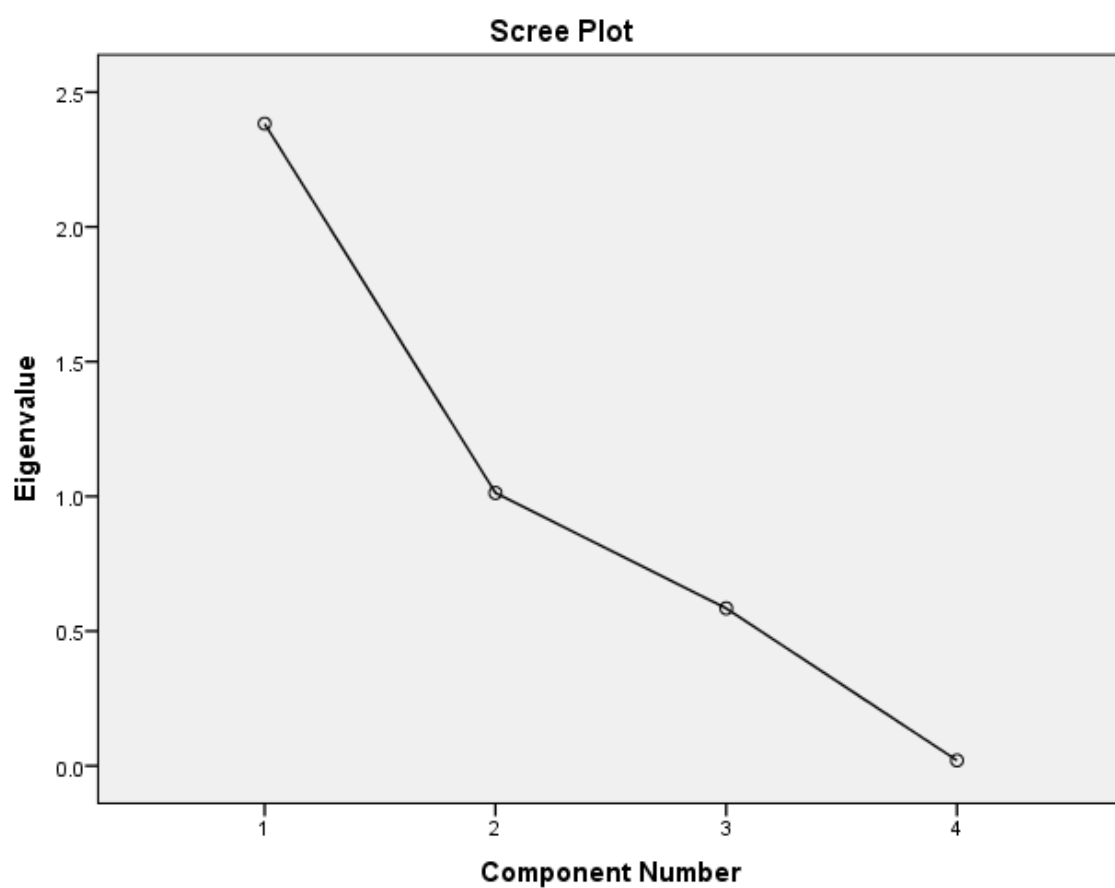
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.383	59.575	59.575	2.383	59.575
2	1.013	25.317	84.892	1.013	25.317
3	.584	14.610	99.502		
4	.020	.498	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	59.575	1.979	49.486	49.486
2	84.892	1.416	35.406	84.892
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	-.640	.502
PL_EVCdN	.531	-.693
EVCd_TpdN	.926	.359
EVCd_TSpdN	.913	.391

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECd	-.265	-.769
PL_EVCdN	.070	.870
EVCd_TpdN	.972	.201
EVCd_TSpdN	.979	.167

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.840	.543
2	.543	-.840

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 16:29:52
Comments		
Input	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_EVCdN EVCd_TpdN EVCd_TSpdN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha <sup>a</sup>	N of Items
-.316	3

- a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.



## C.5.3 Consumption Network

### C.5.3.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:58:39
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16

Maximum Memory Required	3008 (2.938K) bytes
----------------------------	---------------------

**Correlation Matrix**

		Nodes	Edges_d	Reciprocity	Den_d
Correlation	Nodes	1.000	.965	.080	-.920
	Edges_d	.965	1.000	.111	-.834
	Reciprocity	.080	.111	1.000	-.070
	Den_d	-.920	-.834	-.070	1.000
Sig. (1-tailed)	Nodes		.000	.226	.000
	Edges_d	.000		.147	.000
	Reciprocity	.226	.147		.255
	Den_d	.000	.000	.255	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.583
Bartlett's Test of Sphericity	Approx. Chi-Square
	429.557
	df
	6
	Sig.
	.000

**Communalities**

	Initial	Extraction
Nodes	1.000	.987
Edges_d	1.000	.930
Reciprocity	1.000	1.000
Den_d	1.000	.898

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.826	70.658	70.658	2.826	70.658
2	.989	24.716	95.374	.989	24.716
3	.169	4.228	99.602		
4	.016	.398	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.658	2.810	70.255	70.255
2	95.374	1.005	25.119	95.374
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.992	-.057
Edges_d	.964	-.019
Reciprocity	.138	.990
Den_d	-.946	.065

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.993	.036
Edges_d	.962	.071
Reciprocity	.045	.999
Den_d	-.947	-.024

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.996	.094
2	-.094	.996

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 15:58:54	
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.977	2

### C.5.3.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 15:59:24
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpinN PL_TSpinN S_con R_con /MISSING LISTWISE /ANALYSIS PL_TpinN PL_TSpinN S_con R_con /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.14
	Maximum Memory Required	3008 (2.938K) bytes



**Correlation Matrix**

		PL_TpinN	PL_TSpinN	S_con	R_con
Correlation	PL_TpinN	1.000	.882	-.020	.043
	PL_TSpinN	.882	1.000	-.012	.003
	S_con	-.020	-.012	1.000	.783
	R_con	.043	.003	.783	1.000
Sig. (1-tailed)	PL_TpinN		.000	.425	.341
	PL_TSpinN	.000		.455	.487
	S_con	.425	.455		.000
	R_con	.341	.487	.000	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.485
Bartlett's Test of Sphericity    Approx. Chi-Square	217.592
df	6
Sig.	.000

**Communalities**

	Initial	Extraction
PL_TpinN	1.000	.941
PL_TSpinN	1.000	.940
S_con	1.000	.892
R_con	1.000	.892

Extraction Method: Principal  
Component Analysis.

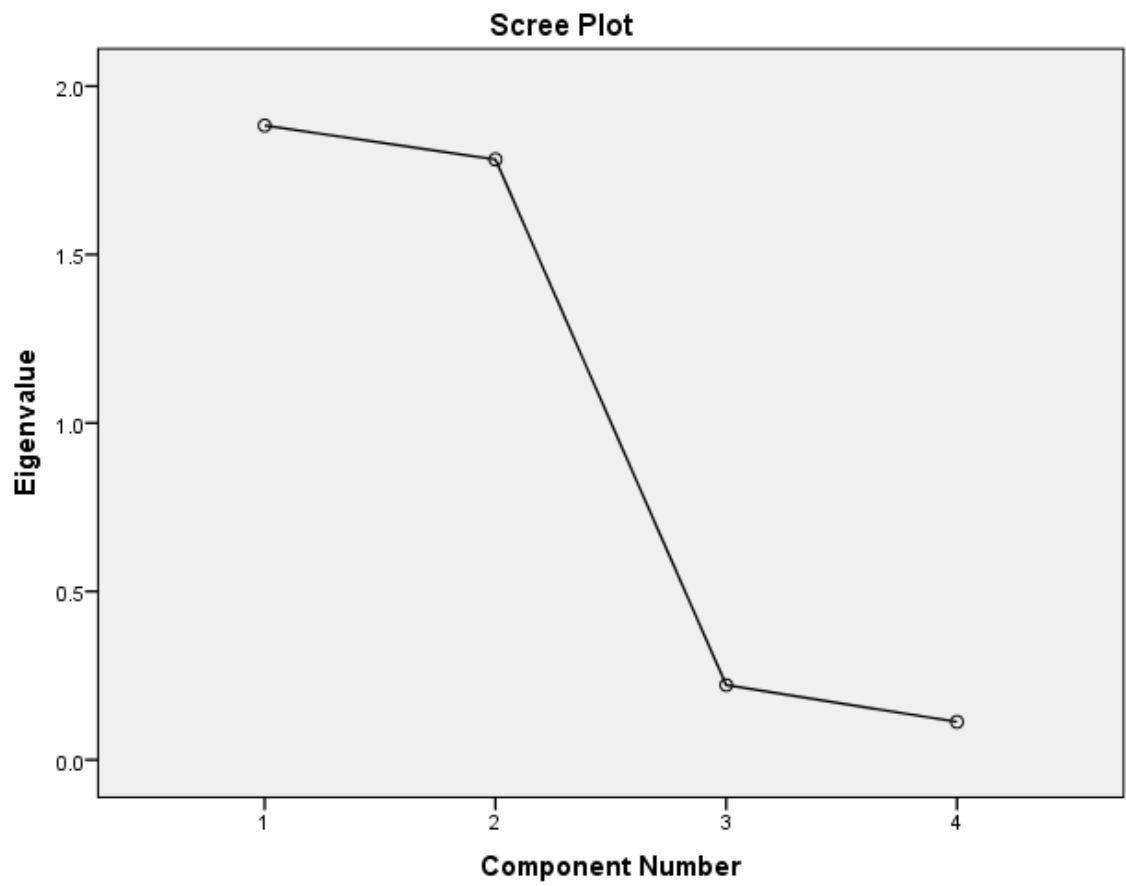
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.883	47.076	47.076	1.883	47.076
2	1.782	44.556	91.633	1.782	44.556
3	.222	5.550	97.182		
4	.113	2.818	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	47.076	1.882	47.062	47.062
2	91.633	1.783	44.570	91.633
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpinN	.968	-.061
PL_TSpinN	.966	-.079
S_con	.049	.943
R_con	.095	.940

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpinN	.970	.011
PL_TSpinN	.970	-.007
S_con	-.021	.944
R_con	.025	.944

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.997	.074
2	-.074	.997

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

Notes		
Output Created		26-MAR-2015 15:59:43
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	91
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_TpinN PL_TSpinN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.933	2

```
RELIABILITY
/VARIABLES=S_con R_con
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.046	2

### C.5.3.3 Network Flow Variables (MV2)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:00:18
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.499	.495	.604	.594
	Tpaths_d	.499	1.000	1.000	.854	.856
	TSpaths_d	.495	1.000	1.000	.852	.855
	AvgPL_d	.604	.854	.852	1.000	.998
	AvgGL_d	.594	.856	.855	.998	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.501
Bartlett's Test of Sphericity	Approx. Chi-Square
	1813.378
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_d	1.000	.457
Tpaths_d	1.000	.894
TSpaths_d	1.000	.892
AvgPL_d	1.000	.927
AvgGL_d	1.000	.926

Extraction Method: Principal  
Component Analysis.



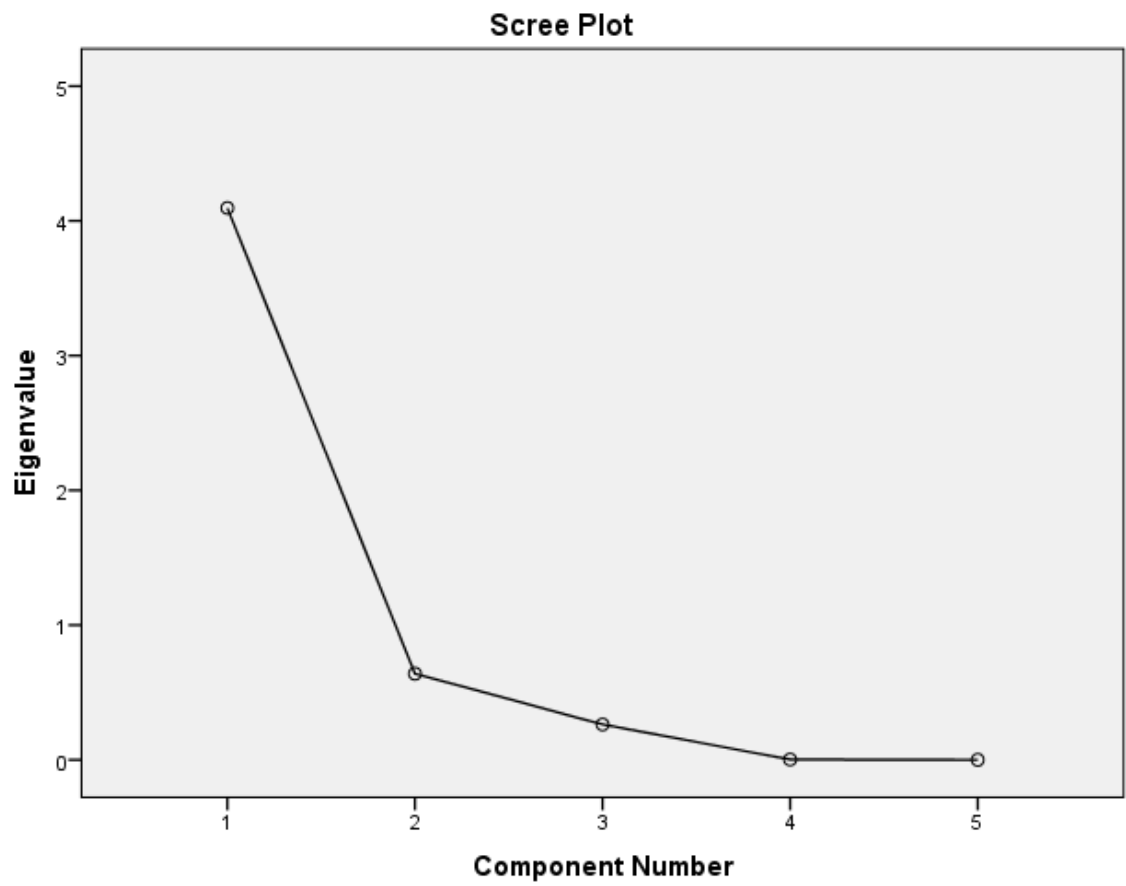
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
				Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.096	81.915	81.915	4.096	81.915
2	.639	12.781	94.696		
3	.263	5.257	99.953		
4	.002	.047	100.000		
5	6.120E-7	1.224E-5	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	
	Cumulative %	
1	81.915	
2		
3		
4		
5		

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.676
Tpaths_d	.946
TSpaths_d	.944
AvgPL_d	.963
AvgGL_d	.963

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 1 components extracted.

**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created		26-MAR-2015 16:00:36
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.905	5

### C.5.3.4 Dependent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:01:02
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /MISSING LISTWISE /ANALYSIS ECin PL_EVCinN EVCin_TpinN EVCin_TSpinN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECin	PL_EVCinN	EVCin_TpinN	EVCin_TSpinN
Correlation	ECin	1.000	-.273	.228	.228
	PL_EVCinN	-.273	1.000	-.080	-.081
	EVCin_TpinN	.228	-.080	1.000	1.000
	EVCin_TSpinN	.228	-.081	1.000	1.000
Sig. (1-tailed)	ECin		.004	.015	.015
	PL_EVCinN	.004		.225	.224
	EVCin_TpinN	.015	.225		.000
	EVCin_TSpinN	.015	.224	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.516
Bartlett's Test of Sphericity    Approx. Chi-Square	1001.674
df	6
Sig.	.000

### Communalities

	Initial	Extraction
ECin	1.000	.602
PL_EVCinN	1.000	.702
EVCin_TpinN	1.000	.994
EVCin_TSpinN	1.000	.994

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

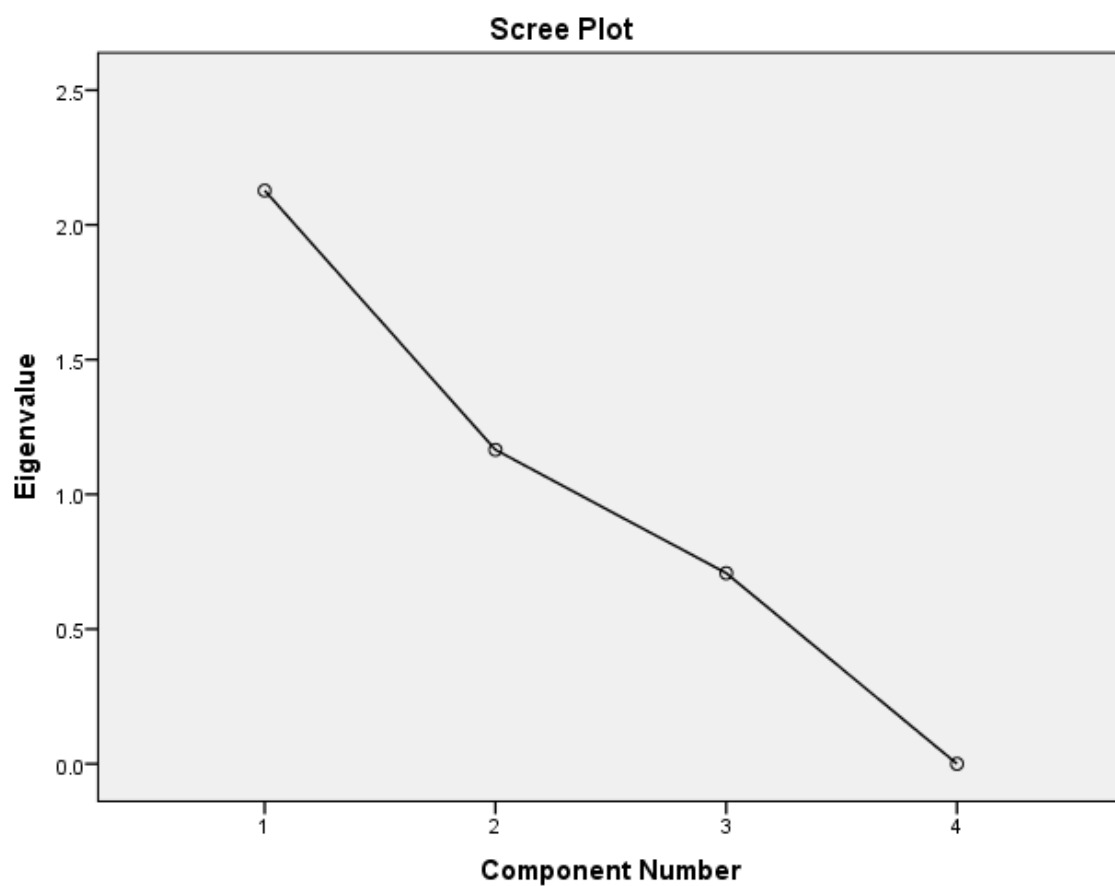
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.127	53.181	53.181	2.127	53.181
2	1.165	29.131	82.312	1.165	29.131
3	.708	17.688	100.000		
4	6.357E-6	.000	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	53.181	2.015	50.387	50.387
2	82.312	1.277	31.924	82.312
3				
4				

Extraction Method: Principal Component Analysis.





**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	.451	-.632
PL_EVCinN	-.247	.801
EVCin_TpinN	.965	.250
EVCin_TSpinN	.965	.250

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECin	.209	.748
PL_EVCinN	.041	-.837
EVCin_TpinN	.993	.094
EVCin_TSpinN	.993	.094

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.940	.341
2	.341	-.940

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 16:01:23
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES= EVCin_TpinN EVCin_TSpinN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
1.000	2

## C.5.4 Propagation Network

### C.5.4.1 Independent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:12:13
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES Nodes Edges_d Reciprocity Den_d /MISSING LISTWISE /ANALYSIS Nodes Edges_d Reciprocity Den_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA FACTORS(2) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15

Maximum Memory Required	3008 (2.938K) bytes
----------------------------	---------------------

**Correlation Matrix**

		Nodes	Edges_d	Reciprocity	Den_d
Correlation	Nodes	1.000	.965	.080	-.920
	Edges_d	.965	1.000	.111	-.834
	Reciprocity	.080	.111	1.000	-.070
	Den_d	-.920	-.834	-.070	1.000
Sig. (1-tailed)	Nodes		.000	.226	.000
	Edges_d	.000		.147	.000
	Reciprocity	.226	.147		.255
	Den_d	.000	.000	.255	

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.583
Bartlett's Test of Sphericity	Approx. Chi-Square
	429.557
	df
	6
	Sig.
	.000

**Communalities**

	Initial	Extraction
Nodes	1.000	.987
Edges_d	1.000	.930
Reciprocity	1.000	1.000
Den_d	1.000	.898

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.826	70.658	70.658	2.826	70.658
2	.989	24.716	95.374	.989	24.716
3	.169	4.228	99.602		
4	.016	.398	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	70.658	2.810	70.255	70.255
2	95.374	1.005	25.119	95.374
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.992	-.057
Edges_d	.964	-.019
Reciprocity	.138	.990
Den_d	-.946	.065

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Nodes	.993	.036
Edges_d	.962	.071
Reciprocity	.045	.999
Den_d	-.947	-.024

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with

Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.996	.094
2	-.094	.996

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created	26-MAR-2015 16:12:26	
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=Nodes Edges_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.977	2

### C.5.4.2 Network Structure Variables (MV1)

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:12:47
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES PL_TpoutN PL_TSpoutN S_pro R_pro /MISSING LISTWISE /ANALYSIS PL_TpoutN PL_TSpoutN S_pro R_pro /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		PL_TpoutN	PL_TSpoutN	S_pro	R_pro
Correlation	PL_TpoutN	1.000	.689	.248	.302
	PL_TSpoutN	.689	1.000	.134	.192
	S_pro	.248	.134	1.000	.980
	R_pro	.302	.192	.980	1.000
Sig. (1-tailed)	PL_TpoutN		.000	.009	.002
	PL_TSpoutN	.000		.103	.034
	S_pro	.009	.103		.000
	R_pro	.002	.034	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.530
Bartlett's Test of Sphericity	Approx. Chi-Square
	355.435
df	6
Sig.	.000

### Communalities

	Initial	Extraction
PL_TpoutN	1.000	.842
PL_TSpoutN	1.000	.856
S_pro	1.000	.990
R_pro	1.000	.990

Extraction Method: Principal Component Analysis.

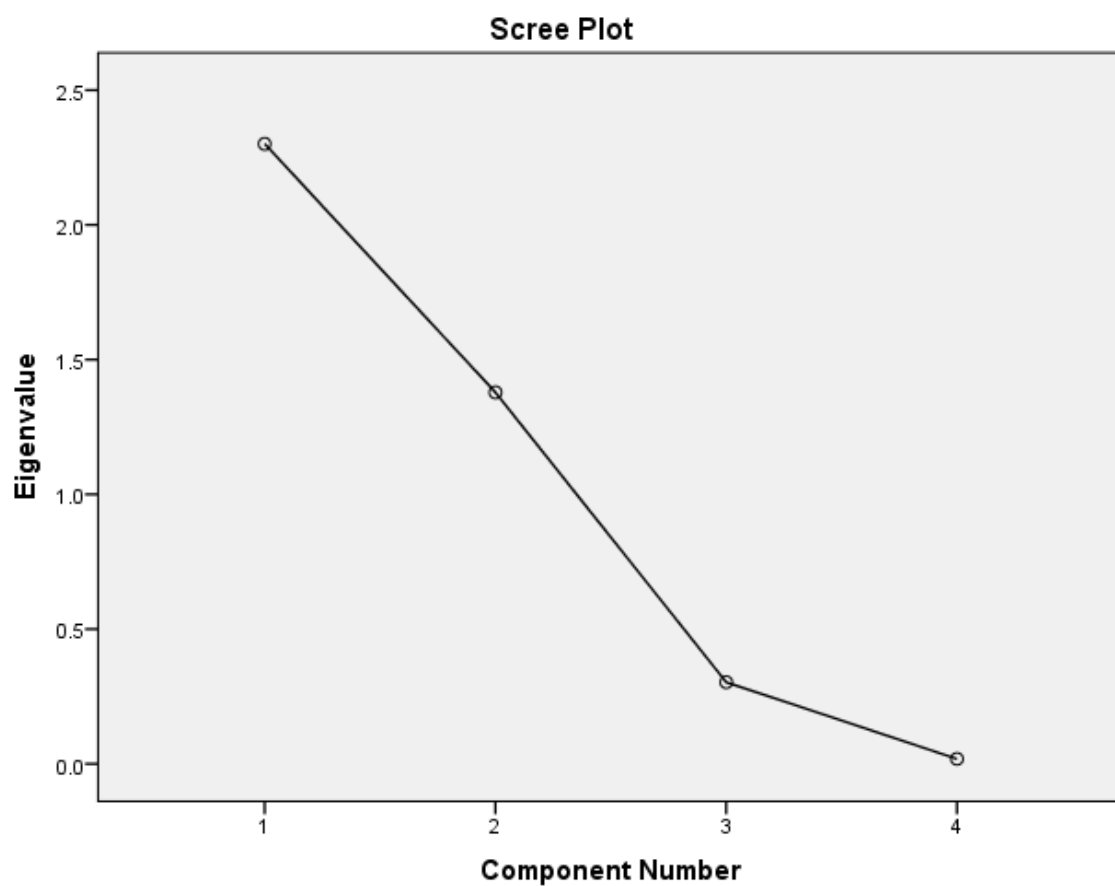
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.301	57.515	57.515	2.301	57.515
2	1.378	34.460	91.976	1.378	34.460
3	.303	7.569	99.545		
4	.018	.455	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	57.515	1.985	49.625	49.625
2	91.976	1.694	42.350	91.976
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpoutN	.674	.623
PL_TSpoutN	.576	.724
S_pro	.855	-.509
R_pro	.886	-.454

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
PL_TpoutN	.182	.900
PL_TSpoutN	.043	.924
S_pro	.991	.087
R_pro	.984	.150

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.811	.585
2	-.585	.811

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.



## Reliability

### Notes

Output Created	26-MAR-2015 16:13:04	
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=PL_TpoutN PL_TSpoutN S_pro R_pro /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.635	4

RELIABILITY

```
/VARIABLES=PL_TpoutN PL_TSpoutN  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.816	2

### C.5.4.3 Network Flow Variables (MV2)

## Factor Analysis

Notes		
Output Created		26-MAR-2015 16:13:22
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /MISSING LISTWISE /ANALYSIS GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.15
	Maximum Memory Required	4248 (4.148K) bytes

### Correlation Matrix

		GD_d	Tpaths_d	TSpaths_d	AvgPL_d	AvgGL_d
Correlation	GD_d	1.000	.499	.495	.604	.594
	Tpaths_d	.499	1.000	1.000	.854	.856
	TSpaths_d	.495	1.000	1.000	.852	.855
	AvgPL_d	.604	.854	.852	1.000	.998
	AvgGL_d	.594	.856	.855	.998	1.000
Sig. (1-tailed)	GD_d		.000	.000	.000	.000
	Tpaths_d	.000		.000	.000	.000
	TSpaths_d	.000	.000		.000	.000
	AvgPL_d	.000	.000	.000		.000
	AvgGL_d	.000	.000	.000	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.501
Bartlett's Test of Sphericity	Approx. Chi-Square
	1813.378
	df
	10
	Sig.
	.000

### Communalities

	Initial	Extraction
GD_d	1.000	.457
Tpaths_d	1.000	.894
TSpaths_d	1.000	.892
AvgPL_d	1.000	.927
AvgGL_d	1.000	.926

Extraction Method: Principal  
Component Analysis.

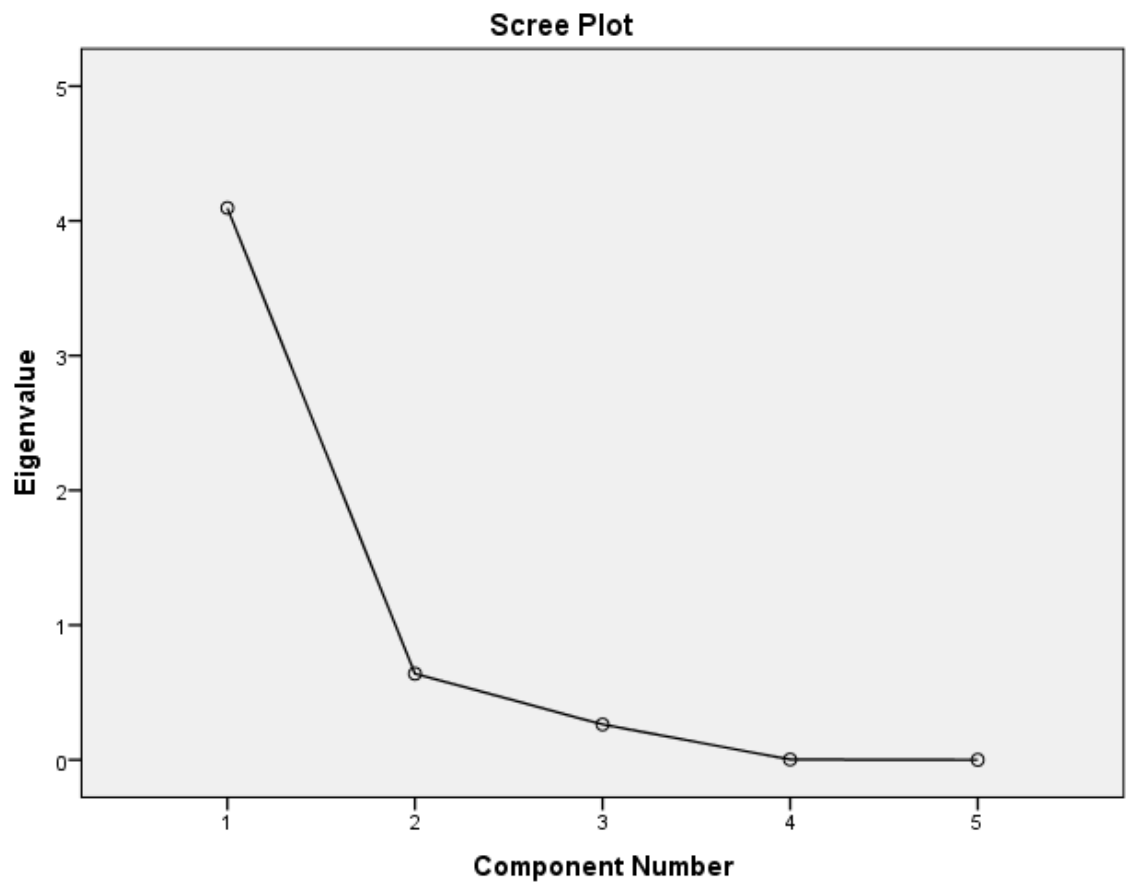
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.096	81.915	81.915	4.096	81.915
2	.639	12.781	94.696		
3	.263	5.257	99.953		
4	.002	.047	100.000		
5	6.120E-7	1.224E-5	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings
	Cumulative %
1	81.915
2	
3	
4	
5	

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
GD_d	.676
Tpaths_d	.946
TSpaths_d	.944
AvgPL_d	.963
AvgGL_d	.963

Extraction Method: Principal

Component Analysis.<sup>a</sup>

a. 1 components extracted.

**Rotated  
Component  
Matrix<sup>a</sup>**

--

a. Only one component was extracted. The solution cannot be rotated.

## Reliability

### Notes

Output Created	26-MAR-2015 16:13:45	
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.



**Reliability Statistics**

Cronbach's Alpha	N of Items
.905	5

### C.5.4.4 Dependent Variables

#### Factor Analysis

Notes		
Output Created		26-MAR-2015 16:14:00
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /MISSING LISTWISE /ANALYSIS ECout PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.15
	Maximum Memory Required	3008 (2.938K) bytes

### Correlation Matrix

		ECout	PL_EVCoutN	EVCout_Tpout N	EVCout_TSpou tN
Correlation	ECout	1.000	-.522	-.319	-.287
	PL_EVCoutN	-.522	1.000	.369	.322
	EVCout_TpoutN	-.319	.369	1.000	.989
	EVCout_TSpoutN	-.287	.322	.989	1.000
Sig. (1-tailed)	ECout		.000	.001	.003
	PL_EVCoutN	.000		.000	.001
	EVCout_TpoutN	.001	.000		.000
	EVCout_TSpoutN	.003	.001	.000	

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.561
Bartlett's Test of Sphericity Approx. Chi-Square	385.846
df	6
Sig.	.000

### Communalities

	Initial	Extraction
ECout	1.000	.773
PL_EVCoutN	1.000	.751
EVCout_TpoutN	1.000	.995
EVCout_TSpoutN	1.000	.994

Extraction Method: Principal Component Analysis.

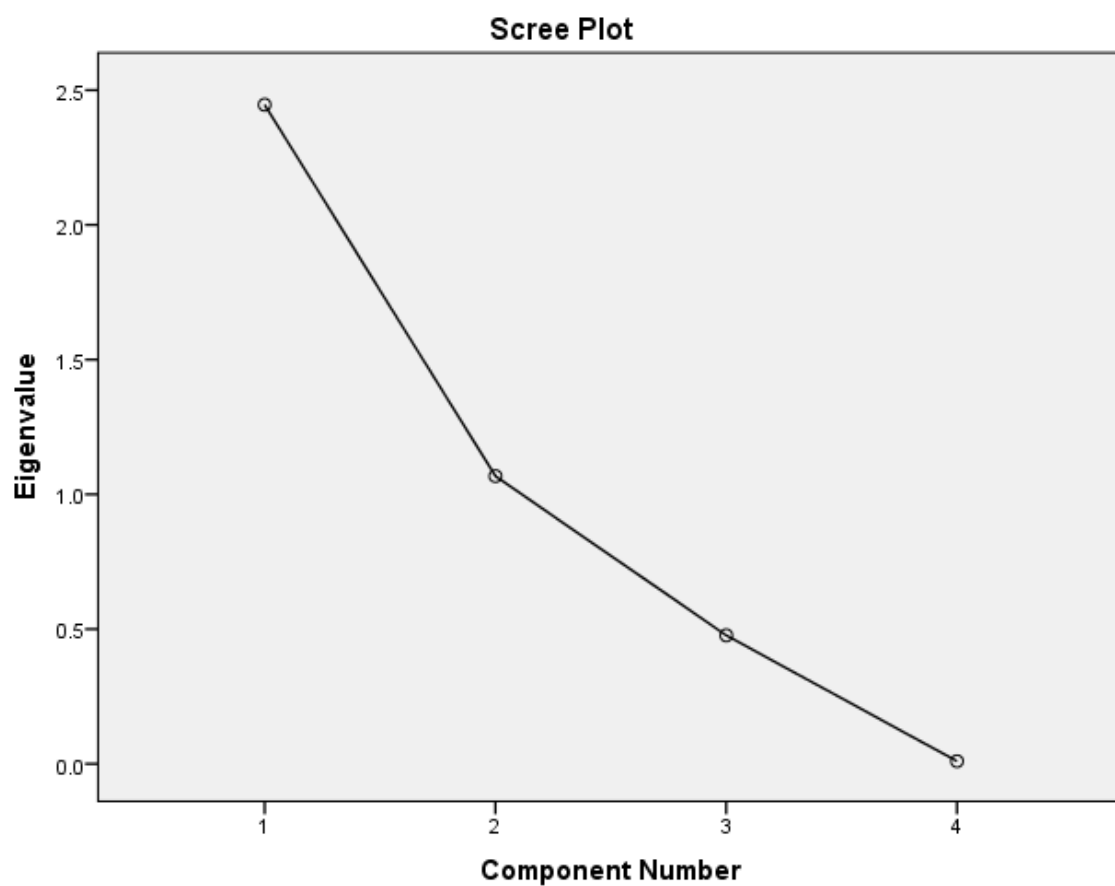
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.446	61.141	61.141	2.446	61.141
2	1.068	26.689	87.830	1.068	26.689
3	.477	11.921	99.752		
4	.010	.248	100.000		

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	61.141	1.974	49.352	49.352
2	87.830	1.539	38.479	87.830
3				
4				

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.616	.627
PL_EVCoutN	.655	-.568
EVCout_TpoutN	.915	.397
EVCout_TSpoutN	.894	.441

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 2 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
ECout	-.133	-.869
PL_EVCoutN	.199	.843
EVCout_TpoutN	.974	.213
EVCout_TSpoutN	.983	.165

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.811	.585
2	.585	-.811

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

## Reliability

### Notes

Output Created		26-MAR-2015 16:14:17
Comments		
Input	Active Dataset	DataSet11
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PL_EVCoutN EVCout_TpoutN EVCout_TSpoutN /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	91	100.0
	Excluded <sup>a</sup>	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.812	3