

# Second Stage

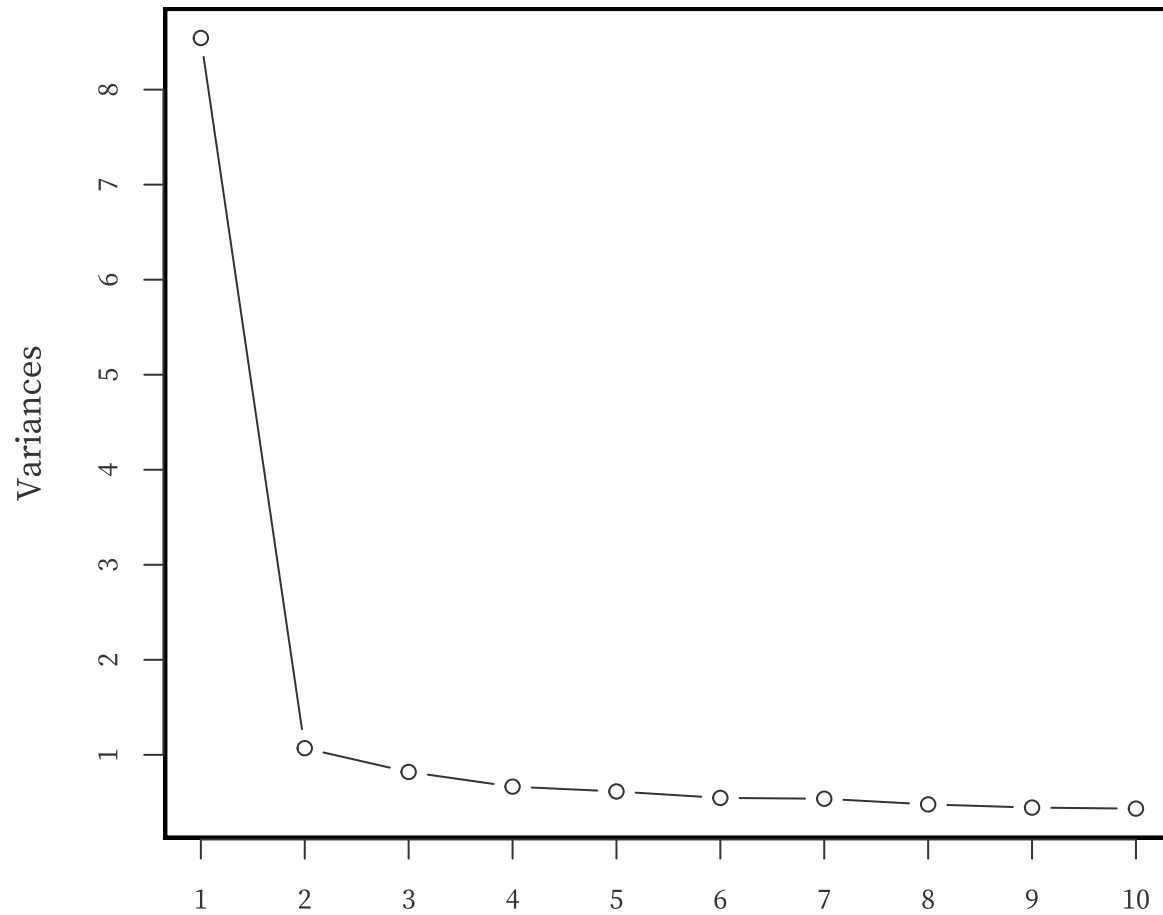
2022-07-15

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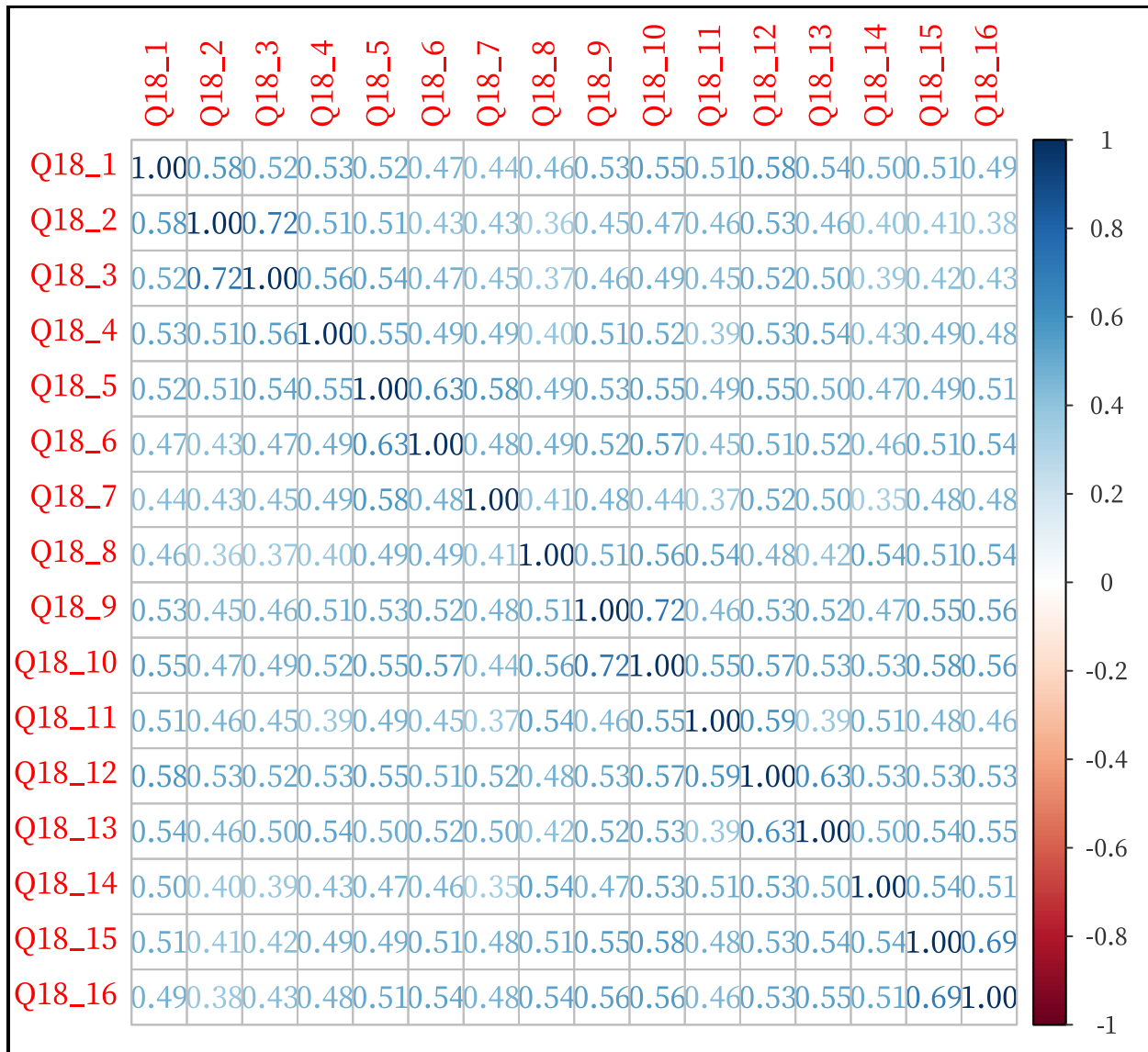
## 0.1 PCA of Prevention Behaviors

The figure suggests that prevention behaviors cannot be well categorized automatically.



### 0.1.1 Correlations between Prevention Behaviors

The figure suggests the strong correlations exist between prevention behavior items.



### 0.2 Manual Categorization of Prevention Behaviors

- Select Q18\_8 Cover mouth when cough; Q18\_15 Help family members and friends; Q18\_16 Care about elders as other-oriented/social-oriented prevention behaviors
- Select the rest variables as self-oriented prevention behaviors

```
##
## =====
##                               Dependent variable:
##                               -----
##                               mean_selfnew      mean_social
##                               OLS               OLS
##
```

```

##                                     (1)                                     (2)
## -----
## empathy                           0.55*** (0.03)                       0.52*** (0.03)
## age                               -0.003 (0.002)                       -0.01** (0.003)
## gender                            0.15*** (0.05)                       0.13** (0.06)
## education                         -0.06*** (0.03)                     -0.08*** (0.03)
## income                            0.03** (0.01)                       0.03** (0.01)
## Constant                          3.26*** (0.20)                       3.66*** (0.22)
## -----
## Observations                       1,175                               1,175
## R2                                 0.22                               0.18
## Adjusted R2                        0.22                               0.17
## Residual Std. Error (df = 1169)    0.93                               1.01
## F Statistic (df = 5; 1169)         65.38***                       50.04***
## =====
## Note:                               *p<0.1; **p<0.05; ***p<0.01
##                                     Empathy on self/social oriented prevention

```

### 0.3 Relationship between social support, resilience and life satisfaction

```

##
## =====
##                                     Dependent variable:
##                                     -----
##                                     life satisfaction
##                                     OLS
##                                     (1)                                     (2)
## -----
## mean_support                       0.24*** (0.03)                       0.24*** (0.03)
## mean_resilience                   0.38*** (0.03)                       0.38*** (0.03)
## age                               0.003 (0.002)
## gender                             0.001 (0.06)
## education                         0.08*** (0.03)
## income                            -0.001 (0.01)
## Constant                          0.49*** (0.17)                       0.15 (0.23)
## -----
## Observations                       1,175                               1,175
## R2                                 0.19                               0.20
## Adjusted R2                        0.19                               0.19
## Residual Std. Error    0.98 (df = 1172)    0.98 (df = 1168)
## F Statistic            138.70*** (df = 2; 1172)  48.27*** (df = 6; 1168)
## =====
## Note:                               *p<0.1; **p<0.05; ***p<0.01
##                                     Social support, resilience and life satisfaction

```

### 0.4 Relationships between demographic variables, media use, information-source assessment and depression

% Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com % Date and time: , 7 18, 2022 - 21 06 30 % Requires LaTeX packages: dcolumn

% Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com % Date and time: , 7 18, 2022 - 21 06 30 % Requires LaTeX packages: dcolumn

Table 1:

	<i>Dependent variable:</i>			
	Depression			
	<i>OLS</i>			
	(1)	(2)	(3)	(4)
age	−0.12*** (0.02)			
gender		−0.24 (0.38)		
education			0.70*** (0.16)	
income				−0.02 (0.07)
Constant	22.27*** (0.70)	17.60*** (0.60)	14.81*** (0.59)	17.34*** (0.47)
Observations	1,175	1,175	1,175	1,175
R <sup>2</sup>	0.05	0.0004	0.02	0.0000
Adjusted R <sup>2</sup>	0.04	−0.001	0.01	−0.001
Residual Std. Error (df = 1173)	6.29	6.44	6.39	6.44
F Statistic (df = 1; 1173)	55.74***	0.41	18.72***	0.06

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
 Demographics separately on Depression

Table 2:

	<i>Dependent variable:</i>	
	Depression	
	<i>OLS</i>	
age	−0.11*** (0.02)	
gender	−0.33 (0.37)	
education	0.69*** (0.17)	
income	−0.10 (0.07)	
Constant	20.84*** (1.17)	
Observations	1,175	
R <sup>2</sup>	0.06	
Adjusted R <sup>2</sup>	0.06	
Residual Std. Error	6.25 (df = 1170)	
F Statistic	18.74*** (df = 4; 1170)	

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
 All demographicson and Depression

## 0.5 Mediation effects of media use

### 0.5.1 Mediation of phone use

No significant mediation effect.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	ci.upper
depre	~	Use_phone	a1	0.1656868	0.0861880	1.9223875	0.0545570	-0.0032386	0.3341639
depre	~	age	b1	-0.1123904	0.0156417	-7.1852855	0.0000000	-0.1430476	-0.0817332
depre	~	gender	b2	-0.3534973	0.3682663	-0.9598958	0.3371077	-1.0752859	0.3682913
depre	~	education	b3	0.7195381	0.1692842	4.2504733	0.0000213	0.3877471	1.0513291
depre	~	income	b4	-0.0953983	0.0744256	-1.2817947	0.1999147	-0.2412698	0.0504711
Use_phone	~	age	c1	-0.0082539	0.0052890	-1.5605919	0.1186201	-0.0186201	0.0021662
Use_phone	~	gender	c2	0.1488661	0.1245754	1.1949875	0.2320919	-0.0952973	0.3930503
Use_phone	~	education	c3	-0.1974557	0.0570092	-3.4635770	0.0005330	-0.3091917	-0.0857185
Use_phone	~	income	c4	-0.0198818	0.0251850	-0.7894315	0.4298599	-0.0692434	0.0294807
age	~~	gender		-0.5741979	0.1718196	-3.3418647	0.0008322	-0.9109582	-0.2374376
gender	~~	education		-0.0684943	0.0168010	-4.0768073	0.0000457	-0.1014236	-0.0355650
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.7166720	1.0673750
age	~~	education		-0.7834819	0.3918295	-1.9995481	0.0455491	-1.5514537	-0.0155035
age	~~	income		0.7855176	0.8777524	0.8949193	0.3708302	-0.9348456	2.5058808
gender	~~	income		-0.0369688	0.0374359	-0.9875214	0.3233871	-0.1103418	0.0364042
depre	~~	depre		38.7693390	1.5995008	24.2383993	0.0000000	35.6343750	41.9043030
Use_phone	~~	Use_phone		4.4417758	0.1832537	24.2383993	0.0000000	4.0826052	4.8009464
age	~~	age		137.4465565	5.6706119	24.2383993	0.0000000	126.3323613	148.5607517
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0.2701918
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609	1.4138007
income	~~	income		6.5819103	0.2715489	24.2383993	0.0000000	6.0496842	7.1141364
depre	~1			19.4099242	1.3824380	14.0403578	0.0000000	16.7003955	22.1194529
Use_phone	~1			8.6481860	0.3940880	21.9448095	0.0000000	7.8757877	9.4207843
age	~1			43.0331915	0.3420172	125.8217026	0.0000000	42.3628500	43.7035330
gender	~1			1.5046809	0.0145859	103.1602432	0.0000000	1.4760931	1.5332687
education	~1			3.4510638	0.0333649	103.4339103	0.0000000	3.3856698	3.5164578
income	~1			5.8978723	0.0748440	78.8021965	0.0000000	5.7511808	6.0445638
Indirect1	:=	a1*c1	Indirect1	-0.0013676	0.0011287	-1.2116129	0.2256606	-0.0035798	0.0008446
Indirect2	:=	a1*c2	Indirect2	0.0246651	0.0243033	1.0148878	0.3101593	-0.0229685	0.0722987
Indirect3	:=	a1*c3	Indirect3	-0.0327158	0.0194639	-1.6808442	0.0927932	-0.0708644	0.0054328
Indirect4	:=	a1*c4	Indirect4	-0.0032942	0.0045110	-0.7302559	0.4652338	-0.0121355	0.0055471

### 0.5.2 Mediation of social media chat

Social media chat has mediation effect between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.low
depre	~	Socialmedia_chat	a1	0.2878930	0.0773356	3.7226436	0.0001971	0.13631
depre	~	age	b1	-0.1026537	0.0158420	-6.4798467	0.0000000	-0.13370
depre	~	gender	b2	-0.3370920	0.3664730	-0.9198277	0.3576628	-1.05536
depre	~	education	b3	0.7155241	0.1678823	4.2620570	0.0000203	0.38648
depre	~	income	b4	-0.1118599	0.0741716	-1.5081240	0.1315228	-0.25723
Socialmedia_chat	~	age	c1	-0.0385709	0.0058691	-6.5718364	0.0000000	-0.05007
Socialmedia_chat	~	gender	c2	0.0286895	0.1382406	0.2075334	0.8355933	-0.24225
Socialmedia_chat	~	education	c3	-0.0996963	0.0632627	-1.5759087	0.1150469	-0.22368
Socialmedia_chat	~	income	c4	0.0457372	0.0279476	1.6365338	0.1017279	-0.00903
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.91095
gender	~~	education		-0.0684943	0.0168010	-4.0768075	0.0000457	-0.10142
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.71667
age	~~	education		-0.7834821	0.3918295	-1.9995485	0.0455490	-1.55145
age	~~	income		0.7855176	0.8777524	0.8949193	0.3708302	-0.93484
gender	~~	income		-0.0369688	0.0374359	-0.9875218	0.3233869	-0.11034
depre	~~	depre		38.4379329	1.5858280	24.2383993	0.0000000	35.32976
Socialmedia_chat	~~	Socialmedia_chat		5.4696930	0.2256623	24.2383993	0.0000000	5.02740
age	~~	age		137.4465580	5.6706120	24.2383993	0.0000000	126.33236
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.22976
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.20226
income	~~	income		6.5819103	0.2715489	24.2383993	0.0000000	6.04968
depre	~1			18.3662288	1.3366238	13.7407614	0.0000000	15.74649
Socialmedia_chat	~1			8.6024551	0.4373170	19.6709823	0.0000000	7.74532
age	~1			43.0331915	0.3420172	125.8217018	0.0000000	42.36285
gender	~1			1.5046809	0.0145859	103.1602425	0.0000000	1.47609
education	~1			3.4510638	0.0333649	103.4339102	0.0000000	3.38566
income	~1			5.8978723	0.0748440	78.8021960	0.0000000	5.75118
Indirect1	:=	a1*c1	Indirect1	-0.0111043	0.0034282	-3.2390778	0.0011992	-0.01782
Indirect2	:=	a1*c2	Indirect2	0.0082595	0.0398603	0.2072116	0.8358446	-0.06986
Indirect3	:=	a1*c3	Indirect3	-0.0287019	0.0197776	-1.4512282	0.1467163	-0.06746
Indirect4	:=	a1*c4	Indirect4	0.0131674	0.0087891	1.4981560	0.1340927	-0.00405

### 0.5.3 Mediation of Social media Post

Social media post has mediation effects between age, education and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.low
depre	~	Socialmedia_post	a1	0.4638986	0.0654258	7.0904579	0.0000000	0.33566
depre	~	age	b1	-0.0986212	0.0154736	-6.3734966	0.0000000	-0.12894
depre	~	gender	b2	-0.3725326	0.3610319	-1.0318548	0.3021401	-1.08014
depre	~	education	b3	0.5725357	0.1659787	3.4494528	0.0005617	0.24722
depre	~	income	b4	-0.1004289	0.0729783	-1.3761477	0.1687759	-0.24346
Socialmedia_post	~	age	c1	-0.0326294	0.0068336	-4.7748206	0.0000018	-0.04602
Socialmedia_post	~	gender	c2	0.0942008	0.1609588	0.5852479	0.5583810	-0.22127
Socialmedia_post	~	education	c3	0.2463610	0.0736592	3.3446045	0.0008240	0.10199
Socialmedia_post	~	income	c4	0.0037431	0.0325405	0.1150282	0.9084228	-0.06003
age	~~	gender		-0.5741979	0.1718196	-3.3418646	0.0008322	-0.91095
gender	~~	education		-0.0684943	0.0168010	-4.0768071	0.0000457	-0.10142
education	~~	income		0.8920236	0.0894667	9.9704501	0.0000000	0.71667
age	~~	education		-0.7834821	0.3918295	-1.9995485	0.0455490	-1.55145
age	~~	income		0.7855177	0.8777524	0.8949194	0.3708302	-0.93484
gender	~~	income		-0.0369688	0.0374359	-0.9875215	0.3233871	-0.11034
depre	~~	depre		37.2955166	1.5386955	24.2383993	0.0000000	34.27972
Socialmedia_post	~~	Socialmedia_post		7.4151726	0.3059267	24.2383993	0.0000000	6.81556
age	~~	age		137.4465585	5.6706120	24.2383993	0.0000000	126.33236
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.22976
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.20226
income	~~	income		6.5819105	0.2715489	24.2383993	0.0000000	6.04968
depre	~1			17.9791242	1.2112577	14.8433514	0.0000000	15.60510
Socialmedia_post	~1			6.1731000	0.5091849	12.1234937	0.0000000	5.17511
age	~1			43.0331915	0.3420172	125.8217016	0.0000000	42.36285
gender	~1			1.5046809	0.0145859	103.1602427	0.0000000	1.47609
education	~1			3.4510638	0.0333649	103.4339105	0.0000000	3.38566
income	~1			5.8978723	0.0748440	78.8021949	0.0000000	5.75118
Indirect1	:=	a1*c1	Indirect1	-0.0151367	0.0038219	-3.9605124	0.0000748	-0.02262
Indirect2	:=	a1*c2	Indirect2	0.0436996	0.0749225	0.5832644	0.5597153	-0.10314
Indirect3	:=	a1*c3	Indirect3	0.1142865	0.0377812	3.0249579	0.0024867	0.04023
Indirect4	:=	a1*c4	Indirect4	0.0017364	0.0150975	0.1150130	0.9084348	-0.02785



### 0.5.4 Mediation of Social media News

Social media use has mediation effects between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lo
depre	~	Socialmedia_news	a1	0.2366485	0.0805294	2.9386603	0.0032963	0.0788
depre	~	age	b1	-0.1068099	0.0157711	-6.7724886	0.0000000	-0.1377
depre	~	gender	b2	-0.3573735	0.3674022	-0.9727037	0.3307006	-1.0774
depre	~	education	b3	0.6889754	0.1680764	4.0991810	0.0000415	0.3595
depre	~	income	b4	-0.1061265	0.0742935	-1.4284765	0.1531548	-0.2517
Socialmedia_news	~	age	c1	-0.0293601	0.0056488	-5.1976092	0.0000002	-0.0404
Socialmedia_news	~	gender	c2	0.1206042	0.1330506	0.9064538	0.3646957	-0.1401
Socialmedia_news	~	education	c3	-0.0090988	0.0608877	-0.1494355	0.8812100	-0.1284
Socialmedia_news	~	income	c4	0.0314139	0.0268984	1.1678728	0.2428581	-0.0213
age	~~	gender		-0.5741979	0.1718196	-3.3418646	0.0008322	-0.9109
gender	~~	education		-0.0684943	0.0168010	-4.0768075	0.0000457	-0.1014
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.7166
age	~~	education		-0.7834821	0.3918295	-1.9995485	0.0455490	-1.5514
age	~~	income		0.7855175	0.8777524	0.8949192	0.3708303	-0.9348
gender	~~	income		-0.0369688	0.0374359	-0.9875217	0.3233870	-0.1103
depre	~~	depre		38.6075268	1.5928249	24.2383993	0.0000000	35.4856
Socialmedia_news	~~	Socialmedia_news		5.0667042	0.2090363	24.2383993	0.0000000	4.6570
age	~~	age		137.4465580	5.6706120	24.2383993	0.0000000	126.3323
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022
income	~~	income		6.5819104	0.2715489	24.2383993	0.0000000	6.0496
depre	~1			19.0355196	1.3145851	14.4802493	0.0000000	16.4589
Socialmedia_news	~1			7.6370502	0.4208988	18.1446244	0.0000000	6.8121
age	~1			43.0331915	0.3420172	125.8217018	0.0000000	42.3628
gender	~1			1.5046809	0.0145859	103.1602426	0.0000000	1.4760
education	~1			3.4510638	0.0333649	103.4339101	0.0000000	3.3856
income	~1			5.8978723	0.0748440	78.8021959	0.0000000	5.7511
Indirect1	:=	a1*c1	Indirect1	-0.0069480	0.0027161	-2.5581027	0.0105245	-0.0122
Indirect2	:=	a1*c2	Indirect2	0.0285408	0.0329501	0.8661828	0.3863899	-0.0360
Indirect3	:=	a1*c3	Indirect3	-0.0021532	0.0144276	-0.1492426	0.8813622	-0.0304
Indirect4	:=	a1*c4	Indirect4	0.0074340	0.0068497	1.0853067	0.2777858	-0.0059

### 0.5.5 Mediation of Online Search

Online search has mediation effect between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower
depre	~	Online_search	a1	0.2922850	0.0906214	3.2253411	0.0012582	0.1146703
depre	~	age	b1	-0.1031357	0.0159255	-6.4761164	0.0000000	-0.1343492
depre	~	gender	b2	-0.2768624	0.3673536	-0.7536675	0.4510489	-0.9968622
depre	~	education	b3	0.7057627	0.1680521	4.1996665	0.0000267	0.3763867
depre	~	income	b4	-0.1070834	0.0742407	-1.4423822	0.1491946	-0.2525924
Online_search	~	age	c1	-0.0363422	0.0050160	-7.2453236	0.0000000	-0.0461733
Online_search	~	gender	c2	-0.1778049	0.1181452	-1.5049687	0.1323321	-0.4093653
Online_search	~	education	c3	-0.0648019	0.0540666	-1.1985582	0.2306998	-0.1707704
Online_search	~	income	c4	0.0287081	0.0238850	1.2019309	0.2293903	-0.0181056
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.9109582
gender	~~	education		-0.0684943	0.0168010	-4.0768074	0.0000457	-0.1014236
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.7166720
age	~~	education		-0.7834821	0.3918295	-1.9995485	0.0455490	-1.5514538
age	~~	income		0.7855174	0.8777524	0.8949191	0.3708303	-0.9348457
gender	~~	income		-0.0369688	0.0374359	-0.9875215	0.3233870	-0.1103418
depre	~~	depre		38.5499750	1.5904505	24.2383993	0.0000000	35.4327492
Online_search	~~	Online_search		3.9950704	0.1648240	24.2383993	0.0000000	3.6720213
age	~~	age		137.4465578	5.6706120	24.2383993	0.0000000	126.3323625
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609
income	~~	income		6.5819103	0.2715489	24.2383993	0.0000000	6.0496843
depre	~1			18.2595651	1.4104489	12.9459250	0.0000000	15.4951362
Online_search	~1			8.8381201	0.3737465	23.6473668	0.0000000	8.1055905
age	~1			43.0331915	0.3420172	125.8217019	0.0000000	42.3628500
gender	~1			1.5046809	0.0145859	103.1602428	0.0000000	1.4760931
education	~1			3.4510638	0.0333649	103.4339100	0.0000000	3.3856698
income	~1			5.8978723	0.0748440	78.8021960	0.0000000	5.7511808
Indirect1	:=	a1*c1	Indirect1	-0.0106223	0.0036050	-2.9465690	0.0032132	-0.0176879
Indirect2	:=	a1*c2	Indirect2	-0.0519697	0.0381063	-1.3638081	0.1726280	-0.1266567
Indirect3	:=	a1*c3	Indirect3	-0.0189406	0.0168587	-1.1234934	0.2612280	-0.0519831
Indirect4	:=	a1*c4	Indirect4	0.0083910	0.0074502	1.1262699	0.2600513	-0.0062112

### 0.5.6 Mediation of Email

Email has mediation effect between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	ci.upper
depre	~	Email	a1	0.4262942	0.0769337	5.5410564	0.0000000	0.2755068	0.5770811
depre	~	age	b1	-0.0962604	0.0157690	-6.1044200	0.0000000	-0.1271671	-0.0653533
depre	~	gender	b2	-0.3890846	0.3640597	-1.0687385	0.2851875	-1.1026286	0.3244593
depre	~	education	b3	0.6967956	0.1665393	4.1839711	0.0000286	0.3703846	1.0232066
depre	~	income	b4	-0.1096311	0.0735943	-1.4896693	0.1363112	-0.2538733	0.0346110
Email	~	age	c1	-0.0410456	0.0058584	-7.0062643	0.0000000	-0.0525279	-0.0295633
Email	~	gender	c2	0.1413376	0.1379886	1.0242707	0.3057074	-0.1291150	0.4117903
Email	~	education	c3	-0.0233954	0.0631474	-0.3704884	0.7110186	-0.1471620	0.1003713
Email	~	income	c4	0.0256599	0.0278966	0.9198211	0.3576662	-0.0290165	0.0803363
age	~~	gender		-0.5741979	0.1718196	-3.3418647	0.0008322	-0.9109582	-0.2374377
gender	~~	education		-0.0684943	0.0168010	-4.0768073	0.0000457	-0.1014236	-0.0355650
education	~~	income		0.8920235	0.0894667	9.9704500	0.0000000	0.7166720	1.0673753
age	~~	education		-0.7834821	0.3918295	-1.9995484	0.0455490	-1.5514538	-0.0155103
age	~~	income		0.7855175	0.8777524	0.8949192	0.3708303	-0.9348457	2.5058800
gender	~~	income		-0.0369688	0.0374359	-0.9875215	0.3233870	-0.1103418	0.0364042
depre	~~	depre		37.9009071	1.5636720	24.2383993	0.0000000	34.8361663	40.9656480
Email	~~	Email		5.4497689	0.2248403	24.2383993	0.0000000	5.0090901	5.8904473
age	~~	age		137.4465587	5.6706120	24.2383993	0.0000000	126.3323634	148.5607541
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0.2701918
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609	1.4138007
income	~~	income		6.5819104	0.2715489	24.2383993	0.0000000	6.0496843	7.1141364
depre	~1			17.3796420	1.3098939	13.2679772	0.0000000	14.8122972	19.9469863
Email	~1			8.1239073	0.4365198	18.6106279	0.0000000	7.2683443	8.9794704
age	~1			43.0331915	0.3420172	125.8217015	0.0000000	42.3628500	43.7035330
gender	~1			1.5046809	0.0145859	103.1602426	0.0000000	1.4760931	1.5332680
education	~1			3.4510638	0.0333649	103.4339099	0.0000000	3.3856698	3.5164577
income	~1			5.8978723	0.0748440	78.8021958	0.0000000	5.7511808	6.0445633
Indirect1	:=	a1*c1	Indirect1	-0.0174975	0.0040260	-4.3461229	0.0000139	-0.0253883	-0.0096067
Indirect2	:=	a1*c2	Indirect2	0.0602514	0.0598203	1.0072072	0.3138352	-0.0569942	0.1774970
Indirect3	:=	a1*c3	Indirect3	-0.0099733	0.0269795	-0.3696630	0.7116336	-0.0628521	0.0429053
Indirect4	:=	a1*c4	Indirect4	0.0109387	0.0120549	0.9074037	0.3641933	-0.0126885	0.0345659

### 0.5.7 Mediation of media share

Media share has mediation effects between age, education and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	ci.upper
depre	~	Media_share	a1	0.5667589	0.0657720	8.6170200	0.0000000	0.4378481	0.6956697
depre	~	age	b1	-0.0917952	0.0153904	-5.9644498	0.0000000	-0.1219599	-0.0616305
depre	~	gender	b2	-0.3058706	0.3575081	-0.8555627	0.3922397	-1.0065737	0.3948325
depre	~	education	b3	0.5937684	0.1639572	3.6214850	0.0002929	0.2724183	0.9151185
depre	~	income	b4	-0.1063586	0.0722796	-1.4714890	0.1411589	-0.2480240	0.0353068
Media_share	~	age	c1	-0.0387514	0.0067321	-5.7562119	0.0000000	-0.0519461	-0.0255567
Media_share	~	gender	c2	-0.0405146	0.1585673	-0.2555043	0.7983336	-0.3513009	0.2702717
Media_share	~	education	c3	0.1641859	0.0725648	2.2626094	0.0236598	0.0219614	0.3064104
Media_share	~	income	c4	0.0135263	0.0320570	0.4219442	0.6730657	-0.0493043	0.0763569
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.9109582	-0.2374376
gender	~~	education		-0.0684943	0.0168010	-4.0768076	0.0000457	-0.1014237	-0.0355649
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.7166720	1.0673750
age	~~	education		-0.7834823	0.3918295	-1.9995489	0.0455490	-1.5514540	-0.0155028
age	~~	income		0.7855171	0.8777524	0.8949188	0.3708305	-0.9348460	2.5058801
gender	~~	income		-0.0369688	0.0374359	-0.9875219	0.3233869	-0.1103418	0.0364041
depre	~~	depre		36.5796583	1.5091615	24.2383993	0.0000000	33.6217561	39.5381605
Media_share	~~	Media_share		7.1964668	0.2969035	24.2383993	0.0000000	6.6145465	7.7783871
age	~~	age		137.4465582	5.6706120	24.2383993	0.0000000	126.3323629	148.5609535
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0.2701918
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609	1.4138007
income	~~	income		6.5819104	0.2715489	24.2383993	0.0000000	6.0496844	7.1141364
depre	~1			17.0807201	1.2122733	14.0898259	0.0000000	14.7047081	19.4569321
Media_share	~1			6.6379120	0.5016197	13.2329581	0.0000000	5.6547556	7.6210684
age	~1			43.0331915	0.3420172	125.8217017	0.0000000	42.3628500	43.7037330
gender	~1			1.5046809	0.0145859	103.1602427	0.0000000	1.4760931	1.5332687
education	~1			3.4510638	0.0333649	103.4339100	0.0000000	3.3856698	3.5164578
income	~1			5.8978723	0.0748440	78.8021957	0.0000000	5.7511808	6.0445638
Indirect1	:=	a1*c1	Indirect1	-0.0219627	0.0045885	-4.7864993	0.0000017	-0.0309560	-0.0129694
Indirect2	:=	a1*c2	Indirect2	-0.0229620	0.0899089	-0.2553920	0.7984203	-0.1991803	0.1532563
Indirect3	:=	a1*c3	Indirect3	0.0930538	0.0425209	2.1884258	0.0286386	0.0097144	0.1763932
Indirect4	:=	a1*c4	Indirect4	0.0076661	0.0181903	0.4214393	0.6734343	-0.0279863	0.0433185

### 0.5.8 Mediation of Short message

Short message has mediation effect between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower
depre	~	Short_message	a1	0.3532772	0.0838115	4.2151383	0.0000250	0.1890096
depre	~	age	b1	-0.1070757	0.0156138	-6.8577611	0.0000000	-0.1376782
depre	~	gender	b2	-0.3584408	0.3659327	-0.9795266	0.3273199	-1.0756557
depre	~	education	b3	0.7221551	0.1676399	4.3077770	0.0000165	0.3935870
depre	~	income	b4	-0.1080086	0.0739987	-1.4596025	0.1443994	-0.2530434
Short_message	~	age	c1	-0.0189150	0.0054067	-3.4984154	0.0004680	-0.0295121
Short_message	~	gender	c2	0.0838104	0.1273499	0.6581112	0.5104667	-0.1657908
Short_message	~	education	c3	-0.1000147	0.0582788	-1.7161410	0.0861362	-0.2142392
Short_message	~	income	c4	0.0263707	0.0257459	1.0242685	0.3057085	-0.0240903
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.9109582
gender	~~	education		-0.0684943	0.0168010	-4.0768074	0.0000457	-0.1014236
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.7166720
age	~~	education		-0.7834821	0.3918295	-1.9995485	0.0455490	-1.5514538
age	~~	income		0.7855174	0.8777524	0.8949191	0.3708303	-0.9348457
gender	~~	income		-0.0369688	0.0374359	-0.9875217	0.3233870	-0.1103418
depre	~~	depre		38.3119526	1.5806305	24.2383993	0.0000000	35.2139738
Short_message	~~	Short_message		4.6418261	0.1915071	24.2383993	0.0000000	4.2664790
age	~~	age		137.4465575	5.6706120	24.2383993	0.0000000	126.3323622
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609
income	~~	income		6.5819103	0.2715489	24.2383993	0.0000000	6.0496843
depre	~1			18.1422581	1.3228898	13.7141112	0.0000000	15.5494417
Short_message	~1			7.6443013	0.4028648	18.9748553	0.0000000	6.8547008
age	~1			43.0331915	0.3420172	125.8217021	0.0000000	42.3628500
gender	~1			1.5046809	0.0145859	103.1602426	0.0000000	1.4760931
education	~1			3.4510638	0.0333649	103.4339102	0.0000000	3.3856698
income	~1			5.8978723	0.0748440	78.8021962	0.0000000	5.7511808
Indirect1	:=	a1*c1	Indirect1	-0.0066823	0.0024823	-2.6920119	0.0071022	-0.0115474
Indirect2	:=	a1*c2	Indirect2	0.0296083	0.0455348	0.6502337	0.5155413	-0.0596384
Indirect3	:=	a1*c3	Indirect3	-0.0353329	0.0222296	-1.5894549	0.1119577	-0.0789021
Indirect4	:=	a1*c4	Indirect4	0.0093162	0.0093601	0.9953046	0.3195881	-0.0090293

### 0.5.9 Mediation of Digital Game

Digital game has mediation effect between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	
depre	~	Digital_game	a1	0.5357636	0.0645341	8.3020282	0.0000000	0.4092792	0
depre	~	age	b1	-0.0793627	0.0157645	-5.0342672	0.0000005	-0.1102606	-0
depre	~	gender	b2	-0.2525153	0.3583811	-0.7045999	0.4810593	-0.9549293	0
depre	~	education	b3	0.7055183	0.1639667	4.3028146	0.0000169	0.3841495	1
depre	~	income	b4	-0.0934699	0.0724315	-1.2904593	0.1968912	-0.2354330	0
Digital_game	~	age	c1	-0.0641986	0.0068759	-9.3367079	0.0000000	-0.0776751	-0
Digital_game	~	gender	c2	-0.1424466	0.1619550	-0.8795444	0.3791062	-0.4598725	0
Digital_game	~	education	c3	-0.0348960	0.0741151	-0.4708352	0.6377584	-0.1801589	0
Digital_game	~	income	c4	-0.0097479	0.0327418	-0.2977199	0.7659169	-0.0739207	0
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.9109582	-0
gender	~~	education		-0.0684943	0.0168010	-4.0768071	0.0000457	-0.1014236	-0
education	~~	income		0.8920235	0.0894667	9.9704497	0.0000000	0.7166720	1
age	~~	education		-0.7834822	0.3918295	-1.9995488	0.0455490	-1.5514539	-0
age	~~	income		0.7855173	0.8777524	0.8949190	0.3708304	-0.9348458	2
gender	~~	income		-0.0369687	0.0374359	-0.9875212	0.3233872	-0.1103418	0
depre	~~	depre		36.7363767	1.5156272	24.2383993	0.0000000	33.7658020	39
Digital_game	~~	Digital_game		7.5072425	0.3097252	24.2383993	0.0000000	6.9001923	8
age	~~	age		137.4465581	5.6706120	24.2383993	0.0000000	126.3323628	148
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609	1
income	~~	income		6.5819103	0.2715489	24.2383993	0.0000000	6.0496843	7
depre	~1			16.2014897	1.2637340	12.8203323	0.0000000	13.7246166	18
Digital_game	~1			8.6630111	0.5123363	16.9088379	0.0000000	7.6588505	9
age	~1			43.0331915	0.3420172	125.8217018	0.0000000	42.3628500	43
gender	~1			1.5046809	0.0145859	103.1602429	0.0000000	1.4760931	1
education	~1			3.4510638	0.0333649	103.4339099	0.0000000	3.3856698	3
income	~1			5.8978723	0.0748440	78.8021963	0.0000000	5.7511808	6
Indirect1	:=	a1*c1	Indirect1	-0.0343953	0.0055439	-6.2041116	0.0000000	-0.0452612	-0
Indirect2	:=	a1*c2	Indirect2	-0.0763177	0.0872552	-0.8746495	0.3817646	-0.2473347	0
Indirect3	:=	a1*c3	Indirect3	-0.0186960	0.0397720	-0.4700798	0.6382980	-0.0966477	0
Indirect4	:=	a1*c4	Indirect4	-0.0052226	0.0175532	-0.2975287	0.7660629	-0.0396261	0

### 0.5.10 Mediation of Whatsapp

Whatsapp has mediation effects between age, education and depression.

lhs	op	rhs	label	est	se	z	pvalue
depre	~	Whatsapp_wechat_line	a1	0.3284364	0.0778755	4.2174517	0.0000247
depre	~	age	b1	-0.1024414	0.0157630	-6.4988335	0.0000000
depre	~	gender	b2	-0.4108867	0.3663792	-1.1214793	0.2620839
depre	~	education	b3	0.7526067	0.1681538	4.4757046	0.0000076
depre	~	income	b4	-0.1008258	0.0739668	-1.3631226	0.1728439
Whatsapp_wechat_line	~	age	c1	-0.0344559	0.0058188	-5.9214531	0.0000000
Whatsapp_wechat_line	~	gender	c2	0.2498321	0.1370558	1.8228492	0.0683262
Whatsapp_wechat_line	~	education	c3	-0.2002961	0.0627206	-3.1934662	0.0014058
Whatsapp_wechat_line	~	income	c4	0.0064953	0.0277081	0.2344183	0.8146602
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322
gender	~~	education		-0.0684943	0.0168010	-4.0768074	0.0000457
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000
age	~~	education		-0.7834822	0.3918295	-1.9995486	0.0455490
age	~~	income		0.7855174	0.8777524	0.8949191	0.3708303
gender	~~	income		-0.0369688	0.0374359	-0.9875216	0.3233870
depre	~~	depre		38.3113266	1.5806046	24.2383993	0.0000000
Whatsapp_wechat_line	~~	Whatsapp_wechat_line		5.3763446	0.2218110	24.2383993	0.0000000
age	~~	age		137.4465580	5.6706120	24.2383993	0.0000000
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000
income	~~	income		6.5819104	0.2715489	24.2383993	0.0000000
depre	~1			17.9339287	1.3473182	13.3108341	0.0000000
Whatsapp_wechat_line	~1			8.8567757	0.4335692	20.4275933	0.0000000
age	~1			43.0331915	0.3420172	125.8217019	0.0000000
gender	~1			1.5046809	0.0145859	103.1602425	0.0000000
education	~1			3.4510638	0.0333649	103.4339101	0.0000000
income	~1			5.8978723	0.0748440	78.8021958	0.0000000
Indirect1	:=	a1*c1	Indirect1	-0.0113166	0.0032943	-3.4352143	0.0005921
Indirect2	:=	a1*c2	Indirect2	0.0820540	0.0490388	1.6732470	0.0942787
Indirect3	:=	a1*c3	Indirect3	-0.0657845	0.0258389	-2.5459438	0.0108983
Indirect4	:=	a1*c4	Indirect4	0.0021333	0.0091144	0.2340570	0.8149407

### 0.5.11 Mediation of Skype

Skype has mediation effects between age, education, income and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.low
depre	~	Skype_FT_zoom	a1	0.5931991	0.0679161	8.7342963	0.0000000	0.46008
depre	~	age	b1	-0.0945181	0.0153247	-6.1677068	0.0000000	-0.12455
depre	~	gender	b2	-0.2668772	0.3572778	-0.7469740	0.4550793	-0.96712
depre	~	education	b3	0.4086381	0.1665419	2.4536650	0.0141409	0.08222
depre	~	income	b4	-0.1448591	0.0724085	-2.0005819	0.0454375	-0.28677
Skype_FT_zoom	~	age	c1	-0.0324340	0.0065143	-4.9789159	0.0000006	-0.04520
Skype_FT_zoom	~	gender	c2	-0.1044432	0.1534366	-0.6806932	0.4960656	-0.40517
Skype_FT_zoom	~	education	c3	0.4689558	0.0702169	6.6786779	0.0000000	0.33133
Skype_FT_zoom	~	income	c4	0.0778266	0.0310197	2.5089381	0.0121095	0.01702
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.91095
gender	~~	education		-0.0684943	0.0168010	-4.0768075	0.0000457	-0.10142
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.71667
age	~~	education		-0.7834822	0.3918295	-1.9995487	0.0455490	-1.55145
age	~~	income		0.7855174	0.8777524	0.8949190	0.3708304	-0.93484
gender	~~	income		-0.0369688	0.0374359	-0.9875218	0.3233869	-0.11034
depre	~~	depre		36.5201703	1.5067072	24.2383993	0.0000000	33.56707
Skype_FT_zoom	~~	Skype_FT_zoom		6.7382914	0.2780007	24.2383993	0.0000000	6.19342
age	~~	age		137.4465580	5.6706120	24.2383993	0.0000000	126.33236
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.22976
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.20226
income	~~	income		6.5819104	0.2715489	24.2383993	0.0000000	6.04968
depre	~1			18.0890108	1.1731676	15.4189482	0.0000000	15.78964
Skype_FT_zoom	~1			4.6422949	0.4853888	9.5640743	0.0000000	3.69095
age	~1			43.0331915	0.3420172	125.8217018	0.0000000	42.36285
gender	~1			1.5046809	0.0145859	103.1602426	0.0000000	1.47609
education	~1			3.4510638	0.0333649	103.4339101	0.0000000	3.38566
income	~1			5.8978723	0.0748440	78.8021957	0.0000000	5.75118
Indirect1	:=	a1*c1	Indirect1	-0.0192398	0.0044480	-4.3254908	0.0000152	-0.02795
Indirect2	:=	a1*c2	Indirect2	-0.0619556	0.0912944	-0.6786355	0.4973689	-0.24088
Indirect3	:=	a1*c3	Indirect3	0.2781842	0.0524341	5.3054037	0.0000001	0.17541
Indirect4	:=	a1*c4	Indirect4	0.0461666	0.0191450	2.4114225	0.0158904	0.00864

### 0.5.12 Mediation of Online friends

Online friends has mediation effects between age, education and depression.



lhs	op	rhs	label	est	se	z	pvalue	ci.lower
depre	~	Online_friends	a1	0.6303420	0.0607824	10.3704634	0.0000000	0.5112106
depre	~	age	b1	-0.0909228	0.0151406	-6.0052481	0.0000000	-0.1205978
depre	~	gender	b2	-0.1265607	0.3533663	-0.3581573	0.7202256	-0.8191458
depre	~	education	b3	0.2251679	0.1674880	1.3443824	0.1788248	-0.1031025
depre	~	income	b4	-0.1099814	0.0713382	-1.5416910	0.1231487	-0.2498017
Online_friends	~	age	c1	-0.0362266	0.0071896	-5.0387733	0.0000005	-0.0503179
Online_friends	~	gender	c2	-0.3208928	0.1693423	-1.8949361	0.0581009	-0.6527977
Online_friends	~	education	c3	0.7323869	0.0774958	9.4506706	0.0000000	0.5804980
Online_friends	~	income	c4	0.0179092	0.0342353	0.5231200	0.6008908	-0.0491908
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.9109582
gender	~~	education		-0.0684943	0.0168010	-4.0768075	0.0000457	-0.1014236
education	~~	income		0.8920235	0.0894667	9.9704498	0.0000000	0.7166720
age	~~	education		-0.7834822	0.3918295	-1.9995486	0.0455490	-1.5514539
age	~~	income		0.7855173	0.8777524	0.8949189	0.3708304	-0.9348459
gender	~~	income		-0.0369688	0.0374359	-0.9875217	0.3233869	-0.1103418
depre	~~	depre		35.6300900	1.4699853	24.2383993	0.0000000	32.7489718
Online_friends	~~	Online_friends		8.2077266	0.3386249	24.2383993	0.0000000	7.5440339
age	~~	age		137.4465576	5.6706120	24.2383993	0.0000000	126.3323623
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609
income	~~	income		6.5819104	0.2715489	24.2383993	0.0000000	6.0496843
depre	~1			18.6330461	1.1363097	16.3978588	0.0000000	16.4059200
Online_friends	~1			3.5056687	0.5357058	6.5440188	0.0000000	2.4557047
age	~1			43.0331915	0.3420172	125.8217020	0.0000000	42.3628500
gender	~1			1.5046809	0.0145859	103.1602426	0.0000000	1.4760931
education	~1			3.4510638	0.0333649	103.4339101	0.0000000	3.3856698
income	~1			5.8978723	0.0748440	78.8021959	0.0000000	5.7511808
Indirect1	:=	a1*c1	Indirect1	-0.0228351	0.0050385	-4.5321272	0.0000058	-0.0327104
Indirect2	:=	a1*c2	Indirect2	-0.2022722	0.1085109	-1.8640726	0.0623115	-0.4149497
Indirect3	:=	a1*c3	Indirect3	0.4616543	0.0660901	6.9852216	0.0000000	0.3321200
Indirect4	:=	a1*c4	Indirect4	0.0112889	0.0216074	0.5224557	0.6013531	-0.0310608

### 0.5.13 Mediation of Watch TV

TV has mediation effect between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	ci.u
depre	~	Watch_TV	a1	0.2366485	0.0805294	2.9386603	0.0032963	0.0788138	0.394
depre	~	age	b1	-0.1068099	0.0157711	-6.7724886	0.0000000	-0.1377208	-0.075
depre	~	gender	b2	-0.3573735	0.3674022	-0.9727037	0.3307006	-1.0774687	0.362
depre	~	education	b3	0.6889754	0.1680764	4.0991810	0.0000415	0.3595518	1.018
depre	~	income	b4	-0.1061265	0.0742935	-1.4284765	0.1531548	-0.2517391	0.039
Watch_TV	~	age	c1	-0.0293601	0.0056488	-5.1976092	0.0000002	-0.0404315	-0.018
Watch_TV	~	gender	c2	0.1206042	0.1330506	0.9064538	0.3646957	-0.1401701	0.381
Watch_TV	~	education	c3	-0.0090988	0.0608877	-0.1494355	0.8812100	-0.1284364	0.110
Watch_TV	~	income	c4	0.0314139	0.0268984	1.1678728	0.2428581	-0.0213060	0.084
age	~~	gender		-0.5741979	0.1718196	-3.3418646	0.0008322	-0.9109582	-0.237
gender	~~	education		-0.0684943	0.0168010	-4.0768075	0.0000457	-0.1014236	-0.035
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.7166720	1.067
age	~~	education		-0.7834821	0.3918295	-1.9995485	0.0455490	-1.5514538	-0.015
age	~~	income		0.7855175	0.8777524	0.8949192	0.3708303	-0.9348457	2.505
gender	~~	income		-0.0369688	0.0374359	-0.9875217	0.3233870	-0.1103418	0.036
depre	~~	depre		38.6075268	1.5928249	24.2383993	0.0000000	35.4856473	41.729
Watch_TV	~~	Watch_TV		5.0667042	0.2090363	24.2383993	0.0000000	4.6570006	5.476
age	~~	age		137.4465580	5.6706120	24.2383993	0.0000000	126.3323627	148.560
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0.270
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609	1.413
income	~~	income		6.5819104	0.2715489	24.2383993	0.0000000	6.0496843	7.114
depre	~1			19.0355196	1.3145851	14.4802493	0.0000000	16.4589802	21.612
Watch_TV	~1			7.6370502	0.4208988	18.1446244	0.0000000	6.8121038	8.461
age	~1			43.0331915	0.3420172	125.8217018	0.0000000	42.3628500	43.703
gender	~1			1.5046809	0.0145859	103.1602426	0.0000000	1.4760931	1.533
education	~1			3.4510638	0.0333649	103.4339101	0.0000000	3.3856698	3.516
income	~1			5.8978723	0.0748440	78.8021959	0.0000000	5.7511808	6.044
Indirect1	:=	a1*c1	Indirect1	-0.0069480	0.0027161	-2.5581027	0.0105245	-0.0122715	-0.001
Indirect2	:=	a1*c2	Indirect2	0.0285408	0.0329501	0.8661828	0.3863899	-0.0360402	0.093
Indirect3	:=	a1*c3	Indirect3	-0.0021532	0.0144276	-0.1492426	0.8813622	-0.0304308	0.026
Indirect4	:=	a1*c4	Indirect4	0.0074340	0.0068497	1.0853067	0.2777858	-0.0059912	0.020

#### 0.5.14 Mediation of Radio

Radio has mediation effect between age and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	ci.upper
depre	~	Radio	a1	0.2922850	0.0906214	3.2253411	0.0012582	0.1146703	0.4698997
depre	~	age	b1	-0.1031357	0.0159255	-6.4761164	0.0000000	-0.1343492	-0.0719222
depre	~	gender	b2	-0.2768624	0.3673536	-0.7536675	0.4510489	-0.9968622	0.4431377
depre	~	education	b3	0.7057627	0.1680521	4.1996665	0.0000267	0.3763867	1.0351387
depre	~	income	b4	-0.1070834	0.0742407	-1.4423822	0.1491946	-0.2525924	0.0384256
Radio	~	age	c1	-0.0363422	0.0050160	-7.2453236	0.0000000	-0.0461733	-0.0265111
Radio	~	gender	c2	-0.1778049	0.1181452	-1.5049687	0.1323321	-0.4093653	0.0537553
Radio	~	education	c3	-0.0648019	0.0540666	-1.1985582	0.2306998	-0.1707704	0.0411666
Radio	~	income	c4	0.0287081	0.0238850	1.2019309	0.2293903	-0.0181056	0.0755218
age	~~	gender		-0.5741979	0.1718196	-3.3418645	0.0008322	-0.9109582	-0.2374370
gender	~~	education		-0.0684943	0.0168010	-4.0768074	0.0000457	-0.1014236	-0.0355650
education	~~	income		0.8920235	0.0894667	9.9704499	0.0000000	0.7166720	1.0673751
age	~~	education		-0.7834821	0.3918295	-1.9995485	0.0455490	-1.5514538	-0.0155104
age	~~	income		0.7855174	0.8777524	0.8949191	0.3708303	-0.9348457	2.5058803
gender	~~	income		-0.0369688	0.0374359	-0.9875215	0.3233870	-0.1103418	0.0364043
depre	~~	depre		38.5499750	1.5904505	24.2383993	0.0000000	35.4327492	41.6672008
Radio	~~	Radio		3.9950704	0.1648240	24.2383993	0.0000000	3.6720213	4.3181196
age	~~	age		137.4465578	5.6706120	24.2383993	0.0000000	126.3323625	148.5607531
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0.2701918
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609	1.4138007
income	~~	income		6.5819103	0.2715489	24.2383993	0.0000000	6.0496843	7.1141364
depre	~1			18.2595651	1.4104489	12.9459250	0.0000000	15.4951362	21.0239941
Radio	~1			8.8381201	0.3737465	23.6473668	0.0000000	8.1055905	9.5706497
age	~1			43.0331915	0.3420172	125.8217019	0.0000000	42.3628500	43.7035330
gender	~1			1.5046809	0.0145859	103.1602428	0.0000000	1.4760931	1.5332680
education	~1			3.4510638	0.0333649	103.4339100	0.0000000	3.3856698	3.5164577
income	~1			5.8978723	0.0748440	78.8021960	0.0000000	5.7511808	6.0445639
Indirect1	:=	a1*c1	Indirect1	-0.0106223	0.0036050	-2.9465690	0.0032132	-0.0176879	-0.0035567
Indirect2	:=	a1*c2	Indirect2	-0.0519697	0.0381063	-1.3638081	0.1726280	-0.1266567	0.0227173
Indirect3	:=	a1*c3	Indirect3	-0.0189406	0.0168587	-1.1234934	0.2612280	-0.0519831	0.0141018
Indirect4	:=	a1*c4	Indirect4	0.0083910	0.0074502	1.1262699	0.2600513	-0.0062112	0.0229931

### 0.5.15 Mediation of newspaper

Newspaper has mediation effect between education and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	ci.up
depre	~	Newspaper	a1	0.4527864	0.0646723	7.0012440	0.0000000	0.3260311	0.5795
depre	~	age	b1	-0.1173882	0.0153423	-7.6512758	0.0000000	-0.1474586	-0.0873
depre	~	gender	b2	-0.2800252	0.3612319	-0.7751951	0.4382244	-0.9880268	0.4279
depre	~	education	b3	0.5351104	0.1666935	3.2101461	0.0013267	0.2083972	0.8618
depre	~	income	b4	-0.1025985	0.0730175	-1.4051219	0.1599850	-0.2457101	0.0405
Newspaper	~	age	c1	0.0080176	0.0069168	1.1591538	0.2463935	-0.0055390	0.0215
Newspaper	~	gender	c2	-0.1077938	0.1629177	-0.6616461	0.5081981	-0.4271066	0.2115
Newspaper	~	education	c3	0.3350629	0.0745557	4.4941299	0.0000070	0.1889364	0.4811
Newspaper	~	income	c4	0.0086266	0.0329365	0.2619169	0.7933855	-0.0559277	0.0731
age	~~	gender		-0.5741979	0.1718196	-3.3418644	0.0008322	-0.9109582	-0.2374
gender	~~	education		-0.0684943	0.0168010	-4.0768072	0.0000457	-0.1014236	-0.0355
education	~~	income		0.8920236	0.0894667	9.9704500	0.0000000	0.7166720	1.0673
age	~~	education		-0.7834822	0.3918295	-1.9995488	0.0455490	-1.5514539	-0.0155
age	~~	income		0.7855175	0.8777524	0.8949192	0.3708303	-0.9348457	2.5058
gender	~~	income		-0.0369688	0.0374359	-0.9875212	0.3233872	-0.1103418	0.0364
depre	~~	depre		37.3338208	1.5402758	24.2383993	0.0000000	34.3149356	40.3527
Newspaper	~~	Newspaper		7.5967578	0.3134183	24.2383993	0.0000000	6.9824693	8.2110
age	~~	age		137.4465605	5.6706121	24.2383993	0.0000000	126.3323650	148.5607
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0.2701
education	~~	education		1.3080308	0.0539652	24.2383993	0.0000000	1.2022609	1.4138
income	~~	income		6.5819105	0.2715489	24.2383993	0.0000000	6.0496845	7.1141
depre	~1			19.1743598	1.1671147	16.4288568	0.0000000	16.8868571	21.4618
Newspaper	~1			3.6848623	0.5153817	7.1497727	0.0000000	2.6747326	4.6949
age	~1			43.0331915	0.3420172	125.8217007	0.0000000	42.3628500	43.7035
gender	~1			1.5046809	0.0145859	103.1602425	0.0000000	1.4760931	1.5332
education	~1			3.4510638	0.0333649	103.4339101	0.0000000	3.3856698	3.5164
income	~1			5.8978723	0.0748440	78.8021949	0.0000000	5.7511808	6.0445
Indirect1	:=	a1*c1	Indirect1	0.0036303	0.0031745	1.1435861	0.2527953	-0.0025916	0.0098
Indirect2	:=	a1*c2	Indirect2	-0.0488076	0.0740956	-0.6587112	0.5100813	-0.1940322	0.0964
Indirect3	:=	a1*c3	Indirect3	0.1517119	0.0401142	3.7820034	0.0001556	0.0730896	0.2303
Indirect4	:=	a1*c4	Indirect4	0.0039060	0.0149236	0.2617339	0.7935266	-0.0253437	0.0331

## 0.6 Information source mediation analysis

Information source related confusion has significant mediation effect between age and depression.

Information source related confusion has relatively weak significant mediation effect ( $p < 0.1$ ) between income and depression.

Information source related certainty has relatively weak ( $p < 0.1$ ) mediation effect between education and depression.

lhs	op	rhs	label	est	se	z	pvalue	ci.lower	ci.upper
depre	~	certainty	a1	-0.5615210	0.1107112	-5.0719449	0.0000004	-0.7785109	-0.34453
depre	~	overload	a2	0.0960127	0.1103870	0.8697827	0.3844192	-0.1203419	0.31236
depre	~	anxiety	a3	0.9926370	0.1027916	9.6567912	0.0000000	0.7911691	1.19410
depre	~	confusion	a4	1.1133721	0.1026806	10.8430605	0.0000000	0.9121218	1.31462
depre	~	age	b1	-0.0954407	0.0137519	-6.9401755	0.0000000	-0.1223939	-0.06848
depre	~	gender	b2	-0.3716163	0.3224770	-1.1523808	0.2491646	-1.0036597	0.26042
depre	~	education	b3	0.7438708	0.1478191	5.0323053	0.0000005	0.4541507	1.03359
depre	~	income	b4	-0.1380049	0.0654184	-2.1095720	0.0348952	-0.2662226	-0.00978
certainty	~	age	c1	-0.0012346	0.0036038	-0.3425920	0.7319054	-0.0082980	0.00582
certainty	~	gender	c2	0.1129793	0.0848838	1.3309879	0.1831930	-0.0533899	0.27934
certainty	~	education	c3	-0.0706756	0.0388452	-1.8194173	0.0688478	-0.1468108	0.00545
certainty	~	income	c4	0.0269667	0.0171606	1.5714249	0.1160840	-0.0066676	0.06060
overload	~	age	d1	-0.0052764	0.0036144	-1.4598320	0.1443362	-0.0123605	0.00180
overload	~	gender	d2	-0.0270461	0.0851330	-0.3176925	0.7507182	-0.1939038	0.13981
overload	~	education	d3	-0.0273772	0.0389593	-0.7027131	0.4822346	-0.1037359	0.04898
overload	~	income	d4	0.0348201	0.0172110	2.0231283	0.0430599	0.0010871	0.06855
anxiety	~	age	e1	-0.0060949	0.0038815	-1.5702451	0.1163581	-0.0137024	0.00151
anxiety	~	gender	e2	0.0448281	0.0914237	0.4903341	0.6238975	-0.1343589	0.22401
anxiety	~	education	e3	-0.0602402	0.0418380	-1.4398438	0.1499116	-0.1422412	0.02176
anxiety	~	income	e4	0.0117690	0.0184828	0.6367551	0.5242844	-0.0244566	0.04799
confusion	~	age	f1	-0.0111857	0.0038857	-2.8787096	0.0039931	-0.0188015	-0.00356
confusion	~	gender	f2	0.0577800	0.0915225	0.6313202	0.5278312	-0.1216008	0.23716
confusion	~	education	f3	-0.0308139	0.0418832	-0.7357091	0.4619077	-0.1129035	0.05127
confusion	~	income	f4	0.0354166	0.0185028	1.9141265	0.0556040	-0.0008481	0.07168
age	~~	gender		-0.5741969	0.1718192	-3.3418675	0.0008322	-0.9109563	-0.23743
gender	~~	education		-0.0684946	0.0168010	-4.0768193	0.0000457	-0.1014239	-0.03556
education	~~	income		0.8920233	0.0894667	9.9704460	0.0000000	0.7166717	1.06737
age	~~	education		-0.7834855	0.3918285	-1.9995622	0.0455476	-1.5514553	-0.01551
age	~~	income		0.7855216	0.8777501	0.8949263	0.3708265	-0.9348369	2.50588
gender	~~	income		-0.0369697	0.0374359	-0.9875475	0.3233743	-0.1103428	0.03640
depre	~~	depre		29.7003962	1.2253448	24.2383993	0.0000000	27.2987645	32.10202
certainty	~~	certainty		2.0622505	0.0850820	24.2383993	0.0000000	1.8954930	2.22900
overload	~~	overload		2.0743800	0.0855824	24.2383993	0.0000000	1.9066416	2.24211
anxiety	~~	anxiety		2.3922643	0.0986973	24.2383993	0.0000000	2.1988212	2.58570
confusion	~~	confusion		2.3974386	0.0989108	24.2383993	0.0000000	2.2035771	2.59130
age	~~	age		137.4458184	5.6705815	24.2383993	0.0000000	126.3316829	148.55995
gender	~~	gender		0.2499781	0.0103133	24.2383993	0.0000000	0.2297644	0.27019
education	~~	education		1.3080312	0.0539652	24.2383993	0.0000000	1.2022613	1.41380
income	~~	income		6.5819102	0.2715489	24.2383993	0.0000000	6.0496842	7.11413
depre	~1			13.6385310	1.4130173	9.6520623	0.0000000	10.8690680	16.40799
certainty	~1			4.7799078	0.2685259	17.8005467	0.0000000	4.2536067	5.30620
overload	~1			4.5560212	0.2693144	16.9171078	0.0000000	4.0281746	5.08386
anxiety	~1			4.4941606	0.2892145	15.5391960	0.0000000	3.9273106	5.06101
confusion	~1			4.4816624	0.2895271	15.4792505	0.0000000	3.9141997	5.04912
age	~1			43.0331915	0.3420163	125.8220404	0.0000000	42.3628518	43.70353
gender	~1			1.5046809	0.0145859	103.1602382	0.0000000	1.4760931	1.53326
education	~1			3.4510638	0.0333649	103.4338925	0.0000000	3.3856698	3.51645
income	~1			5.8978723	0.0748440	78.8021969	0.0000000	5.7511808	6.04456
Indirect1	:=	a1*c1	Indirect1	0.0006933	0.0020282	0.3418131	0.7324915	-0.0032820	0.00466
Indirect2	:=	a1*c2	Indirect2	-0.0634402	0.0492779	-1.2873975	0.1979558	-0.1600232	0.03314
Indirect3	:=	a1*c3	Indirect3	0.0390858	0.0231734	1.7125634	0.0867929	-0.0057331	0.08510
Indirect4	:=	a1*c4	Indirect4	-0.0151424	0.0100880	-1.5010315	0.1333474	-0.0349144	0.00462
Indirect5	:=	a2*d1	Indirect5	-0.0005066	0.0006780	-0.7472102	0.4549367	-0.0018354	0.00082
Indirect6	:=	a2*d2	Indirect6	-0.0025968	0.0087020	-0.2984099	0.7653904	-0.0196524	0.01445
Indirect7	:=	a2*d3	Indirect7	0.0026286	0.0048988	0.5466099	0.5846473	-0.0190537	0.00670