Stepwise—Multiple Regression

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Com 631, Spring 2017

Data: Film & TV Usage 2015

I. MODEL



# Multiple Regression Using the Stepwise Method

# **Independent Variables**

### **Demographics**

Item: Age

Item: Income

Dummied Item: Gender (Female)

### Digital Media Habits

Recoded Item: Watching Film on Device (Q3g reverse coded)

Recoded Item: Surfing the Internet for Fun (Q3h reverse coded)

Recoded Item: Checking Email (Q3i reverse coded)

Recoded Item: Facebook (Q3j reverse coded)

Recoded Item: Video games (Q3k reverse coded)

Recoded Item: Watching Videos on Smartphones (Q3n reverse coded)

### **Cosmopoliteness**

Item: Enjoying media from other countries (Q29s)

Item: I see myself as a citizen of the world (Q29t)

#### Internet Media Use

Item: I often watch videos on my cellphone (Q28a)

Item: I often search for videos on YouTube to watch (Q28b)

Item: I often share videos via Facebook (Q28c)

Item: I often share videos on Instagram (Q28d)

Item: I like to watch [shows on a mobile device to pass time] (Q28e)

\*Note: All variables were entered in at the same time using this stepwise method.

## **Dependent Variable**

Scale: New Technology Excitement

\*Note: New Technology Excitement is a straight additive scale that is comprised of Q29a (loving the options at my fingertips today), Q29e (I can hardly wait to see what tech comes next), and Q29f (I am getting less patient waiting for new tech). Each was standardized, and the three were summed. The Cronbach's alpha was .70.

### **II. RUNNING SPSS**

## Analyze $\rightarrow$ Regression $\rightarrow$ Linear

# Add your DV where it says Dependent

Independents: Enter all items you have selected for your stepwise multiple regression

'Method': select 'Stepwise'



Click the 'Statistics' button on the right.

Make sure that 'Estimate', 'Model fit', 'R squared change', 'Descriptives', and 'Collinearity diagnostics' are checked.

🟫 Linear Regressi	ion		×
		endent:	Statistics
💫 💫 Q23k. I ofte 🋐	Linear Regression: Sta	tistics X	
🛛 💑 Q23I. I like p 🎽			Plots
💰 Q24. Are th	Regression Coefficients	📝 <u>M</u> odel fit	S <u>a</u> ve
💑 Q25a. Repe	👿 <u>E</u> stimates	📝 R <u>s</u> quared change	Options
a25b. Repe	📃 Confidence intervals	🛃 Descriptives	
a25c. Repe	Level(%): 95	Part and partial correlations	Style
a26. If YES		Collinearity diagnostics	
💑 Q27. Do yo			
💑 Q28a. I ofte	Residuals		
💑 Q28b. l ofte	Durbin-)Aletson		
Q28c. Foffe			-
ស Q28α. Ι οπε	Casewise diagnostic:		
	Outliers outside.	3 standard deviations	
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& Q29b I'm m			
& Q29c.   like	Continue	Cancel Help	
Q29d, I think th	at tn		J
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Select Plots (underneath Statistics)

Add \*ZRESID as the Y, and \*ZPRED as the X

Check the 'Histogram' box under 'Standardized Residual Plots'

Select 'Continue'

	_		Dependent:	tatistics
Q2	Ń	Linear Regression: Plots	×	Ints
Q2	Γ			Ē
Q2		DEPENDNT	Scatter 1 of 1	ive
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		OK Paste	e <u>R</u> eset Cancel Help	

## Then hit 'Paste'

Highlight the text in your syntax and then hit Run (green triangle)



# **III. SPSS OUTPUT**

Des	criptive Statis	stics	
	Mean	Std. Deviation	Ν
Zscore(NewTechnology)	.0546212	.95583818	325
Age	34.70	11.363	325
Income	4.81	2.322	325
Femaleness	.6185	.48651	325
FilmOnDevice	5.1262	1.47806	325
SurfInternetFun	7.3877	1.09312	325
CheckEmail	7.6615	.78325	325
Facebook	6.4185	2.29673	325
VideoGames	5.3231	2.42230	325
VideosSmartPhone	4.6431	2.40408	325
Q29s. I like to see films and			
TV programs from other	4.13	1.956	325
countries.			
Q29t. I see myself as a	4 70	1 910	225
citizen of the world.	4.72	1.010	525
Q28a. I often watch videos	2.04	2 1 4 9	225
on my cell phone.	3.04	2.140	525
Q28b. I often search for			
videos on YouTube to	4.34	2.082	325
watch.			
Q28c. I often share videos	2.85	1 996	325
via Facebook.	2.05	1.990	525
Q28d. I often share videos	1 77	1 505	325
on Instagram.	1.77	1.505	525
Q28e. I like to watch TV			
shows on a			
laptop/tablet/phone when	3.74	2.201	325
I'm stuck somewhere and			
have to pass the time.			

		Zscore (NewTechnol					SurfinternetFu		CONTENRIOUS		VideosSmart	Q29s. I like to see films and TV programs from other	Q29t. I see myself as a citizen of the	Q28a, I often watch videos on my cell	Q28b. I often search for videos on YouTube to	Q28c. I often share videos	Q28d. I often share videos	Q28e. I like to watch TV shows on a laptop/tablet/p hone when I' m stuck somewhere and have to pass the	-
Pearson	Zscore	0 gy)	Age	income	remaieness	FilmOnDevice	101	CheckEmail 071	Pacebook	videoGames	Filone	countries.	wona.	phone.	watch.	via Pacebook.	on instagram.	ume.	-
ooneilalon	ogy) Are	- 094	1.000	.000	.042	.039	390.	.071	. 090	.112	.403	.004	.207	.191	.190	.134	.100	.420	
	Income	.006	.167	1.000	.024	068	.028	.111	104	022	.001	134	115	.029	118	174	029	024	
	Femaleness	.042	.140	.024	1.000	023	.006	.114	.270	044	.007	096	038	005	013	.136	150	002	
	SurfinternetFu	181	041	000	023	222	1 000	410	.033	193	101	.101	.065	022	166	- 030	- 118	.192	
	n CheckEmail	071	088	111	114	120	410	1 000	172	043	136	- 106	- 015	022	053	- 038	- 182	059	
	Facebook	.141	080	104	.270	.033	.062	.172	1.000	.211	.284	231	033	.136	.065	.393	.149	.109	,
	VideoGames VideosSmart	.277	113	022	044	.223	.183	.043	.211	1.000	.345	031	.070	.140	.142	.101	.081	.182	:
	Phone	.409	303	.001	.007	.239	.191	.136	.284	.345	1.000	.011	.048	.526	.261	.278	.285	.356	·
	Q29s. I like to see films and TV programs from other countries.	.084	083	134	096	.101	.065	106	231	031	.011	1.000	.488	.032	.192	.088	.112	.120	
	Q29t. I see myself as a citizen of the world.	.207	150	115	038	.085	.057	015	033	.070	.048	.488	1.000	.145	.195	.109	.101	.144	
	Q28a. I often watch videos on my cell phone.	.338	181	.029	005	.050	.022	.022	.136	.140	.526	.032	.145	1.000	.458	.346	.337	.405	
	Q28b. I often search for videos on YouTube to watch.	.250	189	118	013	.092	.166	.053	.065	.142	.261	.192	.195	.458	1.000	.434	.167	.382	:
	Q28c. I often share videos via Facebook.	.134	126	174	.136	.081	030	038	.393	.101	.278	.088	.109	.346	.434	1.000	.486	.333	1
	share videos on Instagram. Q28e. I like to watch TV/	.158	166	029	150	.059	118	182	.149	.081	.285	.112	.101	.337	.167	.486	1.000	.266	
	shows on a laptop/tablet/p hone when I' m stuck somewhere and have to	.426	157	024	002	.192	.059	.059	.109	.182	.356	.120	.144	.405	.382	.333	.266	1.000	
Sig. (1-tailed)	Zscore (NewTechnol		.045	.456	.227	.235	9 .00 <sup>.</sup>	1 .10	2 .00	15 .0	00 .0	00 .1	J66	000	000	.000	.008	.002	.000
	Age	.045		.001	.006	.229	9 .06	.056	5 .07	r6 .0:	21 .0		068	003	001	.000	.011	.001	.002
	Income	.456	.001		.334	.113	2 .31	.02	3 .03	30 .3	49 .4	95 .1	. 800	019	298	.017	.001	.300	.332
	Femaleness FilmOnDevice	.227	.006	.334	.340	.340	45	5 .020	5 .00	00 .2 14 .0	13 .4 00 .0	48 .1	042	250 . 064 .	465	.405	.007	.003	.483
	SurfinternetFu	.001	.061	.310	.455	.000		000	.1:	.0	.0 00		20	155	348	.001	.293	.017	.143
	CheckEmail	.102	.056	.023	.020	.016	5 .00	5		.2	19 .0	07 .	29	395	349	.171	.247	.001	.145
	Facebook VideoGames	.005	.076	.030	.000	.274	4 .133	3 .00'		0	0. 00	00 .		275 .	007	.120	.000	.003	.024
	VideosSmart	.000	.000		.448	.000	00.00	0 .00	7 .00	0. 0	00		19	195	000	.000	.000	.000	.000
	Q29s. I like to																		
	see films and TV programs from other countries.	.066	.068	.008	.042	.035	5 .12	.029	9 .00	.2	92 .4	19		. 000	280	.000	.057	.022	.015
	citizen of the world.	.000	.003	.019	.250	.064	4 .15	5 .39	5 .21	.1	D4 .1	95 .1	000		004	.000	.025	.035	.005
	watch videos on my cell phone.	.000	.001	.298	.465	.185	5 .341	3 .349	9 .00	.0	06 .0	00 .:	280 .1	D04		.000	.000	.000	.000
	search for videos on YouTube to watch.	.000	.000	.017	.405	.050	00.00	.17		20 .0	05 .0	. 00		. 000	000		.000	.001	.000
	Q28c. I often share videos via Facebook.	.008	.011	.001	.007	.074	4 .29:	3 .24	7 .00	.0	35 .0			025	000	.000		.000	.000
	Q280. Fotten share videos on Instagram. Q28e. Flike to watch TV	.002	.001	.300	.003	.145	5 .013	7 .001	.00	.0	73 .0	00 .1		035 .	000	.001	.000		.000
	shows on a laptop/tablet/p hone when I' m stuck somewhere and have to	.000	.002	.332	.483	.000	0 .14	3 .14	5 .02	24 .0	D1 .0	00 .I	015 J	005	000	.000	.000	.000	

N	Zscore																	
	(New rechnol ogy)	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Age	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Income	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Femaleness	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	FilmOnDevice	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	SurfinternetFu n	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	CheckEmail	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Facebook	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	VideoGames	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	VideosSmart Phone	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Q29s. I like to see films and TV programs from other countries.	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Q29t. I see myself as a citizen of the world.	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Q28a. I often watch videos on my cell phone.	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Q28b. I often search for videos on YouTube to watch.	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Q28c. I often share videos via Facebook.	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Q28d. I often share videos on Instagram.	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
	Q28e. I like to watch TV shows on a laptop/tablet/p hone when I' m stuck somewhere and have to nass the	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325

#### Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to- remove >= .100).
2	VideosSmartPhone		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to- remove >= .100).

	Middel Summary <sup>9</sup>												
						Cha	nge Statisti	cs					
			Adjusted R	Std. Error of	R Square				Sig. F Change				
Model	R	R Square	Square	the Estimate	Change	F Change	df1	df2					
1	.426 <sup>a</sup>	.181	.179	.86620182	.181	71.526	1	323	.000				
2	.507 <sup>b</sup>	.257	.253	.82621447	.076	33.022	1	322	.000				
3	.529°	.279	.273	.81517184	.022	9.783	1	321	.002				
4	.542 <sup>d</sup>	.293	.284	.80854892	.014	6.280	1	320	.013				
5	.556 <sup>e</sup>	.309	.298	.80095489	.015	7.097	/ 1	319	.008				
6	.566 <sup>f</sup>	.321	.308	.79529894	.012	5.553	1	318	.019				

a. Predictors: (Constant), Q28e. Nike to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.

b. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone

c. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world.

d. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone,

Q29t. I see myself as a citizen of the world., VideoGames

e. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone,

Q29t. I see myself as a citizen of the world., VideoGames, FilmOnDevice

f. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t.

I see myself as a citizen of the world., VideoGames, FilmOnDevice, SurfInternetFun

_ 5. Depender	in variable. Escore(i tew i	cennology)	_
3	Q29t. I see myself as a citizen of the world.		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to- remove >= .100).
4	VideoGames		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to- remove >= .100).
5	FilmOnDevice		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to- remove >= .100).
6	SurfInternetFun		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to- remove >= .100).

g. Dependent Variable: Zscore(NewTechnology)

a. Dependent Variable: Zscore(NewTechnology)

#### **ANOVA**<sup>a</sup>

Mode	9	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.666	1	53.666	71.526	.000 <sup>b</sup>
	Residual	242.349	323	.750		
	Total	296.015	324			
2	Regression	76.208	2	38.104	55.819	.000 <sup>c</sup>
	Residual	219.807	322	.683		
	Total	296.015	324			
3	Regression	82.709	3	27.570	41.489	.000 <sup>d</sup>
	Residual	213.306	321	.665		
	Total	296.015	324			
4	Regression	86.815	4	21.704	33.199	.000 <sup>e</sup>
	Residual	209.200	320	.654		
	Total	296.015	324			
5	Regression	91.367	5	18.273	28.484	.000 <sup>f</sup>
	Residual	204.648	319	.642		
	Total	296.015	324			
6	Regression	94.880	6	15.813	25.001	.000 <sup>g</sup>
	Residual	201.135	318	.633		
	Total	296.015	324			

a. Dependent Variable: Zscore(NewTechnology)

b. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.

c. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone

d. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world.

e. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world., VideoGames

f. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world., VideoGames, FilmOnDevice

g. Predictors: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world., VideoGames, FilmOnDevice, SurfInternetFun

Coefficients <sup>a</sup>												
	Unsta	ndardized	Standardized			Collinea	rity					
	Coe	fficients	Coefficients			Statisti	cs					
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF					
1 (Constant)	636	.095		6.713	.000							
Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.	.185	.022	.426	8.457	.000	1.000	1.000					
2 (Constant)	-1.011	.111		- 9.070	.000							
Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.	.139	.022	.321	6.240	.000	.873	1.145					
VideosSmartPhone	.117	.020	.295	5.746	.000	.873	1.145					
3 (Constant)	-1.350	.154		8.742	.000							
Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.	.130	.022	.299	5.840	.000	.857	1.167					
VideosSmartPhone	.118	.020	.296	5.836	.000	.873	1.145					
Q29t. I see myself as a citizen of the world.	.079	.025	.150	3.128	.002	.979	1.021					
4 (Constant)	-1.513	.166		9.092	.000							
Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.	.126	.022	.291	5.727	.000	.854	1.171					
VideosSmartPhone	.102	.021	.255	4.835	.000	.792	1.263					
Q29t. I see myself as a citizen of the world.	.076	.025	.144	3.028	.003	.977	1.024					
VideoGames	.050	.020	.126	2.506	.013	.875	1.143					
5 (Constant)	-1.196	.203		- 5.891	.000							
Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.	.132	.022	.305	6.022	.000	.845	1.183					
VideosSmartPhone	.109	.021	.275	5.200	.000	.777	1.287					
Q29t. I see myself as a citizen of the world.	.080	.025	.151	3.196	.002	.974	1.027					
VideoGames	.057	.020	.145	2.889	.004	.856	1.168					
FilmOnDevice	084	.032	130	- 2.664	.008	.907	1.103					

_		_						
6	(Constant)	-1.812	.330		- 5.492	.000		
	Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.	.135	.022	.310	6.158	.000	.844	1.185
	VideosSmartPhone	.103	.021	.260	4.928	.000	.766	1.305
	Q29t. I see myself as a citizen of the world.	.078	.025	.147	3.133	.002	.973	1.028
	VideoGames	.053	.020	.133	2.654	.008	.847	1.180
	FilmOnDevice	097	.032	150	3.043	.003	.881	1.136
	SurfInternetFun	.099	.042	.114	2.357	.019	.918	1.089

a. Dependent Variable: Zscore(NewTechnology)

						Co	llinearity	Statistics
								Minimum
M	odel	Beta In	t	Sig.	Partial Correlation	Tolerance	VIF	Tolerance
1	Age	028 <sup>b</sup>	544	.587	030	.975	1.025	.975
	Income	.016 <sup>b</sup>	.327	.744	.018	.999	1.001	.999
	Femaleness	.043 <sup>b</sup>	.849	.396	.047	1.000	1.000	1.000
	FilmOnDevice	044 <sup>b</sup>	861	.390	048	.963	1.038	.963
	SurfInternetFun	.157 <sup>b</sup>	3.148	.002	.173	.996	1.004	.996
	CheckEmail	.046 <sup>b</sup>	.909	.364	.051	.997	1.003	.997
	Facebook	.096 <sup>b</sup>	1.896	.059	.105	.988	1.012	.988
	VideoGames	.207 <sup>b</sup>	4.134	.000	.224	.967	1.034	.967
	VideosSmartPhone	.295 <sup>b</sup>	5.746	.000	.305	.873	1.145	.873
	Q29s. I like to see films and TV programs from	000p	GEE	512	026	096	1 015	086
	other countries.	.033-	.000	.513	.036	.900	1.015	.900
	Q29t. I see myself as a citizen of the world.	.149 <sup>b</sup>	2.958	.003	.163	.979	1.021	.979
	Q28a. I often watch videos on my cell phone.	.198 <sup>b</sup>	3.663	.000	.200	.836	1.196	.836
	Q28b. I often search for videos on YouTube to	102b	1 992	061	104	954	1 171	954
	watch.	.102	1.002	.001	.104	.004	1.171	.854
	Q28c. I often share videos via Facebook.	008 <sup>b</sup>	151	.880	008	.889	1.124	.889
	Q28d. I often share videos on Instagram.	.048 <sup>b</sup>	.917	.360	.051	.929	1.076	.929
2	Age	.051°	1.002	.317	.056	.906	1.104	.811
	Income	.014°	.285	.776	.016	.999	1.001	.873
	Femaleness	.040°	.841	.401	.047	1.000	1.000	.873
	FilmOnDevice	100 <sup>c</sup>	-2.018	.044	112	.930	1.076	.843

#### Excluded Variables<sup>a</sup>

12

							1	
	SurfInternetFun	.110°	2.259	.025	.125	.963	1.038	.844
	CheckEmail	.012 <sup>c</sup>	.249	.804	.014	.981	1.019	.860
	Facebook	.024 <sup>c</sup>	.482	.630	.027	.919	1.088	.813
	VideoGames	.133°	2.623	.009	.145	.877	1.140	.792
	Q29s. I like to see films and TV programs from	0.426	000	270	040	094	1 010	860
	other countries.	.043°	.882	.378	.049	.984	1.016	.008.
	Q29t. I see myself as a citizen of the world.	.150°	3.128	.002	.172	.979	1.021	.857
	Q28a. I often watch videos on my cell phone.	.079°	1.344	.180	.075	.669	1.494	.669
	Q28b. I often search for videos on YouTube to	0606	1 1 1 0	252	064	0.00	1 100	700
	watch.	.060*	1.149	.252	.064	.030	1.190	.763
	Q28c. I often share videos via Facebook.	063 <sup>c</sup>	-1.218	.224	068	.860	1.162	.814
	Q28d. I often share videos on Instagram.	013°	260	.795	014	.888	1.126	.834
3	Age	.073 <sup>d</sup>	1.457	.146	.081	.889	1.125	.810
	Income	.031 <sup>d</sup>	.644	.520	.036	.987	1.013	.857
	Femaleness	.046 <sup>d</sup>	.971	.333	.054	.999	1.001	.857
	FilmOnDevice	110 <sup>d</sup>	-2.243	.026	124	.926	1.080	.843
	SurfInternetFun	.103 <sup>d</sup>	2.133	.034	.118	.961	1.041	.844
	CheckEmail	.016 <sup>d</sup>	.325	.745	.018	.981	1.019	.857
	Facebook	.032 <sup>d</sup>	.648	.517	.036	.917	1.090	.813
	VideoGames	.126 <sup>d</sup>	2.506	.013	.139	.875	1.143	.792
	Q29s. I like to see films and TV programs from	bood	000	40.4	000	750	4 0 4 0	754
	other countries.	038°	690	.491	039	.758	1.319	.754
	Q28a. I often watch videos on my cell phone.	.060 <sup>d</sup>	1.025	.306	.057	.661	1.512	.661
	Q28b. I often search for videos on YouTube to	oped	<b>C00</b>	400	000	040	4 000	770
	watch.	.030-	.000	.492	.036	.010	1.220	.//0
	Q28c. I often share videos via Facebook.	074 <sup>d</sup>	-1.450	.148	081	.856	1.168	.803
	Q28d. I often share videos on Instagram.	024 <sup>d</sup>	476	.634	027	.884	1.132	.831
4	Age	.073 <sup>e</sup>	1.467	.143	.082	.889	1.125	.739
	Income	.033 <sup>e</sup>	.690	.491	.039	.986	1.014	.791
	Femaleness	.052 <sup>e</sup>	1.100	.272	.061	.996	1.004	.791
	FilmOnDevice	130 <sup>e</sup>	-2.664	.008	148	.907	1.103	.777
	SurfInternetFun	.089 <sup>e</sup>	1.844	.066	.103	.946	1.058	.776
	CheckEmail	.016 <sup>e</sup>	.337	.737	.019	.981	1.019	.781
	Facebook	.017 <sup>e</sup>	.334	.738	.019	.902	1.109	.754
	Q29s. I like to see films and TV programs from	0.078	500	047	000	750	4 007	740
	other countries.	027°	500	.617	028	.753	1.327	.749
	Q28a. I often watch videos on my cell phone.	.072 <sup>e</sup>	1.236	.218	.069	.657	1.521	.631
	Q28b. I often search for videos on YouTube to	ဂသမ	647	E 2 0	005	045	4 007	770
	watch.	.0323	Λ Γ <b>Ο</b> .	.538	.035	.815	1.227	.776
	Q28c. I often share videos via Facebook.	072 <sup>e</sup>	-1.422	.156	079	.856	1.168	.767

	Q28d. I often share videos on Instagram.	020 <sup>e</sup>	390	.697	022	.883	1.133	.756
5	Age	.080 <sup>f</sup>	1.617	.107	.090	.887	1.128	.723
	Income	.025 <sup>f</sup>	.540	.590	.030	.983	1.017	.776
	Femaleness	.050 <sup>f</sup>	1.068	.286	.060	.996	1.004	.776
	SurfInternetFun	.114 <sup>f</sup>	2.357	.019	.131	.918	1.089	.766
	CheckEmail	.028 <sup>f</sup>	.590	.556	.033	.972	1.028	.768
	Facebook	.009 <sup>f</sup>	.191	.848	.011	.899	1.112	.738
	Q29s. I like to see films and TV programs from other countries.	016 <sup>f</sup>	294	.769	016	.749	1.336	.749
	Q28a. I often watch videos on my cell phone.	.053 <sup>f</sup>	.912	.363	.051	.646	1.547	.611
	Q28b. I often search for videos on YouTube to watch.	.029 <sup>f</sup>	.565	.572	.032	.815	1.227	.763
	Q28c. I often share videos via Facebook.	075 <sup>f</sup>	-1.485	.139	083	.856	1.168	.752
	Q28d. I often share videos on Instagram.	024 <sup>f</sup>	479	.632	027	.882	1.134	.741
6	Age	.084 <sup>g</sup>	1.708	.089	.096	.886	1.129	.715
	Income	.020 <sup>g</sup>	.434	.665	.024	.981	1.020	.766
	Femaleness	.048 <sup>g</sup>	1.038	.300	.058	.996	1.004	.766
	CheckEmail	018 <sup>g</sup>	356	.722	020	.823	1.215	.763
	Facebook	.009 <sup>g</sup>	.184	.854	.010	.899	1.112	.729
	Q29s. I like to see films and TV programs from other countries.	022 <sup>g</sup>	405	.686	023	.747	1.339	.747
	Q28a. I often watch videos on my cell phone.	.063 <sup>g</sup>	1.093	.275	.061	.643	1.555	.599
	Q28b. I often search for videos on YouTube to watch.	.014 <sup>9</sup>	.266	.791	.015	.801	1.248	.756
	Q28c. I often share videos via Facebook.	065 <sup>g</sup>	-1.287	.199	072	.849	1.178	.739
	Q28d. I often share videos on Instagram.	003 <sup>g</sup>	051	.959	003	.852	1.174	.723

a. Dependent Variable: Zscore(NewTechnology)

b. Predictors in the Model: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time.

c. Predictors in the Model: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone

d. Predictors in the Model: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world.

e. Predictors in the Model: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world., VideoGames

f. Predictors in the Model: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world., VideoGames, FilmOnDevice

g. Predictors in the Model: (Constant), Q28e. I like to watch TV shows on a laptop/tablet/phone when I'm stuck somewhere and have to pass the time., VideosSmartPhone, Q29t. I see myself as a citizen of the world., VideoGames, FilmOnDevice, SurfInternetFun

				Variance Proportions						
					Q28e. I like to		Q29t.			
					watch TV shows		l see			
					on a		mysel			
					laptop/tablet/phon		f as a			
					e when I'm stuck		citize			
					somewhere and		n of			
Mode	Dimensio	Eigenvalu	Conditio	(Constant	have to pass the	VideosSmartPhon	the	VideoGame	FilmOnDevic	SurfInternetFu
I	n	е	n Index	)	time.	e	world.	S	е	n
1	1	1.862	1.000	.07	.07					
	2	.138	3.672	.93	.93					
2	1	2.733	1.000	.02	.03	.02				
	2	.157	4.172	.08	.93	.32				
	3	.110	4.976	.89	.04	.66				
3	1	3.601	1.000	.01	.01	.01	.01			
	2	.190	4.349	.05	.48	.10	.25			
	3	.151	4.884	.00	.50	.74	.04			
	4	.057	7.929	.95	.00	.15	.70			
4	1	4.469	1.000	.00	.01	.01	.01	.01		
	2	.196	4.779	.03	.68	.04	.12	.06		
	3	.168	5.159	.01	.17	.35	.22	.18		
	4	.115	6.241	.00	.13	.55	.08	.62		
	5	.053	9.212	.96	.01	.04	.57	.14		
5	1	5.394	1.000	.00	.01	.00	.00	.00	.00	
	2	.203	5.157	.01	.67	.07	.09	.03	.02	
	3	.168	5.662	.00	.20	.34	.19	.20	.00	
	4	.115	6.854	.00	.13	.54	.07	.63	.00	
	5	.086	7.932	.04	.00	.05	.48	.13	.40	
	6	.034	12.602	.93	.00	.00	.18	.02	.58	
6	1	6.351	1.000	.00	.00	.00	.00	.00	.00	.00
	2	.215	5.435	.00	.62	.10	.06	.01	.01	.01
	3	.169	6.132	.00	.25	.32	.15	.22	.00	.00
	4	.115	7.423	.00	.11	.52	.03	.66	.00	.00
	5	.093	8.262	.01	.01	.06	.65	.10	.19	.02
	6	.047	11.634	.07	.00	.00	.08	.00	.79	.10
	7	.010	24.690	.91	.00	.01	.02	.00	.00	.88

**Collinearity Diagnostics**<sup>a</sup>

a. Dependent Variable: Zscore(NewTechnology)

Residuals Statistics <sup>a</sup>									
	Minimum	Maximum	Mean	Std. Deviation	N				
Predicted Value	-1.4531686	1.2189310	.0560710	.54094671	326				
Residual	-2.87200761	1.97514808	00063619	.78677142	326				
Std. Predicted Value	-2.786	2.152	.003	1.000	326				
Std. Residual	-3.611	2.484	001	.989	326				

a. Dependent Variable: Zscore(NewTechnology)





Normal P-P Plot of Regression Standardized Residual

# Scatterplot



## **IV. TABLING RESULTS**

# Summary of Stepwise Regression Model Predicting New Technology Excitement

Step #	Predictor Variable	r	Final Beta	R2 Change
1	Using mobile device to pass time (Q28e)	.426***	.310***	.181***
2	Watching videos on smart phone	.409***	.260***	.076***
3	Citizen of the world (Q29t)	.207***	.147**	.022**
4	Playing video games	.277***	.133**	.014*
5	Watching films on a device	.039	150**	.015**
6	Surfing the internet for fun	.181**	.114*	.012*

Note: p<.05\*, p<.01\*\*, p<.001\*\*\*

Total Equation: R2 = .321 Adjusted R2= .308

F 25.001 df: 6, 318 p<.001

#### V. WRITE UP

Multicollinearity diagnostics using condition indexes and tolerances/VIFs indicated that the analysis has no substantive multicollinearity problems. All tolerances are greater than .75 and all VIFs are less than 1.35.

The stepwise regression inserted six of the original sixteen variables in the final model. All six variables have beta values that are significant at the 0.05 level; while most are significant at 0.01 or even 0.001 level. The overall fit of the model is good, with an R2 of .321. This means that this model explains 32.1% of the variance in New Technology Excitement. The number of cases in this test is limited to 325. Notably, of the demographic variables included originally, no demographic factors show up in the final model. Equally notable, the correlation of watching films on a device had a small, positive correlation before controlling for other variables, and once the control was applied it changed to a small, negative correlation. Liking to watch TV shows on a mobile device when one is stuck somewhere and needs to pass the time is a strong unique positive indicator of New Technology Excitement ( $\beta$ =.310, p <.001). This indicates that one's need for mobile technology to pass the time plays an important role in how excited one is for new technology. Watching videos on a smart phone ( $\beta = .260$ , p < .001) is also a strong indicator that shows that the more one watches videos on a smart phone, the excitement for new technology increases. In addition, seeing oneself as a citizen of the world ( $\beta = .147$ , p < .01) is significant because it reveals that as seeing oneself as a 'global' citizen increases, one's excitement for new technology also increases. Another significant variable, playing video games ( $\beta = .133$ , p < .01), indicates that playing video games is uniquely important to New Technology excitement. Furthermore, watching films on a device ( $\beta = -.150$ , p < .01) is significant in that is shows the more one watches films on a device, the less excited they will be over new technology. Lastly, surfing the internet for fun ( $\beta$  = .114, p < .05) is a unique predictor in that it shows that the more one uses the internet for fun, excitement over new technology increases. Overall, holding other variables in the model constant, liking

to watch tv shows on a mobile device to pass the time when stuck somewhere is the most important predictor of New Technology Excitement. Other factors such as watching videos on smartphones, seeing oneself as a citizen of the world, playing video games, watching films on a device, and surfing the internet for fun are also important in predicting New Technology Excitement.