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## LAMPIRAN

### Lampiran 1

#### ***Informed Consent Ahli (Bahasa Inggris ke Bahasa Indonesia)***

Saya yang bertanda tangan di bawah ini

nama : Dwiana Fajriati Dewi

lulusan : *MSc Work and Organizational Psychology*, University of  
Nottingham

menyatakan kesediaan untuk menjadi penerjemah/ahli bahasa dalam proses adaptasi skala oleh mahasiswa dengan

nama : Puspa Akhlakul Karimah Tuhelelu

NIM : C021191046

Demikian pernyataan ini yang disampaikan secara sukarela dan tanpa paksaan atau ancaman. Segala informasi yang saya berikan adalah benar dan dapat dipertanggungjawabkan sebagaimana mestinya.

Makassar, 11 Mei 2023



Dwiana Fajriati Dewi.

## Lampiran 2

### ***Informed Consent Ahli (Bahasa Indonesia ke Bahasa Inggris)***

Saya yang bertanda tangan di bawah ini

nama : Patricia Cecilia Soharto, S.Psi.

lulusan : Universitas Hasanuddin

menyatakan kesediaan untuk menjadi penerjemah/ahli bahasa dalam proses adaptasi skala oleh mahasiswa dengan

nama : Puspa Akhlakul Karimah Tuhelelu

NIM : C021191046

Demikian pernyataan ini yang disampaikan secara sukarela dan tanpa paksaan atau ancaman. Segala informasi yang saya berikan adalah benar dan dapat dipertanggungjawabkan sebagaimana mestinya.

Makassar, 20 Juni 2023



Patricia Cecilia Soharto, S.Psi.



### Lampiran 3

**Tabel Adaptasi Skala**

Nama alat ukur: Environmentally Specific Servant Leadership					
Penerjemah <i>English</i> -Bahasa: Dwiana Fajriati Dewi, S. Psi., M. Sc					
Penerjemah Bahasa- <i>English</i> : Patricia Cecilia Soharto, S.Psi.					
Moderator: Puspa Akhlakul Karimah Tuhelelu					
Dimensi	No. Aitem	Aitem <i>original (English)</i>	Terjemahan ke Bahasa Indonesia	Terjemahan kembali ke <i>English</i>	Aitem hasil evaluasi akhir (Moderator)
Instruksi pengisian	-				Pada skala ini, terdapat sejumlah aitem pernyataan. Setiap pernyataan disertai lima pilihan jawaban, yaitu 1 = sangat tidak setuju 2 = tidak setuju 3 = netral 4 = setuju 5 = sangat setuju Bacalah setiap pernyataan dengan saksama. Kemudian, Anda perlu merespons pernyataan dengan memilih satu jawaban

					yang paling sesuai dengan atasan langsung Anda. Tidak terdapat jawaban salah dan benar. Selain itu, Anda perlu memastikan telah merespons seluruh aitem pernyataan.
-	1	<i>My manager cares about my eco-initiatives.</i>	Manajer saya peduli dengan inisiatif ramah lingkungan saya.	<i>My manager cares about my environmental-friendly initiatives.</i>	
	2	<i>My manager emphasizes the importance of contributing to the environmental improvement.</i>	Manajer saya menekankan pentingnya berkontribusi terhadap perbaikan lingkungan.	<i>My manager emphasizes the importance of contributing to environmental repairments.</i>	
	3	<i>My manager is involved in environmental activities.</i>	Manajer saya terlibat dalam kegiatan ramah lingkungan.	<i>My manager is involved in environmental-friendly activities.</i>	
	4	<i>I am encouraged by my manager to volunteer in environmental activities.</i>	Saya didorong oleh manajer saya untuk menjadi sukarelawan dalam kegiatan ramah lingkungan.	<i>I am encouraged by my manager to volunteer in environmental-friendly activities.</i>	

	5	<i>My manager has a thorough understanding of our organization and its environmental goals.</i>	Manajer saya memiliki pemahaman menyeluruh tentang organisasi kita dan sasaran lingkungannya.	<i>My manager has a thorough understanding about our organization and its environmental targets.</i>	
	6	<i>My manager encourages me to contribute eco-initiatives.</i>	Manajer saya mendorong saya untuk berkontribusi terhadap inisiatif ramah lingkungan.	<i>My manager encourages me to contribute to environmental-friendly initiatives.</i>	
	7	<i>My manager gives me the freedom to handle environmental problems in the way that I feel is best.</i>	Manajer saya memberi saya kebebasan untuk menangani masalah lingkungan dengan cara yang menurut saya terbaik.	<i>My manager gives me freedom to handle environmental problems with ways that I perceive the best.</i>	
	8	<i>My manager does what she/he can do to realize my eco-initiatives.</i>	Manajer saya melakukan apa yang dapat dia lakukan untuk mewujudkan inisiatif ramah lingkungan saya.	<i>My manager does what he/she can do to realize my environmental-friendly initiatives.</i>	

	9	<i>My manager holds high environmental standards.</i>	Manajer saya memiliki standar lingkungan yang tinggi.	<i>My manager has high environmental standards.</i>	
	10	<i>My manager always displays green behaviors.</i>	Manajer saya selalu menampilkan perilaku ramah lingkungan.	<i>My manager has always been displaying green behaviors.</i>	
	11	<i>My manager would not compromise environmental principles in order to achieve success.</i>	Manajer saya tidak akan kompromi dengan prinsip-prinsip ramah lingkungan untuk mencapai kesuksesan.	<i>My manager would not compromise with the pro-environmental principles in order to achieve success.</i>	
	12	<i>My manager values environmental performance more than profits.</i>	Manajer saya lebih menghargai kinerja ramah lingkungan daripada keuntungan.	<i>My manager highly values pro-environmental performances than profits.</i>	

## Lampiran 4

### Isi *Google Form*

#### **Kuisisioner Penelitian di Nipah Park**

Assalamu Alaikum, wr. wb. Salam sejahtera bagi kita semua.

Perkenalkan saya Puspa Akhlakul Karimah, mahasiswa Program Studi Psikologi Fakultas Kedokteran Universitas Hasanuddin. Saat ini saya sedang melakukan penelitian guna memenuhi tugas akhir. Penelitian ini bertujuan untuk mengetahui kontribusi persepsi pemimpin melayani (*servant leadership*) yang berorientasi terhadap lingkungan terhadap perilaku sukarela karyawan terkait keberlanjutan lingkungan bagi karyawan industri jasa di Nipah Park. Oleh karena itu, saya mengharapkan kesediaan Anda untuk meluangkan waktu menjadi partisipan dalam penelitian ini.

Tidak ada jawaban benar dan salah dalam survey ini, sehingga Anda diharapkan dapat memberikan jawaban yang sesuai dengan diri Anda yang sebenarnya. Segala identitas dan jawaban yang Anda berikan akan dijaga kerahasiaannya dan akan digunakan untuk kepentingan penelitian.

Apabila terdapat hal yang ingin ditanyakan terkait penelitian ini, silakan menghubungi saya melalui:

E-mail: [puspaakhlakulkarimah@gmail.com](mailto:puspaakhlakulkarimah@gmail.com)

Whatsapp: 0895413062947

Terima kasih.

Apakah anda bersedia menjadi partisipan dengan mengisi skala penelitian ini secara sukarela?

Ya

Tidak

### **Data Diri Partisipan**

Email :

Nama/Inisial:

Jenis Kelamin:

Perempuan

Laki-laki

Pendidikan terakhir:

Posisi jabatan saat ini:

Lama bekerja di posisi tersebut:

Nomor *whatsapp* untuk kebutuhan reward

### **Instruksi Pengisian Skala Penelitian**

Pada skala ini, terdapat sejumlah aitem pernyataan. Setiap pernyataan disertai lima pilihan jawaban, yaitu

1 = sangat tidak setuju

2 = tidak setuju

3 = netral

4 = setuju

5 = sangat setuju

Bacalah setiap pernyataan dengan saksama. Kemudian, Anda perlu merespons pernyataan dengan memilih salah satu jawaban yang paling sesuai dengan atasan langsung Anda. Tidak terdapat jawaban salah dan benar. Selain itu, Anda perlu memastikan telah merespons seluruh aitem pernyataan.

Saya telah memahami instruksi pengisian skala penelitian ini.

Ya, saya sudah paham

## Organizational Citizenship Behavior for Environment (OCB-E) Scale

Pada skala ini, terdapat sejumlah aitem pernyataan. Setiap pernyataan disertai lima pilihan jawaban, yaitu

1 = sangat tidak setuju

2 = tidak setuju

3 = netral

4 = setuju

5 = sangat setuju

Bacalah setiap pernyataan dengan saksama. Kemudian, Anda perlu merespons pernyataan dengan memilih salah satu jawaban yang paling sesuai dengan atasan langsung Anda. Tidak terdapat jawaban salah dan benar. Selain itu, Anda perlu memastikan telah merespons seluruh aitem pernyataan.

Nomor	Pernyataan	Pilihan Jawaban				
1	Di pekerjaan saya, saya mempertimbangkan akibat dari tindakan saya sebelum melakukan tindakan yang berpengaruh terhadap lingkungan.	1	2	3	4	5
2	Saya secara sukarela melakukan tindakan dan inisiatif ramah lingkungan di kehidupan pekerjaan saya.	1	2	3	4	5
3	Saya memberikan saran kepada rekan saya tentang cara-cara menjaga lingkungan secara lebih efektif, meskipun terkadang bukan tanggung jawab langsung saya.	1	2	3	4	5
4	Saya aktif berpartisipasi di dalam kegiatan lingkungan yang dilaksanakan di dan/atau oleh perusahaan saya.	1	2	3	4	5
5	Saya tetap mendapatkan informasi tentang inisiatif perusahaan saya terkait lingkungan.	1	2	3	4	5
6	Saya melakukan tindakan ramah lingkungan yang memberi kontribusi positif terhadap citra perusahaan.	1	2	3	4	5
7	Saya menjadi sukarelawan untuk proyek, atau kegiatan yang	1	2	3	4	5

	membahas masalah lingkungan di organisasi saya.					
8	Secara spontan, saya memberikan waktu saya untuk membantu rekan memperhatikan aspek lingkungan di seluruh kegiatan mereka di tempat kerja.	1	2	3	4	5
9	Saya mengajak rekan saya untuk menerapkan perilaku yang lebih sadar terhadap lingkungan.	1	2	3	4	5
10	Saya mengajak rekan saya untuk menyampaikan ide dan pendapat terhadap permasalahan lingkungan.	1	2	3	4	5



## Environmentally Specific Servant Leadership (ESSL) Scale

Pada skala ini, terdapat sejumlah aitem pernyataan. Setiap pernyataan disertai lima pilihan jawaban, yaitu

1 = sangat tidak setuju

2 = tidak setuju

3 = netral

4 = setuju

5 = sangat setuju

Bacalah setiap pernyataan dengan saksama. Kemudian, Anda perlu merespons pernyataan dengan memilih salah satu jawaban yang paling sesuai dengan atasan langsung Anda. Tidak terdapat jawaban salah dan benar. Selain itu, Anda perlu memastikan telah merespons seluruh aitem pernyataan.

Nomor	Pernyataan	Pilihan Jawaban				
1	Manajer saya peduli dengan inisiatif ramah lingkungan saya.	1	2	3	4	5
2	Manajer saya menekankan pentingnya berkontribusi terhadap perbaikan lingkungan.	1	2	3	4	5
3	Manajer saya terlibat dalam kegiatan ramah lingkungan.	1	2	3	4	5
4	Saya didorong oleh manajer saya untuk menjadi sukarelawan dalam kegiatan ramah lingkungan.	1	2	3	4	5
5	Manajer saya memiliki pemahaman menyeluruh tentang organisasi kami dan sasaran lingkungannya.	1	2	3	4	5
6	Manajer saya mendorong saya untuk membuat sebuah inisiatif ramah lingkungan.	1	2	3	4	5
7	Manajer saya memberi saya kebebasan untuk menangani masalah lingkungan dengan cara yang menurut saya terbaik.	1	2	3	4	5
8	Manajer saya melakukan apa yang dapat dia lakukan untuk	1	2	3	4	5

	mewujudkan inisiatif ramah lingkungan saya.					
9	Manajer saya memiliki standar lingkungan yang tinggi.	1	2	3	4	5
10	Manajer saya selalu menampilkan perilaku ramah lingkungan.	1	2	3	4	5
11	Manajer saya tidak akan mengorbankan prinsip-prinsip ramah lingkungan untuk mencapai kesuksesan.	1	2	3	4	5
12	Manajer saya lebih menghargai kinerja ramah lingkungan daripada keuntungan.	1	2	3	4	5

## Lampiran 5

### Output Pengolahan Data

#### 1. Uji Validitas dan Reliabilitas Skala ESSL

- RScript - Validitas

```
#renaming data
data<-X_V_ESSL
View(data)

##Multivariate Normality Assesment
library(MVN)
mvn(data, mvnTest = "hz", multivariatePlot ="qq")$multivariateNormality

###CFA MODELING
##Model 7
Model.7<-'
ESSL=~A1+A2+A3+A4+A5+A6+A7+A8+A9+A10+A11+A12'

##CFA Analysis Model 7
library(lavaan)
Model.Analysis.7<-cfa(Model.7, data=data, estimator="MLR")
summary(Model.Analysis.7,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.7,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

###CFA MODELING
##Model 8
Model.8<-'
ESSL=~A1+A2+A3+A4+A5+A6+A7+A8+A10+A11+A12'

##CFA Analysis Model 8
library(lavaan)
Model.Analysis.8<-cfa(Model.8, data=data, estimator="MLR")
summary(Model.Analysis.8,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.8,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

###CFA MODELING
##Model 9
Model.9<-'
ESSL=~A1+A2+A3+A4+A5+A6+A7+A8+A10+A11'
```

```

##CFA Analysis Model 9
library(lavaan)
Model.Analysis.9<-cfa(Model.9, data=data, estimator="MLR")
summary(Model.Analysis.9,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.9,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

##Model's Plot
library(semPlot)
semPaths(Model.Analysis.9,
         what="paths",
         whatLabels = "std.all")

###CFA MODELING
##Model 9
Model.9<-'
ESSL=~A1+A2+A3+A4+A5+A6+A7+A8+A10+A11'

##CFA Analysis Model 9
library(lavaan)
Model.Analysis.9<-cfa(Model.9, data=data, estimator="MLR")
summary(Model.Analysis.9,fit.measures=TRUE,standardized=TRUE)

fitmeasures(Model.Analysis.9,c("pvalue", "chisq", "df", "gfi", "cfi", "rmsea", "srmr", "tli")
)

##Modification Indices
data_mi=modificationindices(Model.Analysis.9,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

##Model's Plot
library(semPlot)
semPaths(Model.Analysis.9,
         what="paths",
         whatLabels = "std.all")

###CFA MODELING
##Model 10
Model.10<-'
ESSL=~A1+A3+A4+A5+A6+A7+A8+A10+A11'

##CFA Analysis Model 10

```

```

library(lavaan)
Model.Analysis.10<-cfa(Model.10, data=data, estimator="MLR")
summary(Model.Analysis.10,fit.measures=TRUE,standardized=TRUE)

inspect(Model.Analysis.10, what="std")
inspect(Model.Analysis.10, 'r2')
fitmeasures(Model.Analysis.10)
fitmeasures(Model.Analysis.10,c("pvalue", "chisq", "df", "gfi", "cfi", "rmsea", "srmr", "tli"
))

##Modification Indices
data_mi=modificationindices(Model.Analysis.10,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

##Model's Plot
library(semPlot)
semPaths(Model.Analysis.10,
         what="paths",
         whatLabels = "std.all")

###CFA MODELING
##Model 10
Model.10<-'
ESSL=~A1+A3+A4+A5+A6+A7+A8+A10+A11
A5 ~~ A7'

##CFA Analysis Model 10
library(lavaan)
Model.Analysis.10<-cfa(Model.10, data=data, estimator="MLR")
summary(Model.Analysis.10,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.10,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

fitmeasures(Model.Analysis.10,c("pvalue", "chisq", "df", "gfi", "cfi", "rmsea", "srmr", "tli"
))

```

- **Rconsole - Validitas**

```

> #renaming data
> data<-X_V_ESSL
> ##Multivariate Normality Assesment
> library(MVN)
> mvn(data, mvnTest = "hz", multivariatePlot ="qq")$multivariateNormality
      Test    HZ p value MVN

```

```

1 Henze-Zirkler 24.57758    0 NO
> ###CFA MODELING
> ##Model 7
> Model.7<-'
+ ESSL=~A1+A2+A3+A4+A5+A6+A7+A8+A9+A10+A11+A12'
> ##CFA Analysis Model 7
> library(lavaan)
> Model.Analysis.7<-cfa(Model.7, data=data, estimator="MLR")
> summary(Model.Analysis.7,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 49 iterations

```

Estimator	ML
Optimization method	NLMINB
Number of model parameters	24

Number of observations	153
------------------------	-----

Model Test User Model:

	Standard	Scaled
Test Statistic	288.459	140.436
Degrees of freedom	54	54
P-value (Chi-square)	0.000	0.000
Scaling correction factor		2.054
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	1971.259	774.216
Degrees of freedom	66	66
P-value	0.000	0.000
Scaling correction factor		2.546

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.877	0.878
Tucker-Lewis Index (TLI)	0.850	0.851
Robust Comparative Fit Index (CFI)		0.902
Robust Tucker-Lewis Index (TLI)		0.880

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-1075.056	-1075.056
Scaling correction factor	3.027	
for the MLR correction		
Loglikelihood unrestricted model (H1)	-930.826	-930.826
Scaling correction factor	2.354	
for the MLR correction		
Akaike (AIC)	2198.112	2198.112

Bayesian (BIC)	2270.842	2270.842
Sample-size adjusted Bayesian (SABIC)	2194.881	2194.881

Root Mean Square Error of Approximation:

RMSEA	0.168	0.102
90 Percent confidence interval - lower	0.150	0.088
90 Percent confidence interval - upper	0.188	0.117
P-value H_0: RMSEA <= 0.050	0.000	0.000
P-value H_0: RMSEA >= 0.080	1.000	0.994

Robust RMSEA	0.147
90 Percent confidence interval - lower	0.117
90 Percent confidence interval - upper	0.177
P-value H_0: Robust RMSEA <= 0.050	0.000
P-value H_0: Robust RMSEA >= 0.080	1.000

Standardized Root Mean Square Residual:

SRMR	0.044	0.044
------	-------	-------

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
ESSL =~				
A1	1.000			
A2	0.945	0.067	14.137	0.000
A3	1.140	0.090	12.612	0.000
A4	1.184	0.143	8.299	0.000
A5	1.141	0.084	13.647	0.000
A6	1.202	0.095	12.674	0.000
A7	1.081	0.123	8.769	0.000
A8	1.119	0.107	10.500	0.000
A9	1.164	0.111	10.495	0.000
A10	1.134	0.114	9.924	0.000
A11	1.111	0.122	9.085	0.000
A12	1.259	0.136	9.273	0.000

Std.lv Std.all

0.504	0.809
0.476	0.838
0.575	0.848
0.597	0.753
0.575	0.874
0.606	0.872

0.545 0.795  
 0.564 0.872  
 0.586 0.891  
 0.571 0.896  
 0.560 0.655  
 0.634 0.790

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.134	0.030	4.518	0.000
.A2	0.096	0.019	5.037	0.000
.A3	0.128	0.065	1.990	0.047
.A4	0.272	0.066	4.156	0.000
.A5	0.102	0.020	5.111	0.000
.A6	0.116	0.026	4.480	0.000
.A7	0.173	0.045	3.863	0.000
.A8	0.100	0.023	4.392	0.000
.A9	0.089	0.028	3.226	0.001
.A10	0.080	0.023	3.444	0.001
.A11	0.416	0.145	2.869	0.004
.A12	0.242	0.067	3.631	0.000
ESSL	0.254	0.046	5.553	0.000

Std.lv	Std.all
0.134	0.346
0.096	0.297
0.128	0.280
0.272	0.433
0.102	0.236
0.116	0.240
0.173	0.369
0.100	0.240
0.089	0.206
0.080	0.198
0.416	0.570
0.242	0.376
1.000	1.000

```
> ##Modification Indices
> data_mi=modificationindices(Model.Analysis.7,
+                               standardized = TRUE,
+                               sort.=TRUE)
> subset(data_mi, mi > 3.84)
  lhs op rhs  mi  epc sepc.lv sepc.all sepc.nox
86 A9 ~~ A10 63.872 0.066 0.066 0.775 0.775
26 A1 ~~ A2 35.234 0.059 0.059 0.522 0.522
63 A4 ~~ A12 28.836 0.118 0.118 0.459 0.459
55 A3 ~~ A12 27.426 0.081 0.081 0.460 0.460
64 A5 ~~ A6 14.181 0.038 0.038 0.349 0.349
65 A5 ~~ A7 12.155 -0.041 -0.041 -0.311 -0.311
77 A7 ~~ A8 11.309 0.040 0.040 0.300 0.300
```



```

37 A2 ~~ A3 10.955 0.033 0.033 0.296 0.296
85 A8 ~~ A12 9.318 -0.042 -0.042 -0.272 -0.272
52 A3 ~~ A9 8.416 -0.029 -0.029 -0.269 -0.269
60 A4 ~~ A9 8.294 -0.040 -0.040 -0.258 -0.258
45 A2 ~~ A11 7.923 -0.048 -0.048 -0.241 -0.241
43 A2 ~~ A9 6.761 -0.022 -0.022 -0.240 -0.240
67 A5 ~~ A9 5.426 -0.021 -0.021 -0.220 -0.220
72 A6 ~~ A8 5.341 0.023 0.023 0.214 0.214
82 A8 ~~ A9 4.768 0.019 0.019 0.206 0.206
80 A7 ~~ A11 4.577 0.049 0.049 0.181 0.181
36 A1 ~~ A12 4.457 -0.033 -0.033 -0.183 -0.183
74 A6 ~~ A10 4.398 -0.019 -0.019 -0.199 -0.199
28 A1 ~~ A4 4.040 -0.033 -0.033 -0.173 -0.173
> ###CFA MODELING
> ##Model 8
> Model.8<-'
+ ESSL=~A1+A2+A3+A4+A5+A6+A7+A8+A10+A11+A12'
> ##CFA Analysis Model 8
> library(lavaan)
> Model.Analysis.8<-cfa(Model.8, data=data, estimator="MLR")
> summary(Model.Analysis.8,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 43 iterations

```

```

Estimator ML
Optimization method NLMINB
Number of model parameters 22

Number of observations 153

```

Model Test User Model:

	Standard	Scaled
Test Statistic	188.338	88.558
Degrees of freedom	44	44
P-value (Chi-square)	0.000	0.000
Scaling correction factor		2.127
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	1653.922	622.412
Degrees of freedom	55	55
P-value	0.000	0.000
Scaling correction factor		2.657

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.910	0.921
Tucker-Lewis Index (TLI)	0.887	0.902
Robust Comparative Fit Index (CFI)		0.937

Robust Tucker-Lewis Index (TLI) 0.921

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-1030.614	-1030.614
Scaling correction factor for the MLR correction	3.054	
Loglikelihood unrestricted model (H1)	-936.445	-936.445
Scaling correction factor for the MLR correction	2.436	
Akaike (AIC)	2105.228	2105.228
Bayesian (BIC)	2171.897	2171.897
Sample-size adjusted Bayesian (SABIC)	2102.266	2102.266

Root Mean Square Error of Approximation:

RMSEA	0.146	0.081
90 Percent confidence interval - lower	0.125	0.064
90 Percent confidence interval - upper	0.168	0.098
P-value H_0: RMSEA <= 0.050	0.000	0.002
P-value H_0: RMSEA >= 0.080	1.000	0.568

Robust RMSEA	0.119
90 Percent confidence interval - lower	0.082
90 Percent confidence interval - upper	0.154
P-value H_0: Robust RMSEA <= 0.050	0.002
P-value H_0: Robust RMSEA >= 0.080	0.960

Standardized Root Mean Square Residual:

SRMR	0.043	0.043
------	-------	-------

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
ESSL =~				
A1	1.000			
A2	0.952	0.065	14.608	0.000
A3	1.150	0.095	12.140	0.000
A4	1.196	0.143	8.373	0.000
A5	1.144	0.089	12.850	0.000
A6	1.201	0.097	12.379	0.000
A7	1.067	0.122	8.738	0.000
A8	1.102	0.103	10.712	0.000

A10	1.093	0.112	9.789	0.000
A11	1.088	0.129	8.458	0.000
A12	1.262	0.140	9.018	0.000

Std.lv Std.all

0.507	0.814
0.483	0.850
0.583	0.861
0.607	0.765
0.580	0.881
0.609	0.877
0.541	0.789
0.559	0.864
0.554	0.869
0.552	0.646
0.640	0.797

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.131	0.029	4.441	0.000
.A2	0.090	0.018	4.929	0.000
.A3	0.119	0.063	1.871	0.061
.A4	0.261	0.064	4.078	0.000
.A5	0.097	0.019	5.065	0.000
.A6	0.112	0.024	4.665	0.000
.A7	0.177	0.044	3.986	0.000
.A8	0.106	0.024	4.357	0.000
.A10	0.099	0.025	3.940	0.000
.A11	0.426	0.145	2.931	0.003
.A12	0.235	0.065	3.616	0.000
ESSL	0.257	0.046	5.552	0.000

Std.lv Std.all

0.131	0.337
0.090	0.278
0.119	0.259
0.261	0.415
0.097	0.223
0.112	0.231
0.177	0.377
0.106	0.254
0.099	0.245
0.426	0.583
0.235	0.365
1.000	1.000

```

> ##Modification Indices
> data_mi=modificationindices(Model.Analysis.8,
+                               standardized = TRUE,
+                               sort.=TRUE)
> subset(data_mi, mi > 3.84)

```

```

lhs op rhs   mi   epc sepc.lv sepc.all sepc.nox
24 A1 ~~ A2 33.123 0.056 0.056 0.518 0.518
57 A4 ~~ A12 26.398 0.110 0.110 0.446 0.446
50 A3 ~~ A12 24.626 0.075 0.075 0.447 0.447
69 A7 ~~ A8 14.101 0.046 0.046 0.338 0.338
59 A5 ~~ A7 13.662 -0.044 -0.044 -0.338 -0.338
58 A5 ~~ A6 11.588 0.034 0.034 0.329 0.329
75 A8 ~~ A12 9.222 -0.043 -0.043 -0.274 -0.274
41 A2 ~~ A11 8.355 -0.049 -0.049 -0.251 -0.251
45 A3 ~~ A6 7.997 -0.031 -0.031 -0.268 -0.268
34 A2 ~~ A3 6.863 0.025 0.025 0.242 0.242
26 A1 ~~ A4 6.810 -0.042 -0.042 -0.228 -0.228
33 A1 ~~ A12 6.645 -0.040 -0.040 -0.227 -0.227
65 A6 ~~ A8 6.304 0.026 0.026 0.238 0.238
71 A7 ~~ A11 5.825 0.056 0.056 0.205 0.205
76 A10 ~~ A11 4.085 0.037 0.037 0.178 0.178
68 A6 ~~ A12 4.036 -0.030 -0.030 -0.183 -0.183
> ###CFA MODELING
> ##Model 9
> Model.9<-'
+ ESSL=~A1+A2+A3+A4+A5+A6+A7+A8+A10+A11'
> ##CFA Analysis Model 9
> library(lavaan)
> Model.Analysis.9<-cfa(Model.9, data=data, estimator="MLR")
> summary(Model.Analysis.9,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 39 iterations

```

```

Estimator                ML
Optimization method      NLMINB
Number of model parameters 20

Number of observations    153

```

Model Test User Model:

```

                Standard   Scaled
Test Statistic      112.488   54.498
Degrees of freedom          35     35
P-value (Chi-square)      0.000   0.019
Scaling correction factor          2.064
Yuan-Bentler correction (Mplus variant)

```

Model Test Baseline Model:

```

Test statistic          1435.311   531.639
Degrees of freedom          45     45
P-value                  0.000   0.000
Scaling correction factor          2.700

```

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.944	0.960
Tucker-Lewis Index (TLI)	0.928	0.948
Robust Comparative Fit Index (CFI)		0.969
Robust Tucker-Lewis Index (TLI)		0.961

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-918.477	-918.477
Scaling correction factor for the MLR correction	3.113	
Loglikelihood unrestricted model (H1)	-862.233	-862.233
Scaling correction factor for the MLR correction	2.446	
Akaike (AIC)	1876.954	1876.954
Bayesian (BIC)	1937.563	1937.563
Sample-size adjusted Bayesian (SABIC)	1874.261	1874.261

Root Mean Square Error of Approximation:

RMSEA	0.120	0.060
90 Percent confidence interval - lower	0.096	0.037
90 Percent confidence interval - upper	0.146	0.081
P-value H <sub>0</sub> : RMSEA ≤ 0.050	0.000	0.209
P-value H <sub>0</sub> : RMSEA ≥ 0.080	0.996	0.062
Robust RMSEA		0.087
90 Percent confidence interval - lower		0.036
90 Percent confidence interval - upper		0.130
P-value H <sub>0</sub> : Robust RMSEA ≤ 0.050		0.099
P-value H <sub>0</sub> : Robust RMSEA ≥ 0.080		0.623

Standardized Root Mean Square Residual:

SRMR	0.036	0.036
------	-------	-------

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
ESSL =~				
A1	1.000			
A2	0.945	0.066	14.367	0.000
A3	1.122	0.085	13.215	0.000
A4	1.163	0.140	8.285	0.000

A5	1.140	0.088	12.949	0.000
A6	1.201	0.100	12.012	0.000
A7	1.059	0.120	8.803	0.000
A8	1.104	0.104	10.583	0.000
A10	1.085	0.110	9.880	0.000
A11	1.071	0.124	8.609	0.000

Std.lv Std.all

0.511	0.820
0.483	0.850
0.574	0.847
0.594	0.749
0.582	0.885
0.614	0.883
0.541	0.789
0.564	0.872
0.554	0.869
0.547	0.641

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.127	0.030	4.251	0.000
.A2	0.090	0.019	4.741	0.000
.A3	0.130	0.071	1.816	0.069
.A4	0.276	0.067	4.113	0.000
.A5	0.094	0.018	5.183	0.000
.A6	0.106	0.022	4.750	0.000
.A7	0.177	0.045	3.928	0.000
.A8	0.100	0.022	4.458	0.000
.A10	0.099	0.025	4.023	0.000
.A11	0.430	0.144	2.977	0.003
ESSL	0.261	0.047	5.601	0.000

Std.lv Std.all

0.127	0.327
0.090	0.278
0.130	0.283
0.276	0.438
0.094	0.216
0.106	0.220
0.177	0.377
0.100	0.239
0.099	0.244
0.430	0.589
1.000	1.000

```

> ##Modification Indices
> data_mi=modificationindices(Model.Analysis.9,
+                               standardized = TRUE,
+                               sort.=TRUE)
> subset(data_mi, mi > 3.84)

```

	lhs	op	rhs	mi	epc	sepc.lv	sepc.all	sepc.nox
22	A1	~~	A2	32.106	0.055	0.055	0.516	0.516
53	A5	~~	A7	15.590	-0.047	-0.047	-0.366	-0.366
61	A7	~~	A8	13.096	0.044	0.044	0.331	0.331
31	A2	~~	A3	9.638	0.031	0.031	0.287	0.287
52	A5	~~	A6	9.177	0.030	0.030	0.302	0.302
38	A2	~~	A11	7.594	-0.047	-0.047	-0.241	-0.241
63	A7	~~	A11	6.323	0.059	0.059	0.214	0.214
28	A1	~~	A8	5.943	-0.026	-0.026	-0.226	-0.226
41	A3	~~	A6	5.743	-0.027	-0.027	-0.229	-0.229
24	A1	~~	A4	5.290	-0.038	-0.038	-0.201	-0.201
66	A10	~~	A11	4.706	0.040	0.040	0.192	0.192

```

> ###CFA MODELING
> ##Model 10
> Model.10<-'
+ ESSL=~A1+A3+A4+A5+A6+A7+A8+A10+A11'
> ##CFA Analysis Model 10
> library(lavaan)
> Model.Analysis.10<-cfa(Model.10, data=data, estimator="MLR")
> summary(Model.Analysis.10,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 40 iterations

```

Estimator	ML
Optimization method	NLMINB
Number of model parameters	18
Number of observations	153

Model Test User Model:

	Standard	Scaled
Test Statistic	60.729	29.413
Degrees of freedom	27	27
P-value (Chi-square)	0.000	0.341
Scaling correction factor		2.065
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	1205.830	430.432
Degrees of freedom	36	36
P-value	0.000	0.000
Scaling correction factor		2.801

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.971	0.994
Tucker-Lewis Index (TLI)	0.962	0.992
Robust Comparative Fit Index (CFI)		0.995

Robust Tucker-Lewis Index (TLI) 0.994

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-876.745	-876.745
Scaling correction factor for the MLR correction	3.177	
Loglikelihood unrestricted model (H1)	-846.380	-846.380
Scaling correction factor for the MLR correction	2.510	
Akaike (AIC)	1789.490	1789.490
Bayesian (BIC)	1844.038	1844.038
Sample-size adjusted Bayesian (SABIC)	1787.066	1787.066

Root Mean Square Error of Approximation:

RMSEA	0.090	0.024
90 Percent confidence interval - lower	0.060	0.000
90 Percent confidence interval - upper	0.121	0.057
P-value H_0: RMSEA <= 0.050	0.017	0.884
P-value H_0: RMSEA >= 0.080	0.734	0.001
Robust RMSEA		0.035
90 Percent confidence interval - lower		0.000
90 Percent confidence interval - upper		0.100
P-value H_0: Robust RMSEA <= 0.050		0.587
P-value H_0: Robust RMSEA >= 0.080		0.152

Standardized Root Mean Square Residual:

SRMR 0.029 0.029

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
ESSL =~				
A1	1.000			
A3	1.137	0.092	12.418	0.000
A4	1.202	0.156	7.711	0.000
A5	1.180	0.093	12.664	0.000
A6	1.242	0.108	11.534	0.000
A7	1.091	0.132	8.283	0.000
A8	1.144	0.114	10.034	0.000
A10	1.119	0.116	9.678	0.000



A11	1.122	0.126	8.929	0.000
Std.lv	Std.all			
0.497	0.798			
0.565	0.834			
0.597	0.753			
0.586	0.891			
0.617	0.888			
0.542	0.791			
0.568	0.879			
0.556	0.872			
0.557	0.653			

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.141	0.031	4.517	0.000
.A3	0.140	0.074	1.900	0.057
.A4	0.272	0.068	4.002	0.000
.A5	0.089	0.018	5.076	0.000
.A6	0.102	0.022	4.683	0.000
.A7	0.176	0.046	3.833	0.000
.A8	0.095	0.021	4.446	0.000
.A10	0.098	0.025	3.956	0.000
.A11	0.419	0.144	2.903	0.004
ESSL	0.247	0.047	5.275	0.000
Std.lv	Std.all			
0.141	0.364			
0.140	0.305			
0.272	0.433			
0.089	0.206			
0.102	0.211			
0.176	0.374			
0.095	0.228			
0.098	0.240			
0.419	0.574			
1.000	1.000			

> inspect(Model.Analysis.10, what="std")

\$lambda

ESSL

A1 0.798  
A3 0.834  
A4 0.753  
A5 0.891  
A6 0.888  
A7 0.791  
A8 0.879  
A10 0.872  
A11 0.653

```

$theta
  A1  A3  A4  A5  A6  A7  A8  A10  A11
A1 0.364
A3 0.000 0.305
A4 0.000 0.000 0.433
A5 0.000 0.000 0.000 0.206
A6 0.000 0.000 0.000 0.000 0.211
A7 0.000 0.000 0.000 0.000 0.000 0.374
A8 0.000 0.000 0.000 0.000 0.000 0.000 0.228
A10 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.240
A11 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.574

```

```

$psi
  ESSL
ESSL 1

```

```

> inspect(Model.Analysis.10, 'r2')
  A1  A3  A4  A5  A6  A7  A8  A10  A11
0.636 0.695 0.567 0.794 0.789 0.626 0.772 0.760 0.426
> fitmeasures(Model.Analysis.10)

```

npar	fmin
18.000	0.198
chisq	df
60.729	27.000
pvalue	chisq.scaled
0.000	29.413
df.scaled	pvalue.scaled
27.000	0.341
chisq.scaling.factor	baseline.chisq
2.065	1205.830
baseline.df	baseline.pvalue
36.000	0.000
baseline.chisq.scaled	baseline.df.scaled
430.432	36.000
baseline.pvalue.scaled	baseline.chisq.scaling.factor
0.000	2.801
cfi	tli
0.971	0.962
cfi.scaled	tli.scaled
0.994	0.992
cfi.robust	tli.robust
0.995	0.994
nnfi	rfi
0.962	0.933
nfi	pnfi
0.950	0.712
ifi	rni
0.971	0.971
nnfi.scaled	rfi.scaled
0.992	0.909

nfi.scaled	pnfi.scaled
0.932	0.699
ifi.scaled	rni.scaled
0.994	0.994
nnfi.robust	rni.robust
0.994	0.995
logl	unrestricted.logl
-876.745	-846.380
aic	bic
1789.490	1844.038
ntotal	bic2
153.000	1787.066
scaling.factor.h1	scaling.factor.h0
2.510	3.177
rmsea	rmsea.ci.lower
0.090	0.060
rmsea.ci.upper	rmsea.ci.level
0.121	0.900
rmsea.pvalue	rmsea.close.h0
0.017	0.050
rmsea.notclose.pvalue	rmsea.notclose.h0
0.734	0.080
rmsea.scaled	rmsea.ci.lower.scaled
0.024	0.000
rmsea.ci.upper.scaled	rmsea.pvalue.scaled
0.057	0.884
rmsea.notclose.pvalue.scaled	rmsea.robust
0.001	0.035
rmsea.ci.lower.robust	rmsea.ci.upper.robust
0.000	0.100
rmsea.pvalue.robust	rmsea.notclose.pvalue.robust
0.587	0.152
rmr	rmr_nomean
0.014	0.014
srmr	srmr_bentler
0.029	0.029
srmr_bentler_nomean	crmr
0.029	0.032
crmr_nomean	srmr_mplus
0.032	0.029
srmr_mplus_nomean	cn_05
0.029	102.061
cn_01	gfi
119.318	0.923
agfi	pgfi
0.872	0.554
mfi	ecvi
0.896	0.632

>

```
fitmeasures(Model.Analysis.10,c("pvalue","chisq","df","gfi","cfi","rmsea","srmr","tli"
```

```

))
pvalue chisq df gfi cfi rmsea srmr tli
0.000 60.729 27.000 0.923 0.971 0.090 0.029 0.962
> ##Modification Indices
> data_mi=modificationindices(Model.Analysis.10,
+ standardized = TRUE,
+ sort.=TRUE)
> subset(data_mi, mi > 3.84)
lhs op rhs mi epc sepc.lv sepc.all sepc.nox
42 A5 ~~ A7 20.499 -0.054 -0.054 -0.433 -0.433
50 A7 ~~ A8 12.199 0.042 0.042 0.328 0.328
20 A1 ~~ A3 6.837 0.033 0.033 0.237 0.237
41 A5 ~~ A6 6.766 0.026 0.026 0.274 0.274
52 A7 ~~ A11 5.212 0.053 0.053 0.196 0.196
30 A3 ~~ A6 3.860 -0.023 -0.023 -0.192 -0.192

> ###CFA MODELING
> ##Model 10
> Model.10<-'
+ ESSL=~A1+A3+A4+A5+A6+A7+A8+A10+A11
+ A5 ~~ A7'
> ##CFA Analysis Model 10
> library(lavaan)
> Model.Analysis.10<-cfa(Model.10, data=data, estimator="MLR")
> summary(Model.Analysis.10,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 46 iterations

```

Estimator	ML
Optimization method	NLMINB
Number of model parameters	19
Number of observations	153

Model Test User Model:

	Standard	Scaled
Test Statistic	36.243	16.774
Degrees of freedom	26	26
P-value (Chi-square)	0.087	0.916
Scaling correction factor		2.161
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	1205.830	430.432
Degrees of freedom	36	36
P-value	0.000	0.000
Scaling correction factor		2.801

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.991	1.000
Tucker-Lewis Index (TLI)	0.988	1.032
Robust Comparative Fit Index (CFI)		1.000
Robust Tucker-Lewis Index (TLI)		1.025

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-864.502	-864.502
Scaling correction factor for the MLR correction	2.987	
Loglikelihood unrestricted model (H1)	-846.380	-846.380
Scaling correction factor for the MLR correction	2.510	
Akaike (AIC)	1767.003	1767.003
Bayesian (BIC)	1824.582	1824.582
Sample-size adjusted Bayesian (SABIC)	1764.445	1764.445

Root Mean Square Error of Approximation:

RMSEA	0.051	0.000
90 Percent confidence interval - lower	0.000	0.000
90 Percent confidence interval - upper	0.087	0.000
P-value H_0: RMSEA <= 0.050	0.454	1.000
P-value H_0: RMSEA >= 0.080	0.100	0.000
Robust RMSEA		0.000
90 Percent confidence interval - lower		0.000
90 Percent confidence interval - upper		0.035
P-value H_0: Robust RMSEA <= 0.050		0.971
P-value H_0: Robust RMSEA >= 0.080		0.005

Standardized Root Mean Square Residual:

SRMR	0.024	0.024
------	-------	-------

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
ESSL =~				
A1	1.000			
A3	1.139	0.095	11.997	0.000
A4	1.207	0.156	7.747	0.000
A5	1.210	0.097	12.460	0.000

A6	1.250	0.108	11.559	0.000
A7	1.138	0.133	8.532	0.000
A8	1.157	0.112	10.304	0.000
A10	1.122	0.113	9.952	0.000
A11	1.135	0.123	9.188	0.000
Std.lv	Std.all			

0.492	0.790
0.561	0.828
0.594	0.749
0.596	0.905
0.616	0.886
0.560	0.817
0.570	0.881
0.552	0.866
0.559	0.654

Covariances:

	Estimate	Std.Err	z-value	P(> z )
.A5 ~~				
.A7	-0.055	0.013	-4.339	0.000
Std.lv	Std.all			
-0.055	-0.495			

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.146	0.032	4.598	0.000
.A3	0.144	0.071	2.018	0.044
.A4	0.276	0.067	4.089	0.000
.A5	0.078	0.016	4.825	0.000
.A6	0.104	0.022	4.741	0.000
.A7	0.156	0.043	3.589	0.000
.A8	0.094	0.021	4.543	0.000
.A10	0.102	0.024	4.280	0.000
.A11	0.418	0.139	2.997	0.003
ESSL	0.242	0.046	5.245	0.000
Std.lv	Std.all			
0.146	0.375			
0.144	0.315			
0.276	0.438			
0.078	0.180			
0.104	0.215			
0.156	0.332			
0.094	0.224			
0.102	0.250			
0.418	0.572			
1.000	1.000			

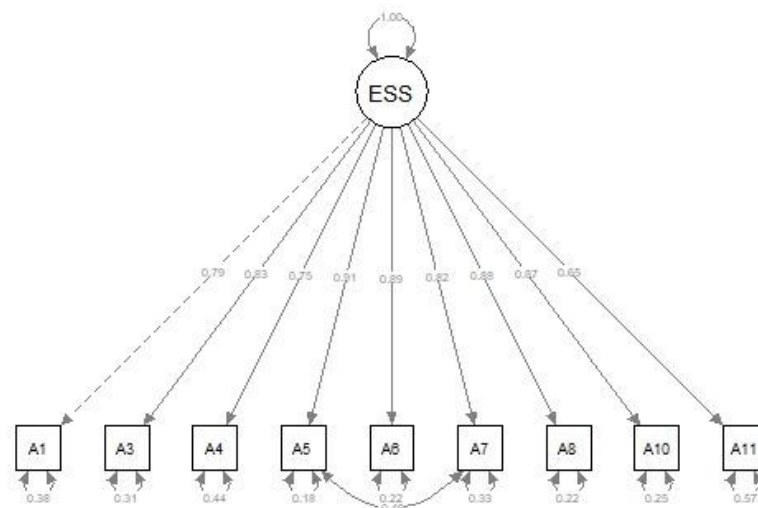
> ##Modification Indices

```

> data_mi=modificationindices(Model.Analysis.10,
+                               standardized = TRUE,
+                               sort.=TRUE)
> subset(data_mi, mi > 3.84)
  lhs op rhs  mi  epc sepc.lv sepc.all sepc.nox
21 A1 ~~ A3 8.250 0.037  0.037  0.252  0.252
50 A7 ~~ A8 6.185 0.030  0.030  0.248  0.248
>
fitmeasures(Model.Analysis.10,c("pvalue", "chisq", "df", "gfi", "cfi", "rmsea", "srmr", "tli"
))
  pvalue chisq  df  gfi  cfi rmsea srmr  tli
  0.087 36.243 26.000 0.952 0.991 0.051 0.024 0.988

> ##Model's Plot
> library(semPlot)
> semPaths(Model.Analysis.10,
+           what="paths",
+           whatLabels = "std.all")

```



- **Rscript - Reliabilitas**

```

##Reliability Assessment
###Creating Reliability Data
library(psych)
rel_data<-subset(data, select = -c(A2,A9,A12))
View(rel_data)

```

```

##Alpha Coef
reliability<-(rel_data)
summary(reliability)
alpha(reliability)

```

- **Rconsole - Reliabilitas**

```

> ##Reliability Assessment

```

```

> ###Creating Reliability Data
> library(psych)
> rel_data<-subset(data, select = -c(A2,A9,A12))
> View(rel_data)
> ##Alpha Coef
> reliability<-(rel_data)
> summary(reliability)
      A1      A3      A4
Min. :3.000 Min. :1.000 Min. :2.000
1st Qu.:4.000 1st Qu.:4.000 1st Qu.:4.000
Median :5.000 Median :5.000 Median :4.000
Mean  :4.575 Mean  :4.523 Mean  :4.301
3rd Qu.:5.000 3rd Qu.:5.000 3rd Qu.:5.000
Max.  :5.000 Max.  :5.000 Max.  :5.000
      A5      A6      A7
Min. :3.000 Min. :3.000 Min. :2.000
1st Qu.:4.000 1st Qu.:4.000 1st Qu.:4.000
Median :5.000 Median :5.000 Median :5.000
Mean  :4.497 Mean  :4.451 Mean  :4.451
3rd Qu.:5.000 3rd Qu.:5.000 3rd Qu.:5.000
Max.  :5.000 Max.  :5.000 Max.  :5.000
      A8      A10     A11
Min. :2.000 Min. :3.00 Min. :1.000
1st Qu.:4.000 1st Qu.:4.00 1st Qu.:4.000
Median :5.000 Median :5.00 Median :5.000
Mean  :4.464 Mean  :4.51 Mean  :4.327
3rd Qu.:5.000 3rd Qu.:5.00 3rd Qu.:5.000
Max.  :5.000 Max.  :5.00 Max.  :5.000
> alpha(reliability)

```

Reliability analysis

Call: alpha(x = reliability)

```

raw_alpha std.alpha G6(smc) average_r S/N ase mean sd
0.94 0.95 0.95 0.67 18 0.0069 4.5 0.58
median_r
0.68

```

95% confidence boundaries

lower alpha upper

Feldt 0.93 0.94 0.96

Duhachek 0.93 0.94 0.96

Reliability if an item is dropped:

```

raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r
A1 0.94 0.94 0.94 0.67 16 0.0077 0.0079
A3 0.94 0.94 0.94 0.66 16 0.0079 0.0083
A4 0.94 0.95 0.95 0.68 17 0.0073 0.0075
A5 0.93 0.94 0.94 0.66 15 0.0082 0.0067
A6 0.93 0.94 0.94 0.66 15 0.0082 0.0070

```



A7	0.94	0.94	0.94	0.67	16	0.0078	0.0086
A8	0.93	0.94	0.94	0.66	15	0.0081	0.0069
A10	0.93	0.94	0.94	0.66	15	0.0082	0.0081
A11	0.95	0.95	0.95	0.70	19	0.0064	0.0041

```
med.r
A1 0.68
A3 0.67
A4 0.70
A5 0.66
A6 0.66
A7 0.69
A8 0.67
A10 0.66
A11 0.70
```

#### Item statistics

	n	raw.r	std.r	r.cor	r.drop	mean	sd
A1	153	0.82	0.82	0.80	0.77	4.6	0.63
A3	153	0.85	0.86	0.84	0.81	4.5	0.68
A4	153	0.80	0.79	0.75	0.73	4.3	0.80
A5	153	0.88	0.89	0.88	0.85	4.5	0.66
A6	153	0.89	0.89	0.88	0.85	4.5	0.70
A7	153	0.83	0.83	0.81	0.78	4.5	0.69
A8	153	0.88	0.88	0.87	0.84	4.5	0.65
A10	153	0.88	0.89	0.87	0.85	4.5	0.64
A11	153	0.73	0.72	0.66	0.64	4.3	0.86

#### Non missing response frequency for each item

	1	2	3	4	5	miss
A1	0.00	0.00	0.07	0.28	0.65	0
A3	0.01	0.00	0.07	0.32	0.61	0
A4	0.00	0.02	0.15	0.34	0.49	0
A5	0.00	0.00	0.09	0.32	0.59	0
A6	0.00	0.00	0.12	0.31	0.57	0
A7	0.00	0.01	0.07	0.37	0.55	0
A8	0.00	0.01	0.07	0.39	0.54	0
A10	0.00	0.00	0.08	0.33	0.59	0
A11	0.01	0.02	0.12	0.33	0.52	0

## 2. Uji Validitas dan Reliabilitas Skala OCB-E

### • Rscript - Validitas

```
#renaming data
data<-OCB_E
View(data)
```

```
##Multivariate Normality Assesment
library(MVN)
mvn(data, mvnTest = "hz", multivariatePlot ="qq")$multivariateNormality
```

```

###CFA MODELING
##Model 1
Model.1<-'
A=~A1+A2+A3
B=~B4+B5+B6+B7
C=~C8+C9+C10
OCBE=~A+B+C'

##CFA Analysis Model 1
library(lavaan)
Model.Analysis.1<-cfa(Model.1, data=data, estimator="MLR")
summary(Model.Analysis.1,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.1,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

##Model 2
Model.2<-'
A=~A1+A2+A3
B=~B4+B5+B6
C=~C8+C9+C10
OCBE=~A+B+C'

##CFA Analysis Model 2
library(lavaan)
Model.Analysis.2<-cfa(Model.2, data=data, estimator="MLR")
summary(Model.Analysis.2,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.2,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

##Model's Plot
library(semPlot)
semPaths(Model.Analysis.1,
         what="paths",
         whatLabels = "est")

##Model 3
Model.3<-'
EI=~A1+A2+A3
ECE=~B4+B5+B6
EH=~C9+C10
OCBE=~EI+ECE+EH'

```

```

##CFA Analysis Model 3
library(lavaan)
Model.Analysis.3<-cfa(Model.3, data=data, estimator="MLR")
summary(Model.Analysis.3,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.3,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

##Model's Plot
library(semPlot)
semPaths(Model.Analysis.3,
         what="paths",
         whatLabels = "std.all")

##Model 3
Model.3<-'
EI=~A1+A2+A3
ECE=~B4+B5+B6
EH=~C9+C10
OCBE=~EI+ECE+EH
A2 ~~ A3'

##CFA Analysis Model 3
library(lavaan)
Model.Analysis.3<-cfa(Model.3, data=data, estimator="MLR")
summary(Model.Analysis.3,fit.measures=TRUE,standardized=TRUE)

##Modification Indices
data_mi=modificationindices(Model.Analysis.3,
                             standardized = TRUE,
                             sort.=TRUE)
subset(data_mi, mi > 3.84)

fitmeasures(Model.Analysis.3,c("pvalue", "chisq", "df", "gfi", "cfi", "rmsea", "srmr", "tli")
)
fitmeasures(Model.Analysis.3,c("gfi", "cfi", "tli"))

##Model's Plot
library(semPlot)
semPaths(Model.Analysis.3,
         what="paths",
         whatLabels = "std.all")

```

- **Rconsole - Validitas**

```

> #renaming data
> data<-OCB_E
> ##Multivariate Normality Assesment
> library(MVN)
> mvn(data, mvnTest = "hz", multivariatePlot ="qq")$multivariateNormality
      Test    HZ p value MVN
1 Henze-Zirkler 14.68295    0 NO
> ###CFA MODELING
> ##Model 1
> Model.1<-'
+ A=~A1+A2+A3
+ B=~B4+B5+B6+B7
+ C=~C8+C9+C10
+ OCBE=~A+B+C'
> ##CFA Analysis Model 1
> library(lavaan)
> Model.Analysis.1<-cfa(Model.1, data=data, estimator="MLR")
Warning message:
In lav_object_post_check(object) :
lavaan WARNING: some estimated lv variances are negative
> summary(Model.Analysis.1,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 47 iterations

```

```

Estimator                ML
Optimization method      NLMINB
Number of model parameters      23

Number of observations      153

```

Model Test User Model:

	Standard	Scaled
Test Statistic	105.108	70.052
Degrees of freedom	32	32
P-value (Chi-square)	0.000	0.000
Scaling correction factor		1.500
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	1105.643	622.181
Degrees of freedom	45	45
P-value	0.000	0.000
Scaling correction factor		1.777

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.931	0.934
Tucker-Lewis Index (TLI)	0.903	0.907
Robust Comparative Fit Index (CFI)		0.944

Robust Tucker-Lewis Index (TLI) 0.922

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-1122.496	-1122.496
Scaling correction factor for the MLR correction	1.943	
Loglikelihood unrestricted model (H1)	-1069.942	-1069.942
Scaling correction factor for the MLR correction	1.685	
Akaike (AIC)	2290.993	2290.993
Bayesian (BIC)	2360.693	2360.693
Sample-size adjusted Bayesian (SABIC)	2287.896	2287.896

Root Mean Square Error of Approximation:

RMSEA	0.122	0.088
90 Percent confidence interval - lower	0.097	0.065
90 Percent confidence interval - upper	0.149	0.111
P-value H_0: RMSEA <= 0.050	0.000	0.004
P-value H_0: RMSEA >= 0.080	0.996	0.736

Robust RMSEA	0.108
90 Percent confidence interval - lower	0.074
90 Percent confidence interval - upper	0.142
P-value H_0: Robust RMSEA <= 0.050	0.005
P-value H_0: Robust RMSEA >= 0.080	0.913

Standardized Root Mean Square Residual:

SRMR	0.050	0.050
------	-------	-------

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
A =~				
A1	1.000			
A2	1.060	0.214	4.944	0.000
A3	1.209	0.137	8.822	0.000
B =~				
B4	1.000			
B5	0.834	0.086	9.643	0.000
B6	0.938	0.081	11.542	0.000
B7	1.249	0.117	10.685	0.000

C =~  
 C8           1.000  
 C9           0.899   0.090   9.952   0.000  
 C10          1.000   0.080   12.471   0.000

OCBE =~  
 A            1.000  
 B            1.459   0.177   8.246   0.000  
 C            1.594   0.228   6.991   0.000

Std.lv Std.all

0.445  0.631  
 0.472  0.711  
 0.538  0.777

0.547  0.779  
 0.456  0.693  
 0.513  0.818  
 0.683  0.830

0.645  0.872  
 0.580  0.859  
 0.645  0.895

0.857  0.857  
 1.017  1.017  
 0.942  0.942

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.300	0.083	3.634	0.000
.A2	0.218	0.061	3.574	0.000
.A3	0.190	0.063	3.002	0.003
.B4	0.194	0.040	4.897	0.000
.B5	0.225	0.035	6.447	0.000
.B6	0.130	0.025	5.208	0.000
.B7	0.210	0.058	3.612	0.000
.C8	0.131	0.027	4.873	0.000
.C9	0.119	0.027	4.491	0.000
.C10	0.103	0.024	4.254	0.000
.A	0.053	0.032	1.625	0.104
.B	-0.010	0.017	-0.599	0.549
.C	0.047	0.026	1.829	0.067
OCBE	0.145	0.036	4.053	0.000

Std.lv Std.all

0.300  0.602  
 0.218  0.495  
 0.190  0.396  
 0.194  0.393  
 0.225  0.519  
 0.130  0.330

```
0.210 0.311
0.131 0.240
0.119 0.262
0.103 0.199
0.266 0.266
-0.035 -0.035
0.112 0.112
1.000 1.000
```

```
> ##Modification Indices
> data_mi=modificationindices(Model.Analysis.1,
+                               standardized = TRUE,
+                               sort.=TRUE)
> subset(data_mi, mi > 3.84)
  lhs op rhs   mi   epc sepc.lv sepc.all sepc.nox
97  B7 ~~ C8 18.120 0.074 0.074 0.446 0.446
47  C =~ B7 15.779 1.966 1.269 1.542 1.542
35  B =~ A1 15.770 -1.295 -0.708 -1.004 -1.004
40  B =~ C10 15.747 -2.027 -1.108 -1.538 -1.538
102 C9 ~~ C10 15.598 0.059 0.059 0.533 0.533
55 OCBE =~ C8 15.598 2.249 0.858 1.159 1.159
41  C =~ A1 14.755 -0.787 -0.508 -0.719 -0.719
48 OCBE =~ A1 14.551 -1.696 -0.647 -0.916 -0.916
67  A2 ~~ A3 14.551 -0.115 -0.115 -0.564 -0.564
100 C8 ~~ C9 14.507 -0.058 -0.058 -0.462 -0.462
57 OCBE =~ C10 14.507 -2.196 -0.837 -1.162 -1.162
38  B =~ C8 13.351 1.854 1.014 1.370 1.370
46  C =~ B6 10.755 -1.239 -0.800 -1.276 -1.276
54 OCBE =~ B7 9.998 -8.020 -3.058 -3.718 -3.718
96  B6 ~~ C10 9.642 -0.039 -0.039 -0.338 -0.338
30  A =~ B6 9.638 0.777 0.346 0.552 0.552
59  A1 ~~ A3 8.913 0.086 0.086 0.361 0.361
49 OCBE =~ A2 8.913 1.429 0.545 0.821 0.821
70  A2 ~~ B6 8.595 0.049 0.049 0.289 0.289
34  A =~ C10 8.011 -0.569 -0.253 -0.351 -0.351
75  A3 ~~ B4 7.391 -0.053 -0.053 -0.277 -0.277
89  B5 ~~ B7 6.438 -0.053 -0.053 -0.244 -0.244
88  B5 ~~ B6 6.390 0.041 0.041 0.239 0.239
36  B =~ A2 6.017 0.855 0.467 0.704 0.704
43  C =~ A3 5.960 0.589 0.380 0.549 0.549
63  A1 ~~ B7 5.170 -0.054 -0.054 -0.216 -0.216
61  A1 ~~ B5 4.282 0.048 0.048 0.184 0.184
31  A =~ B7 4.092 -0.659 -0.293 -0.357 -0.357
> ##Model 2
> Model.2<-'
+ A=~A1+A2+A3
+ B=~B4+B5+B6
+ C=~C8+C9+C10
+ OCBE=~A+B+C'
> ##CFA Analysis Model 2
```

```

> library(lavaan)
> Model.Analysis.2<-cfa(Model.2, data=data, estimator="MLR")
> summary(Model.Analysis.2,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 48 iterations

```

Estimator	ML
Optimization method	NLMINB
Number of model parameters	21
Number of observations	153

Model Test User Model:

	Standard	Scaled
Test Statistic	70.788	46.921
Degrees of freedom	24	24
P-value (Chi-square)	0.000	0.003
Scaling correction factor		1.509
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	925.250	520.832
Degrees of freedom	36	36
P-value	0.000	0.000
Scaling correction factor		1.776

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.947	0.953
Tucker-Lewis Index (TLI)	0.921	0.929
Robust Comparative Fit Index (CFI)		0.960
Robust Tucker-Lewis Index (TLI)		0.940

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-1008.305	-1008.305
Scaling correction factor for the MLR correction		1.866
Loglikelihood unrestricted model (H1)	-972.911	-972.911
Scaling correction factor for the MLR correction		1.676
Akaike (AIC)	2058.611	2058.611
Bayesian (BIC)	2122.250	2122.250
Sample-size adjusted Bayesian (SABIC)	2055.784	2055.784

Root Mean Square Error of Approximation:

RMSEA	0.113	0.079
-------	-------	-------



90 Percent confidence interval - lower	0.083	0.051
90 Percent confidence interval - upper	0.144	0.106
P-value H_0: RMSEA <= 0.050	0.001	0.044
P-value H_0: RMSEA >= 0.080	0.964	0.500

Robust RMSEA	0.097	
90 Percent confidence interval - lower		0.055
90 Percent confidence interval - upper		0.138
P-value H_0: Robust RMSEA <= 0.050		0.037
P-value H_0: Robust RMSEA >= 0.080		0.771

Standardized Root Mean Square Residual:

SRMR	0.046	0.046
------	-------	-------

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
A =~				
A1	1.000			
A2	1.052	0.212	4.954	0.000
A3	1.188	0.130	9.169	0.000
B =~				
B4	1.000			
B5	0.877	0.087	10.034	0.000
B6	0.983	0.089	11.011	0.000
C =~				
C8	1.000			
C9	0.938	0.088	10.677	0.000
C10	1.037	0.076	13.696	0.000
OCBE =~				
A	1.000			
B	1.356	0.175	7.752	0.000
C	1.424	0.195	7.305	0.000
Std.lv	Std.all			
0.450	0.637			
0.473	0.713			
0.534	0.771			
0.548	0.780			
0.481	0.731			
0.538	0.859			
0.629	0.850			

0.590 0.875  
 0.653 0.905  
  
 0.887 0.887  
 0.988 0.988  
 0.903 0.903

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.296	0.083	3.544	0.000
.A2	0.216	0.058	3.719	0.000
.A3	0.194	0.062	3.132	0.002
.B4	0.193	0.041	4.721	0.000
.B5	0.202	0.035	5.743	0.000
.B6	0.103	0.023	4.427	0.000
.C8	0.152	0.030	5.015	0.000
.C9	0.107	0.024	4.536	0.000
.C10	0.094	0.023	4.123	0.000
.A	0.043	0.032	1.364	0.173
.B	0.007	0.024	0.307	0.759
.C	0.073	0.026	2.766	0.006
OCBE	0.159	0.037	4.259	0.000

Std.lv	Std.all
0.296	0.594
0.216	0.491
0.194	0.405
0.193	0.391
0.202	0.466
0.103	0.262
0.152	0.277
0.107	0.235
0.094	0.180
0.214	0.214
0.024	0.024
0.185	0.185
1.000	1.000

```

> ##Modification Indices
> data_mi=modificationindices(Model.Analysis.2,
+                               standardized = TRUE,
+                               sort.=TRUE)
> subset(data_mi, mi > 3.84)
  lhs op rhs  mi  epc sepc.lv sepc.all sepc.nox
86 C8 ~~ C9 13.546 -0.063 -0.063 -0.492 -0.492
52 OCBE =~ C10 13.546 -1.349 -0.538 -0.747 -0.747
38 C =~ A1 13.364 -0.723 -0.455 -0.644 -0.644
37 B =~ C10 12.646 -0.867 -0.475 -0.659 -0.659
44 OCBE =~ A1 12.581 -1.933 -0.771 -1.092 -1.092
61 A2 ~~ A3 12.581 -0.104 -0.104 -0.509 -0.509
31 A =~ C10 11.158 -0.657 -0.296 -0.410 -0.410

```

```

32 B =~ A1 10.899 -1.226 -0.671 -0.951 -0.951
33 B =~ A2 9.506 1.224 0.670 1.010 1.010
85 B6 ~~ C10 8.584 -0.036 -0.036 -0.367 -0.367
54 A1 ~~ A3 8.293 0.082 0.082 0.343 0.343
45 OCBE =~ A2 8.292 1.684 0.672 1.012 1.012
64 A2 ~~ B6 8.141 0.047 0.047 0.315 0.315
88 C9 ~~ C10 7.859 0.051 0.051 0.505 0.505
50 OCBE =~ C8 7.859 1.013 0.404 0.546 0.546
35 B =~ C8 7.781 0.671 0.367 0.496 0.496
40 C =~ A3 6.813 0.570 0.359 0.518 0.518
41 C =~ B4 6.506 0.634 0.399 0.568 0.568
68 A3 ~~ B4 5.916 -0.049 -0.049 -0.255 -0.255
28 A =~ B6 4.974 0.715 0.322 0.513 0.513
26 A =~ B4 4.943 -0.781 -0.351 -0.500 -0.500
29 A =~ C8 4.607 0.437 0.197 0.266 0.266
71 A3 ~~ C8 4.478 0.038 0.038 0.220 0.220
43 C =~ B6 4.349 -0.493 -0.310 -0.495 -0.495
> ##Model's Plot
> library(semPlot)
> semPaths(Model.Analysis.1,
+         what="paths",
+         whatLabels = "est")
> ##Model 3
> Model.3<-'
+ EI=~A1+A2+A3
+ ECE=~B4+B5+B6
+ EH=~C9+C10
+ OCBE=~EI+ECE+EH'
> ##CFA Analysis Model 3
> library(lavaan)
> Model.Analysis.3<-cfa(Model.3, data=data, estimator="MLR")
> summary(Model.Analysis.3,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 39 iterations

```

Estimator	ML
Optimization method	NLMINB
Number of model parameters	19

Number of observations	153
------------------------	-----

Model Test User Model:

	Standard	Scaled
Test Statistic	41.031	27.579
Degrees of freedom	17	17
P-value (Chi-square)	0.001	0.050
Scaling correction factor		1.488
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	735.242	396.674
Degrees of freedom	28	28
P-value	0.000	0.000
Scaling correction factor		1.854

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.966	0.971
Tucker-Lewis Index (TLI)	0.944	0.953
Robust Comparative Fit Index (CFI)		0.977
Robust Tucker-Lewis Index (TLI)		0.962

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-917.419	-917.419
Scaling correction factor for the MLR correction	1.955	
Loglikelihood unrestricted model (H1)	-896.903	-896.903
Scaling correction factor for the MLR correction	1.734	
Akaike (AIC)	1872.838	1872.838
Bayesian (BIC)	1930.416	1930.416
Sample-size adjusted Bayesian (SABIC)	1870.280	1870.280

Root Mean Square Error of Approximation:

RMSEA	0.096	0.064
90 Percent confidence interval - lower	0.059	0.023
90 Percent confidence interval - upper	0.134	0.098
P-value H <sub>0</sub> : RMSEA ≤ 0.050	0.024	0.244
P-value H <sub>0</sub> : RMSEA ≥ 0.080	0.782	0.240
Robust RMSEA		0.078
90 Percent confidence interval - lower		0.000
90 Percent confidence interval - upper		0.129
P-value H <sub>0</sub> : Robust RMSEA ≤ 0.050		0.184
P-value H <sub>0</sub> : Robust RMSEA ≥ 0.080		0.511

Standardized Root Mean Square Residual:

SRMR	0.041	0.041
------	-------	-------

Parameter Estimates:

Standard errors	Sandwich
Information bread	Observed
Observed information based on	Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
EI =~				
A1	1.000			
A2	1.053	0.212	4.962	0.000
A3	1.173	0.124	9.448	0.000
ECE =~				
B4	1.000			
B5	0.888	0.089	9.928	0.000
B6	1.002	0.094	10.692	0.000
EH =~				
C9	1.000			
C10	1.031	0.071	14.561	0.000
OCBE =~				
EI	1.000			
ECE	1.317	0.182	7.256	0.000
EH	1.343	0.160	8.375	0.000

Std.lv Std.all

0.452	0.640
0.476	0.717
0.530	0.765
0.542	0.772
0.481	0.732
0.543	0.866
0.619	0.918
0.638	0.886
0.894	0.894
0.982	0.982
0.876	0.876

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.294	0.084	3.505	0.000
.A2	0.214	0.057	3.740	0.000
.A3	0.199	0.063	3.164	0.002
.B4	0.199	0.043	4.612	0.000
.B5	0.201	0.035	5.719	0.000
.B6	0.098	0.024	4.063	0.000
.C9	0.072	0.023	3.081	0.002
.C10	0.112	0.033	3.368	0.001
.EI	0.041	0.032	1.291	0.197
.ECE	0.010	0.025	0.414	0.679
.EH	0.089	0.033	2.728	0.006
OCBE	0.163	0.038	4.285	0.000
Std.lv	Std.all			

```

0.294 0.590
0.214 0.486
0.199 0.414
0.199 0.405
0.201 0.465
0.098 0.250
0.072 0.158
0.112 0.216
0.201 0.201
0.035 0.035
0.232 0.232
1.000 1.000

```

```

> ##Modification Indices
> data_mi=modificationindices(Model.Analysis.3,
+                               standardized = TRUE,
+                               sort.=TRUE)
> subset(data_mi, mi > 3.84)
  lhs op rhs  mi  epc sepc.lv sepc.all sepc.nox
40 OCBE =~ A1 11.756 -1.981 -0.800 -1.134 -1.134
55 A2 ~~ A3 11.756 -0.101 -0.101 -0.487 -0.487
29 ECE =~ A1 9.951 -1.214 -0.657 -0.931 -0.931
34 EH =~ A1 9.801 -0.587 -0.363 -0.515 -0.515
30 ECE =~ A2 9.606 1.276 0.691 1.041 1.041
49 A1 ~~ A3 8.303 0.082 0.082 0.339 0.339
41 OCBE =~ A2 8.303 1.792 0.724 1.091 1.091
58 A2 ~~ B6 7.612 0.046 0.046 0.316 0.316
69 B4 ~~ C10 6.616 0.043 0.043 0.286 0.286
36 EH =~ A3 4.983 0.447 0.277 0.400 0.400
37 EH =~ B4 4.688 0.450 0.279 0.397 0.397
61 A3 ~~ B4 4.372 -0.043 -0.043 -0.218 -0.218
26 EI =~ B6 3.997 0.680 0.307 0.490 0.490

> ##Model 3
> Model.3<-'
+ EI=~A1+A2+A3
+ ECE=~B4+B5+B6
+ EH=~C9+C10
+ OCBE=~EI+ECE+EH
+ A2 ~~ A3'
> ##CFA Analysis Model 3
> library(lavaan)
> Model.Analysis.3<-cfa(Model.3, data=data, estimator="MLR")
> summary(Model.Analysis.3,fit.measures=TRUE,standardized=TRUE)
lavaan 0.6.16 ended normally after 45 iterations

```

```

Estimator                ML
Optimization method      NLMINB
Number of model parameters 20

```

Number of observations 153

Model Test User Model:

	Standard	Scaled
Test Statistic	27.296	18.182
Degrees of freedom	16	16
P-value (Chi-square)	0.038	0.313
Scaling correction factor		1.501
Yuan-Bentler correction (Mplus variant)		

Model Test Baseline Model:

Test statistic	735.242	396.674
Degrees of freedom	28	28
P-value	0.000	0.000
Scaling correction factor		1.854

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.984	0.994
Tucker-Lewis Index (TLI)	0.972	0.990
Robust Comparative Fit Index (CFI)		0.995
Robust Tucker-Lewis Index (TLI)		0.992

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-910.551	-910.551
Scaling correction factor for the MLR correction	1.921	
Loglikelihood unrestricted model (H1)	-896.903	-896.903
Scaling correction factor for the MLR correction	1.734	
Akaike (AIC)	1861.102	1861.102
Bayesian (BIC)	1921.711	1921.711
Sample-size adjusted Bayesian (SABIC)	1858.410	1858.410

Root Mean Square Error of Approximation:

RMSEA	0.068	0.030
90 Percent confidence interval - lower	0.016	0.000
90 Percent confidence interval - upper	0.110	0.074
P-value H <sub>0</sub> : RMSEA ≤ 0.050	0.227	0.723
P-value H <sub>0</sub> : RMSEA ≥ 0.080	0.354	0.028
Robust RMSEA		0.037
90 Percent confidence interval - lower		0.000
90 Percent confidence interval - upper		0.102
P-value H <sub>0</sub> : Robust RMSEA ≤ 0.050		0.566

P-value H<sub>0</sub>: Robust RMSEA >= 0.080 0.167

Standardized Root Mean Square Residual:

SRMR 0.031 0.031

Parameter Estimates:

Standard errors Sandwich  
Information bread Observed  
Observed information based on Hessian

Latent Variables:

	Estimate	Std.Err	z-value	P(> z )
EI =~				
A1	1.000			
A2	1.247	0.237	5.251	0.000
A3	1.391	0.205	6.796	0.000
ECE =~				
B4	1.000			
B5	0.882	0.090	9.769	0.000
B6	1.011	0.095	10.605	0.000
EH =~				
C9	1.000			
C10	1.024	0.070	14.737	0.000
OCBE =~				
EI	1.000			
ECE	1.479	0.259	5.719	0.000
EH	1.549	0.265	5.840	0.000
Std.lv	Std.all			
0.438	0.620			
0.546	0.822			
0.609	0.879			
0.541	0.770			
0.477	0.725			
0.547	0.872			
0.621	0.921			
0.636	0.883			
0.810	0.810			
0.970	0.970			
0.884	0.884			

Covariances:

	Estimate	Std.Err	z-value	P(> z )
.A2 ~~				
.A3	-0.112	0.055	-2.051	0.040



Std.lv Std.all

-0.112 -0.900

Variances:

	Estimate	Std.Err	z-value	P(> z )
.A1	0.307	0.088	3.468	0.001
.A2	0.143	0.056	2.566	0.010
.A3	0.109	0.077	1.426	0.154
.B4	0.200	0.043	4.632	0.000
.B5	0.205	0.036	5.705	0.000
.B6	0.094	0.024	3.916	0.000
.C9	0.069	0.023	3.063	0.002
.C10	0.115	0.033	3.458	0.001
.EI	0.066	0.028	2.340	0.019
.ECE	0.017	0.026	0.663	0.507
.EH	0.084	0.033	2.533	0.011
OCBE	0.126	0.042	2.996	0.003

Std.lv Std.all

0.307	0.616
0.143	0.324
0.109	0.228
0.200	0.407
0.205	0.474
0.094	0.240
0.069	0.152
0.115	0.221
0.343	0.343
0.059	0.059
0.218	0.218
1.000	1.000

> ##Modification Indices

> data\_mi=modificationindices(Model.Analysis.3,

+ standardized = TRUE,

+ sort.=TRUE)

> subset(data\_mi, mi > 3.84)

	lhs	op	rhs	mi	epc	sepc.lv	sepc.all	sepc.nox
69	B4	~~	C10	7.104	0.044	0.044	0.290	0.290
58	A2	~~	B6	6.866	0.044	0.044	0.379	0.379
27	EI	=~	B6	6.483	0.454	0.199	0.317	0.317
61	A3	~~	B4	5.072	-0.046	-0.046	-0.309	-0.309
52	A1	~~	B5	4.913	0.049	0.049	0.194	0.194
38	EH	=~	B4	4.835	0.451	0.280	0.399	0.399
40	EH	=~	B6	4.313	-0.410	-0.255	-0.407	-0.407

>

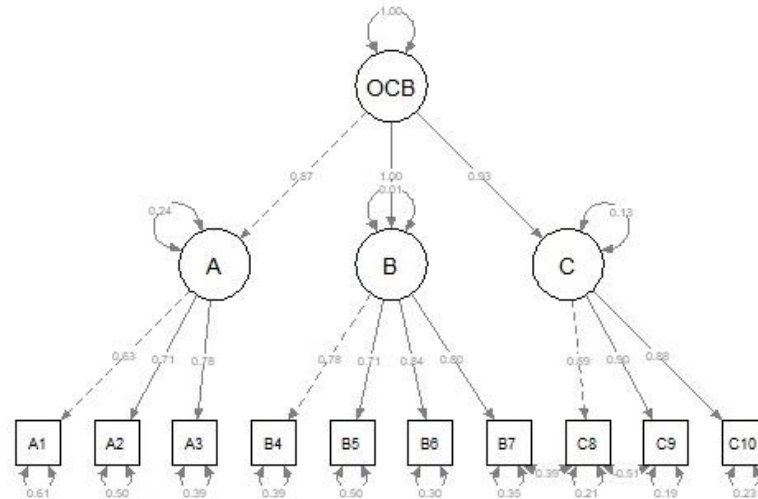
fitmeasures(Model.Analysis.3,c("pvalue","chisq","df","gfi","cfi","rmsea","srmr","tli")

pvalue	chisq	df	gfi	cfi	rmsea	srmr	tli
0.038	27.296	16.000	0.957	0.984	0.068	0.031	0.972

```

> ##Model's Plot
> library(semPlot)
> semPaths(Model.Analysis.3,
+   what="paths",
+   whatLabels = "std.all")

```



- **Rscript - Reliabilitas**

```

##Reliability Assessment
###Creating Reliability Data
library(psych)
rel_data<-subset(data, select = -c(B7,C8))
View(rel_data)

```

```

##Alpha Coef
reliability<-(rel_data)
summary(reliability)
alpha(reliability)

```

- **Rconsole - Reliabilitas**

```

> ##Reliability Assessment
> ###Creating Reliability Data
> library(psych)
> rel_data<-subset(data, select = -c(B7,C8))
> View(rel_data)
> ##Alpha Coef
> reliability<-(rel_data)
> summary(reliability)

```

	A1	A2	A3
Min.	:1.000	Min. :1.000	Min. :2.000
1st Qu.:	4.000	1st Qu.:4.000	1st Qu.:4.000
Median	:5.000	Median :5.000	Median :5.000
Mean	:4.484	Mean :4.575	Mean :4.425
3rd Qu.:	5.000	3rd Qu.:5.000	3rd Qu.:5.000

```

Max. :5.000 Max. :5.000 Max. :5.000
  B4      B5      B6
Min. :3.000 Min. :3.000 Min. :3.000
1st Qu.:4.000 1st Qu.:4.000 1st Qu.:4.000
Median :5.000 Median :5.000 Median :5.000
Mean :4.425 Mean :4.477 Mean :4.529
3rd Qu.:5.000 3rd Qu.:5.000 3rd Qu.:5.000
Max. :5.000 Max. :5.000 Max. :5.000
  C9      C10
Min. :3.000 Min. :3.000
1st Qu.:4.000 1st Qu.:4.000
Median :5.000 Median :5.000
Mean :4.438 Mean :4.366
3rd Qu.:5.000 3rd Qu.:5.000
Max. :5.000 Max. :5.000
> alpha(reliability)

```

Reliability analysis  
Call: alpha(x = reliability)

```

raw_alpha std.alpha G6(smc) average_r S/N ase mean sd
  0.9      0.9  0.91    0.54 9.5 0.012 4.5 0.53
median_r
  0.56

```

```

95% confidence boundaries
  lower alpha upper
Feldt  0.88 0.9 0.93
Duhachek 0.88 0.9 0.93

```

```

Reliability if an item is dropped:
raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r
A1  0.91  0.91  0.90  0.58 9.7  0.012 0.0081
A2  0.90  0.90  0.90  0.55 8.7  0.013 0.0141
A3  0.89  0.89  0.90  0.55 8.4  0.013 0.0146
B4  0.89  0.89  0.90  0.54 8.2  0.014 0.0116
B5  0.89  0.89  0.90  0.55 8.5  0.013 0.0139
B6  0.88  0.88  0.89  0.52 7.6  0.015 0.0118
C9  0.88  0.88  0.88  0.52 7.7  0.015 0.0090
C10 0.89  0.89  0.89  0.53 7.9  0.014 0.0090
med.r
A1  0.57
A2  0.57
A3  0.56
B4  0.55
B5  0.55
B6  0.51
C9  0.51
C10 0.53

```

Item statistics

	n	raw.r	std.r	r.cor	r.drop	mean	sd
A1	153	0.65	0.65	0.58	0.54	4.5	0.71
A2	153	0.73	0.74	0.68	0.65	4.6	0.67
A3	153	0.77	0.77	0.72	0.68	4.4	0.69
B4	153	0.78	0.78	0.74	0.70	4.4	0.70
B5	153	0.75	0.76	0.71	0.67	4.5	0.66
B6	153	0.85	0.85	0.84	0.79	4.5	0.63
C9	153	0.84	0.84	0.83	0.78	4.4	0.68
C10	153	0.82	0.82	0.81	0.75	4.4	0.72

Non missing response frequency for each item

	1	2	3	4	5	miss
A1	0.01	0.00	0.08	0.32	0.59	0
A2	0.01	0.00	0.06	0.28	0.65	0
A3	0.00	0.01	0.10	0.36	0.54	0
B4	0.00	0.00	0.12	0.33	0.55	0
B5	0.00	0.00	0.09	0.34	0.57	0
B6	0.00	0.00	0.07	0.33	0.60	0
C9	0.00	0.00	0.10	0.35	0.54	0
C10	0.00	0.00	0.14	0.35	0.51	0

>

### 3. Uji Asumsi

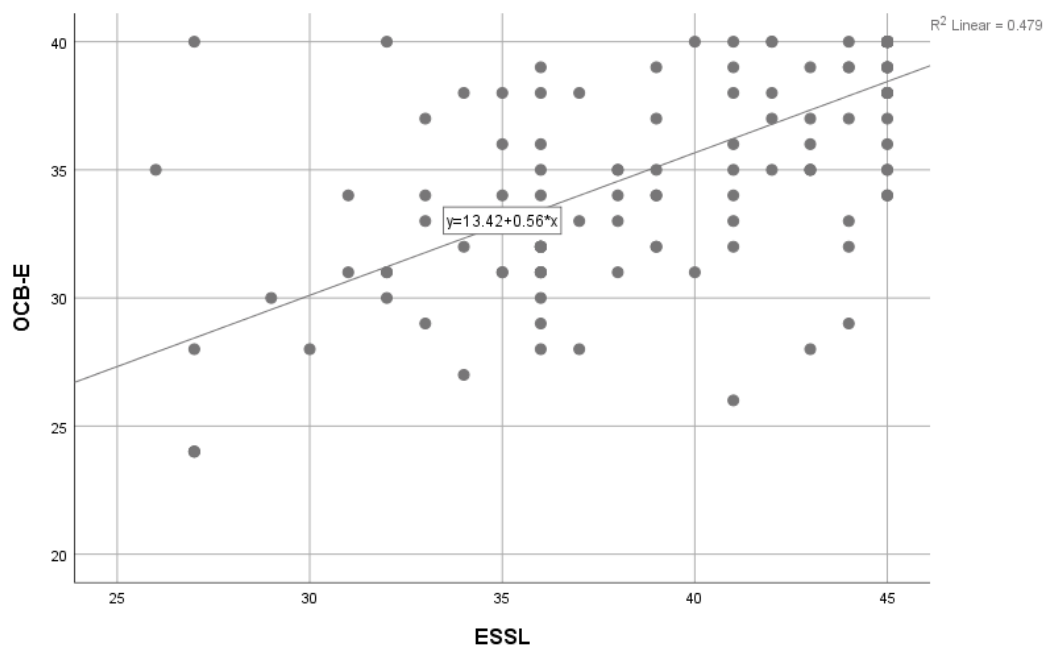
- Normalitas Residual

#### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.154	153	.000	.945	153	.000

a. Lilliefors Significance Correction

- Uji Linearitas



ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
OCB-E * ESSL	Between Groups	(Combined)	1552.680	18	86.260	9.963	.000
		Linearity	1298.534	1	1298.534	149.973	.000
		Deviation from Linearity	254.146	17	14.950	1.727	.045
Within Groups			1160.235	134	8.658		
Total			2712.915	152			

#### 4. Uji Deskriptif

##### Jenis Kelamin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	115	75.2	75.2	75.2
	Perempuan	38	24.8	24.8	100.0
	Total	153	100.0	100.0	

##### Posisi Jabatan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Outsource	90	58.8	58.8	58.8
	Non Outsource	63	41.2	41.2	100.0
	Total	153	100.0	100.0	

##### Pendidikan Terakhir

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SMP	42	27.5	27.5	27.5
	SMA/SMK	67	43.8	43.8	71.2
	D3/S1	44	28.8	28.8	100.0
	Total	153	100.0	100.0	

##### Masa Kerja

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 tahun	131	85.6	85.6	85.6
	6-25 tahun	22	14.4	14.4	100.0
	Total	153	100.0	100.0	

### Correlations

		Masa Kerja (tahun)	ESSL	OCB-E
Masa Kerja (tahun)	Pearson Correlation	1	.159 <sup>*</sup>	.192 <sup>*</sup>
	Sig. (2-tailed)		.049	.018
	N	153	153	153
ESSL	Pearson Correlation	.159 <sup>*</sup>	1	.692 <sup>**</sup>
	Sig. (2-tailed)	.049		.000
	N	153	153	153
OCB-E	Pearson Correlation	.192 <sup>*</sup>	.692 <sup>**</sup>	1
	Sig. (2-tailed)	.018	.000	
	N	153	153	153

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### 4. Robust Regression - Bootstrapping

- Rscript

```
#renaming data
data.puspa<-PUSPAROBUST
View(data)
```

```
library(car)
library(QuantPsyc)
library(boot)
library(readxl)
```

```
album2 <- data.puspa
```

```
head(album2)
```

```
albumSales.2 <-lm(OCBE ~ESSL, data=album2)
```

```
summary(albumSales.2)
```

```
#Beta setiap koefisien
lm.beta(albumSales.2)
```

```
#confident interval setiap koefisien
confint(albumSales.2)
```

```
bootReg<- function(formula, data, indices) {
  d <- data[indices,] #allows boot to select sample
  fit <- lm(formula, data=d) #fit regression model
  return(summary(fit)$r.square) #return R-squared of model
}
```

```
bootResults<-boot(statistic = bootReg, formula = OCBE ~ ESSL, data = album2,
R = 2000)
boot.ci(bootResults, type = "bca", index = 1)
```

- **Rconsole**

```
> #renaming data
> data.puspa<-PUSPAROBUST
> library(car)
> library(QuantPsyc)
> library(boot)
> library(readxl)
> album2 <- data.puspa
> head(album2)
# A tibble: 6 × 2
  ESSL OCBE
  <dbl> <dbl>
1  45  39
2  36  33
3  39  39
4  45  38
5  43  35
6  43  37
> albumSales.2 <-lm(OCBE ~ESSL, data=album2)
> summary(albumSales.2)
```

```
Call:
lm(formula = OCBE ~ ESSL, data = album2)
```

```
Residuals:
  Min    1Q  Median    3Q   Max
-10.2205 -1.4448  0.4523  1.5552 11.5644
```

```
Coefficients:
```



	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	13.42180	1.90982	7.028	6.74e-11 ***
ESSL	0.55607	0.04723	11.774	< 2e-16 ***

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 3.061 on 151 degrees of freedom  
Multiple R-squared: 0.4786, Adjusted R-squared: 0.4752  
F-statistic: 138.6 on 1 and 151 DF, p-value: < 2.2e-16

```
> #Beta setiap koefisien
> lm.beta(albumSales.2)
  ESSL
0.6918447
> #confident interval setiap koefisien
> confint(albumSales.2)
      2.5 %   97.5 %
(Intercept) 9.6483694 17.195223
ESSL      0.4627541 0.649378
> bootReg<- function(formula, data, indices) {
+   d <- data[indices,] #allows boot to select sample
+   fit <- lm(formula, data=d) #fit regression model
+   return(summary(fit)$r.square) #return R-squared of model
+ }
> bootResults<-boot(statistic = bootReg, formula = OCBE ~ ESSL, data = album2,
R = 2000)
> boot.ci(bootResults, type = "bca", index = 1)
BOOTSTRAP CONFIDENCE INTERVAL CALCULATIONS
Based on 2000 bootstrap replicates
```

CALL :

```
boot.ci(boot.out = bootResults, type = "bca", index = 1)
```

Intervals :

Level BCa

95% ( 0.2913, 0.6303 )

Calculations and Intervals on Original Scale