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DEVELOPING ATTITUDES ON GLOBAL AWARENESS INSTRUMENT OF SENIOR HIGH SCHOOL'S STUDENTS

Aman Abadi Nugraha
amanabadi03@gmail.com
Founder and Executive Director Youth Leadership Connection (YOULEC Indonesia)
Yetti Supriyati
Pascasarjana Universitas Negeri Jakarta

ABSTRACT

This study developed the attitudes on global awareness instrument of senior high school's students. It used Research and Development (R&D) design which consisted of preliminary phase, product development, and product implementation (field test). The data were collected from 20 panels, the first phase of field test which consist of 250 students, and the second phase of field test which consist of 265 students . The data were analyzed by using factor analysis with Confirmatory Factor Analysis (CFA) method. The result of this study indicated that the standardized attitudes on global awareness instrument consist of 55 items with cognition, conation, and affection dimension with Composite Reliability (CR) was 0,933 and Variance Extracted (VE) was 0,824.

Keywords: *attitude, global awareness, the 21st Century Learning, CFA, instrument development*

INTRODUCTION

Every nation needs to realize and synergize with the goal of national education of XXI century (the 21st century), which aims to have a respectable position in the global world, namely through the formation of a society consisting of qualified human resources to implement the goals of the nation (BSNP, 2010: 39). Globalization in the 21st century has had tremendous consequences on almost every aspect of life, including the education sector without exception (Kelly, 2017: 1). In this globalization era, not only the Indonesian people who want a progress or do not want eroded by the change. Other countries, both are preparing. Silence without doing a change in a better direction is not the right solution. The challenge now is the need to have global competitiveness in the midst of such a competitive era, marked by the rapidly growing world of information and the growing world of technology. In this case, roles and awareness need to be sharpened and enhanced.

The era of globalization of terms with competition and free information, even has a high risk (Azizy, 2004: 120). In the context of globalization, education must play a role to defend the culture and national identity in the midst of an incessant culture, the rapid development of science and the advancement of the world of technology and information. For teachers, to instill global competencies, such as knowledge, skills, and mindset need to engage in a global environment for all students, teachers themselves must also be prepared (Parkhouse, et al., 2015: 10). In addition, another influence of globalization in the field of education is the need to create educated and skilled educators with skills to deal with the possibilities that can occur in relation to different market contexts (Le, 2014: 17).

Global awareness (global aware-ness) is indispensable, and even needs to be outlined as the primary skill of every citizen. Having such capabilities will encourage better inter-state relations, improve the nation's competitiveness in the global world, and maintain the integrity and dignity of the nation. Global

awareness raises students' ability to work collaboratively with others of different backgrounds, understand and find solutions to global issues, and gain the skills of the 21st century (Crawford & Kirby, 2008: 57). Kirkwood (2004: 57) explains that there are eight components that include global awareness, among others, human trust and the value of global systems, global issues and issues, understanding of cultural differences, awareness of choice, global history, , and the development of analytical, evaluational, and participatory skills.

Trilling & Fadel (2009: 186) describes the 21st century educational framework as follows.

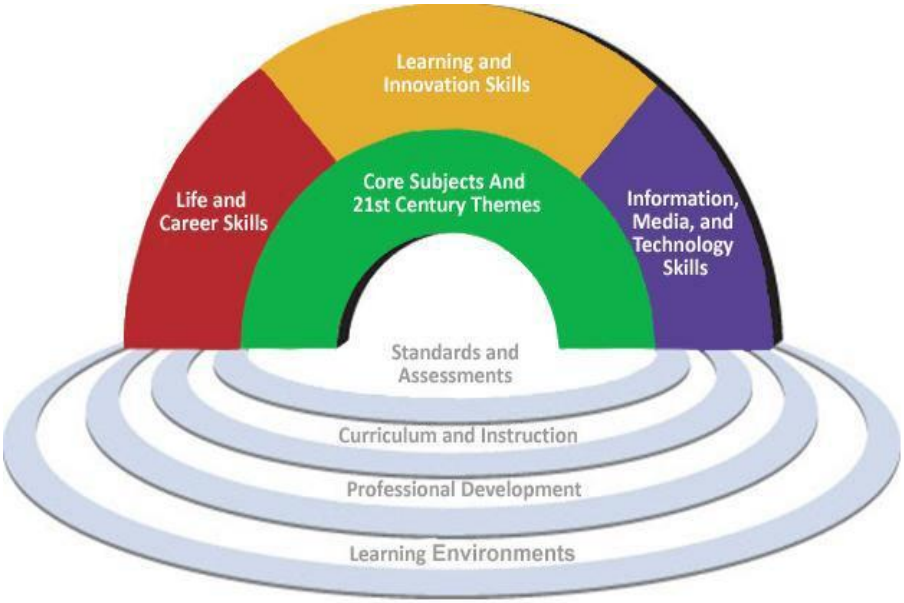

Figure 1. 21st Century Learning Framework

The United Nations Declaration of Human Rights, argues that education must show progress in human personality and strengthen concern for fellow human beings and the principle of freedom. This will advance the understanding, tolerance, and friendship of all countries, races, or religious groups (Izadi, 2012: 79). Global education (global education) is a transcendent education, education whose products are meant to participate in the global market. It is an education that is fostered on a fraternal colony that will encourage the exchange of kindness, service, knowledge, and information (Mary, 2016).

There is a need for valid and reliable instruments to measure attitudes toward the global awareness of learners, because learners are an important factor in determining the progress or attractiveness of a country, so it is appropriate if the instrument of attitudes toward global awareness is developed.

METHOD

This research uses Research and Development (R & D) design which includes preliminary stage, product development, and product implementation (pilot). In the preliminary stage, the need analysis of the instrument of attitudes toward global

awareness of high school students is to answer how important the instrument is to be developed. In the product development phase, a review of attitude constructs on global high school students awareness, development of indicators and indicators, grid preparation, statement preparation, and assessment by 20 panelists. Meanwhile, in the implementation phase of the product (pilot), the first phase of the test involving 250 high school students and the second phase of testing involving 265 high school students.

Data analysis technique used in this research is factor analysis with Confirmatory Factor Analysis (CFA) method. Azwar (2012: 121) explains that in the factor analysis dike- nal two procedures based on a slightly different mind base of exploration-tory factor analysis (EFA) and confirma-tory factor analysis (CFA). EFA verify the number of dimensions underlying factors and the relationship pattern between grains with factor loading. Watkins (1989: 688) explains that recent developments have introduced confirmatory factor analysis (CFA) that has a primacy as a procedure in testing hypotheses. Using this method, the researcher can establish an analytical model, test the possibility of fit data, and compare the model according to the good-ness of fit measure. DiStefano & Hess (2005: 225) explains that CFAs are used to evaluate latent structures that have been developed previously and built on theoretical basis.

RESULT AND DISCUSSION

Based on the validation result by 4 experts and 20 panelists, it was found that 75 points of statement originally developed on the instrument of attitude towards global awareness as a whole is valid according to the calculation of Aiken's validity coefficient while the interrater reliability coefficient is 0.901 according to the coefficient ratio Hoyt's reliability. With these results, 75 items that have been validated by experts and panelists can proceed to the first phase of empirical trials. Is used to analyze inter-relationship between variables and to explore factor structure, then the fit size of the model is tested using CFA (Wipula-nusat, Panuwatwanich & Stewart, 2017: 58).

To develop the instrument, more conventional tyrosine procedures are used, since the CFA in the process of instrument development is tested of the latent structure of an instrument, where CFA is used to. The test respondents involved in the first pilot phase were 250 high school students. At this stage, the attitude insight toward global awareness consists of 19 indicators spread in 3 dimenasi and contains 75 items of statement. The result of instrument attitude modification to global awareness through second order CFA test in first phase trial is presented in Table1.

Table 1. Goodness of Fit Instruments Attitudes to Global Awareness in High School Students through First-Stage Empirical Validaton

No	*Goodness of Fit*	Score	Decision
1	*Chi-Square*	6059,471	Unfulfilled
2	*Probability*	0,00	Unfulfilled
3	*RMSEA*	0,071	Fulfilled
4	*RMSR*	0,075	Fulfilled
5	*NFI*	0,833	Unfulfilled

6	*CFI*	0,910	Fulfilled
7	*IFI*	0,910	Fulfilled
8	*GFI*	0,606	Unfulfilled
9	*RFI*	0,828	Unfulfilled
10	*AGFI*	0,584	Unfulfilled
11	*PGFI*	0,574	Unfulfilled

Based on Table 1 above it appears that most of the Good-ness of Fit requirements are not met because the values obtained are still outside the inter-val that it should be, so it says the model is not fit. It can also be shown from the CFA second order diagram based on the standardized solution in Figure 2 and the second order CFA diagram based on the t-value in Figure 3.

Based on Figures 2 and 3 it can be seen that there are 8 items of invalid statements with recoil loading factor and t value respectively presented in Table 2.

Table 2. Records of Invalid Statement Item In First Stage Empirical Exam

No	Item Code	Item Number	*Factor Loading* Score	*T-Value*	T-Table	Decision
1	A24	8	0,06	0,93	1,96	Invalid
2	A32	10	0,03	0,38	1,96	Invalid
3	A34	12	0,01	0,20	1,96	Invalid
4	A45	17	0,08	1,14	1,96	Invalid
5	A74	30	0,03	0,43	1,96	Invalid
6	B22	44	0,00	0,07	1,96	Invalid
7	B34	50	0,12	1,75	1,96	Invalid
8	B52	55	0,12	1,83	1,96	Invalid

Based on Table 2 above, there are 8 items of statement in the instrument of attitudes toward global awareness that are invalid while 67 other statement items can be declared valid with t-count> t-table value is 1.96 ($\alpha = 0,05$; df = 2697).

Because at this stage there is still an invalid statement item and goodness of fit criterion is still not fulfilled it is necessary to modify, that is by eliminating (drop) the eight grains of invalid so it needs to be re-analysis by using analysis of CFA factor.

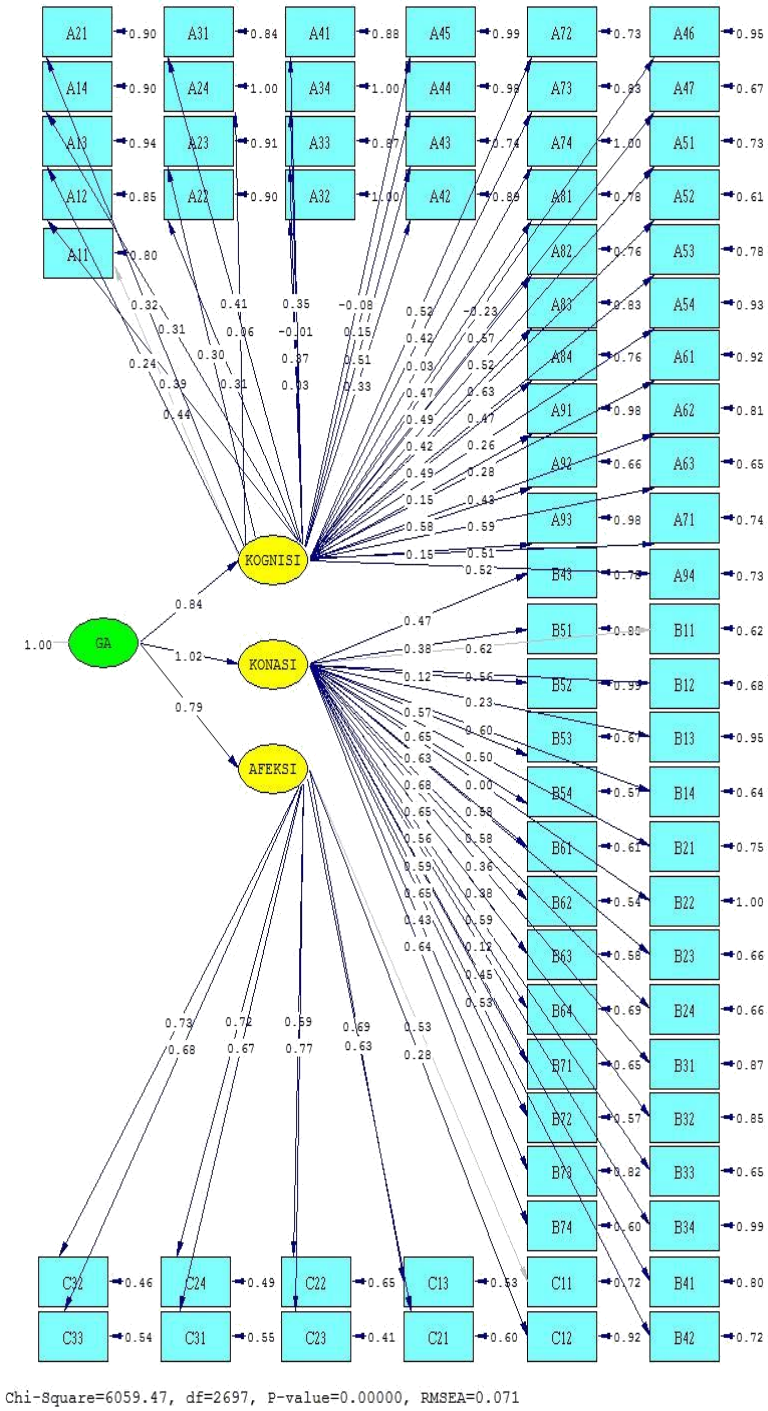

Figure 2. CFA Second Order Diagram based on Standardized Solution
Of First Empirical Test

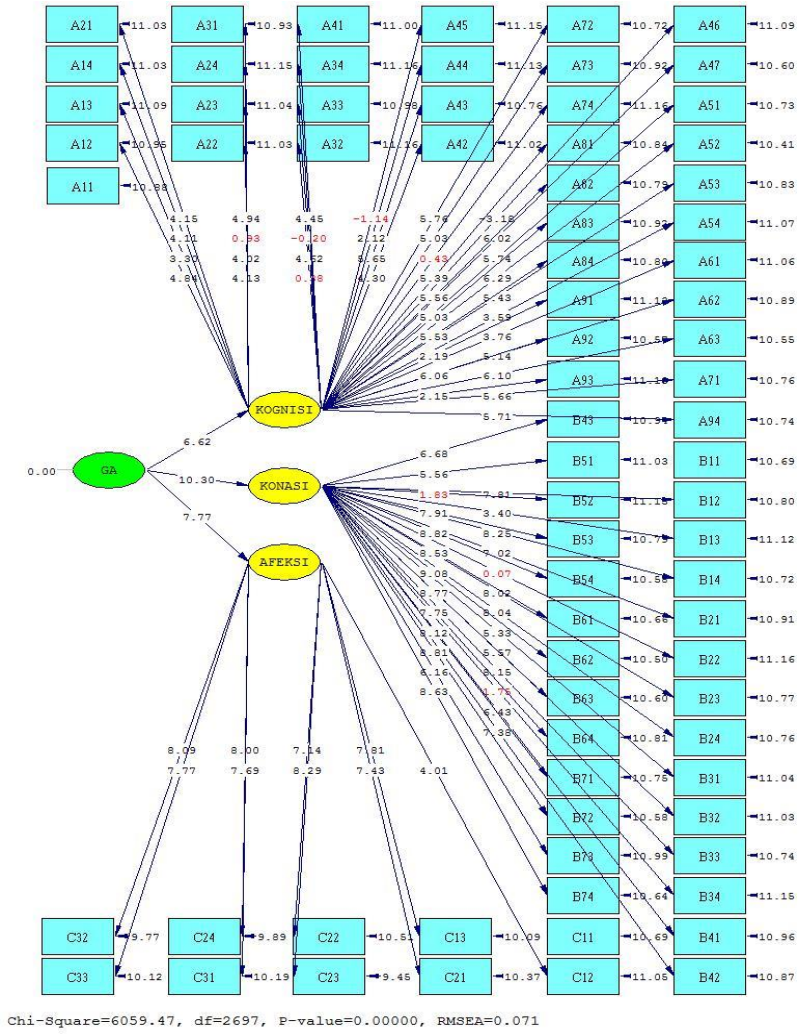

Figure 3. CFA Second Order Diagram based on T-Value
First Empirical Test Results

The recapitulation of attitude instrument development result toward global awareness of SPK students in SMA through CFA second order test based on first empirical validity test after revision is presented in Table 3.

Table 3. Goodnes of Fit Instrument Attitudes to Global Awareness in High School Students through Empirical Validation First Stage after Revision

No	*Goodness of Fit*	*Cut of Value*	Score	Decision
1	*Chi-Square*		4990,362	Unfulfilled

2	*Probability*	0,00	Unfulfilled
3	*RMSEA*	0,0731	Fulfilled
4	*RMSR*	0,074	Fulfilled
5	*NFI*	0,908	Fulfilled
6	*CFI*	0,923	Fulfilled
7	*IFI*	0,924	Fulfilled
8	*GFI*	0,916	Fulfilled
9	*RFI*	0,905	Fulfilled
10	*AGFI*	0,902	Fulfilled
11	*PGFI*	0,608	Fulfilled

Based on Table 3 above it appears that most of the Goodness of Fit requirements have been met since the values obtained are within the required intervals, so it is said that the model obtained is fit. It can also be shown from the CFA second order diagram based on standardized solution attitude instrument on the global awareness of SPK students in senior high school through first empirical validation after revision in Figure 4 and second order CFA diagram based on t-value of attitude instrument on global awareness of SPK students on level SMA through the first stage empirical validation after the revision in Figure 5.

Based on Figures 4 and 5 it can be seen that the 67 items of statement contained in the empirical validity test analysis of the first stage of the attitude instrument to the global awareness of the SPK students at the SMA level after the overall revision have been valid. This is because t-value value of each item of statement has more than t-table value is 1,96 ($\alpha = 0,05$; df = 2141). As for loading factor loading, std. error, t-value, and R2 of each 67 items statement of attitude instrument toward global awareness of SPK student at high school level after revision is presented in Table 4.

Based on Fig. 4, Fig. 5, and Table 4 it appears that the whole grain which is the constructor of the cognition dimension is valid. It can be seen from the t-value of each item is more than t-table value. Similarly, the whole grain constituting the constructor of the con's dimension is valid. It can be seen from the t-value of each item mentioned more than the t-table value. Likewise, the whole grain constituting the constructor of the affection dimension is valid. It can be seen from the t-value of each item mentioned more than the t-table value.

Likewise, for the dimensions of cognition, conformation, and affection constitute the constructor of attitude toward global awareness. This is indicated by the loading factor value of each dimension of 0.837; 1,022; and 0.790 with t-value respectively of 6,620; 10,302; and 7,774. Because the value of t-value of each dimension> 1,96 it can be said that the three dimensions of constructive attitude construct to global awareness is valid.

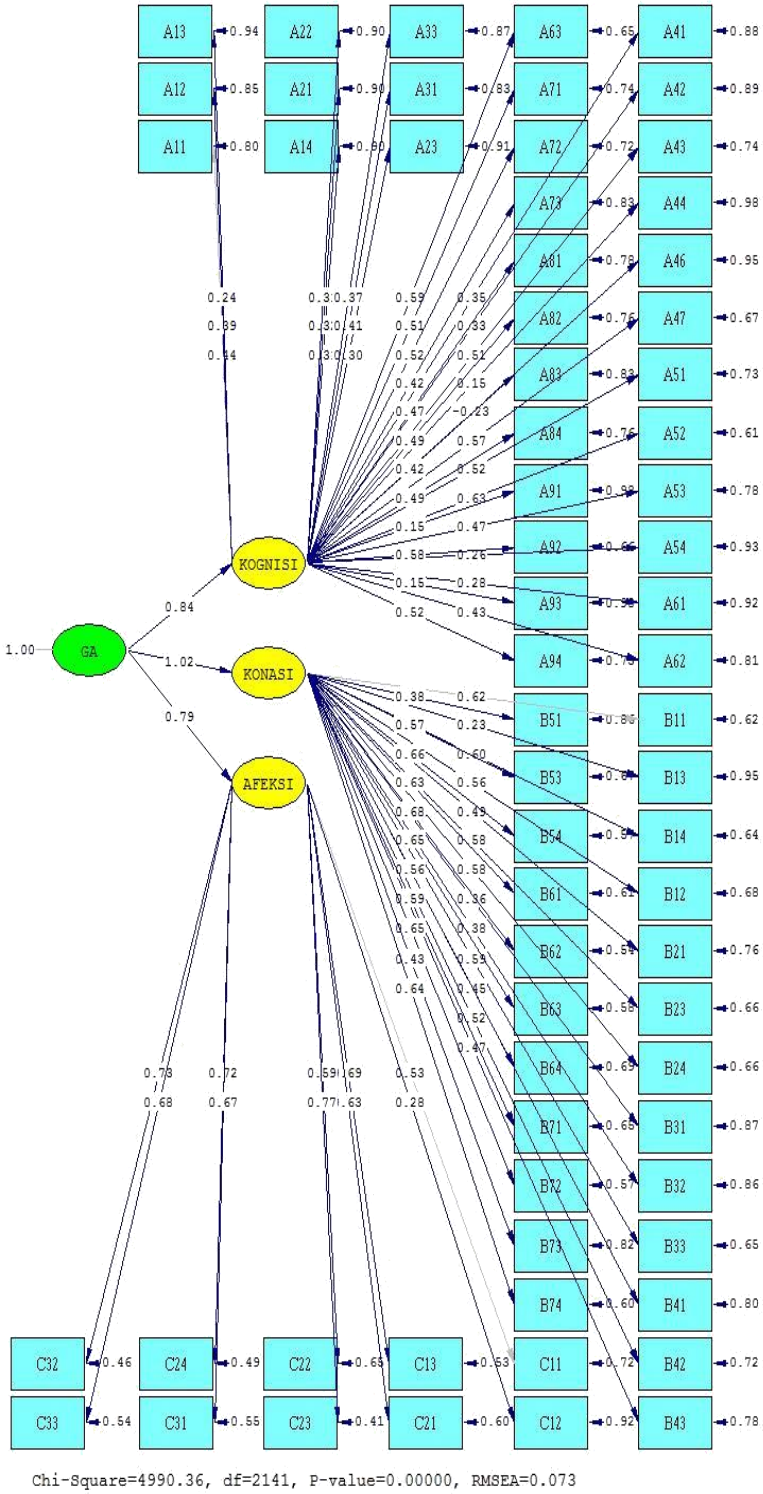

Figure 4. CFA Second Order Diagram based on Standardized Solution First Empirical Test Results After Revision

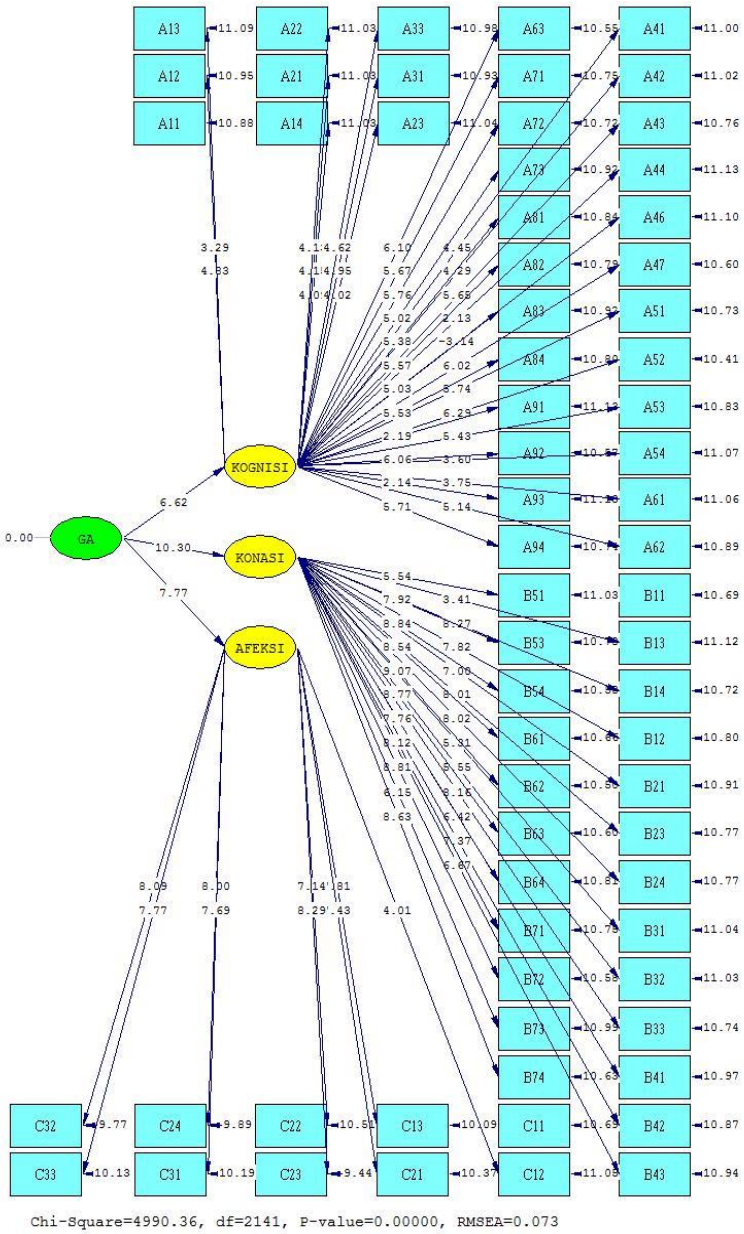

Figure 5. CFA Second Order Diagram based on T-Value
First Empirical Test Results After Revision

Table 4. Recapitulation of Empirical Validity Test Results First Stage of Attitude Instrument to Global Awareness of SPK Students at SMA level.

Konstruk	*Goodness of Fit*			Variabel Endogen	*Factor Loading*	*Std. Error*	*t-value*	R^2
		df	*p-value*					
				A11	0,442	-	-	0,195
				A12	0,392	0,065	4,834	0,154
				A13	0,239	0,076	3,290	0,057
				A14	0,311	0,086	4,094	0,097
				A21	0,316	0,074	4,148	0,100
				A22	0,315	0,074	4,127	0,099
				A23	0,305	0,079	4,021	0,093
				A31	0,407	0,066	4,951	0,166
				A33	0,367	0,066	4,618	0,135
				A41	0,348	0,069	4,447	0,121
				A42	0,332	0,066	4,295	0,110
				A43	0,506	0,075	5,649	0,256
				A44	0,145	0,072	2,129	0,021
				A46	0,226	0,078	3,144	0,051
				A47	0,571	0,085	6,019	0,326
				A51	0,521	0,075	5,738	0,271
Kognisi	4990,362	2141	0,00	A52	0,628	0,091	6,288	0,394
				A53	0,471	0,087	5,427	0,222
				A54	0,265	0,070	3,598	0,070
				A61	0,279	0,089	3,755	0,078
				A62	0,431	0,089	5,141	0,186
				A63	0,588	0,090	6,105	0,346
				A71	0,509	0,090	5,668	0,259
				A72	0,524	0,089	5,761	0,275
				A73	0,416	0,095	5,022	0,173
				A81	0,466	0,088	5,385	0,217
				A82	0,493	0,083	5,566	0,243
				A83	0,417	0,085	5,030	0,174
				A84	0,487	0,086	5,528	0,237
				A91	0,152	0,067	2,185	0,023
				A92	0,580	0,080	6,063	0,336
				A93	0,148	0,075	2,136	0,022
				A94	0,517	0,058	5,712	0,267
				B11	0,616	-	-	0,379
				B12	0,564	0,058	7,824	0,318

				B13	0,228	0,069	3,410	0,052
				B14	0,602	0,060	8,266	0,363
Konasi	4990,362	2141	0,00	B21	0,494	0,064	7,000	0,244
				B23	0,581	0,064	8,015	0,337
				B24	0,581	0,058	8,023	0,338
				B31	0,363	0,079	5,315	0,132
				B32	0,381	0,067	5,547	0,145

Konstruk	***Goodness of Fit***			**Variabel Endogen**	***Factor Loading***	***Std. Error***	***t-value***	**R^2**
		df	***p-value***					
				B33	0,593	0,061	8,164	0,352
				B41	0,447	0,062	6,419	0,200
				B42	0,524	0,071	7,371	0,275
				B43	0,467	0,074	6,670	0,218
				B51	0,379	0,067	5,540	0,144
				B53	0,572	0,081	7,918	0,327
				B54	0,656	0,071	8,841	0,430
Konasi	4990,362	2141	0,00	B61	0,628	0,059	8,535	0,394
				B62	0,678	0,063	9,073	0,460
				B63	0,650	0,063	8,774	0,422
				B64	0,558	0,069	7,759	0,311
				B71	0,590	0,071	8,122	0,348
				B72	0,653	0,068	8,815	0,427
				B73	0,425	0,069	6,146	0,181
				B74	0,636	0,069	8,628	0,404
				C11	0,533	-	-	0,284
				C12	0,285	0,085	4,011	0,081
				C13	0,686	0,083	7,808	0,471
				C21	0,632	0,090	7,430	0,399
				C22	0,592	0,085	7,138	0,351
Afeksi	4990,362	2141	0,00					
				C23	0,767	0,081	8,290	0,588
				C24	0,717	0,089	7,998	0,514
				C31	0,669	0,072	7,686	0,447
				C32	0,732	0,076	8,091	0,536
				C33	0,680	0,083	7,768	0,463
Global				Kognisi	0,837	0,126	6,620	0,701
Awareness	4990,362	2141	0,00	Konasi	1,022	0,099	10,302	1,045
(GA)				Afeksi	0,790	0,102	7,774	0,624

In addition to the validity test, model measurement is also done to test the reliability of a construct. Reliability tests are performed to prove the accuracy, consistency and indicate the extent to which a measuring instrument can give relatively the same results when re-measured on the same subject. Reliability test in SEM is used composite reliability (CR) and variance extrac-ted (VE).

Based on the results of the analysis obtained that the value of CR and VE for the dimensions of cognition are 0.863 and 0.517 respectively; CR and VE values for respective dimensions are 0.908 and 0.503; CR and VE values for affective dimensions are respectively 0.871 and 0.513; and CR and VE values for the Global Awareness (GA) dimension are 0.916 and 0.787 respectively.

Thus, it can be concluded that the attitude attitudes toward global awareness on SPK students at high school level that meet valid and reliable criteria in the first stage empirical test is three dimensions, 19 indicators with 67 valid items. While 8 other invalid items must be dropped and not used in the second stage of empirical validity test.

The test respondents involved in the second test phase were 265 high school students. At this stage, the attitude insight toward global awareness consists of 19 indicators spread in 3 dimension and contains 67 items of reality. The result of developing an attitude instrument toward global awareness through second order CFA testing in the second phase trial is presented in Table 5.

Table 5. Goodness of Fit Instruments Attitudes to Global Awareness in High School Students through Second Empirical Validation

No	*Goodness of Fit*	*Cut of Value*	Score	Decision
1	*Chi-Square*		5211,207	Unfulfilled
2	*Probability*		0,00	Unfulfilled
3	*RMSEA*		0,0737	Fulfilled
4	*RMSR*		0,0703	Fulfilled
5	*NFI*		0,709	Unfulfilled
6	*CFI*		0,822	Unfulfilled
7	*IFI*		0,823	Unfulfilled
8	*GFI*		0,629	Unfulfilled
9	*RFI*		0,699	Unfulfilled
10	*AGFI*		0,606	Unfulfilled
11	*PGFI*		0,591	Unfulfilled

Based on Table 5 above it appears that most of the Good-ness of Fit requirements are not met because the values obtained are still outside the inter-val that it should be, so it says the model obtained is not fit. It can also be shown from the CFA second order diagram based on the standardized solu- tion in Fig. 6 and the second order CFA diagram based on the t-value of Fig. 7.

Based on Figures 6 and 7 it can be seen that there are 12 items of invalid statements with recharge factor loading and t-values respectively presented in Table 6.

Table 6. Recap of Invalid Statement Item In Second Stage Empirical Test

No	Item Code	Code Number	*Factor Loading* Score	*T-Value*	T-Tabel	Decision
1	A14	4	0,01	0,18	1,96	Invalid
2	A22	6	0,05	0,82	1,96	Invalid
3	A31	8	0,05	0,81	1,96	Invalid
4	A43	12	0,06	0,92	1,96	Invalid
5	A54	19	0,08	1,25	1,96	Invalid
6	A61	20	0,12	1,83	1,96	Invalid
7	A92	31	0,00	0,03	1,96	Invalid
8	A94	33	0,07	0,99	1,96	Invalid
9	B14	37	0,04	0,65	1,96	Invalid
10	B43	46	0,04	0,66	1,96	Invalid
11	B62	51	0,08	1,17	1,96	Invalid
12	C23	63	0,12	1,84	1,96	Invalid

Based on Table 6 above, there is a 12-point statement in the capture instrument of invalid global awareness through the second stage empirical validity test, while the other 55 statements can be declared valid with t count> t-table 1, 96 (α = 0,05; df = 2141). Because at this stage there are still items that are not valid statements and goodness of fit criteria are still not met then it needs to be done modification, ie by dropping (drop) to 12 items that are invalid so it needs to be re-analysis by using CFA factor analysis.

The recapitulation of attitude instrument development result toward global awareness of SPK students in senior high school through second order CFA test based on second stage empirical validity test after revision is presented in Table 7.

Table 7. Goodnes of Fit Instrument Attitudes to Global Awareness SPK Students at Senior High School through Second Empirical Validation after Revision

No	*Goodness of Fit*	*Cut of Value*	Score	Decision
1	*Chi-Square*		3154,349	Unfulfilled
2	*Probability*		0,00	Unfulfilled
3	*RMSEA*		0,0757	Fulfilled
4	*RMSR*		0,0652	Fulfilled
5	*NFI*		0,937	Fulfilled
6	*CFI*		0,916	Fulfilled
7	*IFI*		0,926	Fulfilled
8	*GFI*		0,907	Fulfilled
9	*RFI*		0,904	Fulfilled
10	*AGFI*		0,903	Fulfilled

11	*PGFI*		0,620	Fulfilled

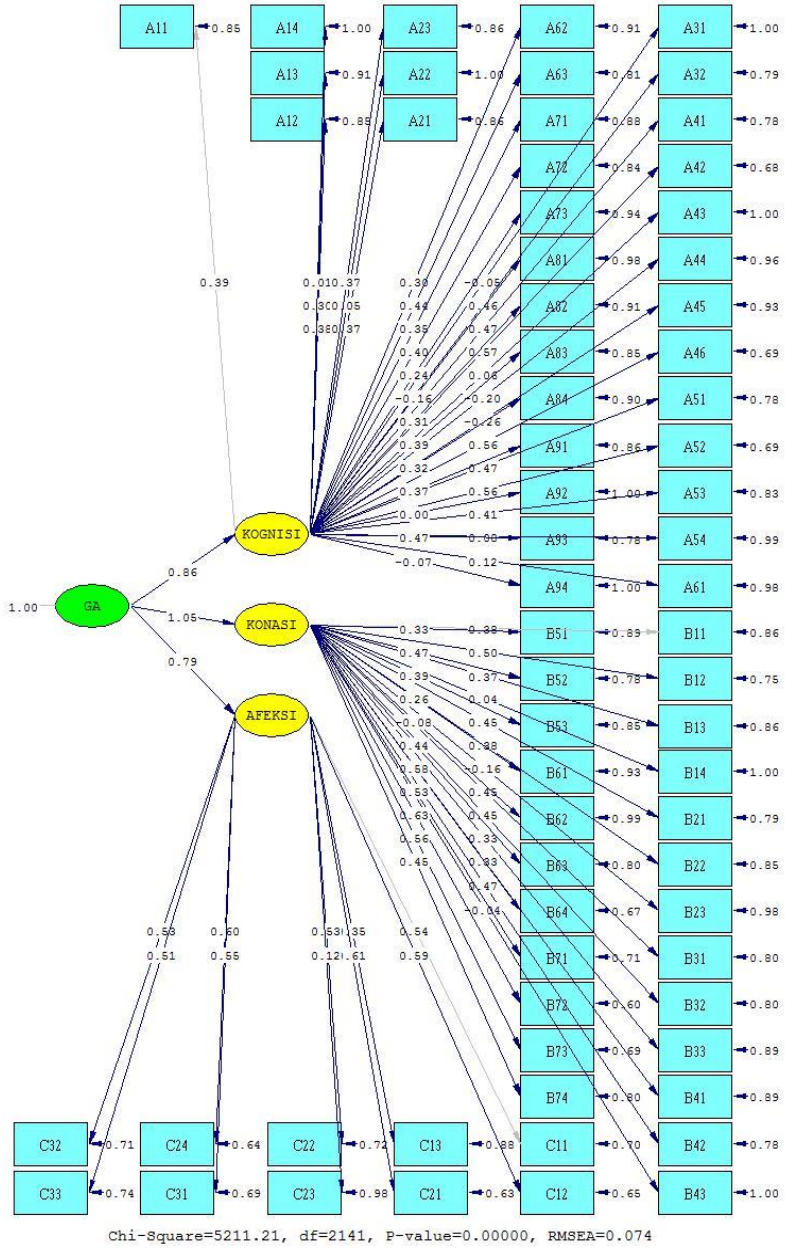

Figure 6. CFA Second Order Diagram based on Standardized Solution of Second Stage Empirical Test Results

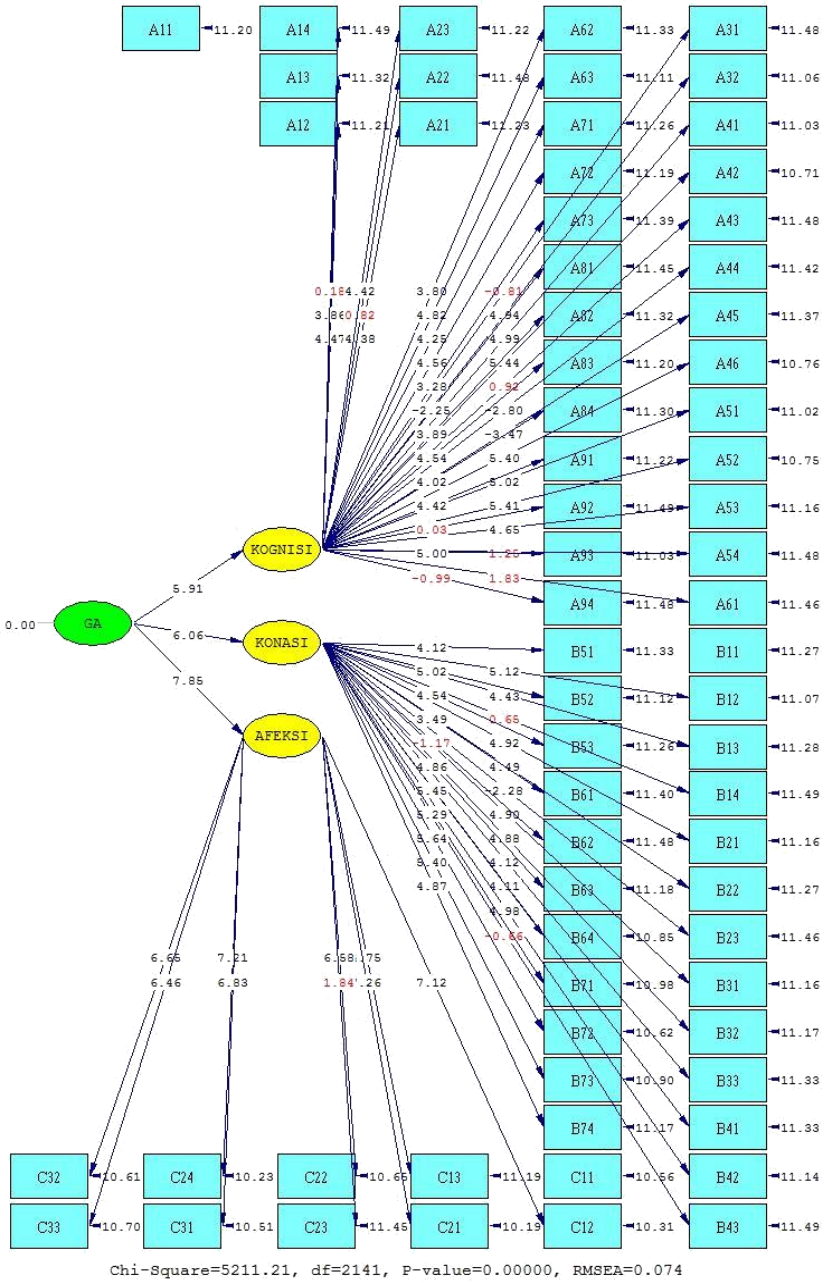

Figure 7. CFA Second Order Diagram based on T-Value
Second Empirical Test Results

Based on Table 7 it appears that most of the requirements of Goodness of Fit have been met because the values obtained are within the required intervals, so it is said that the model obtained is fit. This can also be shown from the CFA second order diagram based on the standardized solution attitude instrument on the global awareness of SPK students in senior high school through second stage empirical validation after revision in Figure 8 and second order CFA diagram

based on t-value of attitude instrument on student global awareness SPK at SMA level through second stage empirical validation after revision in Figure 9.

Based on Figures 8 and 9, it can be seen that the 55 points statements contained in the test analysis of empirical validity of the second stage of the instrument attitudes toward the global awareness of the SPK students at the SMA level after the full revision has been valid. This is because the value of t-value of each item of grain has more than t-table value is 1,96 ($\alpha = 0,05$; df = 1427). As for reka-pan factor loading, std. error, t-value, and R2, respectively, 55 items of attitude ins- trumen attitudes to the global awareness of SPK students at senior secondary level after revision are presented in Table 8.

Based on Fig. 8, Fig. 9, and Table 8 it appears that the overall grain constituting the constructor of the cognition dimension is valid. It can be seen from the t-value of each item is more than t-table value. Similarly, the whole grain constituting the constructor of the con's dimension is valid. It can be seen from the t-value of each item is more than t-table value. Likewise, the whole grain constituting the constructor of the affection dimension is valid. It can be seen from the t-value of each item is more than t-table value.

Likewise, for the dimensions of cognition, conformation, and affection constitute the constructor of attitude toward global awareness. This is indicated by the loading factor value of each dimension of 0.868; 1,041; and 0,798 with t-value respectively 5,905; 6,091; and 7,893.

Because the value of t-value of each dimension> 1,96 it can be said that the three dimensions of constructor attitude toward global awareness is valid.

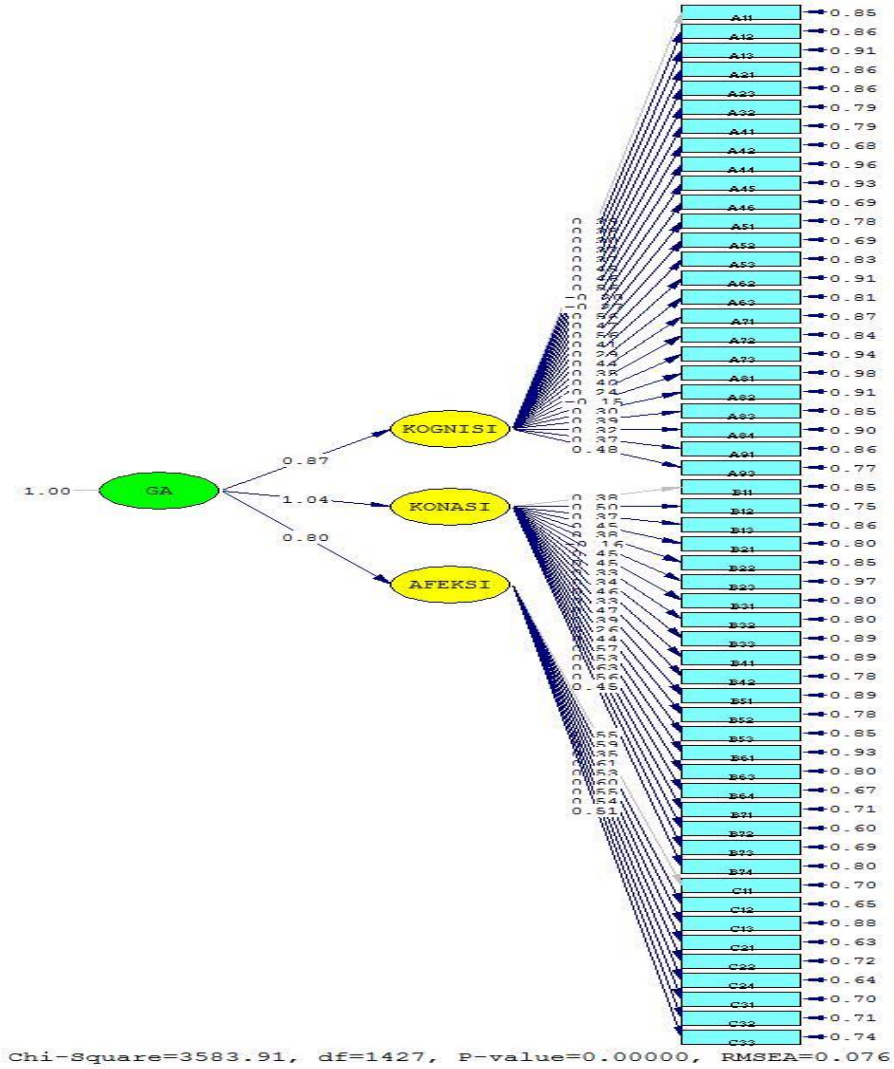

Figure 8. CFA Second Order Diagram based on Standardized Solution Second Empirical Test Results After Revision

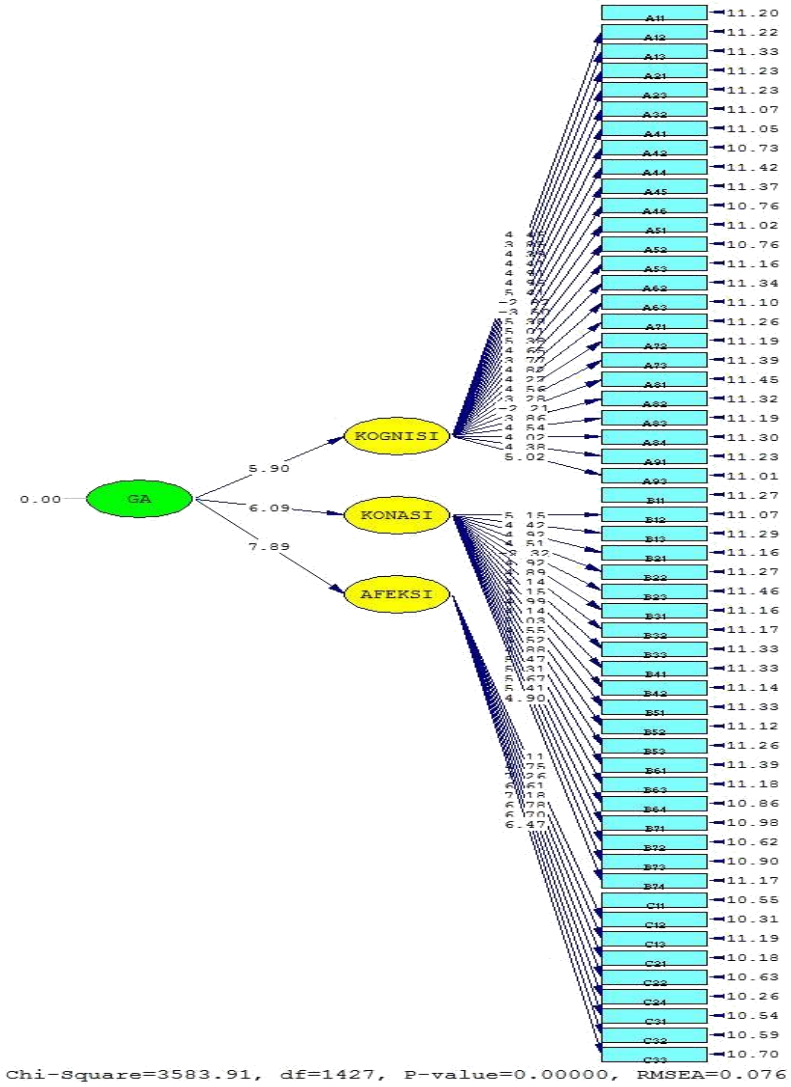

Figure 4.8. CFA Second Order Diagram based on T-Value
Second Empirical Test Results After Revision

Table 8. Recapitulation of Second Stage Empirical Validity Test Results Instrument Attitudes to Global Awareness of SPK Students at SMA level.

Konstruk	***Goodness of Fit***			Variabel Endogen	***Factor Loading***	***Std. Error***	***t-value***	**R^2**
		df	***p-value***					
				A11	0,387	-	-	0,150
				A12	0,379	0,081	4,445	0,144
Kognisi	3154,349	1427	0,00	A13	0,303	0,082	3,845	0,092

				A21	0,371	0,066	4,393	0,138
				A23	0,373	0,070	4,405	0,139
Konstruk	***Goodness of Fit***			Variabel Endogen	***Factor Loading***	***Std. Error***	***t-value***	**R^2**
		df	***p-value***					
				A32	0,455	0,080	4,912	0,207
				A41	0,462	0,079	4,947	0,213
				A42	0,564	0,084	5,411	0,318
				A44	0,202	0,081	2,825	0,041
				A45	0,266	0,082	3,497	0,071
				A46	0,555	0,089	5,379	0,308
				A51	0,474	0,070	5,013	0,225
				A52	0,556	0,085	5,380	0,309
				A53	0,410	0,080	4,647	0,168
				A62	0,295	0,075	3,768	0,087
Kognisi	3154,349	1427	0,00					
				A63	0,437	0,072	4,817	0,191
				A71	0,355	0,076	4,268	0,126
				A72	0,396	0,077	4,563	0,157
				A73	0,245	0,081	3,279	0,060
				A81	0,155	0,068	2,215	0,024
				A82	0,305	0,074	3,861	0,093
				A83	0,392	0,075	4,541	0,154
				A84	0,322	0,079	4,017	0,104
				A91	0,370	0,076	4,384	0,137
				A93	0,475	0,071	5,024	0,226
				B11	0,382	-	-	0,146
				B12	0,496	0,064	5,147	0,246
				B13	0,370	0,061	4,415	0,137
				B21	0,451	0,068	4,917	0,203
				B22	0,385	0,072	4,510	0,148
				B23	0,158	0,073	2,316	0,025
				B31	0,452	0,074	4,921	0,204
				B32	0,447	0,065	4,894	0,200
				B33	0,335	0,090	4,143	0,112
				B41	0,335	0,076	4,147	0,112
Konasi	3154,349	1427	0,00	B42	0,465	0,070	4,991	0,216
				B51	0,335	0,067	4,145	0,112
				B52	0,473	0,090	5,034	0,224
				B53	0,390	0,085	4,545	0,152
				B61	0,265	0,070	3,516	0,070

				B63	0,444	0,094	4,881	0,197
				B64	0,574	0,086	5,467	0,329
				B71	0,534	0,069	5,314	0,285
				B72	0,634	0,084	5,666	0,402
				B73	0,559	0,077	5,414	0,313
				B74	0,447	0,078	4,897	0,200
				C11	0,546	-	-	0,298
Afeksi	3154,349	1427	0,00	C12	0,590	0,067	7,114	0,348
				C13	0,346	0,066	4,747	0,120

Konstruk	***Goodness of Fit***			Variabel Endogen	***Factor Loading***	***Std. Error***	***t-value***	**R^2**
		df	***p-value***					
				C21	0,609	0,069	7,264	0,371
				C22	0,528	0,065	6,607	0,279
				C24	0,598	0,068	7,182	0,358
Afeksi	3154,349	1427	0,00					
				C31	0,549	0,078	6,779	0,301
				C32	0,539	0,075	6,700	0,291
				C33	0,513	0,054	6,468	0,263
Global				Kognisi	0,868	0,147	5,905	0,753
Awareness	3154,349	1427	0,00	Konasi	1,041	0,171	6,091	1,083
(GA)				Afeksi	0,798	0,101	7,893	0,637

Based on the results of the analysis obtained that the value of CR and VE for the dimensions of cognition are 0.811 and 0.515 respectively; CR and VE values for respective dimensions are 0.825 and 0.519; CR and VE values for affective dimensions are 0.785 and 0.529 respectively; and CR and VE values for the Global Awareness (GA) dimensions are 0.933 and 0.824, respectively.

Thus, it can be concluded that the attitude attitudes toward global awareness in SPK students at senior high school that meet valid and reliable criteria in the first stage empirical test is three dimensions, 19 indicators with 55 valid items. While 12 other invalid items should be dropped.

Discussion

The instruments generated in this study may be used by researchers, lecturers or teachers, who intend to measure the global awareness level (global awareness) of students at the high school level or equivalent. The global instrument of awareness is essential to be developed, keeping in mind the importance of the times and the central role of youth in global relations.

Given the development of the instruments produced in this study, global awareness (global awareness) is necessary, and even needs to be outlined as the primary skill of every citizen. Having such capabilities will encourage better inter-

state relations, improve the nation's competitiveness in the global world, and maintain the integrity and dignity of the nation.

The resulting instrument is the development of an attitude instrument towards global awareness for high school students, in this case SPK school. Developed from theoretical underpinnings of theory and validated theoretically and empirically, so as to obtain valid and reliable results. The instruments developed are limited to the realm of cognition, conformation and affection dimensions.

The following mentioned the dimension and the indicator: First Dimension, that is Cognition Dimension. It consists of 9 (nine) indicators, among which are: developing skills in communicating and interacting; Be able to open-minded in private and broad community contexts; Able to improve themselves with their own ability (self concept); Having high cognitive aspect skills; Have a broad knowledge of local and global issues; Mastering a foreign language other than English; Building knowledge based on individual students' own perceptions; Has the ability to adapt, flexible, and always think global to berpartisifasi effectively in the global world Have skills in handling problems.

The Second Dimension, the Conversion Dimension. Consists of 7 (seven) indicators, among them: Provide effective response in communicating; Having a high self-awareness (self awareness); Have a confidence in himself (self confidence); Have the ability to respect himself (self esteem); Students recognize themselves as part of a global society that has a dependence on other global societies; Having attention to international issues and global issues; Have a high awareness in socially responsible in global life.

Third Dimension, the Affection Dimension. Consists of 3 (three) indicators, among them: Have the ability to appreciate others; Able to learn and cooperate with individuals who diversify diverse religions, lifestyles, races / ethnicities, and cultures in a spirit of mutual respect; Have a mutual respect for the diversity that exists in this world.

The above dimensions and indicators form the basis for assessing a student's global attitude of consciousness with very high, high, medium, low and very low classification. This instrument is developed in the form of assessment rubric. Rubric is one form of assessment that is expected to measure all components of students. Using the assessment rubric, instrument users will more easily measure or classify students in terms of global awareness attitude capabilities.

CONCLUSION

In the development of an attitude instrument toward global awareness for high school students in SPK schools, based on qualitative analysis of 4 experts and quantitatively from 20 panelists, 75 out of 75 selected statement statements are 75 points for the domains of cognition, conformation and affection that can tested empirically to respondents. In the development of the instrument after empirical validation resulted in 3 dimensions, 19 indicators, 55 items of valid and reliable instruments with Composite Reliabilty (CR) of 0.933 and Variance Extracted (VE) of 0.824.

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REFERENCES

Azizy, A.Q. (2004). *Melawan Globalisasi: Reinterpretasi Ajaran Islam Persiapan SDM dan Terciptanya Masyarakat Madani*. Yogyakarta: Pustaka Pelajar.

Azwar, S. (2012). *Reliabilitas dan Validitas*. Yogyakarta: Pustaka Pelajar.

BSNP. (2010). *Paradigma Pendidikan Nasional Abad XXI. Versi 1.0*. Jakarta: Author.

Burnouf, L. (2004). Global Awareness and Perspectives in Global Education. *Canadian Social Studies, 38(3),* 1-12.

Crawford, E. O.,Kirby, M. M. (2008). Fostering Students' Global Awareness: Technology Applications in Social Teaching and Learning. *Journal of Curriculum and Instruction (JoCI), 2(1),* 56-73, doi: 10.3776/joci.2008.v2n1p56-73

DiStefano, C., Hess, B. (2005). Using Confirmatory Factor Analysis for Construct Validation: an Empirical Review. *Journal of Psychoeducational Assessment, 23(3),* 225-241, doi: 10.1177/073428290502300303.

Izadi, P. (2012). World Citizenship as an Historical Imperative: Should Global Education be a Compulsory Element in Teacher Training?. *International Journal of Global Education, 1(1),* 75-82.

Kelly, A. (2017). Review of Global Perspective on Higher Education. *Educational Review Journal, 24*, 1-doi: http://dx.doi.org/10.14507/er.v24.2195

Le, H. (2014). Vietnamese Higher Education in the Context of Globalization: Qualitative or Quantitative Targets?. *The International Journal Education Journal: Comparative Perspective, 13(1),* 17-29.

Mary, L. K. (2016). Language Issue and Global Education: a Dilemma to Kenya. *International Journal of Global Education, 5(2),* 46-54.

Parkhouse, H., Glazier, J., Wagner, A. T., Cain, J. M. (2015). From Local to Global: Making the Leap in Teacher Education. *International Journal of Global Education, 4(2),* 10-29.

Trilling, B., Fadel, C. (2009). *21st Century Skills: Learning for Life in Our Times.* San Fransisco: Jossey-Bass A Wiley Imprint.

Watkins, D. (1989). The Role of Confirmatory Factor Analysis in Cross-Cultural Research. *International Journal of Psychology, 24*, 685-701.

Wipulanusat, W., Panuwatwanich, K., Stewart, R. A. (2017). Worplace Innovation: Exploratory and Corfirmatory Factor Analysis for Construct Validation. *Management and Production Engineering Review, 8(2),* 57-68, doi: 10.1515/mper-2017-0018.