

THE MEASUREMENT MODEL OF INTRAPERSONAL AND INTERPERSONAL SKILLS CONSTRUCTS BASED ON CHARACTER EDUCATION

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Introduction

The purpose of character education in schools is to educate the students become the overall superior personal, namely the smart personal intellectually, emotionally, socially, and spiritually. The planting of this character education should start from the basic education in the elementary school. The building overall superior personal had been stated in pasal 3, UU No. 20/2003 about national education (Kemendiknas, 2011: 243).

The results of survey that was conducted in several elementary schools in Yogyakarta, it was found that 70% of elementary schools students intelligence that is developed in the elementary schools is the intellectual intelligence through cognitive assessment. The teachers attention of the importance the emotional intelligence, social, and spiritual development is still very low in the learning process and assessment. The assessment of students' character education is only based on observations of teachers during the school. Meanwhile the assessment of intrapersonal and interpersonal skills hadn't been in elementary school yet. The assessment model that is used by teachers varies and is usually developed by the religious teachers. The most teachers assume that the building students character and morals is done through the religious subjects.

The assessment practice of learning outcomes in elementary schools is conducted by the cognitive assessment. The student appreciation is done by teachers with giving the students ranking and test scores (Zuchdi, 2010: 68). Although all teachers know that the education have three domains, namely cognitive, affective, and psychomotor, but in practice the affective and

psychomotor assessment haven't received the adequate attention. This condition occurs due to a lack of the ability of educators to describe the performance indicators of the affective domain. Thus, teachers assessment haven't described the ability of students overall. As a result, teachers aren't able to provide the guidance of affective aspects which include the emotional, social, and spiritual intelligences. This affective aspects are manifested in the form of intrapersonal and interpersonal skills. Both of these skills are the core of the character education that need be given to students in the learning process in elementary schools. The development of intrapersonal and interpersonal skills is very important because both of these skills have the major impact on a person's success in life.

The results of the studies conducted by Goleman (1995: 15), Gardner (1996: 26), and Bar-On (1988: 24; 1997: 123; 2000: 46; 2005: 94), Berkowitz (2002: 23) concluded that 80% of the deciding person's success was the emotional intelligence.

Similarly Zamroni's research found that 70% of success in life is not because of intellectual and vocational intelligences, but rather as a generic intelligence (2005: 49). The generic capability is shown through personal abilities and social skills.

According Zuchdi (2010: 69) that the intrapersonal and interpersonal skills can affect on the development of personality in a positive direction. The positive effects can form in respect for others, being able to find alternative solutions, creative, patient, and independent. To realize a student personality that has the good character, teachers need to assess periodically the students' interpersonal and intrapersonal skills. This character assessment is expected for developing students' potential as a whole, both intellectual ability and the ability of emotional, social, and spiritual.

The effects of lack of attention to intrapersonal and interpersonal skills in school can cause the existence of various forms of asocial behavior among elementary school students. Based on the research results by Marzuki (2008: 59), that a decline in the moral behavior of students from cultural norms and religious rules is caused by the low intrapersonal and interpersonal skills in students. Every day people felt that the moral values desired hadn't still been suitable. The decline in moral behavior and attitudes of these students was felt at all levels of education,

especially at the elementary school level as the foundation of the first education for children in schools.

Therefore, this study is important and strategic to be done because the measurement model of intrapersonal and interpersonal skills constructs become the basis for arrangement the assessment model of intrapersonal and interpersonal skills based on character education in elementary school students. Thus, the findings of this study can be used by elementary school teachers to improve students' character embodied in the form of emotional, social, and spiritual intelligences. Besides, this assessment model can be used to determine the performance of intrapersonal and interpersonal skills in order to implement character education in elementary school students, so that teachers can do early the character building the elementary school students.

Constructs of Interpersonal and Intrapersonal Skills

Lickona argues that in teaching the good character should involve three aspects of character education, namely: (1) aspect of moral knowing (the knowledge of good morals), (2) aspect of moral feeling (feel a moral goodness), and (3) aspect of moral action (values moral practiced in life) (1992: 53). In aspect of moral knowing, there are six things that become purpose of the character education teaching, namely: (1) moral awareness, (2) knowing moral values), (3) perspective taking, (4) moral reasoning, (5) decision making, and (6) self-knowledge.

In aspect of moral feeling, there are six things that should be felt by a person to become a man of character, namely: conscience, self-esteem, empathy, loving the good, self-control, and humility. Meanwhile, in aspect of moral action is outcome a combination of two other character components required three aspects of character, that is competence, will, and habit. Based on the above opinion, the manifestation of the students character cover three aspects of character, namely: the moral knowing, the moral feeling, and the moral action performed by the students during the school

Manifestations of character education is also associated with intrapersonal and interpersonal skills. Intrapersonal skills are defined as the individual's ability to recognize, appreciate, managing, controlling sense of self, and feel the reality of self-spiritual to understand the reality of self-existence and dare to be responsible for private life, so that forming a noble personality. This definition was formulated as a result of the synthesis of five theoretical concepts of intrapersonal skills by Gardner (1993: 24-25), Lazear (2000: 24), Bar-On (1997b: 120), Lwin. (2005: 233), and Amin (1974: 61). Meanwhile, interpersonal skills are defined as the ability to appreciate the views of others, realizing social responsibility, working together, tolerant, and able to communicate with others. This definition as a result of the synthesis of five theoretical concepts of interpersonal skills by Gardner (1993: 240), Bar-On (1997b: 161), Lazear (2000: 23), Mant (1997: 161), and Cunningham & Corderio (2003 : 205).

Based on this conceptual definition can be formulated indicators of intrapersonal and interpersonal skills. Intrapersonal skills has five indicators, namely: (1) recognize self-feeling, (2) respect self-feeling, (3) managing self-feeling, (4) control self-feeling, and (5) feel the reality of self-spirituality. Meanwhile, interpersonal skills has five indicators, namely: (1) respect the views of others, (2) be aware of social responsibility, (3) collaboration with others, (4) tolerance toward others, and (5) communicate effectively with others.

Zuchdi (2010: 51-53) says that to assess the achievement of the objectives of character education, the assessment of intrapersonal and interpersonal skills can be done on three aspects of the character, namely reasoning, feeling, and behavior. Therefore, this study was conducted to develop a measurement model of intrapersonal and interpersonal skills constructs of elementary school students that covers all three domains, namely cognitive, affective, and psychomotor.

Method

The subjects of this study were the fifth grade students of the elementary schools in Yogyakarta Special Region including: Yogyakarta, Sleman, Bantul and Gunung Kidul. The sample size was 464 students from 15 elementary schools.

The sample selection was done by purposive sampling based on a consideration of the child's age (10-12 years) and schools variation in aspects: (1) differences in the implementation of character education in elementary school, (2) differences as the piloting elementary school in character education, (3) religious differences, (4) differences in the length of time in school, (5) differences in character education programs in schools. Based on these criteria, sample that was selected included: four elementary schools piloting in character education, two elementary schools non-piloting in character education, one private elementary school patterned nationality, four private elementary schools based on Islamic, two private elementary schools based on Catholic, two elementary schools implementing full day, two public and private “Madrasah Ibtidaiyah”.

The data were collected by using a questionnaire and analyzed using the Explanatory Factor Analysis (EFA) dan the Confirmatory Factor Analysis (CFA). EFA method is used to determine the eigenvalues which are formed to be a factor of the latent variable. Thus, this method is able to show the dimensions of the latent variable that can be used as a factor in the formation of intrapersonal and interpersonal skills constructs in aspects: cognitive, affective, and psychomotor. Meanwhile, CFA method is used to test the *criteria of the goodness of fit statistic* of the latent variables measurement model, evaluate the indicators validity and the construct reliability of the latent variables (Joreskog and Sorbon, 1999: 115).

Finding and Discussion

The results of the construct validity test by using EFA to construct intrapersonal and interpersonal skills of elementary school students are shown in Table 1.

Table 1. Results of Testing EFA

No.	Aspects of Intrapersonal and Interpersonal Skills	KMO MSA	<i>Eigenvalue Value</i>
1.	Intrapersonal-Cognitif	0.869	1 factor
2.	Intrapersonal-Affective	0.938	1 factor
3.	Intrapersonal-Psychomotor	0.924	2 factor
4.	Interpersonal-Cognitif	0.872	1 factor
5.	Interpersonal-Affective	0.937	1 factor
6.	Interpersonal-Psychomotor	0.902	1 factor

Based on the Table 1, the five aspects of intrapersonal and interpersonal skills constructs of elementary school students have characteristics value (eigenvalue) as one factor, and the value of KMO MSA is greater than 0.70. This includes categories satisfying, and formed factor is unidimensional. This indicates that the five aspects of intrapersonal and interpersonal skills constructs of elementary school students in according with the indicators estimated as unidimensional. Meanwhile, the psychomotor aspects of intrapersonal skills are two factors that have eigenvalue greater than 1. Yet the factors are selected only one factor that have close meaning with the measured variables, and have a variance greater.

This study uses the second order confirmatory factor analysis (CFA). Measurements on the second order CFA shows the relationship between the indicators and the latent variables. The results of testing using the second order CFA for measuring the intrapersonal skill construct is shown in figure 1.

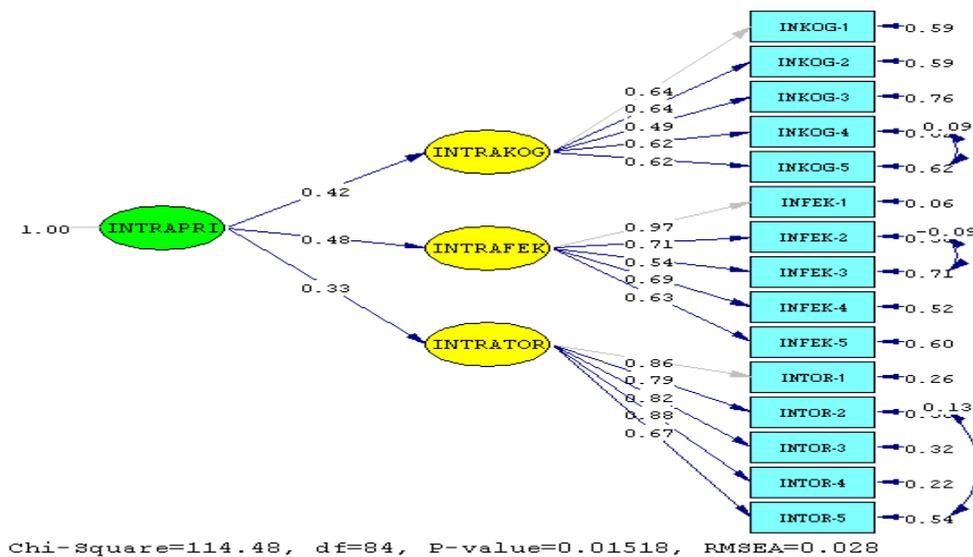


Figure 1. The test results of the intrapersonal skill construct

The test results of the second order CFA of the intrapersonal skill construct produces the goodness of fit index. The results of testing the second order CFA are shown in the following table 2.

Table 2. Results of fit test of the intrapersonal skill construct

No.	Goodness of Fit Index criteria	Cutoff value	Computation results	Comment
1.	P-value	> 0.05	0.01518	less good fit
2.	RMSEA	\leq 0.08	0.028	<i>good fit</i>
3.	RMR	< 0.05	0.041	<i>good fit</i>
4.	NFI	\geq 0,90	0.97	<i>good fit</i>
5.	NNFI	\geq 0.90	0.99	<i>good fit</i>
6.	CFI	\geq 0.90	0.99	<i>good fit</i>
7.	IFI	\geq 0.90	0.99	<i>good fit</i>
8.	RFI	\geq 0.90	0.97	<i>good fit</i>
9.	GFI	\geq 0.90	0.97	<i>good fit</i>
10.	AGFI	\geq 0.90	0.95	<i>good fit</i>

Source: Results of LISREL Analysis

Based on the statistics values of the model fit test results are obtained 9 GOF measure that indicate the good model fit and one GOF shows the less good model fit. Thus, it can be concluded that the measurement model of intrapersonal skill construct has fulfilled the criteria of the goodness of fit statistic, so that the measurement model of intrapersonal skill construct is expressed as a good measurement model. Therefore, the results of these tests can be categorized as the fit measurement model to measure the intrapersonal skill construct.

The measurement model of intrapersonal skill construct is analysed by using the second order confirmatory factor analysis. There are three latent variables of the intrapersonal skill construct, namely: cognitive, affective, and psychomotor aspects. In the first level, there are three measurements of the latent variables that are measured by 15 indicators, namely: (1) cognitive latent variable is measured by the observed variables (indicators): INKOG-1, INKOG-2, INKOG-3, INKOG-4, INKOG-5, (2) affective latent variable is measured by the observed variables (indicators): INFEK-1, INFEK-2, INFEK-3, INFEK-4, INFEK-5, and (3) psychomotor latent variable is measured by the observed variables (indicators): INTOR -1, INTOR-2, INTOR-3, INTOR-4, INTOR-5. Meanwhile, the measurement of the second order CFA shows the relationship between the cognitive, affective, psychomotor latent variables and the intrapersonal skill construct. The results of second order CFA for intrapersonal skill construct is shown in Table 3.

Table 3. Result of Second Order CFA of intrapersonal skill construct

Variables	Stand. Loading Factors $\geq 0,50$	Standar Error	t value	Reliability		Comment
				CR $\geq 0,70$	VE $\geq 0,50$	
INTRAKOG				0.74	0.52	good reliability
INKOG-1	0.64	0.59	---			good validity
INKOG-2	0.64	0.59	9.74			good validity
INKOG-3	0.49	0.76	8.15			enough validity
INKOG-4	0.62	0.62	9.06			good validity
INKOG-5	0.62	0.62	9.04			good validity
INTRAFEK				0.84	0.59	good reliability
INFEK-1	0.97	0.06	---			good validity
INFEK-2	0.71	0.50	17.96			good validity
INFEK-3	0.54	0.71	12.48			good validity
INFEK-4	0.69	0.52	17.61			good validity
INFEK-5	0.63	0.60	15.46			good validity
INTRATOR				0.90	0.65	good reliability
INTOR-1	0.86	0.26	---			good validity
INTOR-2	0.79	0.38	20.29			good validity
INTOR-3	0.82	0.32	21.67			good validity
INTOR-4	0.88	0.22	24.11			good validity
INTOR-5	0.67	0.54	16.10			good validity

Source: Results of LISREL Analysis

Based on the test results of second order CFA, the intrapersonal skill construct is acquired 14 values observed variables (indicators) that have value t_{count} greater than 1.96 (the significance level of 0.05 is 1.96) and the coefficient of the standardized loading factor (λ) is greater than 0.50 ($\lambda > 0.50$). Thus, it can be stated that the observed variables (indicators) have good validity. Meanwhile, one value of the observable variables (INKOG-3) has value t_{count} greater than 1.96 ($t_{\text{count}} = 8.15$), but the coefficient value of standardized loading factor (λ) is smaller than 0.50 ($\lambda = 0.49$), so that it can be stated that the observed variable (INKOG-3) has sufficient validity to the cognitive latent variables (INTRAKOG). Thus, It can be concluded that the fourteenth indicators used to measure the cognitive, affective, and psychomotor on intrapersonal skills have good validity, but one indicator has sufficient validity.

The sequence of the indicators that have major contributions include: (1) the ability of self-conscious (INFEK-1) with $\lambda_6 = 0.97$; (2) be able to handle stress, and resilient (INTOR-4) with $\lambda_{14} = 0.88$; (3) the ability of sportsmanship (INTOR-1) with $\lambda_{11} = 0.86$; (4) take risks and dare to make their own decisions (INTOR-3) with $\lambda_{13} = 0.82$; (5) work hard, and never give up (INTOR-2) with $\lambda_{12} = 0.79$; (6) confident and persistent (INFEK-2) with $\lambda_7 = 0.71$; (7) capable of handling weaknesses, have a

competitive spirit, and dare express their feelings (INFEK-4) with $\lambda_9 = 0.69$; (8) honest, and trustworthy (trust) (INTOR-5) with $\lambda_{15} = 0.67$; (9) the ability of reflective thinking (INKOG-1) with $\lambda_1 = 0.64$; (10) the ability to think critically (INKOG-2) with $\lambda_2 = 0.64$; (11) is able to feel the presence of God, recognizing the reality of the spiritual, and is able to take lessons every event (INFEK-5) with $\lambda_{10} = 0.63$; (12) creative (INKOG-4) with $\lambda_4 = 0.62$; and (13) faith and fear of God (INKOG-5) with $\lambda_5 = 0.62$; (14) to open up, be accountable to yourself and assertive (INFEK-3) with $\lambda_8 = 0.54$; and (15) to be innovative (INKOG-3) with $\lambda_3 = 0.49$.

Based on the test results of the second order CFA, three latent variables of the intrapersonal skill construct are obtained, as follows: (1) cognitive (INTRAKOG) has the good reliability (CR=0.74 and $CR \geq 0.70$; VE=0.52 and $VE \geq 0.50$); (2) the affective aspect (INTRAFEK) has the good reliability (CR=0.84 and $CR \geq 0.70$; VE=0.59 and $VE \geq 0.50$); (3) psychomotor aspect (INTRATOR) has the good reliability (CR=0.90 and $CR \geq 0.70$; VE=0.65 and $VE \geq 0.50$). Thus, it can be concluded that the reliability of all latent variables measurement model of the construct of intrapersonal skill are good.

The results of testing using the second order CFA for measuring the interpersonal skill construct is shown in figure 2.

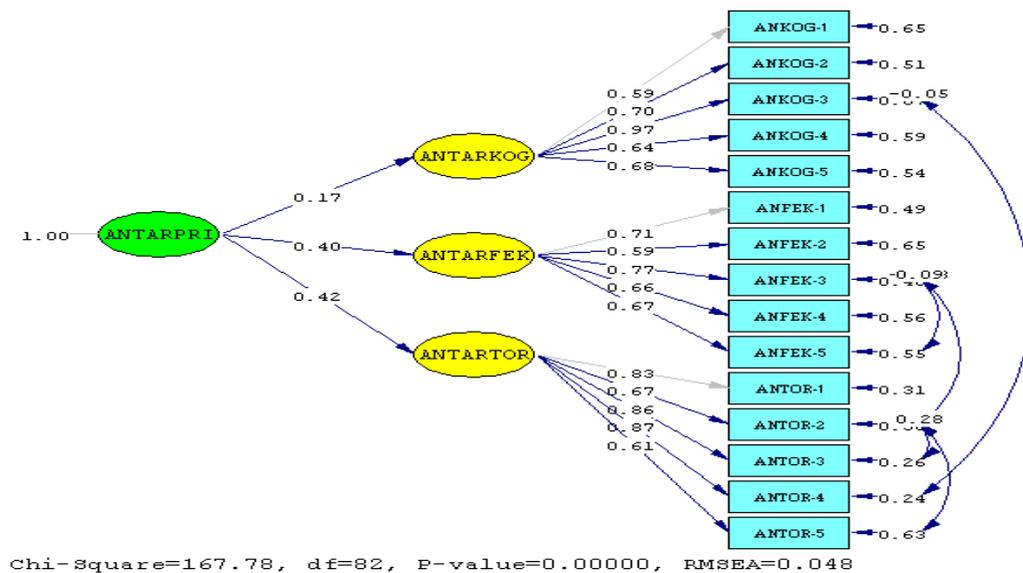


Figure 2. The test results of the interpersonal skill construct

The test results of the second order CFA of the interpersonal skill construct produces the goodness of fit index. The results of testing the second order CFA are shown in the following table 4.

Table 4. Results of fit test of the interpersonal skill construct

No.	Goodness of Fit Index criteria	Cutoff value	Computation results	Comment
1.	P-value	> 0.05	0.00000	less good fit
2.	RMSEA	≤ 0.08	0.048	<i>good fit</i>
3.	RMR	< 0.05	0.040	<i>good fit</i>
4.	NFI	≥ 0.90	0.96	<i>good fit</i>
5.	NNFI	≥ 0.90	0.97	<i>good fit</i>
6.	CFI	≥ 0.90	0.98	<i>good fit</i>
7.	IFI	≥ 0.90	0.98	<i>good fit</i>
8.	RFI	≥ 0.90	0.95	<i>good fit</i>
9.	GFI	≥ 0.90	0.95	<i>good fit</i>
10.	AGFI	≥ 0.90	0.93	<i>good fit</i>

Source: Results of LISREL Analysis

Based on the statistics values of the model fit test results are obtained 9 GOF measure that indicate the good model fit and one GOF shows the less good model fit. Thus, it can be concluded that the measurement model of interpersonal skill construct has fulfilled the criteria of the goodness of fit statistic, so that the measurement model of interpersonal skill construct is expressed as a good measurement model. Therefore, the results of these tests can be categorized as the fit measurement model to measure the interpersonal skill construct.

The measurement model of interpersonal skill construct is analysed by using the second order confirmatory factor analysis. There are three latent variables of the interpersonal skill construct, namely: cognitive, affective, and psychomotor aspects. In the first level, there are three measurements of the latent variables that are measured by 15 indicators, namely: (1) cognitive latent variable is measured by the observed variables (indicators): ANKOG-1, ANKOG-2, ANKOG-3, ANKOG-4, ANKOG-5, (2) affective latent variable is measured by the observed variables (indicators): ANFEK-1, ANFEK-2, ANFEK-3, ANFEK-4, ANFEK-5, and (3) psychomotor latent variable is measured by the observed variables (indicators): ANTOR-1, ANTOR-2, ANTOR-3, ANTOR-4, ANTOR-5. Meanwhile, the measurement of the second order CFA shows the relationship between the cognitive, affective, psychomotor latent variables and the interpersonal skill construct. The results of second order CFA for interpersonal skill construct is shown in Table 5.

Table 5. Result of Second Order CFA of interpersonal skill construct

Variables	Stand. Loading Factors $\geq 0,50$	Standar Error	t value	Reliability		Comment
				CR $\geq 0,70$	VE $\geq 0,50$	
ANTARKOG				0.84	0.53	good reliability
ANKOG-1	0.59	0.65	---			good validity
ANKOG-2	0.70	0.51	12.30			good validity
ANKOG-3	0.97	0.07	14.11			good validity
ANKOG-4	0.64	0.59	11.48			good validity
ANKOG-5	0.68	0.54	12.01			good validity
ANTARFEK				0.81	0.50	good reliability
ANFEK-1	0.71	0.49	---			good validity
ANFEK-2	0.59	0.65	11.49			good validity
ANFEK-3	0.77	0.40	13.35			good validity
ANFEK-4	0.66	0.56	12.86			good validity
ANFEK-5	0.67	0.55	11.57			good validity
ANTARTOR				0.88	0.60	good reliability
ANTOR-1	0.83	0.31	---			good validity
ANTOR-2	0.67	0.56	15.14			good validity
ANTOR-3	0.86	0.26	21.36			good validity
ANTOR-4	0.87	0.24	21.69			good validity
ANTOR-5	0.61	0.63	13.66			good validity

Source: Results of LISREL Analysis

Based on the test results of second order CFA, the interpersonal skill construct is acquired 15 values observed variables (indicators) that have value t_{count} greater than 1.96 (the significance level of 0.05 is 1.96) and the coefficient of the standardized loading factor (λ) is greater than 0.50 ($\lambda > 0.50$). It can be stated that all observed variables (indicators) have good validity. Thus, It can be concluded that the all indicators used to measure the cognitive, affective, and psychomotor on interpersonal skill have good validity.

The sequence of the indicators that have major contributions include: (1) understand the benefits of working together (ANKOG-3) with $\lambda_3 = 0.97$; (2) empathy, tolerance (ANTOR-4) with $\lambda_{14} = 0.87$; (3) harmony, mutual aid (ANTOR-3) with $\lambda_{13} = 0.86$; (4) the ability to be democratic, and fair (ANTOR-1) with $\lambda_{11} = 0.83$; (5) to be cooperative, solidarity, and participatory (ANFEK-3) with $\lambda_8 = 0.77$; (6) the ability to respect the wishes of others (ANFEK-1) with $\lambda_6 = 0.71$; (7) give priority to the public interest (ANKOG-2) with $\lambda_2 = 0.70$; (8) determine appropriate communication (ANKOG-5) with $\lambda_5 = 0.68$; (9) to be friendly, cheerful, and sociable (ANFEK-5) with $\lambda_{10} = 0.67$; (10) obey the rules, net (ANTOR-2) with $\lambda_{12} = 0.67$; (11) attention to others, be respectful, and tolerant (ANFEK-4) with $\lambda_9 = 0.66$; (12) know the difficulties of others

(ANKOG-4) with $\lambda_4 = 0.64$; (13) skilled conflict resolution, and friends (ANTOR-5) with $\lambda_{15} = 0.61$; (14) the ability to understand the thoughts and feelings of others (ANKOG-1) with $\lambda_1 = 0.59$; and (15) care for the environment, feel partly responsible, self-sacrificing, and helpful (ANFEK-2) with $\lambda_7 = 0.59$.

Based on the test results of the second order CFA, three latent variables of the interpersonal skill construct are obtained, as follows: (1) cognitive has the good reliability (CR=0.84 and $CR \geq 0.70$; VE=0.53 and $VE \geq 0.50$); (2) the affective aspect has the good reliability (CR=0.81 and $CR \geq 0.70$; VE=0.50 and $VE \geq 0.50$); (3) psychomotor aspect has the good reliability (CR=0.88 and $CR \geq 0.70$; VE=0.60 and $VE \geq 0.50$). Thus, it can be concluded that the reliability of all latent variables measurement model of the construct of interpersonal skill are good.

Based on the test results of the second order CFA, it can be seen that two models, namely: (1) the measurement model of intrapersonal skill construct (INTRAPRI) consisting of intrapersonal-cognitive skill aspects (INTRAKOG), intrapersonal-affective skill aspects (INTRAFEK), intrapersonal-psychomotor skill aspects (INTRATOR), and (2) the measurement model of interpersonal skill construct (ANTARPRI) consisting of interpersonal-cognitive skill aspects (ANTARKOG), interpersonal-affective skill aspects (ANTARFEK), interpersonal-psychomotor skill aspects (ANTARTOR) have fulfilled the statistical requirements and are categorized as the fit measurement model. This means that both the measurement model have fulfilled the goodness of fit statistic, so that it can be used as an instrument to detect the intrapersonal and interpersonal skills achievement in character education in the elementary schools.

Besides, the test results of the second order CFA are also known items that contribute the biggest and the smallest as follows: (1) intrapersonal-cognitive skill aspects, the biggest items are the effective thinking skill, and the critical thinking skill, meanwhile the smallest item is innovative; (2) intrapersonal-affective skill aspect, the biggest item is self-aware capability, meanwhile the smallest item is open, accountable to yourself and assertive; (3) intrapersonal-psychomotor skill aspect, the biggest item is able to handle stress, and tough, meanwhile the smallest

item is honest, and trustworthy (trust); (4) interpersonal-cognitive skill aspect, the biggest item is to understand the benefits of cooperation, meanwhile the smallest item is the ability to understand the thoughts and feelings of others; (5) interpersonal-affective skill aspect, the biggest item is to be cooperative, solidarity, and participatory, meanwhile the smallest item is concerned with the environment, to feel partly responsible, self-sacrificing, and helpful; and (6) interpersonal-psychomotor skill aspect, the biggest item is empathetic, tolerant, meanwhile the smallest item is skillfully resolve conflicts, and friends.

Conclusion and Suggestion

The conclusions of this study can be formulated that the measurement models of intrapersonal and interpersonal skills constructs at the elementary school students are declared valid and reliable because all the indicators that are used to measure the cognitive, affective, and psychomotor skills in intrapersonal and interpersonal constructs have the loading factor coefficient values greater than 0.50. Meanwhile, the reliability of the intrapersonal and interpersonal skills construct have a composite reliability coefficient (construct reliability) greater than 0.70. This measurement model of constructs also fulfills the criteria in goodness of fit statistics, so that the measurement model of intrapersonal and interpersonal skills constructs at elementary school students are declared a measurement model that has fulfilled the criteria for a valid, reliable, and goodness of fit statistic. Thus, the results of this study can be developed to create the assessment model of intrapersonal and interpersonal skills based on character education in the elementary school.

Some suggestions are: (1) the measurement model of intrapersonal and interpersonal skills constructs based on character education in the elementary school can be used as a basis for developing the assessment instruments of intrapersonal and interpersonal skills based on character education in elementary school; (2) The use of this measurement model can encourage teachers to be more objective in detecting the level of achievement of intrapersonal and interpersonal

skills of students in the cognitive, affective, and psychomotor aspects to the parents.

References

- Amin, A. (1974). *Kitab al-akhlak*. Beirut-Lubnan: Dar al-Kitab al-‘Araby.
- Bar-On, R. (1988). *The development of a concept of psychological well-being*. Doctoral dissertation: Rhodes University, South Africa.
- _____. (1997a). *The emotional quotient inventory (EQ-i): a test of emotional intelligence*. Toronto, Canada: Multi-Health Systems, Inc.
- _____. (1997b). *The emotional quotient inventory (EQ-i): technical manual*. Toronto, Canada: Multi-Health Systems, Inc.
- _____. (2000). *Emotional dan social intelligence: Insights from the emotional quotient inventory (EQ-i)*. In R.Bar-On and J.D.A.Parker (Eds), *Handbook of emotional intelligence*. San Francisco: Jossey-Bass.
- _____. (2005). *Emotional intelligence and subjective wellbeing*. Manuscript submitted for publication.
- Bar-On, R., & Fund, S. (2004). *The impact of emotional and social intelligence on self-preceived physical helth*. Manuscript submitted for publication.
- Berkowitz, M.W., Battistich, V.C., & Bier, M.C. (2002). *What works in character education: What is known and what needs to be known*. In Nucci, Larry P.& Narvaez, Darcia. (Eds.). *Handbook of moral and character education* pp.414-431. New York and London: Routledge Taylon & Francis Group.
- Cunningham, W.G., & Paula, A.C. (2003). *Educational leadership: a problem based approach*. Boston: Pearson Education.
- Gardner, H. (1993). *Frames of mind: the theory of multiple intelligence*. New York: Basic Books.
- _____. (1996). *Intelligence: multiple perspectives*. Harcourt Brace College. Fort Worth. Tex.
- Goleman, D. (1995). *Emotional intelligence, why it can matter more than IQ*. New York: Bantam Books.
- Joreskog, K.G., & Sorbom, D. (1999). *Lisrel 8: User’s reference guide*. Chicago: Scientific Software International.
- Ministry of Education. (2011) *The guidance of implementation of character education*. Jakarta: Research and Development Department of Education.
- Lazear, D. (2000). *Pathways of learning: teaching students and parents about multiple intelligences*. Arizona: Zephyr.
- Lwin, M. (2005). *How to multiply your child’s intelligence*. Terjemahan Christine S. Jakarta: Indeks.
- Mant, A. (1997). *Intelligent leadership*. New South Wales: Allen & Unwin.
- Plomp, T.J. (1997). *Educational design: introduction*. from Plomp (eds.). *Educational & training system design: introduction*. *Design of education and training (in Dutch)*. Utrecht (the Netherlands): Lemma. Netherland. Faculty of Educational Science and Technology, University of Twente.

- Wijanto, Setyo Hari. (2008). *Structural equation modeling with Lisrel 8.8 concepts and tutorials*. Yogyakarta: Graha Ilmu.
- Zamroni. (2005). Development of the educational assessment system that implements the CBC under an autonomy. *Journal of Educational Research and Evaluation*. Vol 2. No. 12, May 2005, Year 11, ISSN 1410-4725. Yogyakarta: HEPI PPs. UNY.
- Zuchdi, D. (2010). *Humanization of education, rediscover the humane education*. Jakarta: Bumi Aksara.
- Zuchdi, D. et.al. (2010). Development of the character education model with a comprehensive approach in the elementary school integrated with learning Indonesian, science and social studies. *Reports of Graduate Research Grant*. Yogyakarta: Yogyakarta State University.