
Developing the instrument of character assessment of Nang (Winning) in Ki Hajar Dewantara's teaching

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Abstract: This study aims to produce instruments for evaluating student character based on valid and reliable teaching evaluating the character of students of SMP Negeri 2 Kaliangkrik, Magelang Regency, and to find out what are the indicators in measuring student character based on the teaching of Nang (win) in State Junior High School 2 Kaliangkrik. The research design used is Research and Development with Borg and Gall models. The stages are research and information gathering, planning, initial product development, initial field testing, product revision, field testing, operational product revision, operational field testing, final product revision, and dissemination and implementation. The research subjects were 273 students of SMP Negeri 2 Kaliangkrik. Data collection techniques in the form of questionnaire research and instruments produced were questionnaire sheets. The assessment instruments that have been developed are validated by the expert and revised according to the advice of the expert. The data analysis technique used in this study is the validity test using factor analysis and reliability testing. The results of this study are arranged as a valid and reliable character evaluation instrument (win). Based on the development of the Nang character assessment instrument for students at Kaliangkrik State Junior High School 2 Kaliangkrik Magelang, what has been done has obtained a standardized instrument to measure the value of the character Nang (win) with 11 indicators, namely (1) Not Easy Emotions and self-introspection (2) Increasing friends and study hard (3) Always tolerant. (4) Arrogant and humble (5) See things positively and dare to apologize and forgive (6) Be optimistic in all situations (7) Sportive (8) Do not Procrastinate and believe in yourself (9) No demeaning others and never give up (10) Always think clearly. (11) Appreciating Achievement.

Keywords: Winning, Assessment Instruments, Character, Validity, Reliability.

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INTRODUCTION

Everyone needs the education to deal with the century's rapid development. Good and sufficient education will result in tough and reliable human resources who have the capability to deal with the increasingly modern and developing world. According to the 1945 Constitution (1945) Article 31 Verse (3), the Government has to afford and administer a national education system that promotes faithfulness, piety, and nobility to enlighten the nation's life as having been governed by the Law.

In order to implement the 1945 Constitution, the Law Number 20 of 2003 Regarding the National Education System has been imposed. Within the Law (2003), Article Number 3 states that national education serves to develop the skills and shape the characters and the civilization of the dignified nation in order to brighten the life of the nation and to develop the potential of the students so that the students will be faithful and pious individuals before God the Almighty and will also be noble, healthy, knowledgeable, skillful, creative, independent, democratic, and responsible citizens.

The meaning contained in the Law Number 20 of 2003 Regarding the National Education System is that education emphasizes intellectual or cognitive skills and the affective aspects or attitudes. The emphasis has been given due to the fading boundaries of the life norms within the public. As a result, the situation leads to the deteriorating quality of the morals and the national characters.

Character education in Indonesia deems highly necessary to be developed, recalling the increasing number of brawls among the students along with the other forms of juvenile delinquency, especially in the big cities. Some of these delinquencies are (1) extortion/bullying; (2) domination of the seniors against the juniors; (3) riots among the football supporters; and (4) drug abuse alike. Not to mention, even the desire to develop honesty among the students through the Canteen of Honesty has been ruined to pieces due to the fact that such a canteen always goes into bankruptcy since the characteristic of honesty has not been well-developed among the students.

Article 1 of the National Education System Law explains that education is a conscious and planned effort to manifest a learning process and situation so that the students actively develop their self-potentials in order to master the strength of religious spirituality, self-control, personality, intelligence, nobility, and skills necessary for themselves, the society, the nation, and the state. Then, Article 33 of the Law also explains that national education serves to develop the skills and shape the characters as well as the civilization of the nation, which has the significance in developing brightening the life of the nation and seeking to develop the students into faithful and pious individuals before God The Almighty and will also be noble, healthy, knowledgeable, skillful, creative, independent, democratic, and responsible citizens (Kementerian Pendidikan Nasional, 2011).

Characters refer to the way of thinking and behaving that becomes the peculiar traits of each individual in order that individuals may live and cooperate in the family, the society, the nation, and the state. Individuals with good character are the ones who can make decisions and who are ready to be held accountable for the consequence of each decision that they have made (Suyanto, 2010).

Character education refers to the efforts of internalizing the habit in such a way that the children will be habituated to keep thinking, behaving, and taking actions based on the values of virtue. With regards to the statement, Ki Hadjar Dewantara has thought far ahead with regard to the issue of character education. Honing the mind intelligence is really good because the sharpened mind intelligence can build fine and sound characters so that the personality (*persoonlijkheid*) and the character (the soul based on the mystic Law). If this idealism has been achieved, then people will always be able to get over their original desire and temperament (cruel, wrathful, angry, stingy, hardened, and alike) (Dewantara, 1977; Harianto et al., 2020; Winarni & Lutan, 2020).

Character education has been designed and has even been socialized in schools. However, the implementation of character education among students still needs sufficient supporting learning instruments such as syllabi, lesson plans, learning media, and assessment instruments. The issues that the teachers have in implementing character education is the difficulties in developing the descriptor formula for the character assessment of the students, especially regarding the characters that have been implemented based on the noble teachings of Ki Hajar Dewantara. The absence of studies on character internalization using the instrument that has been implemented based on the teachings of *Ning-Nung* and *Nang* and also the instrument that has been used for measuring the achievement of the attitudes/characters that the students have implemented based on the same teaching encourage the researchers to conduct further investigations since up to date the teachers have only been accustomed to develop the cognitive assessment instrument. Not to mention, the elements that have been formulated by the Department of National Education within the implementation of character education are only limited to: (1) descriptions; (2) school indicators; and (3) general classroom indicators.

Paying attention to the concrete conditions, recently, a set of instruments for assessing the characters of the students becomes necessary. Thus, the development of the character assessment instrument is focused on junior high school students in relation to the teaching of the win (*Nang – menang*). Therefore, the problem formulation that the researchers would like to raise is: (1) how is the validity and the reliability of the character assessment instrument for the junior high school students based on the teaching of win (*Nang – menang*); and (2) what are the indicators and the items that can be developed and serve as the basis for the design of the character assessment instrument based on the teaching of win (*Nang – menang*) in the context of the junior high school students.

An instrument is one of the tools used for measurement activities. In other words, an instrument can be defined as a tool for gathering information over the characteristics of an object, in this case, the junior high school students, in the form of skills, interests, motivation, and alike (Widoyoko, 2020).

The instrument's definition in the evaluation scope is based on the understanding of the instrument itself as a tool for measuring the students' learning results, and the measurement tool includes the learning results in the cognitive, affective, and psychomotor domain. Before an instrument has been deployed,

the instrument should be analyzed first. Two important characteristics that can be used for analyzing an instrument are validity and reliability. An instrument will be considered valid if it is used to measure what it should measure. According to the statement, the instrument's target is one of the aspects that should be considered in analyzing the instrument's validity. The other aspects can be, for example, the relevance between the indicators and the test items, the use of the language, the relevance with the governing curriculum, the guidelines in the test item composition, and the like (Suryabrata, 2010). On another occasion, an instrument can be defined as a tool that can be used and deployed by a researcher in order to assist the data-gathering activities so that these activities can be more systematic and facilitated (Fajaruddin et al., 2021; Mardapi, 2018).

According to Azwar (2019), psychometricians have assigned the criteria for a measurement instrument in order to be considered a good one. These criteria are valid, reliable, standardized, economic, and practical. In addition, according to Gronlund et al. (2009), the main characteristics that a measurement tool should have can be classified into validity, reliability, and usefulness. In a brief manner, the research instrument development (Andarini, 2010; Setyosari, 2016) altogether states that validity and reliability become two aspects that should be completely given attention.

Sugiyono (2016) proposes that the departure point within the design of an instrument lies in the variables set for the study's conduct. The operational definitions of these variables should be outlined, and their indicators should be defined as well based on the supporting theoretical elaboration. The presence of the indicators will assist the researchers in compiling questions and statements relevant to the operational definition and the theory so that the instrument can be deployed for gathering the data from the respondents in a valid manner.

Iskandar (2013) states that six steps should be undergone in designing a research instrument, and the six steps are (1) identifying the variables under the study; (2) elaborating the variables into dimensions; (3) looking for the indicators of each dimension; (4) describing the guidelines of the instrument; (5) formulating the items of the questions or the statements in the instrument; and (6) designing the instrument completion guidelines.

Etymologically, character means behavior, mental traits, or morals that discern one individual to another (Andarini, 2010). The term character is derived from a Grecian word, "kharassein" which means to sculpt or carve. On the contrary, the word character in Latin means discerning the sign (Narwanti, 2011). According to Kamus Besar Bahasa Indonesia, a character refers to a set of unique values that have been internalized into an individual's personality and manifested into his or her behaviors. Character coherently imparts from the results of the mind, the soul, the intention, and the body of an individual or a group of individuals (Kurniawan, 2013).

Our behaviors shape the characters. Hence, the behaviors in childhood usually remain until adolescence. Regarding the statement, parents can influence the good or the bad by shaping their children's habits (Lickona, 2022). In the meantime, according to Atmaja (2012), character education is a set of fundamental values that should be contemplated if a society is willing to live and cooperate peacefully. The values such as wisdom, respect for others, personal responsibility, a sense of mutual fate, and peaceful conflict resolution should be the values that are prioritized in character education.

On the contrary, according to (Atmaja, 2012), character education refers to the fundamental values that should be contemplated if society would like to pursue peaceful life and cooperation. The values such as wisdom, respect toward others, personal responsibilities, a sense of solidarity and empathy, and peaceful resolution are the ones that should have been promoted in character education.

The Law Number 20 of 2003 Regarding the National Education System has formulated the objectives and the functions of the national education that should be developed in Indonesia. Article 3 of the National Education System Law mentions that national education serves to shape and develop the characters and the civilization of a dignified nation in order to brighten the life of the nation and develop the potential of the learning participants so that the learning participant can be pious, faithful, noble, health, skillful, creative, independent, democratic, and responsible citizens.

National character education refers to the efforts pursued by the school along with the teachers and the school leadership through all lessons and other activities in order to develop the characters, traits, moralities, or personalities of the students by internalizing all virtues that have been commonly believed to serve as the foundation for the perspective, the attitude, and the action that displays the nobility of the students (H. Hidayatullah et al., 2022; M. F. Hidayatullah & Rohmadi, 2010; Indarwati, 2020).

Character education aims at developing the values that include: (1) the development of the student's potential to become good individuals; (2) establishing a nation of Pancasila; (3) developing the citizens' potential in order to internalize self-confidence, nationalism, and the affection towards humanity. Then, character education serves to: (1) develop a multicultural national life; (2) develop an intelligent and noble national civilization that contributes to the development of the life of mankind; and (3) develop a peaceful, creative, and independent attitude among the citizens so that the citizens can co-exist with other nations within a harmony. In order to achieve the optimum result, character education should be pursued through numerous media, namely the family, the educational unit or agency, the society, the Government, the business world, and the mass media (Kemendiknas, 2011:7).

Ki Hadjar Dewantara has thought far ahead in the case of character education. Honing the mind's intelligence is very good because it can develop good and well-established traits and even manifest the personality (*persoonlijkheid*) and the characters (the soul that is based on the Law of spirituality). If such a kind situation is reached, then people will always be able to defeat their desires and original traits (cruel, wrathful, angry, stingy, and alike) (Dewantara, 1977).

In the system that he has developed, Ki Hadjar Dewantara has issued "10 Instructions for the Joins of an Independent Life." Later, these instructions are reviewed again and bear the popular name "character education." One of the principles of character education is *Neng-Ning-Nung-Nang*. With *Neng*, which stands for *meneng* or being quiet, they can reach their inner peace and will not be nervous. Afterward, people will be *Ning*, which stands for *wening*, and they will have a clear state of mind; hence, people will be able to discern right and wrong. Subsequently, people will be *Nung*, which stands for *hanung*, which means that they will be physically and mentally strong to achieve their aspirations. Last but not least, in the end, people will be *Nang*, which stands for *menang*, which is when people have authority and power over their own power.

The teaching known as 4N by Ki Hadjar Dewantara is one of his legacies pertaining to the attitudes and the behaviors of the Indonesian people in dealing with problems, negotiations, and conflicts that cannot be set apart from the grand concept of his struggle in order to free the nation from the occupation by means of Education and Culture (Febriyanti, 2021).

4N itself is an abbreviation of four words in the Javanese language, namely: (1) *Neng*, which stands for *meneng* and means calm and silent with the focus on active listening; (2) *Ning*, which stands for *wening* and means being clear in mind and the soul; (3) *Nung*, which stands for *hanung* and means magnanimity and greatness of soul; and (4) *Nang*, which stands for *menang* and means gaining victory both mentally and physically; being put all together, the teaching has an enormous impact (Fuadah & Djohar, 2015).

In a more specific manner, *menang* refers to an unusual achievement. KBBI (2008) defines this term as: (1) being able to defeat enemies or being superior; (2) gaining results because of being able to defeat the opponent; (3) having passed the test; (4) earning gift (in a game and alike); (5) being superior against; and (6) having been decided not guilty (in a trial).

Nang or *menang* also refers to the ones with *Nung* or *kesinungan* or who always main their good deeds. As a result, their uncountable good deeds will always be their fortress for themselves. This is the result of the victory from a self-contemplation known as *laku prihatin*. In other words, this kind of victory can be considered another form of blessing, enjoyment in all forms, and true life. The true life itself will be the one that delivers the benefits (blessing) to all creatures in the universe. As a result, an individual who has attained the true life will always be in a state of adequacy, physical and mental peacefulness, inability to be harmed by other people, and being luck throughout their life (*meraih ngelmu beja*) (Lanang Hf, 2011).

In addition, *Nang* or *menang* also refers to moral victory and/or physical victory. The victory gained after the principle of *Neng-Ning-Nung* does not offend the opponent's heart. This situation can be achieved because of the atmosphere of "gaining victory without conquering" or gaining victory without humiliation, also known as "*menang tanpa ngasorake*." Other people also define *Nang* as *wenang*, which refers to the authority or the position that can be earned through a conducive and persuasive manner by means of the *Neng-Ning-Nung* process with the democratic achievement of *Nang* (Praddi, 2009).

Departing from the explanations, it can be concluded that *Nang* (*menang*) is a way of behaving against a problem to attain the right and realistic conclusion and on-time conclusion. The attitude that should be shown is thus the one that does not offend the losing party, does not brag one's self, and appreciates the achievement of the other people by showing sincere efforts.

Several studies have been related to the development of the attitude instrument for students. One of these studies was conducted by Waruwu and Supriyoko (2017). The objectives of the study are to (1) attain the measurement of the student's learning product instrument; (2) process the discipline toward the regulations at school, observe the learning activities at school, and observe the learning discipline at home; (3) meet the validity requirements, the construct validity, and the construct reliability for the instrument of discipline measurement for the students; and (4) to meet 44 points of discipline measurement for the sampled junior high school students. The study itself has earned 44 survey items and Kaiser-Meyer-Olkin (KMO) value 0.862 ($0.862 > 0.600$) with the Bartlett's Test probability value sig. 0.000 ($0.000 < 0.050$) and reliability value 0.834 ($0.834 > 0.600$). Hence, the final score that the Negeri 2 Public Junior High School Kalasan Sleman Yogyakarta students have attained is 135.12, which belongs to the range 121.00 – 143.00 and the "High" category.

A study on the development of attitude measurement has also been conducted by Sumarjana et al. (2018). Through the study, the researchers have designed a valid and reliable instrument for the attitude "Ngandel." This instrument has six indicators and consists of 24 items. The results of the study show that for Physics, the tendency of the "Ngandel" attitude among the students of Negeri 3 Public Junior High School belongs to the "Very High" category.

A similar study has also been conducted by Wardani et al. (2018). The study found that the Aiken index falls in the range of 0.750 – 1.000 with a mean score of 0.795. The such range indicates that the assessment instrument toward the attitude of persistence among the public junior high school students consisting of 6 indicators (hardworking, passionate, optimistic, persevering, hopeful, and tenacious) and 24 question items have been valid. The score of the instrument reliability for the measurement instrument toward the attitude of perseverance is 0.850, which means the instrument is reliable.

Last but not least, another study on the development of attitude measurement instruments has also been conducted by Fathurrohmah et al. (2017). The objective of the study is to explain the process of developing the measurement instrument for the attitude of being proactive and the results of measuring the attitude of being proactive among the students from Negeri 1 Public Senior High School Klirong Kebumen. In the study, the researchers have implemented the Research and Development Method for developing the measurement instrument toward the attitude of being proactive based on the developmental model proposed by Sugiyono (2016). Then, the limited experiment involves seven students, the expanded experiment involves 35 students, and the wide-scale experiment involves 234 students. The results of the study thus show that the measurement of the attitude of being proactive among the students has not made use of a proven instrument. Departing from the data of the preliminary experiment toward the instrument with 33 question items, it is found that the final instrument consists of 39 items, and all of these items have a correlation between the item score and the total score $> r$. The concurrent validity of the instrument is 0.625, with a significance value of 0.000. Through the factor analysis, 11 factors have been attained with the Determinant of Correlation Matrix 8.640×10^{-7} table 5.00%, the coefficient of Kaiser-Meyer-Olkin (KMO) 0.838, the value of Bartlett Test of Sphericity 3,045.979, and the significance value 0.000. At the same time, the coefficient of reliability shown by Cronbach's Alpha value is 0.894. Overall, these findings show that the measurement instrument for the attitude of being proactive that has been developed among the students of Negeri 1 Senior High School Klirong Kebumen has good item validity, concurrent validity, construct validity, and reliability. By administering the final instrument, it is found that 28.02% of students fall into the "Very High" category, 58.94% of students fall into the "High" category, 13.04% of students fall into the "Moderate" category, 0.00% students fall into the "Poor" category, and also 0.00% students fall into the "Very Poor" category. The mean score of the students' proactiveness is 119.13 ("High").

Paying attention to the overall explanation, it seems necessary to develop the instrument of assessment toward the attitude of the students based on the teaching of *Nang (menang)* in order to attain the instrument that measures the attitude of the students based on the given teaching in a more appropriate and accountable manner. Through the instrument of assessment toward the characters of the students based on the teaching of *Nang (menang)* in the form of attitude scales, the teachers will be more facilitated in assessing the characters or the students based on the given teaching.

METHODS

The method that has been adopted in the conduct of the study is Research and Development (R&D). R&D is a research method that has been adopted to design a certain product and test its effectiveness

(Sugiyono, 2016). As an alternative, R&D can also be understood as the processes or steps in developing a new product or refining an existing product in a reliable manner (Sukmadinata, 2015). Then, specific to the context of the study, the study has been designed using the Borg & Gall Model, whose R&D stages are cyclical (Emzir, 2012). Then, the subjects of the instrument development for the character assessment are the Grade VII students to the Grade IX students of Negeri 2 Public Junior High School Kaliangkrik Magelang. The study itself has taken place in the Even Semester of the Academic Year 2019/2020.

As having been previously mentioned, the procedures that have been undergone in the recent R&D research refer to the ones developed by Borg & Gall, but these procedures are adopted with limitations. (Gall et al., 2003) state that it is possible to limit the R&D steps in a small-scale experiment, and the limitation includes the one for the research steps. In other words, all of the developmental steps proposed by Borg & Gall should not be followed, giving each researcher the flexibility to cater to their study's needs. So, the steps that have been adopted for the conduct of the study are: (1) Data Gathering, which aims at identifying the characters of the students on the research site; (2) Planning, which reviews the variables that will be designed based on the field study, defines the indicators that will be shaped out of the variables that have been designed and formulates the guidelines for the character assessment based on the teaching of *Nang (menang)*; (3) Preliminary Product Development, which aims at designing the assessment instrument for the characters of the students based on the teaching of *Nang (menang)* along with the completion guidance and evaluates the reliability of the instrument by consulting it to the experts; (4) Field Preliminary Experiment and First Analysis, which serves as the readability test that involves 10 subjects (students) using the questionnaire that has been designed along with the analysis afterward; (5) Product Revision (Revision I), which revises the preliminary product that has been designed based on the results of the preliminary experiment so that the draft of the main product (model) can be attained and operated for the expanded experiment; (6) Field Experiment and Analysis II, which involves 200 experiment subjects (students) from Grade VII to IX along with the evaluation analysis afterward; (7) Final Product Revision and Improvement, which aims at the final revision toward the model that has been developed in order to attain the final product; and (8) Dissemination and Implementation, which disseminates the product/model that has been developed to the field.

The product assessment aims at attaining the accurate data that have been used for pursuing the revision and setting the objective of the efficiency and effectiveness of the product that has been developed. Within the product assessment, the assessment design, the assessment subject, the data type, the data gathering instrument, and the data analysis technique are explained. Then the instrument that has been used for the data-gathering activities is a questionnaire. The questionnaire is a data-gathering technique that benefits a number of written questions or statements to elicit responses from the respondents (Sugiyono, 2016). This method has been implemented in order to attain more complete data regarding material expert validation, media expert validation, and teacher validation. At the same time, this method has also been implemented to gather the students' opinions and experiences in attending to the learning process at their school.

The data analysis technique adopted in the study describes all opinions, suggestions, and responses from the validators gathered from the criticism and suggestion form. Afterward, the data attained from the questionnaire are considered qualitative data that should be quantified using a four-item Likert scale. By the time the data have been completely gathered, the data are analyzed by using the factor analysis and the instrument reliability test.

RESULTS AND DISCUSSIONS

Results of Development

The study is conducted because of the potential among the students as the generation that can practice the knowledge they have in daily life through their good behaviors. However, in reality, some of the students have practiced their knowledge through rather poor behaviors such as extortion/bullying, senior domination against junior, dishonesty, liquor consumption, and even being easily offended without knowing how to resolve the issues well. Hence, it can be said that the implementation of character education existed in schools is still low. The issue that the teachers should deal with in implementing character education is related to the difficulties in developing the formulation of character assessment descriptors among the students, especially with regard to the characters that have been implemented

based on the noble teachings by Ki Hajar Dewantara. The absence of the study on the characters using the instrument that has been developed from the implementation of the *Neng-Ning-Nung-Nang* teachings and the absence of the instrument for measuring the achievement of the students' attitudes/characters that have been implemented based on the *Neng-Ning-Nung-Nang* teachings as well have made the teachers to be used in developing the solely cognitive measurement instrument. In relation to the statement, the elements that have been formulated by the Department of National Education only center around: (1) description; (2) school indicators; and (3) classroom indicators in general.

Preliminary Instrument

In the study, the researchers have developed an instrument in order to measure the character *nang* (*menang*) in accordance with the teachings of Ki Hajar Dewantara on Negeri 2 Public Junior High School Kaliangkrik at the Regency of Magelang. The study refers to the interview, several theoretical reviews, and a number of previously conducted studies. Departing from the review of these aspects, the researchers have taken three operational definitions or variables that will later be developed into indicators. From the indicators that have been shaped, the researchers devise the statement items in the form of valency (opinion) and factual data (behavior) that stand alone from the positive and the negative statement. Afterward, the researchers designed the character *nang* (*menang*) assessment guidelines. These guidelines will be developed into the questionnaire for gathering the data on the students' assessment character based on the teaching of *Nang* (*menang*) in Negeri 2 Public Junior High School Kaliangkrik at the Regency of Magelang.

Instrument Validation

An instrument validity test should be conducted so that the instrument is valid. The objective of conducting the instrument validity test is to identify whether the data or the instrument that has been operated is valid. In addition, the instrument validity test is also conducted to identify and systematically evaluate the instrument and the product that will be developed in accordance with the given objective. At the beginning of the instrument design, three operational definitions, 12 indicators, and 48 statements were included in the guidelines, and the experts should validate these guidelines. From the results of the validation by Prof. Dr. Samsi Haryanto, M.Pd., it is suggested that there should be a word addition for the term *menang* in the factual negative statement on the third indicator, the fourth indicator should be omitted, the word *selalu* and *tidak* for the factual statement should be omitted, and the tenth indicator should be omitted. On the contrary, the feedback provided by the expert named Broto Wibowo, S.Pd., M.Pd. has encouraged the researchers to use words or sentences that the students can easily understand and replace several items that have a close relationship with the students at school.

Based on the validation results from the material experts, 2 out of 12 indicators cannot be included in the instrument because the two indicators do not fit into their operational definitions. As a result, the instrument has now had 40 statement items and ten indicators with three operational definitions. Each indicator is broken down into four statements.

The assessment results and the material expert's response serve as the tool for identifying whether the character instrument that has been designed can or cannot proceed to the next level, namely the empirical validation.

Readability Test

The results of the readability test from the ten students can be seen in Table 1.

Table 1. Results of the Readability Test

No.	Criteria	Understanding of the Content		Convenience in Reading the Content	
		Number	%	Number	%
1.	Convenient	8	80	10	100
2.	Sufficient	2	20	0	
3.	Moderate	0		0	

From the results in the above table, it is found that most of the students are convenient to understand the items within the instrument (8 students or 80%) while 2 (20%) students are sufficient ot undersrand the same items. Then, the aspects of convenience imply that all students (100%) are conveniently reading the items within the instrument. The statement thus shows that the instrument can be implemented

for measuring the character values based on the teaching of *Nang (menang)* despite that there are several revisions pertaining to the terms that the students understand. After the revision has been completed, then the instrument of the student's character assessment based on the teaching of *Nang (menang)* can be implemented in the expanded experiment.

Results of Expanded Experiment

The expanded experiment for the instrument of the student's character assessment based on the teaching of *Nang (menang)* is conducted by the students from Negeri 2 Public Junior High School Kaliangkrik. The total number of subjects that participated in the experiment was 200 respondents, consisting of students from Grade VII, Grade VIII, and Grade IX. The validity test is administered by using the factor analysis through the implementation of the Kaiser – Meyer – Olkin (KMO) Test, Bartlett's Test, and Measurement of Sampling Adequacy (MSE) Test. The analysis of the results of the expanded experiment is conducted through three stages. In the first stage, item number 02 and item number 34 do not meet the item validity; therefore, both items are excluded from the calculation. Then, in the second stage, the analysis is conducted without including item number 02 and item number 34. In this stage, the commonalities value of item number 20 and the item number is lower than 0.50 (< 0.50). Consequently, item number 20 and item number 39 should be excluded from the calculation. Next, in the third stage, the analysis is conducted by making calculations against the 36 items. In terms of item validity, all items have been considered valid.

In the interest of construct validity, the researchers should conduct factor analysis. The computation results from the factor analysis show that the Kaiser – Meyer – Olkin (KMO) Value and the Measure of Sampling Adequacy is 0.782. Since the value 0.782 is higher than 0.500, it can be concluded that the sample adequacy falls into the "Satisfying" category. At the same time, the size of Bartlett's Test of Sphericity is 2,170.261 with a significant value of 0.000. This value implies that there is a highly significant inter-variable correlation within the instrument that has been developed. Therefore, the factor analysis may proceed to the next level. In the table of commonalities, the statement that extraction value < 0.50 is not found anymore. Similarly, in the Anti Image Correlation (AIC) table, the MSA value < 0.50 is not found either. Therefore, it can be concluded that the instrument of the student's character assessment has been valid in terms of construct validity. In addition, the computation results also show that the commonalities value > 0.50 , and thus all data can proceed to the subsequent test. In other words, each variable in the character assessment instrument based on the teaching of *Nang (menang)* is related to each other.

Table 2. Result of KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.782
Bartlett's Test of Sphericity	Approx. Chi-Square	2,170.261
	df	630
	Sig.	0.000

The Total Variance Explained describes the number of factors that have been shaped (Santoso, 2011). In the table of Total Variance Explained, 11 factors have been shaped from 36 statement items that have been included. The eigenvalue of each factor > 1.00 . Eigenvalue describes the relative importance of each factor in calculating the variance of the 36 variables that have been analyzed. The size of the variance that can be explained by the new factors that have been shaped is 61,283%, while the remaining 38,717% can be explained by other factors that have not been included in the study.

At the factor rotation, the factor matrix is transformed into a simpler matrix to make the data interpretation more convenient. Within the analysis, the factor rotation is conducted by using the varimax rotation method. The result interpretation is achieved by viewing the factor loading. Factor loading refers to the number that shows the correlation size between the variable and the first factor, the second factor, or the other factor that has been formed. The process of determining which item that will be included in which factor is administered by comparing the correlation size in each line within the table of the Rotated Component Matrix. Thereby, all items become valid in terms of the construct. By paying attention to the biggest factor loading in each line, the statement item that supports each factor that has been shaped will be supported. After the statement items have been grouped based on the factors, the researchers observe each statement item's characters belonging to a single factor. Departing from the

character of the statement item, the researchers will define the name of the factor. The name of the factor is adjusted to the aspect of the indicator of the statement at the guidelines of the preliminary developed model of the instrument of the student's character assessment based on the teaching of *Nang (menang)*.

From the results in Table 2, it can be reported that 11 factors have been shaped, and this number is higher than the number of the factors that have been predicted, namely three factors. Then, each factor is represented by at least one statement item. The factor with the most statement items is factor number 1, 7 statement items. On the contrary, the factor with the least statement items is factor number 11, which is 1 statement item. The results of the analysis of the distribution of the items on the instrument of the student's assessment character based on the teaching of *Nang (menang)* in the Negeri 2 Public Junior High School Kaliangkrik can be seen in Table 3 below.

Table 3. The Naming of the Factor Loading Distribution in the Expanded Experiment

No.	Item Distributions	Factor	New Factors
1.	P4, P6, P10, P12, P14, P16, P18	1	Not being easily bad-tempered and always pursuing self-introspection
2.	P25, P35, P36, P37	2	Finding more friends and becoming more diligent in study
3.	P5, P9	3	Always being tolerant
4.	P24, P26, P28, P30, P40	4	Not being proud and always being humble
5.	P3, P11, P13, P32	5	Positively viewing all things and having the courage to ask for an apology and apologize
6.	P27, P31, P33	6	Being optimistic in all situations
7.	P1, P15, P21	7	Being sportive
8.	P8, P19, P22	8	Not being procrastinative and always being self-confident
9.	P29, P38	9	Not underestimating others and always being persistent
10.	P7, P23	10	Always thinking clearly
11.	P17	11	Appreciating achievement

Then, the Screeplot display that explains the relationship between the number of the factors that have been shaped and the eigenvalue in the form of a graphic can be seen in Figure 1.

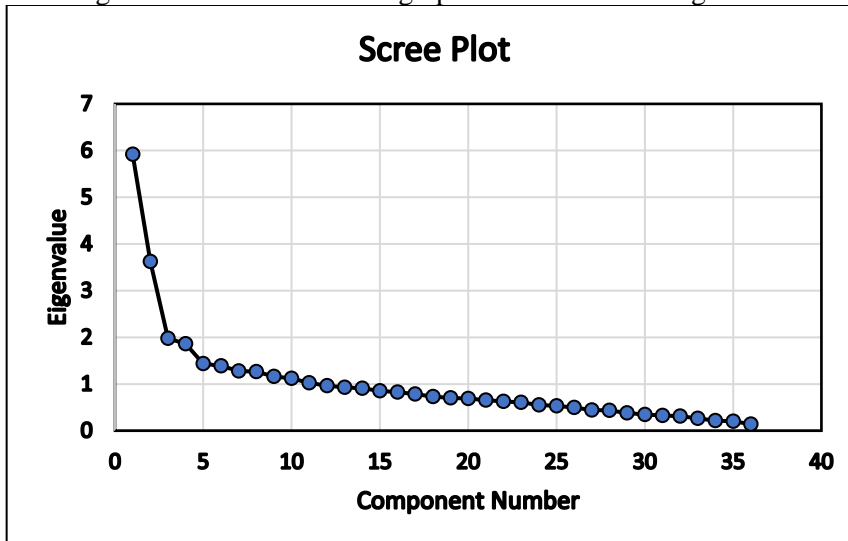


Figure 1. Scree plot from the Expanded Experiment

From the scree plot in Figure 1 above, there are 11 component points which an eigenvalue > 1.00. Thus, it can be interpreted that there are 11 factors that have been formed. The scree plot diagram shows how the tendency of eigenvalue decreases. The scree plot diagram serves as a reference for determining the number of factors that will be used. By paying attention to the above scree plot, it is clear that the corner of the graphic is closer to an elbow shape. Thus, it can be reported that the instrument of the student's character assessment based on the teaching of *Nang (menang)* in Negeri 2 Public Junior High School Kaliangkrik that has been developed is unidimensional.

From the above explanation, it can be concluded that in terms of the instrument's item validity, all items within the instrument have been valid, the instrument has good concurrent validity, the instrument has good reliability, and the instrument also has good construct validity. Thereby, the number of items

that have been used in uncovering the student's character assessment based on the teaching of *Nang (menang)* in Negeri 2 Public Junior High School Kaliangkrik under the valid and reliable manner is 36 statement items. Departing from the 36 statement items, a final instrument for the student's character measurement can be designed based on the teaching of *Nang (menang)* in the Negeri 2 Public Junior High School Kaliangkrik so that the data-gathering activities can be conducted conveniently.

Reliability

The results of the reliability test toward the 36 statement items that have been valid can be seen in Table 4.

Table 4. Reliability Statistics

Cronbach's Alpha	N of Items
0.805	36

Table 4 shows the results of the analysis of the reliability test with **Cronbach's Alpha = 0.805** from **36 variable items**. The reliability value of 0.805 is a strong one. Therefore, it can be said that the questionnaire has been consistent (*reliable*), and the reliability implies that the trustworthiness of the instrument in delivering the information is 80.50%.

Implementation

The final instrument is implemented for the students who have not been provided with the treatment in the previous experiment with a total number of respondents of 200 people. From the results of the implementation, 64% of students belong to the "Very High" category, 34% of students belong to the "High" category, 0% of students belong to the "Moderate" category, 0% of students belong to the "Low" category, and 0% students belong to the "Very Low" category. The percentage of the character *menang* among the students from the Negeri 2 Public Junior High School Kaliangkrik can be seen in Figure 2.

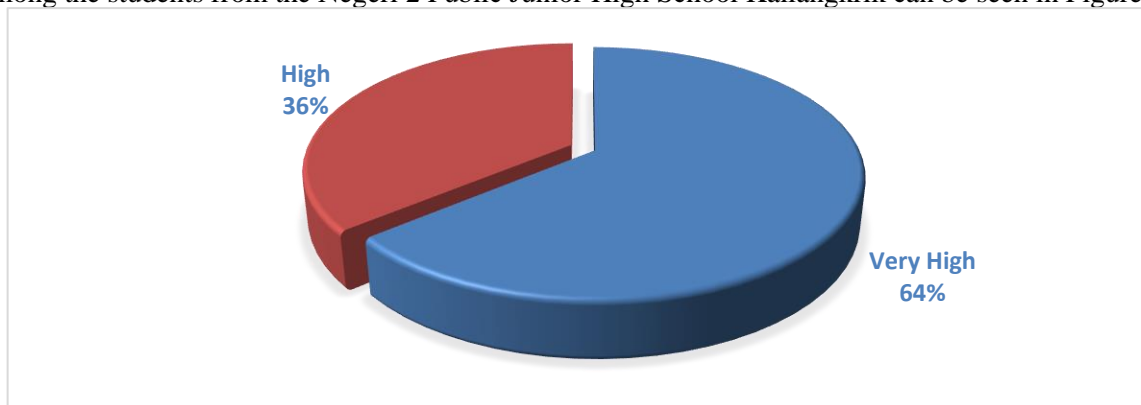


Figure 2. Percentage of the Character *Menang* among the Students from Negeri 2 Public Junior High School Kaliangkrik

CONCLUSIONS

From the results of and the discussions within the study above, several conclusions can be drawn regarding the development of the instrument of the student's character assessment based on the teaching of *Nang (menang)* in the Negeri 2 Public Junior Junior High School Kaliangkrik at the Regency of Magelang. First, the instrument that has been developed consists of 36 items, with 18 valency items and 18 actual items. Second, from the item validity test using the factor analysis, a KMO value of 0.782 ($0.782 > 0.500$) has been attained with the probability significance value 0.000 ($0.000 < 0.500$). Third, the instrument reliability is 0.805 ($0.805 > 0.700$). Fourth, from these findings, the instrument of the student's character assessment based on the teaching of *Nang (menang)* consists of 36 valid and reliable statement items, and, therefore, the instrument may proceed as the instrument of character assessment. Fifth, at the beginning of the study, the instrument consists of 3 variables, ten indicators, and 40 statement items. Sixth, based on the development of the instrument of the student's character assessment based on the teaching of *Nang (menang)*, a standardized instrument for measuring the character of *Nang (menang)* has been attained with 11 indicators, namely: (1) not being easily bad-tempered and always

pursuing self-introspection; (2) finding more friends and becoming more diligent in the study; (3) always being tolerant; (4) not being proud and always being humble; (5) viewing all things in a positive manner and having the courage to ask for an apology and apologize; (6) being optimistic in all situations; (7) being sportive; (8) not being procrastinative and always being self-confident; (9) not underestimating others and always being persistent; (10) always thinking clearly; and (11) appreciating achievement. Seventh, or the last one, from the results of the character measurement, it is found that 128 students (64%) have the character *menang* with the "Very High" category, and 72 students (36%) have the character *menang* with the "High" category.

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