A Study on Measuring Social Perspective Taking of Indonesian Navy Officer

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Abstract
This research was about the Social Perspective Taking instrument which was adapted from a instrument developed by Diazgranados and friends in 2016, by adjusting the setting of the Indonesian Navy. Procedures used with the cross-cultural adaptation stage started from the process of translating to field testing (Beaton, Bombardier, Guillemin, & Ferraz, 2000). Subject involved 120 Navy officers with the rank of major. Sampling using simple random sampling techniques and statistical tests were SEM analysis. The results of the study were all valid items (loading factor> 0.5) and reliable indicators. Goodness of fit model was quite good. This instrument is expected to detect the right candidate for officers and assist the process of preparing officers to become leaders whose decisions are not solely based on knowledge from military education, but also consider perspectives on the thoughts, feelings and behavior of others. The weakness of this instrument is the item in the form of open questions, so it requires more time and effort compared to similar tests with answer choices.

Keywords: social perspective taking, instrument, officer

Introduction
Human develop, grow, and change, although varied but are universal. The level of individual development is on a significant line with the function and understanding of the condition of others. This evolving perspective has two important implications. First, knowledge of their level of understanding and social development will be very useful for their efforts in trying to solve problems. Second, the most accurate results of social perception, when used to try to check their own attitudes, opinions and concepts as closely as possible with perspectives outside themselves (Diazgranados, Selman & Dionne, 2016; Selman, 1980).
Indonesian navy officer should ideally be someone who knows and understands others, be it superiors, subordinates, the community and even enemies, so that they understand what must be done in order to be an example for subordinates and the community in the life of society, nation and state, sensitive to environmental development and social problems that arise, and support development programs and be able to invite the community to participate in it (RI Law No. 34, 2004). To get an officer of this quality requires a process. The execution of a soldier's duty is very close to violence, both during training and assignment. He must continue to maintain his fighting instincts by carrying out routine training, so that it may arise the problem of violence carried out as a result of this. Esprit de corps is also often understood negatively and wrongly in implementing it (Palante, 1899; Qureshi & Ab Hamid, 2017). Some of the violations committed by members of the Indonesian Navy were evidence of misuse of their abilities and authority for personal gain and hurt or harming others (Richard, 2016).

The ability to put oneself into someone else's position is an ability called Selman as Social Perspective Taking (SPT). The experience of interacting with diverse environments, allows individuals to have the opportunity to take on a number of roles and meet the perspectives of others who are sources of awareness of equality and reciprocity based on a sense of justice. (Diazgranados, Selman & Dionne, 2016; Lickona, 1976; Selman, 1971; Selman, 1980). If the individual gets adequate feedback about his SPT ability, this will stimulate his moral cognitive development. The SPT will fail to promote better moral development when individual grows without reaching the critical level of moral competence that should be (Lind, 2000).

The SPT theory is a theory of strong structural development. Extensive theoretical and empirical studies of Jean Piaget dominant provide the basis for the description of a diverse sequence of qualitatively different ways of organizing and understanding a particular domain of experience through which children pass (Selman, 1980). SPT ability is a mutual ability which implies an increasingly accurate perception of what causes others to do something in a particular situation, and specifically about how one's own actions will affect other people's attitudes towards him (Diazgranados, Selman, & Dionne, 2016; Selman, 1980).
Selman discussed the development of the SPT by emphasizing his theoretical criteria on the overall structure and focusing on thought forms and dealing with the expression of thoughts that based cognitive structures rather than affective (Selman, 1980). SPT as an approach that is associated with different social understandings and actions that are developed by individuals in a hierarchical social cognitive construction and develop continuously. In the first stage the development of social understanding is characterized as a stage of play, where the child plays a role with the behavior of the person known, namely the parent. Then the child observed the environment outside the family, for example peers or neighbors. In this phase the social coordination becomes more organized and operational play naturally becomes increasingly complex. Example: In a soccer sports game, the child mentally anticipated intensely the opponent’s attack or the goal keeper on the opposing team, his abilities and strengths in his own team, as well as he recognized his own abilities in his position. The results and conditions of the game will increased its ability to coordinate its perspectives and present mental maps or internal coordination. Individual presented their abstract and normative social perspectives, which required him to obtain conceptions of social consensus or social norms. He also differentiated himself as an actor who positioned himself as an observer and made internal understanding. When an individual internally can make an understanding of a group or society, then he is able to become a part of his social environment and self-reflection of social rationalization. Self as "rational being" arised from the ability of organisms and assumes group attitudes in cooperative community processes (Selman, 1980).

In this study, the instrument which developed by Diazgranados in 2016 based on Selman's Social Perspective Taking Theory was adapted and adjusted in the Indonesian Navy's settings. No other study was adapted this instrument in Indonesia setting, thus the current study will answer the gap of knowledge further. The hypothesis was a measure of social perspective taking adaptation tools that have valid and reliable items as well as models that were fit to be used in measuring the ability of the Navy officer’s SPT. This instrument was expected to be able to detect the right candidate for officers and assist the process of preparing officers to become leaders in making decisions not solely based on knowledge gained in military education, but also based on perspectives about the thoughts, feelings and behavior of others.
**Method**

**Subject**

The subjects of this study were 120 senior Indonesian Navy officers aged 35-44 years with a 12 to 20 year assignment period, which was a fairly mature and well-established assignment. All subjects have signed inform consent, and agree to involved in this study. They were classified as adult (Boyd, Denise; Johson, Paul, & Bee, 2015; Santrock, 2013), who were in the period of adjusting to new lifestyles and meeting social expectations by playing the role of spouse, parent, breadwinner, and developed new attitudes, interests and values in carrying out this role (Hurlock, 1978; Santrock, 2013).

**Procedure**

In the research process, procedural steps taken in the process of measuring or retrieving data were priorities, because measuring directly showed how researchers determine important concepts (Creswell, 2003). In compiling the instrument, the researcher considered that the data collection met the standardization requirements, namely the uniformity of the process in administering, scoring, and interpreting the results obtained from the same measuring instrument. In taking data also objective. This means that the respondents get the same treatment and the measuring instrument had the same meaning for each respondent. Respondents' answers were checked through consistency check and inconsistent answers were not used in data processing (Anastasi, 1988).

The questionnaire led participants to a scenario that reflected a situation where someone was confronted with an incident of bullying. Individuals did not know what to do and tried to ask others (respondents) for advice. Respondents were then asked to think about recommendations that might be received from three different advisors. In the first story P1 was someone who had the same experience as a character, who was often a victim of violence; P2 was a person who had a good relationship with the perpetrators of violence; and P3 was respondent. In the second story P1 was someone who had the same job as the character, namely as a subordinate; P2 was an authority figure or a person who had power over a character; and P3 was respondent. Respondent were then asked to answer 3 questions. Q1 = What would (as an actor) recommend to the observer? Q2 = Why did the
Subject recommend so. Q3 = What might be wrong in the recommendation (Diazgranados, Selman, & Dionne, 2016).

In adapting instruments using cross-cultural adaptation procedures, included the process of language transfer and the problem of cultural adaptation in preparing the scale for use in other settings (Beaton et al., 2000). Adaptation not only translated, but also adapted to the cultural context in which the scale will be used. The instrument in this study was translated according to the purpose of the study, namely the original scale in English, translated into Indonesian and adjusted to the background of the assignment within the Navy. The structure of the scale did not change, so did the form of the question that began with the story, the number of items, how to answer, and the scoring technique can be said to be the same as the original scale (Beaton et al., 2000). The adaptation process began by translating each item until it was tested into a large sample to see its validity and reliability (Beaton et al., 2000).

Tabell

The stages of cross-cultural adaptation of SPT Measures

| Tahap         | Kegiatan                                                                 |
|---------------|---------------------------------------------------------------------------|
| I Initial Translation | The instrument was translated from English into Indonesian with adaptations to the Navy background. Two reporters were asked to compare and assess the differences, then each made a note of the item that was deemed inappropriate in writing. |
| II SyntesisoffThe Translations | The two translation correctors confirmed the researcher and discussed the choice of words perceived differently until an agreement was reached between the translation corrector and the writer. |
| III Back Translation | The results of the discussion were translated back into English with the help of a professional translator. The aim was to check the validity and to ensure that the translated version reflects an item that had the same content as the original |
| IV Expert Committee | The expert committee responded by reviewing the questionnaire. Their notes were made to achieve equality between source and target versions in four areas: Semantic Equality (Were the words the same or different meanings?) Idiomatic Equality (Did a phrase or idiom formulate with equal expressions in the desired version) and Equivalent Equality (Items were arranged to capture culture and life experiences) and Equivalent Conceptual (words had the same meaning for each respondent). |
| V Test of the Prefinal Version | Before the field test, a pilot study was carried out on 10 respondents to fill out the questionnaire and was interviewed or asked to write down their understanding of the questionnaire to investigate whether the respondent understood the instructions, how to answer, knew the expected response and the reason for the response chosen. Field tests |
were carried out on 120 navy officers. The data was then processed and tested the validity and reliability of the item and the model test. Submitting all reports and presenting them to reviewers to re-check translations and had the expertise to verify that the adaptation stages had been followed, and ensure that instrument were appropriate.

The questionnaire on the SPT instrument was in the form of open-ended questions arising from a story, where respondents were asked to write down their answers and to provide an assessment needed a code book. Analysis of participants' responses to SPT issues identified how respondents performed various SPT actions, which varied in their function and level of integration. SPT as a basic element which is an act of taking the social perspective of another person, based on three types of SPT actions whose function is to: (1) recognize the existence of actors in certain situations; (2) articulating how actors think, feel or tend to behave; and (3) identify their position in the scenario, according to their roles, circumstances, and experiences that can influence how they think and feel about a problem, which is interpreted in the items.

| Indicators | Items | Questions |
|------------|-------|-----------|
| Acknowledge the existence, feelings, and actions to be taken by actors who are similar to the characters in the story | SEC1 | What would Lieutenant Ali suggest to Lieutenant Rina? |
| | SEC2 | Why did Lieutenant Ali suggest that? |
| | SEC3 | Could Lieutenant Ali’s advice be wrong? |
| | SEC4 | What would Corporal Suryo recommend to Corporal Hadi? |
| | SEC5 | Why was Corporal Suryo’s suggestion like that? |
| | SEC6 | Could Corporal Suryo’s recommendation be wrong? |
| Acknowledge the existence, feelings, and actions to be taken by actors who are opponents of the characters | THI1 | What would Lieutenant Herman suggest to Lieutenant Rina? |
| | THI2 | Why was Lieutenant Herman’s suggestion like that? |
| | THI3 | Could Lieutenant Herman’s suggestion be wrong? |
| | THI4 | What would the commander command to Corporal Hadi? |
| | THI5 | Why was the commander's order so? |
| | THI6 | Could the commander's order be wrong? |
| Positioning one’s own existence, feelings and actions | ACT1 | What would you suggest to Lieutenant Rina? |
| | ACT2 | Why did you suggest that? |
| | ACT3 | Could your suggestion be wrong? |
| | ACT4 | What would you suggest to Koptu Hadi? |
| | ACT5 | Why did you suggest that? |
| | ACT6 | Could your suggestion be wrong? |
To get a score, respondents' answers were recorded to be explored both explicit and implicit answers, then categorized by developing a code book which was the result of analysis of existing answers.

Table 3  
Examples of Classification of Answers's respondent of SPT instrument

| Grading Criteria                                                                 | Example Answers                                      | Value |
|----------------------------------------------------------------------------------|------------------------------------------------------|-------|
| Undifferentiated. Individuals cannot clearly distinguish a person's physical or  | Just wanna have fun.                                 | 1     |
| psychological character.                                                          |                                                      |       |
| Differentiated. Individuals are able to predict how other people will react and   | Leo deserved to be tempted.                          | 2     |
| behave based on their perspective.                                               |                                                      |       |
| General views. Emphasis on emotion.                                              |                                                      |       |
| Self-reflective / Second-person. Individuals are able to perceive the second    | No, Ali intended to maintain class cohesiveness.     | 3     |
| person can do something (visible action) that even the respondent does not want  |                                                      |       |
| to do.                                                                            |                                                      |       |
| Third-person. Capable of capturing third-person perspectives with operational     | Hadi asked for permission and told of the emergency  | 4     |
| actions simultaneously with his own perspective (looking at it from two sides)    | conditions encountered so that the commander can     |       |
| In-depth. Individuals consider the perspectives of others by referring to the     | make the right decision.                             |       |
| social environment and cultural origin of others, assuming that others will act in| The lyn vehicle cannot be used for personal purposes, | 5     |
| accordance with the norms and values of their society.                           | but the safety of the child's mother must be a      |       |
|                                                                                 | priority so she must have the courage to ask        |       |
|                                                                                 | permission from the commander                         |       |
The results of the model test with Confirmatory Factors Analysis on the SPT adaptation instrument obtained loading factor values for each item showed a value > 0.5, thus there were no items dropped. All items in the tool trial are valid. Likewise, the results of the calculation of the reliability test show that the indicator was quite reliable.

Table 4

| Indicator | Lambda | T-values | Item Validity | Lambda2 | Error | Construct Reliability | Reliability's Indicator |
|-----------|--------|----------|---------------|---------|-------|------------------------|-------------------------|
| SEC1      | 0.631  | Fit      | Valid         | 0.398   | 0.602 |                        |                         |
| SEC2      | 0.710  | 6.468    | Valid         | 0.504   | 0.496 |                        |                         |
| SEC3      | 0.767  | 6.862    | Valid         | 0.588   | 0.412 |                        |                         |
| SEC4      | 0.714  | 6.493    | Valid         | 0.510   | 0.490 |                        |                         |
| SEC5      | 0.724  | 6.564    | Valid         | 0.524   | 0.476 |                        |                         |
| SEC6      | 0.655  | 6.066    | Valid         | 0.429   | 0.571 |                        |                         |
| THI1      | 0.803  | Fit      | Valid         | 0.645   | 0.355 |                        |                         |
| THI2      | 0.761  | 9.084    | Valid         | 0.579   | 0.421 |                        |                         |
| THI3      | 0.805  | 9.797    | Valid         | 0.648   | 0.352 |                        |                         |
| THI4      | 0.701  | 8.186    | Valid         | 0.491   | 0.509 |                        |                         |
| THI5      | 0.705  | 8.242    | Valid         | 0.497   | 0.503 |                        |                         |
| THI6      | 0.790  | 9.559    | Valid         | 0.624   | 0.376 |                        |                         |

Chi-Square=955.15, df=132, P-value=0.00000, RMSEA=0.232
| ACT | Fit | Valid | 0.638 | 0.362 | 0.883 | Reliable |
|-----|-----|-------|-------|-------|-------|----------|
| ACT2 | 0.809 | 9,827 | Valid | 0.654 | 0.346 |
| ACT3 | 0.712 | 8,319 | Valid | 0.507 | 0.493 |
| ACT4 | 0.665 | 7,649 | Valid | 0.442 | 0.558 |
| ACT5 | 0.722 | 8,472 | Valid | 0.521 | 0.479 |
| ACT6 | 0.765 | 9,119 | Valid | 0.585 | 0.415 |

For the test model with CFA first order data obtained the Goodness of Fit index showed RMR 0.00 <0.05 (fit); GFI 1.00> 0.90 (fit); NFI 1.00> 0.90 (fit); IFI 1.00> 0.90 (fit); and CFI 1.00> 0.90 (fit); so the model can be said to be fit. Thus the instrument is suitable for use in measuring SPT within the Navy.

**Discussion**

In the military environment the command line and hierarchy are more rigorous, so that communication is more one-way. However, with a good SPT ability, an officer of the Navy will be more successful in interpersonal relations, because it can display more trustworthy behavior, both as superiors, as subordinates, and as equal coworkers in positions. The experience of interacting with many environments and diversity of social interactions, gives individuals the opportunity to take on a number of roles and meet the perspectives of others. (R. L. Selman, 1971; Robert L Selman, 1980). By understanding other people's social perspectives, he also has a social awareness of the need to be fair and respectful, and has the capability to negotiate effectively.

For an officer, the ability of the SPT is important to understand the way of thinking of subordinates and is an important factor for overcoming the environment, understanding enemies, local residents and working with elements of the country and with strangers (Strong, Foss, Yager, Metcalf, & Social, 2009 ). The results of interacting with other people's experiences make individuals see what others see, hear what others hear, touch what other people touch, say what others have said, move when others move, and - through narration and drama - feel emotions that are being exhibited (Raij, Kotranza, Lind, & Lok, 2009). But individuals who "care" no more contribute to helping solve the problems of others compared to individuals who are more justice oriented (Lewis & Young, 2000). That is, the ability of the SPT will avoid aggressive behavior and experience to overcome problems by
occupying himself on a par with others and resting his decisions or conclusions on a sense of justice that is universal, not emotional in nature.

The responses to the SPT scenario were analyzed with a focus on how participants responded to each different actor. This method provides the process of generating theories through the existence of different categories. In identifying the SPT ability of respondents, the answers were recorded to explore not only the explicit but also the implicit ones. The answers are then categorized by developing a code book which is the result of an analysis of the existing answers. To compile a code book means that all responses require quite long and repetitive steps, but the results will be more accurate.

The results of the validity and reliability test show that the items that are arranged and in the form of open questions measure what they want to be measured and are reliable. Enright and Lapsley have also conducted a review of the validity and extracts of the SPT instruments used in research in the medical environment, and the results were stated to be quite valid (Enright & Lapsley, 1980). The Enright instrument used is a closed question. The correction and scoring process is easier and does not require the ability to capture the essence of the answers to questions. Respondents are directed more at answers that match their knowledge of ethics in the medical field. For respondents outside the field of medicine, it might be difficult to recognize the problems contained in each item. This consideration encourages the writer to keep using the SPT questionnaire with open questions.

The results of this study are expected to contribute to the building of SPT theory and the instruments that measure it. In this case the setting is indeed specific to the environment in the Indonesian Navy. In addition, based on these findings, the Navy can make regulations in the development of its personnel, especially in preparing officers to become individuals who can understand not only internal problems within the scope of their assignments, but also external assignments when interacting with side units or organizations outside the Navy, even including international communication.

In addition to setting the study limited to personnel within the Navy, this instrument has been through the process of instrument adaptation and statistical testing with validity and reliability test results that meet the requirements, and the test model shows fit results.
Another limitation in using the SPT instrument is that it takes time, costs and labor are quite expensive. Appraisers must also have knowledge and standards in providing assessments of open answers. In this assessment can be very subjective so it is rather difficult to control the assessment, unless there is supervision that checks the results of the scoring appraiser.

The implication of the findings of this study is the need for further research with a development research design, in order to develop tools and also training models to improve the ability of SPT Navy officers. A good instrument will be a differentiator in the ability of every officer. However, the main purpose of this study is not only to measure it, but also as a basis for developing a mechanism for the development of personnel, especially officers in order to have the ability to take the social perspective of others better, develop more positive things, both with superiors, subordinates and colleagues.

Conclusions
Based on the results of the research, the following conclusions are obtained: The instrument of adaptation from social perspective taking Diazgranados cs has valid and reliable items as well as a fit model to be used in measuring the ability of the Navy officer’ SPT.

With this conclusion, some things that can be suggested are: First the findings of this study had contributed to the field of psychology in developing theory and SPT instruments, but development research needs to be done with a more general setting. Second, to use this instrument is necessary to prepare the assessor so that it does not become an obstacle in the scoring process. Many studies have shown that social perspective taking variable gives a good contribution in forming mature individuals so that they are automatically ready to become leaders, not only within the military. Third, the research does not stop only at making instruments, but also develops modules that can develop the capabilities of the Navy officers. This ability is important to identify multicultural understanding and emotional responses that are promoted by parties who are at odds with the country's interests. By having early detection skills of political orientation, racism, or things that threaten national defense, Indonesian navy officers have a strong provision for operational tasks. The teaching material can use curriculum documents, student writing, field notes, journals, reports, and focus group interviews, and research (Burant & Rios, 2010).


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