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Review

Adaptation of quantitative measurement tools to quantitative measurement of possibility

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When correlation between variables is not explicit, data can be collected by adapting the quantitative measurement tools in use for quantitative measurement of possibility, a nonlinear measurement. This adaptation is possible because measurement data can be evaluated more qualitatively using parameters for possibility. These can be defined as regular-symmetric, irregular-symmetric, symmetric with regard to situation at which the distribution begins, event-based symmetric, symmetrical-contiguous, and of symmetrical discrimination, all available using possibility measurement tools. Without modifying the structure of conventional quantitative measurement tools, their pre-measurement adaptation can be carried out, making quantitative possibility measurement tools. This is made possible by converting scale values and scale options of each measurement tool to situation numbers and event numbers. Post-measurement adaptation can be carried out by converting the value measured to a symmetrical situation number. In this study, adaptation techniques and principles will be provided, for conventional quantitative measurement tools which will be classified according to their scale indicators and then used for quantitative measurements of possibility.

Key words: Adaptation of measurement tools, adaptation over scale indicator technique, adaptation over items technique.

INTRODUCTION

With the increase in the importance of possibility within the measurement process, the use of possibility measurement tools started to expand into different disciplines, as well (Mauris, 2013; Ryguła et al., 2018; Hou et al., 2016). To give an example, the possibility measurement tools are used for identifying the lipid markers in medicine (Sumino et al., 2016). Use of possibility in measurement may bring new perspectives into measurement. Use of probability in the evaluation, on the other hand, has the ability to do the same within the scope of evaluation. However, there are various uncertainties and challenges experienced within the scope of using the possibility theories in measurement and evaluation (Ferrero et al., 2014). Some of these challenges are stated as follows, quoted from the study carried out by Ferrero et al. (2014):

"The evaluation and expression of uncertainty in

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> measurement is one of the fundamental issues in measurement science and challenges measurement experts especially when the combined uncertainty has to be evaluated. Recently, a new approach, within the framework of possibility theory, has been proposed to generalize the currently followed probabilistic approach. When possibility distributions are employed to represent random contribution to measurement uncertainty, their combination is still an open problem. This combination is directly related to the construction of the joint possibility distribution, generally performed by means of t-norms."

The first thing to do for eliminating the uncertainties and challenges stated in the respective literature within the scope of possibility measurement and evaluation is the correlation of possibility with measurement and probability with evaluation. In that, since the probability is the ratio of possibilities, it can be identified as the evaluation of measured data. In this case, the probability calculation in education provides us with the "level" within the scope of evaluation on success level or knowledge level.

The second thing to do for eliminating the uncertainties and challenges in measurement and evaluation within the scope of education is to develop measurement tools and evaluation methods with the rules that comply with the possibility theories. The third thing to do for eliminating the uncertainties and challenges in the possibility measurement within education is to carry out measurements by means of adaptation of existing measurement tools with the possibility measurement tools based on the rules that comply with the possibility theories.

In many disciplines, quantitative measurement tools are conventional for the measurement of variables whose correlation is not known. More specifically, when the correlation between dependent and independent variables is unknown, the measurement can be carried out via possibility measurement tools. For this purpose, conventional, linear, quantitative measurement tools whose main use consists simply in the correlation of variables can be applied when converted to nonlinear tools for the quantitative measurement of possibility. This adaptation can be carried out by applying the principles of possibility distribution and of symmetrical possibility.

There are rules and computable equations of symmetrical, regular-symmetrical, and irregular-symmetrical possibilities, along with those for symmetrical possibility regarding the situation at which a distribution begins, and event-based symmetrical possibility. Using these as well as dependent possibility distributions, with and without different arrays, conventional quantitative measurement tools can be adapted, deriving special possibility distributions as described by Yılmaz (2018). Possibility distributions can be obtained with reference to the number of items (or questions) of a measurement tool, its scale options, or its scale value. Probabilities are calculated according to the number of distributions involved, and to the possibility distribution number and the results to be obtained from the measurement. Conventional quantitative measurement tools can be adapted to quantitative possibility measurement tools by obtaining the possibility distributions of measurement results. These possibility distributions can be obtained by correlating the values determined at length of conventional quantitative measurement with symmetrical situation numbers (independent variables of symmetry).

In this study, techniques and principles will be provided for the adaptation of conventional quantitative measurement tools for use in possibility measurement; in particular, techniques and principles which do not require modification in the structure of measurement tools. With these adaptation techniques and principles, both pre-post-adaptation of a measurement tool, and of the measurement results, can be achieved. Adapted measurement tools can be evaluated by information theories or VDOIHI methods (Yılmaz, 2011; Yılmaz and Yalçın, 2011).

ADAPTATION TECHNIQUES AND PRINCIPLES

In different disciplines and according to their preparation style, quantitative measurement tools can be divided into four groups by scale indicators (response options). Their adaptation into quantitative possibility measurement tools can be carried out over the scale indicators and items /questions of these four groups. The four groups are as follows: (1) optional by two situations, (2) multiple-choice, (2) optional from lower limit (0 ≤) to upper limit, and (4) optional from negative limit to positive limit. Values cannot be attributed to some variables (e.g., gender) registered via certain measurement tools: these values indicate the aims or targets of measurement. In cases where values may be attributed to variables (e.g. educational level) measured by certain tools, these tools can be applied for the second group, "optional from lower limit to upper limit", using the measurement scale. There are options with measurement tools, such as those operating by two situations and those by multiple-choice, measuring for true and false. When the options are not appropriate for selection, as with true-false in multiple-choice measurement tools (MCMT), according to the answer options they may be used with either "optional from lower limit to upper limit" types or "optional from negative limit to positive limit" types.

Pre-adaptation of a measurement tool can be carried out by defining the possibility distribution number and independent variables (situation and event number) relative to the tool's item number or to its scale indicator.
Post-adaptation for quantitative possibility measurement

can be carried out by defining the independent variables of symmetry relative to the values obtained via conventional quantitative measurement. In this way, the structure of the conventional tool does not change because the adaptation for possibility measurement can be achieved without modifying items or the measurement scale. The scale indicator of the measurement tool may comprise numeral values or symbols (concepts). Any value on the scale will be termed a “scale value”. A symbol on the scale of the measurement tool will be termed a “scale option”. Without separating the scale value or scale option of the measurement tool, the term “scale indicator” can be used. There is a scale option or a scale value for each item on a measurement tool. This should be true for all the items of measurement tools with particular standards. A measurement tool can only have scale option or scale value. When there is scale option on a measurement tool, all items should have the same number of options. When there is scale value on a measurement tool, all items of the measurement tool should have the same values.

With scale option on a measurement tool, it can be adapted for possibility measurement by digitizing the options. In cases where the measurement tool requires digitizing, the “smallest significant piece (SSP)” method (Yılmaz, 2011) can be utilized. In this method, according to the purpose of the measurement, SSPs can be digitized by scoring. In a binary-basis digital system, the unit of measurement is one bit. In all bases, including binary base, the SSP can be used as a unit for possibility measurement.

Adaptation can be performed by two different techniques. The first of these is “adaptation over items”; the second is “adaptation over scale indicator”. The technique of converting a measurement tool’s item number to an event number will be termed “adaptation over items”. When a scale value is to be converted to an event number, this will be termed “adaptation over scale indicator”. Situation values are determined according to the measurement tool to be adapted, and the adaptation technique. Adaptation over items is performed in order to evaluate all items of a measurement tool together, converting to scale option or binary base. Adaptation over scale indicator is performed in order to evaluate each item of a measurement tool separately, using scale values. Both adaptations can be performed before or after measurement. In pre-measurement adaptation, event and situation numbers are determined for the adaptation to be carried out. Post-measurement adaptation can be performed after converting values to symmetrical situation numbers (that is, to independent variables of symmetry) and determining event and situation numbers. These pre- and post-measurement adaptations can be performed by means of adaptation over items technique or adaptation over scale indicator technique.

When a scale indicator comprises scale option, as when digitization is required, this can be done either by means of SSP or by application of SSP to those numerical values which are in accord with the measurement. Scale indicators from negative limit to positive limit can comprise verbal expressions, so this can be used as scale option in verbal expressions. For example, if such a scale option is to be digitized, there is mesoscale option, from negative limit to positive limit. According to SSP, the mesoscale option can be set at “0”, and each of the scale options to the right is then set at “1”, and each scale option to the left at “-1”. Scale option can be converted to scale value by taking of the scale option score together with the sum of scale options scores which fall between the scale option and the mesoscale option. In sensory analysis of foods, for example, the color of a food can be determined because the scale option can register different tones and /or colors. When such a measurement tool requires digitizing, it can be carried out by scoring tone and / or wavelength values (or ranges) for the colors at “1” and applying SSP.

When a scale indicator comprises scale values for conversion to scale options from lower limit to upper limit, those scale options having importance to each other, numerical values can be used, such as 0 or 1, 2,3, and so on, thus becoming scale values. In this type of conversion, no operations like addition, subtraction, multiplication, or division can be performed using the numeral values. These values may only relate the greatness of one scale option to the other options. If they show no significant correlation in the adaptation, the conversion to scale option can be done by assigning letters, such as a, b, c, and so on. In the conversion to scale option of values from negative limit to positive limit, if the scale options have importance to each other, scale values can be converted to scale options by assigning appropriate numerical values, e.g., -3, -2, -1, 0, 1, 2, 3.

The techniques and principles provided in this paper can be applied for conventional quantitative measurement in order to prepare tools quantitative measurement of possibility. Furthermore, they can be applied either to the measurement tool or to the results obtained. This paper does not provide for structural modification of quantitative tools. Such modifications can be performed by independent preparation (without modification), via principles of possibility, or by using the techniques and principles provided in this study. When a measurement tool has not been structurally modified, it allows pre-measurement adaptation.

Adaptation of measurement tools (AMT): Those using two situations and those using multiple-choice

Since measurement tools using two or more options are prepared for base values equal at base to one true and false, they are binary-basis independent possibility measurement tools. This applies to each item for such measurement tools. Each should have the same number of options within the scope of a given tool. Where the values are binary, such as true or false, no value or symbol affects the adaptation. These measurement tools are binary-based and can be converted to binary-basis independent possibility measurement tools wherein each item presents options such as true and false. Pre- and post-measurement adaptations of these tools can be performed by means of adaptation over items.

Application of adaptation over items for binary basis

Once adapted to binary-basis independent possibility distribution by means of adaptation over items, according to whether the same scale indicator has been measured in the items, post-measurement adaptation can be performed. The resulting binary-basis independent possibility measurement tool is adapted through multiple-choice items by using the obtained values (e.g. number of “trues”) as symmetrical situation values. The scale options selected are determined by means of the measurement in binary-basis independent possibility distributions, since all symmetrical possibilities with the same value are equal. In MCMTs, adaptation of options such as false can be carried out separately for each item. In the adaptation of these measurement tools, the event number is equal to the item number of the measurement tool; the situation number is two. By determining the event numbers, pre-measurement adaptation can be carried out with the same technique, yielding a binary-basis independent possibility measurement tool adapted through multiple-choice items.

After pre- or post-measurement adaptation has been performed for a possibility measurement tool, two different evaluations can be carried out. The first can be carried out via the Shannon Equation, and the second evaluation can be carried out by summing the symmetrical possibilities obtained for each symmetrical situation number, calculating the probabilities via this sum. With symmetrical situation numbers and/or events showing symmetrical situations, measurement data can be evaluated more qualitatively by means of possibility distributions. These include regular-symmetric, irregular-symmetric, symmetric with regard to situation at which the distribution begins, event-based symmetric, symmetrical-contiguous and symmetrical by discrimination. If required, values for probability can be converted to the desired value system (e.g., grades).

AMTs: Those using lower limit and upper limit

Tools using lower limit and upper limit can be adapted to four different types of possibility distributions. These are distributions of independent possibility, binary-basis independent possibility, dependent possibility with or without different arrays (where that for dependent possibility with different arrays takes the number of situations as equal to the number of events). Pre- and post-measurement adaptation of these tools be carried out by means of adaptation over items or by adaptation over scale indicator technique.

Application of adaptation over items with upper and lower limits

Measurement tools to which adaptation over items can be applied will be adapted either to independent possibility distribution or to binary-basis independent possibility distribution. If scale indicators for all items are to be evaluated together, the adaptation will be to independent possibility distribution, letting the event number be equal to the item number. In this kind of adaptation, scale values should be converted to scale option. After this conversion, situation number is equal to scale option number. A measurement tool adapted from use of upper and lower limits to independent possibility distribution can be termed a measurement tool for independent possibility adapted through optional items from lower limit to upper limit. Measurement is performed in order to evaluate all item and scale options together, with scale options selected for the items determined via measurement. With independent probability distributions, since all symmetrical possibilities given the same symmetrical situation number are equal to each other, the scale option numbers can be used as symmetrical situation numbers. Symmetrical possibilities are therefore calculated with symmetrical situation numbers, and evaluation with symmetrical possibilities can be carried out by calculating the probabilities. If the scale options for all items are determined in the measurement, the adaptation will be incorrect for evaluation as the symmetrical possibility will reduce to one.

If scale indicators for all items are to be evaluated separately, the adaptation over items should be to a binary-basis independent possibility distribution, according to whether or not the same scale indicator is measured following the evaluation. A measurement tool adapted from use of upper and lower limits to binary-basis independent possibility distribution can be termed a binary-basis independent possibility measurement tool adapted through optional items from lower limit to upper limit. When the same scale indicator has two situations, such as whether or not it has been measured, binary-basis independent possibility measurement is performed. In the adaptation of these measurement tools, the event number is equal to the item number of the measurement tool. On the other hand, the number of situations is two, determining whether or not the same scale indicator is measured. The same measurement is performed separately for each scale indicator. Since binary-basis independent possibility measurement is performed, the number of items on which the same scale value is measured is equal to the symmetrical situation number. In this kind of measurement, therefore, the evaluation methods suggested for binary-basis independent possibility measurement tools adapted through multiple-choice items can be utilized separately for each scale indicator.

Application of adaptation over scale indicator

Measurement tools can be adapted over scale indicator, to dependent possibility distribution, with or without different arrays, where the number of situations is equal to the number of events. An adaptation whose event number shows the maximum scale value, or its equivalent by scale option, can derive a dependent possibility distribution with different arrays where the number of situations is equal to the number of events. Where the event number will be equal to that of the scale values or of the scale options, it can present a dependent possibility distribution without different arrays.

A measurement tool adapted from use of upper and lower limits to a dependent possibility distribution with different arrays in which the number of situations equals the number of events can be termed a possibility measurement tool with different arrays adapted through optional scale indicators from lower limit to upper limit. The selected scale indicator value determined via measurement, and the scale indicator value to be measured equal to the symmetrical situation number, evaluations can be carried out. This is achieved by calculating symmetrical possibilities in dependent possibility distributions with different arrays where the number of situations equals the number of events.

A measurement tool adapted from use of from upper and lower limits to a dependent possibility distribution without different array can be termed a possibility measurement tool without different array adapted through optional scale indicators from lower limit to upper limit. The value selected for a scale indicator is determined via measurement, and that value is taken as equal to the symmetrical situation number. Evaluations can be carried out by calculating the symmetrical possibilities in distributions without different arrays using symmetrical situation numbers.

AMTs: Those using negative and positive limits

Measurement tools with negative and positive limits can be adapted to four different types of possibility distribution. The distribution types to which this measurement tool can be adapted are independent possibility distribution, binary-basis independent possibility distribution, dependent possibility distribution without different array, and dependent possibility distribution with different array where the number of situations equals the number of events. Pre- and post-measurement adaptation of tools with negative and positive limits can be carried out by adaptation over items or by adaptation over scale indicator. Scale indicators in this kind of measurement tool have either a mesoscale value or a mesoscale option. The mesoscale value or option can be termed the mesoscale indicator. When adapting by means of either technique, the measurement tool can be divided into two halves using the mesoscale indicator. The half which has negative scale indicators can be termed the negative scale indicator, and the other half the positive scale indicator.

Application of adaptation over items

Measurement tools can be adapted using adaptation over items, yielding either independent possibility distributions or binary-basis independent possibility distributions. If the scale indicators of all items are to be evaluated together, the adaptation to independent possibility distribution by means of adaptation over items can be carried out either for the entire scale indicator or for each half. When carried out for the entire scale, the scale indicator is converted to a scale indicator with upper and lower limits, and principles are applied for independent possibility measurement tools adapted through optional items from lower limit to upper limit. Such adapted tools can be termed independent possibility measurement tools adapted through optional items from negative limit to positive limit. In this adaptation, the conversion is done in such a way that the situation number is equal to the scale values number on the scale indicator, or scale options number.

In adaptations to be carried out for either half of a scale indicator, each half is converted separately to scale indicators as for a tool upper and lower limit to limits. Then, principles are applied for independent possibility measurement tools adapted through optional items from lower limit to upper limit. A measurement tool with adapted negative range can be termed an independent possibility measurement tool adapted through optional negative-half items from negative limit to positive limit. In this adaptation, the conversion is done in such a way that the situation number is equal to the scale values number, or to the scale options number on the negative-half scale indicator. Measurement tools with adapted positive ranges can be termed independent possibility measurement tools adapted through optional positive-half items from negative limit to positive limit. In this adaptation, the situation number is equal to the scale values number, or to the scale options number on the positive half scale indicator. As in the evaluation of negative-half measurement tools, evaluations of independent possibility measurement tools adapted through optional items from lower limit to upper limit can be used.

If the scale indicators for all items on a measurement tool are to be evaluated separately, the adaptation is carried out by means of the principles of binary-basis independent possibility measurement tool adapted through optional items from lower limit to upper limit. Measurement tools thus adapted can be termed binary-basis independent possibility measurement tool adapted through optional items from negative limit to positive limit. Evaluation methods suggested for binary-basis independent possibility measurement tools adapted through multiple-choice items can be utilized separately for each scale indicator.

Application of adaptation over scale indicator

The adaptation principles for tools with upper and lower limits by adaptation over scale indicator can be utilized via adaptation over scale indicator, yielding tools showing uniform possibility distribution. These adaptations are carried out either separately for each half or by uniting the scale indicator. If adaptations are to be carried out separately for each half of the scale indicator, each half is converted separately to a scale indicator for tools with upper and lower limits, after which the adaptation of each half is carried out separately. If adaptations are to be carried out by uniting scale indicators, the negative half is converted to scale indicator for optional measurement tools with upper and lower limits. The positive half is converted by uniting both halves of the scale indicator. Thus, in the adaptation of dependent possibility distribution without different arrays, the event number for the positive half is equal to the sum of both halves of the scale indicator, or to the scale values number, or to the scale options number. The situation number, on the other hand, is equal to the sum of maximum values for both halves of the scale indicator, with scale value or values for the scale option. In the adaptation of dependent possibility distributions with different arrays where number of situations equals number of events. For the positive half, the event number is equal to the sum of the maximum values for both halves of the scale indicator, with scale value or values for the scale option. The situation number, on the other hand, is equal to the event number.

Measurement tools whose negative half is adapted to dependent possibility distribution with different arrays where number of situations equals number of events via adaptation over scale indicator, like tools with different arrays adapted through optional scale indicator from lower limit to upper limit, can be termed negative-half possibility measurement tools with different arrays adapted through optional scale indicator from negative limit to positive limit. A measurement tool whose positive half is adapted can be termed a positive-half possibility measurement tool with different arrays adapted through optional scale indicator from negative limit to positive limit.

A measurement tool whose negative half is adapted by uniting its scale indicator to dependent possibility distribution with different arrays where number of situations equals number of events, via adaptation over scale indicator and principles of possibility measurement tools with different arrays adapted through optional scale indicators from lower limit to upper limit can be termed scale-combining negative-half possibility measurement tools with different arrays adapted through optional scale indicator from negative limit to positive limit. A measurement tool whose positive half is adapted by uniting its scale can similarly be termed a scale-combining positive-half possibility measurement tool with different arrays adapted through optional scale indicators from negative limit to positive limit.

A measurement tool whose negative half is adapted to dependent possibility distribution without different arrays via adaptation over scale indicator by means of principles for possibility measurement tools without different arrays adapted through optional scale indicators from lower limit to upper limit can be termed a negative-half possibility measurement tool without different arrays adapted through optional scale indicators from negative limit to positive limit. A tool whose positive half is adapted can likewise be termed a positive-half possibility measurement tool without different array adapted through optional scale indicator from negative limit to positive limit. A measurement tool whose negative half is adapted by uniting its scale indicators to a dependent possibility distribution without different arrays via adaptation over scale indicator by means of principles for possibility measurement tools without different arrays adapted through optional scale indicators from lower limit to upper limit can be termed a scale-combining negative-half possibility measurement tool without different arrays adapted through optional scale indicators from negative limit to positive limit. A measurement tool whose positive half is adapted by uniting its scale indicator can be termed a scale-combining positive-half possibility measurement tool without different arrays adapted through optional scale indicators from negative limit to positive limit.

DISCUSSION

Workers in different disciplines can more easily interpret measurement results as provided by re-classifying measurement tools and adapting them for possibility measurement by means of two techniques. Better interdisciplinary interaction may thus be positively established. Conventional quantitative measurement tools can be adapted for measurement of possibility by means of techniques and principles provided in this study. Quantitative possibility measurement tools can be used with every measurement available via conventional quantitative measurement tools. In areas where correlations and/or equations between dependent and independent variables are not explicit, possibility measurement tools can be utilized as well as other measurement methods and tools. Quantitative possibility measurement tools can be used, above all, in measurements featuring nonlinear expectation of correlations and/or equations between dependent and independent variables.

Depending which possibility distribution type which the measurement tool will be adapted to, items or scale value/ scale options of conventional quantitative measurement tools are adapted to the event and situation number and to the independent variables of symmetry. Being at measured values of the tool, no structural modification of the conventional quantitative measurement tools is required. Therefore, without modifying their structure, conventional quantitative measurement tools can be adapted for quantitative possibility measurement. Measurement can be performed via possibility measurement tools after the measurement tool is adapted, and also the measurement tool and the results can be adapted after the measurement. Thus, nonlinear correlation between variables can be determined via probability measurement tools in fields where quantitative possibility measurement tools are used. Two different evaluation methods can be used in quantitative possibility measurement tools. The first of these; is a two-way probabilistic evaluation method classified VDOIHI (Yılmaz, 2011; Yılmaz and Yalçın, 2011). In the other evaluation method, the information contents can be determined by means of the Shannon equation. Different measurement tools can provide a new dimension to both measurement and evaluation. These new dimensions play a role in qualifying education and training. Individual-centered and knowledge-centered evaluations can be made with different measurement tools. Possibility measurement tools provide knowledge - centered evaluations due to their nature.

Measurement tools with the same structure can be named differently in different disciplines. Thanks to the re-classification of those used under different names in different disciplines by means of scale indicators, measurement results can be interpreted more easily by workers in different disciplines. The names provided in this study can be used for this classification of measurement tools of the same structure. Accordingly, interdisciplinary interaction can be improved.

Quantitative possibility measurement tools can be utilized in disciplines where problems and uncertainties occur in the course of measurement. Although nonlinear correlations can be determined via quantitative possibility measurement tools obtained by means of adaptation, certain problems with a conventional quantitative measurement tools can be transferred to its corresponding possibility measurement tool. For example, with multiple-choice tools, all the other options apart a correct option have one meaning for the measurement. In quantitative measurements, the interpretation of all options of a MCMT can be done using quantitative possibility measurement tools prepared without adaptation.

Whether dependent or independent variables will be measured determines the proper methods and tools of measurement. Therefore, the variables to be measured should be determined before initiating the measurement. In the measurement of variables, linear or nonlinear measurement tool selection is important. The same variable can be measured via linear measurement tools or nonlinear tools. Tool selection depends on measurement purpose. The proper measurement tool should be used for a purpose.

In the evaluation of measurements performed for individual items, items can be united in the sum of probabilities, and the distributions of the items can be united as well. These operations are carried out by means of evaluation techniques. Use of possibility measurement tools in education may bring new perspectives into measurement in education. Use of probability methods in the evaluation, on the other hand, has the ability to do the same in education within the scope of evaluation process. Measurement and evaluation methods that comply with the possibility and probability theories can also bring new perspectives into the teaching methods. Utilizing the Shannon equations with regards to probability calculations, new methods can be developed for data identification (Chen et al., 2019; Elerman, 2018). However, the Shannon equation can be used for identification of two-possibility data. Possibility theories of bases larger than two for identifying the data in bases bigger than two-possibility basis. New perspectives can also be brought for education teaching methods using the data to be collected through possibility measurement tools which can be developed using the rules of possibility theories of bases bigger than two. Through the adaptation rules of quantitative measurement tools in this study into the possibility measurement tools, the uncertainties and challenges experienced in possibility measurement tools can be minimized. Through the data to be obtained with the possibility measurement tools which are projected to be established with the rules in this study, new perspectives can be brought into the teaching methods.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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