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Blue-Collar Workers Entrepreneurial Intentions and The Extended Theory of Reasoned Action: Incorporating SEM and Person-Item Map Analysis

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ABSTRACT

Introduction/Main Objectives: Blue-collar workers face major threats related to the development and application of Industry 4.0. Unfortunately, research on how they deal with this situation is scarce in the behavioral science literature. In this study, we attempt to fill this gap by emphasizing a methodological aspect of combining structural equation modeling (SEM) and person-item map analysis to the extended model of the theory of reasoned action. **Novelty and Methods:** We offer the notion of combining SEM and Rasch model analysis to explain the extended of theory of reasoned action. The respondents were blue-collar workers from Indonesia who have not yet started a business. **Finding/Results:** In line with our goal of applying intersubjective certification to the extended theory of reasoned action (TRA) model in the context of blue-collar workers, our results suggest that religiosity affects entrepreneurial intentions, both directly and indirectly, through attitude. The subjective norms have also been shown to influence the intention of blue-collar workers to become entrepreneurs. The extended TRA model has been proven empirically to have good predictive power, with a total effect of 83%. **Conclusion:** Regarding the sample issue, the person-item map is excellent for explaining our SEM-based findings. The idea of combining the Rasch model property, which is a persons-items map, requires more empirical support to promote its ability to illuminate SEM-based research explanations.

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INTRODUCTION

In the community, blue-collar workers face enormous impacts from the developments caused by the Industrial Revolution 4.0 (IR 4.0) in their careers. Why? Because labor activities are mechanical in the production/process chain and will be replaced by intellectual activities, viz. the routine automation by smart machine (Bogoviz, Osipov, Chistyakova, & Borisov, 2019). This replacement is an IR 4.0 practice based on a behavioral conceptual approach where the interaction of the subjects (humans) with the objects (machines) is transformed into the interaction between machines (Sukhodolov, 2019). The "cyber-physical systems" or automatized machines and processing centers, when connected to the internet (Pozdnyakova, Golikov, Peters, & Morozova, 2019)are capable of working massively, precisely, dynamically, and responsively by being connected through the Internet of Things (IoT). Indeed, new professions may arise from the development of IR 4.0. However, the skills and knowledge needed and the boundaries attached to them (viz. time), make it difficult for blue-collar workers to master them immediately. Wisely, blue-collar workers must prepare for a new profession, namely nascent entrepreneurs, while they have not yet left their present jobs. Therefore, it is vital to know how the entrepreneurial intentions of blue-collar workers formed, and what factors might prove to have had a significant influence of this formation.

In thescientific literature, the theory of reasoned action (TRA) has been widely used by researchers to predict human behavior. Pure components of TRA predict one's intention to buy halal food (Lada, Harvey Tanakinjal, & Amin, 2009);TRA with the moderating role of ethical ideology on the influence of attitude, as well as the moderating role of low self-control and public self-awareness on the influence of subjective norms, predicts one's intention to commit software piracy (Aleassa, Pearson, & McClurg, 2011); TRA with a spirituality/ religiosity consideration influences the intention to delay breast cancer screening (Gullatte, 2006).This theory is based on the assumption that humans behave using rational considerations based on their attitudes and the social pressures they perceive. If it is associated with religiosity only, this theory has succeeded in gaining empirical support from the context of hijab-wearing behavior (Wibowo, 2017), although it was mediated by attitude. If religiosity, alone, was tested with attitudes and behavior, Wibowo and Masitoh (2018) found that, in addition to the attitudes and behavior influenced by religiosity, religiosity had also eliminated the relationship between attitudes and behavior.

Regarding the topic of nascent entrepreneurs, we argue that starting a business when still in a job is different from starting a business when one is unemployed. Blue-collar workers have a time lag that minimizes their bounded rationality. Their response to the macro-environment becomes increasingly more rational. They can gather valuable information through their cognitive capacity. Furthermore, we were also motivated to continue and deepen our previous structural equation modeling (SEM)-based work (Wibowo, 2017) by re-examining the model in different settings and giving an additional analysis of the persons-items map. With this context and motivation, we chose the extended TRA model to explain the phenomenon. We also focused on the technical discussion about the application and the incorporation of two quantitative models, viz. SEM and the Rasch model.

Next, we formulated the research questions as follows, one, whether the extended TRA model can better predict variations in the intention to start a business? Two, does

incorporating SEM and the Rasch model provide a better explanation of the model's prescriptive ability? Therefore, the purpose of this research is to re-examine the extended TRA model in the blue-collar workers' setting and to generate prescriptive insights of the verified SEM model by explicating the chosen independent variable with the Rasch model. We expect our work will contribute to the development of TRA with a faith-based orientation. We try to model the psychological decision process that includes one's faith consideration, which has robustness (due to TRA) and parsimony (against the novel TRA, viz. the reasoned action approach (Fishbein & Ajzen, 2010).

LITERATURE REVIEW

a. Entrepreneurial intention and the theory of reasoned action (TRA)

Behavioral intentions, an element of TRA, are closely related to one's actual behavior. Many researchers apply TRA with adequate discussion studies that involve measuring people's attitudes, perceptions, and opinions, but they can only measure intentions. The separation of intention and behavior is plausible because implementing TRA as a complete model requires gathering data from the same person twice. The aim is to confirm the intention to behave with the actual behavior. Even so, pragmatism in applying this theory has dominated and contributed mainly to the development of behavioral science.

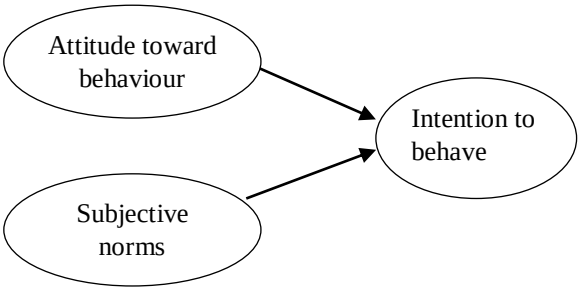

Figure 1. Theory of reasoned action (TRA)
Source: Adapted from Fishbein & Ajzen (1975a)

The intention refers to one's location within the dimension of subjective probability involving the relationship between him/herself and an action. Therefore, the intention to behave is a person's subjective probability that he/she will do something (Fishbein & Ajzen, 1975b). Meanwhile, attitude is the evaluation of positive or negative beliefs or feelings about something (Fishbein & Ajzen, 1975a). We define the attitude toward entrepreneurship as an evaluative tendency toward entrepreneurship, based on the belief in the results obtained. Meanwhile, subjective norms are the respondent's perception of other people's opinions about particular objects. Ajzen (2012) stated that subjective norms are a person's perception of the social stresses he/she faces related to behavior. In this study, the object in question was entrepreneurial behavior that is influenced by social pressure or someone's perception of the expectations of others to behave in certain ways.

b. Religiosity Influence on the Entrepreneurial Intention

Johnson, Jang, Larson, and Li (2001)argued that religiosity is the level at which a person is committed to his/her religion and its teachings, because one's attitude and behavior reflect this commitment. Religiosity has a personal dimension (Slater, Hall, & Edwards, 2001) and represents a person's real relationship with holiness. However, Souiden and Rani (2015), stated that the term religiosity shows someone's respect for their religion. According to El-Menouars' (2014) work, religiosity refers to a person's conformance with religious teachings, which are a reflection of basic beliefs, understanding the main tasks, spiritual experience, knowledge, and orthopraxis.

Many researchers have obtained empirical support for the influence of religiosity on attitudes and intentions. Religiosity influences

the intention to take Islamic loans (Syed Shah Alam, Janor, Aniza, & Wel, 2012); to act out asexual fantasy (Ahrold, Farmer, Trapnell, & Meston, 2011); to support legal abortion (Barkan, 2014); to go to the gaming destination, e.g. Las Vegas. However, religiosity is not related to the intention to become a gang member (McKenzie, 2012). Meanwhile, Shakona (2013) and Wibowo (2017)found that attitude purely mediates the effect of religiosity on intention. However, this mediating role is not always supported even though religiosity influences attitudes and intentions (Wibowo & Masitoh, 2018).

We argue that the values taught in Islam such as one's offspring inheriting one's properties and wealth, giving help to the poor (Al-Bukhari No. 590, n.d.); the belief that Allah is watching and nearby when we serve Him, paying the zakat and perform the Hajj (Nawawi No. 2, n.d.); etc., when socialized adequately to someone, in turn, will provide a basis for others to behave in a certain way. In this case, the behavior in question is entrepreneurial behavior when someone still has a job. Therefore, the level of conformance of a person with Islamic teachings will be both directly or indirectly correlated to his/her intention to decide entrepreneurial behavior. Empirically, in the consistent hijab-wearing behavior's setting, one's religious conformance can lead to the intention to match one's behavior with religious hijab-wearing values (Wibowo & Masitoh, 2018).

Attitude is an evaluative tendency of hijab-wearing behavior, based on one's belief in the results obtained, and it leads to a person favoring a certain direction in the form of judgment, agreeing-disagreeing, or positives-negatives. It is a person's evaluation, whether positive or negative and their beliefs or feelings (Fishbein & Ajzen, 1975). This study argues that one's religiosity provides input to one's belief in an object, for example, hijab-wearing behavior and/or its effects, and in which it becomes the basis of one's attitude. Empirical evidence that supports this argument can be found in Abou-Youssef et al., (2015);); Al Jahwari (2015); Graafland (2015); Schouten and Graafland (2014); Souiden and Rani (2015); Shakona 2013; (Wibowo, 2017).

All the empirical research, reinforces the argument of the positive influence of religiosity on attitudes and on the intention to behave a certain way. Therefore, we proposed the following hypotheses:

H1. Religiosity has positive influences on the entrepreneurial intentions of blue-collar workers

H2. Religiosity has positive influences on the blue-collar workers' attitude toward entrepreneurial behavior

c. Attitude's Influence on Entrepreneurial Intention

Attitude is divided into two categories (Fishbein & Ajzen, 1975a): attitude toward objects and attitude toward behavior. Meanwhile, Azwar (2013) stated that attitude is an evaluative response, it means that attitude arises based on the evaluation process of the individual who assigns conclusions (Lada et al., 2009) to the stimulus in the form of good or bad, positive or negative, and pleasant or unpleasant. This then creates a potential reaction toward the object. The attitude toward the act of entrepreneurship is the focus of this research, which is defined as an evaluative tendency toward entrepreneurship based on the belief in the results obtained.

Generation Y's attitudes have proven to influence the intention to buy halal products (Khalek & Ismail, 2015), to take sharia mortgages (Alam, Janor, Zanariah, & Ahsan, 2012), and to stay at sharia hotels (Shakona,

2013). Attitudes also affect the intention to become a customer of Islamic banks (Souiden & Rani, 2015). Furthermore, in the context of the intention to hijack digital material, attitudes towards piracy also have a positive effect (Yoon, 2011). More specifically, Schouten and Graafland (2014) revealed that some dimensions of the attitude towards corporate social responsibility (CSR) have a positive impact on some of the behavior in executing CSR.

All the empirical research provides support for the positive influence of attitude on the intention to behave in a certain way. Therefore, we proposed the following hypothesis:

H3. Attitudehas positive influences on blue-collar workers' entrepreneurial intentions

d. *Subjective Norm's Influence on Entrepreneurial Intention*

Subjective norms are the respondents' perceptions of other people's opinions about certain objects. Ajzen (2012) stated that subjective norms are a person's perception of the social stresses he or she faces related to his/her behavior. In this study, the object in question was entrepreneurial behavior, which is influenced by social pressure or someone's perception of the expectations of others to behave in certain ways. A number of studies have been conducted to test the significance of this influence. For example, Lada et al. (2009) found that subjective norms influenced the intention to buy halal products, and Khalek and Ismail (2015) found that subjective norms influenced Generation Y to buy halal food. The influence of subjective norms on the intention to hijack digital material is also significant (Yoon, 2011). However, subjective norms are not proven to have any effect on the intention to use Islamic financial systems (Syed Shah Alam et al., 2012).

The information about important social actors for the respondents was, obtained from interviews with 20 of the respondents. Statements from the respondents revealed that the important social actors for blue-collar workers were their parents, lecturers, spouses, and workmates and that these people influenced the respondents' decisions to become entrepreneurs. This condition is consistent with some of the research described and is therefore worthy of testing.

H4. Subjective norms influence the entrepreneurial intentions of blue-collar workers

Some researchers argue that religiosity is a mono dimensional construct, but many of them agree that it is multidimensional (Souiden & Rani, 2015). However, it seems that some researchers preferred to apply religiosity as a single construct (see JOHNSON et al. (2001), Shakona (2013), Barkan (2014), Al Jahwari (2015), etc.) particularly when the research model has a great deal of complexity. Moreover, religiosity also does not, as yet have a general definition which is accepted by the scientific community. Religiosity is considered to consist of many concepts that may be related to each other in different ways (Mahudin, Noor, Dzulkifli, & Janon, 2016). A theologist would say that religiosity is faith; psychologists would consider it to be piety; and, for sociologists, it is considered membership (Holdcroft, 2006). Furthermore, scientific perspectives from various established disciplines contribute to this complexity.

Religiosity is the basis for one's beliefs about an object (Wibowo & Masitoh, 2018), which can also be interpreted as being very likely to influence the way people judge an object, i.e. the attitude toward entrepreneurship. Religiosity is not related to the perspective of others, including how one perceives this perspective to be, i.e.

subjective norms. We argue the values taught in Islam, such as independency, helping the poor, and perfecting work, when socialized adequately to someone, will in turn, provide a basis for one to have an attitude to them, and behave in a certain way.

Our argument can be seen in the research framework depicted in Figure 2.

e. Why the Rasch Model?

Rasch's model is the implementation of a new paradigm of measurement in marketing (Salzberger & Koller, 2013). This statement is correct, in the broader context of measurements related to the latent variables in many disciplines. For nearly half a century, latent variables such as attitudes, opinions, and perceptions were measured with the assumption that the results can be calculated as interval data types, and are on a continuum. Even measurements using a Likert scale produce ordinal-type data, but we take it for granted and consider it to be an interval data type. Therefore, the distance between strongly agree and agree (5 minus 4) is the same as the distance between disagree and strongly disagree (2 minus 1), which is one interval. The Rasch model can restore data according to its natural conditions (Sumintono & Widhiarso, 2016). For example, human attitudes that are naturally continuous and become discrete when measured on a Likert scale are then transformed using continuous probabilities. Interestingly, the Rasch model can also distinguish the differing abilities of respondents who have the same total score (Sumintono & Widhiarso, 2016).

We offer the notion of combining SEM with the Rasch model. In SEM, the researcher must determine what variables scientifically represent the phenomenon of the problem. Then, theoretical and empirical support is sought for the preceding variables up to the earliest variable (independent variable). The explanation chain can be stated even more simply by starting at the end (HUNT, 1991). Once the pattern of relationships between variables is verified, the model must be confidently applied by conducting additional research that cannot be generalized, i.e. qualitative research. The Rasch model provides generalizability and can perform as an alternative to qualitative research.

The Rasch model can provide a thorough overview of the ability of the respondents and the level of difficulty of items to agree on. We can visually calibrate the position of each measure side by side using a persons-items map. The calibration between responses and items offers great potential sources to provide an adequate explanation of SEM-based research. We analyzed all the indicators, even if those indicators were omitted for the goodness of fit in SEM-based research. As the Rasch model

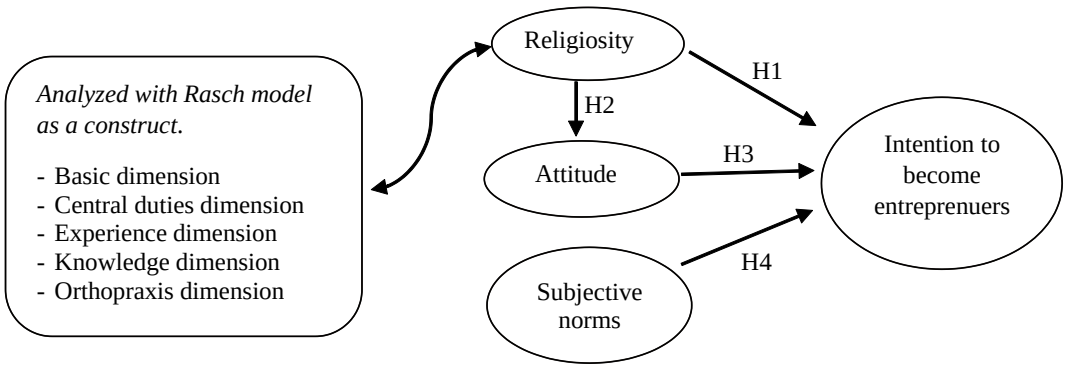

Figure 2. Research Framework

assumes the measured construct is mono dimensional and was adapted to the context of this study, we chose religiosity as an important variable to obtain valuable information regarding the extended TRA model).

METHOD, DATA, AND ANALYSIS

a. Data and measurement

This study took place in the following four cities and four districts of Indonesia: Serang City, Serang Regency, Cilegon City, Pandeglang Regency, Lebak Regency, Tangerang City, Tangerang Regency, and South Tangerang City. We collected data by purposive sampling based on the following criteria: blue-collar workers who have not yet started a business, Muslim males and females whose religion was proven by their ID cards or personal recognition. A total of 474 respondents completed the questionnaire but only 459 were accepted, the rest were rejected for incomplete biodata (i.e., sex and age). The Mahalanobis distance (MD) for multivariate outlier detection (probabilities of MD is smaller than 0.001, Grande, 2015) resulted in the elimination of a further 23 respondents; therefore, the final total number of respondents was 436.

Observations on several respondents were carried out physically. Unstructured interviews with 20 respondents were carried out in a classroom, and the process was kept confidential from the other respondents. Questionnaires were distributed and filled out by the respondents. Religiosity variables were measured using a scale from El-Menouar (2014).The attitude toward entrepreneurship, subjective norms and entrepreneurial intention was measured by adapting the scale of Ajzen (2010). Particularly, for thesubjective norms, the interview revealed parents, spouses, boyfriends/girlfriends, lecturers, and co-workers as the important social actors of the 20 respondents. The indicators are quantified using a commensurate Likert score with a score of 1 to 5, where 1 = *strongly disagree*, 2 = *disagree*, 3 = *doubt*, 4 = *agree*, 5 = *strongly agree***.**

b. Structural equation modeling

LISREL 8.54 was utilized to apply the convergent validity testing with confirmatory factor analysis(CFA), in which the latent variables had sufficient convergence if the minimum factor loading value of each item or indicator was 0.5: ideally 0.7 or higher(Hair Jr., Black, Babin, & Anderson, 2014).Because there was an exploratory element by including indicators of the sample's religiosity, we do a factor analysis before the SEM (see appendix). Moreover, the scale of religiosity that was used(El-Menouar, 2014) still left room for modification. The discriminant validity was obtained when the inter-constructs squared-correlations were less than the average variance extracted (AVE) of the construct. Reliability was tested by the composite reliability (CR) value, with a cut off greater than 0.70, and AVE, with a cut-off value of 0.5 (Hair Jr. et al., 2014). The results of the goodness of fit (GoF) test of the structural model using the root mean square error of approximation (RMSEA) value criteria of < 0.08, and normed fit index (NFI), non-normed fit index NNFI, comparative fit index (CFI), incremental fit index (IFI), relative fit index (RFI), and goodness of fit index (GFI) each should be above 0.9. The absence of agreement on the absolute GoF criteria of SEM (Wijanto, 2008) underlies the selection of seven GoF criteria in this study. Acceptance or rejection of the research's hypothesizes were determined by the significance of the path coefficients in the structural model. A significant path existed when the value of the t-statistics > 1.96 at significance level α = 5%. The latent variable score (LVS) was used to both simplify the religiosity construct and maintain the representation of each dimension.

c. Rasch model

To calibrate between response and item, we used one of the Rasch model's properties, namely person-item/Wright's map. In the Rasch model, validity is evidence gathered to support the inferences made from responses to explicate the meaningfulness of a measured construct through examining the person fit, item fit, and item and person ordering and the like (Bond & Fox, 2015). Further, validity is determined by looking at INFIT and OUTFIT mean square (MNSQ) scores, dus INFIT and OUTFIT z standardized (ZSTD). The scores to be declared valid for these four (two each, for person and item) criteria are as follows: 0.5 <MNSQ <1.5, conformity of accepted z test values -2.0 <ZSTD <2.0 (Sumintono & Widhiarso, 2016). Reliability in the Rasch model comprised of three elements: the reliability of the person, the items, and the results of the interaction between the response and the item, i.e. Cronbach's alpha. The cut off for the three types of reliability should be greater than 0.6 (Sumintono & Widhiarso, 2014).

We analyzed religiosity as the chosen variable, which consisted of five dimensions. In the SEM model, religiosity's dimensions were transformed into indicators for religiosity's constructs by the LVS technique. This was because we examined the effect of religiosity rather than the influence of its constituent dimensions. However, the Rasch model requires that the analyzed variables be mono dimensional. Based on this assumption, we re-analyzed all the indicators of religiosity, including both the existing indicators and those that were eliminated to achieve a SEM model fit. On the person-item map, we still showed the remaining indicators of religiosity in the structural model with red colors.

RESULT AND DISCUSSION

a. SEM results

We obtained satisfactory results for the convergent validity test with only the valid manifest variables which are shown in Table 1 (see appendix), and we also had excellent construct reliability which was higher than 0.7 (Hair Jr. et al., 2014).The latent variable technique (LVS) (Wijanto, 2008) transformed five dimensions into five indicators, namely basic, central duties (Cendut), experience (Exprn) knowledge, and orthopraxis. The last two were not valid and thus eliminated from the measurement model. Table 2 (see appendix) shows that the discriminant validity test results were satisfactory because all the average variance extracted (AVE) values of every variable exceeded the squared correlation

Table 4. Hypotheses test results

Hypothesis	Path	Estimate	Std. Solution	t stats.	Decision
H1	Religiosity➔Entrepreneural intention	0.3	0.25	4.16	Accepted
H2	Religiosity➔ Attitude	0.46	0.42	6.66	Accepted
H3	Attitude➔ Entrepreneurial intention	0.2	0.18	3.34	Accepted
H4	Subjective norm➔ Entrepreneurial intention	0.38	0.32	6.2	Accepted

Source: Data analyzed

between variables (Hair Jr. et al., 2014). Table 3 (see appendix) shows the values of all the goodness of fit criteria, with scores higher than 0.9 (Hair Jr. et al., 2014).These results indicated that the empirical data matched the theoretical sample model proposed.

Table 4 shows the results of the hypotheses tests using a significance level of 0.05 and the yields on the values of the t-statistics, all of which were above 1.96. These results indicated the rejection of the null hypothesis, in other words, the alternative hypothesis was accepted (Hair Jr. et al., 2014).All the proposed hypotheses empirically supported and were based on the standardized scores solution, religiosity's influence on attitude had the greatest path score.

As shown in Table 5 (see appendix), the total influence from religiosity and the subjective norms intention was very high, at 0.83. The effect of religiosity, both directly and indirectly, on the intention to behave, was combined with the effect of attitude, and the result was 0.33 + 0.18= 0.51. This result also showed that the proposed theoretical model efficiently aids in the prediction of human behavior

b. Rasch model results

Person-item map

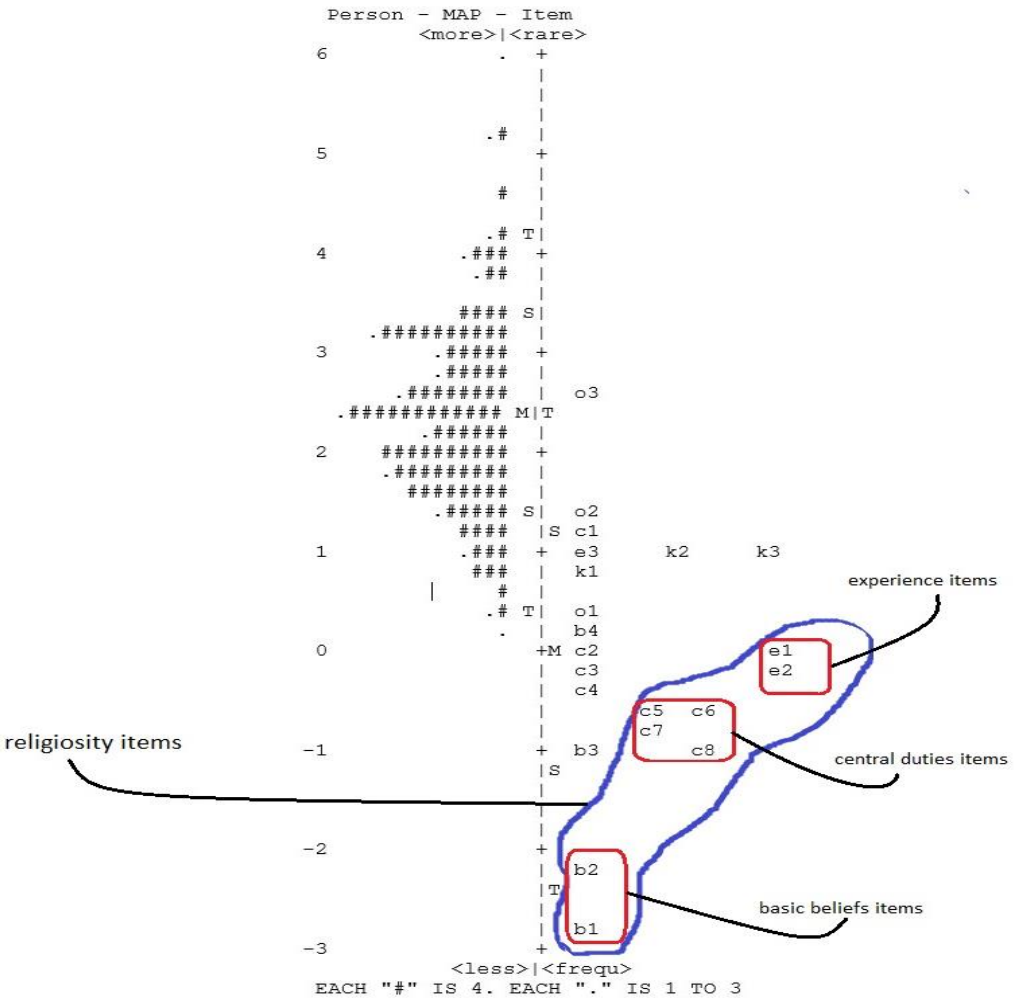

Figure 3 Persons-items map
Source: Data analyzed

Figure 3 depicts the raw calibration of the logit measure between the respondents on the left side, and items on the right side. Responses and items inside the red lines are outliers based on the following formula: mean (M) plus/minus the standard deviation (S). For more detailed results, please see Table 6 and Table 7 (appendix). This map shows that the average respondents' ability to approve (M person = 2.36) was higher than the mean item difficulty level (M item = 0). Items inside the blue line, i.e., b1, b2, c5, c6, c7, c8, e1, e2, are the items that make up the religiosity construct in the SEM's structural model. In general, the map shows that the level of religiosity of the respondents was exceptionally high compared to what can be measured by the items. Ideally, the person and items have the same mean values zero.

Visually, we declared o3 (a Muslim is not allowed to listen to music) was the item that was most difficult for respondents to agree on. Along with o3, o2 (I avoid handshakes with people of the opposite sex), b2 (I'm sure Allah is close), b1 (I believe Allah exists) were outliers due to their position on the logit ruler which were higher/lower than average (M) plus/minus standard deviation (T). In particular, items inside the blue line, which in SEM were valid measures for the religiosity variable, in the Rasch model, b1 and b2 were easy to approve of, even for the respondent with the lowest religiosity, viz. no.43 with code 043fF6#. It means b1 and b2 were unable to differentiate between the respondents, based on their religiosity.

c. Validity and reliability

Table 8 (see appendix) shows that the validity of the person was very satisfying because the INFIT MNSQ and OUTFIT MNSQ values were in the range of 0.5 <MNSQ <1.5, namely 1.06 and 1.02. Likewise, the values for INFIT ZSTD and OUTFIT ZSTD were in the range of -2.0 <ZSTD <2.0, i.e. 0.1 and -0.1. This meant the quality of the respondents was excellent. In other words, the empirical data pattern fitted the ideal pattern proposed by the Rasch model. The same thing also happened to the instrument items, with the values of INFIT MNSQ 0.99 and OUTFIT MNSQ 1.02, and INFIT ZSTD -0.6 and OUTFIT ZSTD 0.0. Overall, the items on a religious scale had good validity. For the reliability of people, respondent no. 435 answered "very agree" to all the items. Therefore, he (number 435, code 435mS1#) was declared an outlier. However, the reliability of this person, as part of a group (consisting of 435 people plus himself) was equally good, which was 0.83.The item reliability score was 0.99. The Cronbach's alpha value was 0.82. In this study, the respondents and items had satisfactory reliability.

d. Discussion

In fulfilling the first research purpose, based on the verified extended TRA model in the context of blue-collar workers, we determined that religiosity affected entrepreneurial intentions both directly and indirectly. Slightly different from our first attempt (Wibowo, 2017) in the context of hijab-wearing behavior, which only received support for its indirect influence. Blue-collar workers' religiosity plays a crucial role in shaping a positive attitude toward entrepreneurial behavior, once they have the intention to start.

This finding supports our results in the context of wearing the hijab (Wibowo & Masitoh, 2018). This support is in the form of verifying the direct influence of religiosity on attitudes and intentions. Nonetheless, our findings contradict Wibowo & Masitoh (2018), who found no support for a mediating relationship between attitudes toward the

influence of religiosity on intention. Some studies have only found a single influence (i.e., attitude not directly affecting the intention to behave; (Souiden & Rani, 2015)(Wibowo, 2017)), or no influence on attitude (Syed. S. Alam et al., 2012). The results of this study are slightly different from Wibowo and Masitoh (2018), who found that attitudes are not related to behavior when the variable of religiosity directly affects both.

As for the influence of subjective norms on entrepreneurial intentions, the results of this study provide support for the argument that, in forming entrepreneurial intentions, social pressure from people who have an interest in the respondent had a significant influence. The effect of this pressure was lower (-0.01) than the effect of religiosity. Our findings support previous empirical findings in the context of software piracy (Aleassa et al., 2011)and travel to gaming destinations, e.g. Las Vegas (Al Jahwari, 2015). However, the results of this study contradict research in Turkey (Bektaş, 2011),despite having a similar model. It was likely that those with a professional background could distinguish and control perceptions regarding the social pressure they receive.

Therefore, the extended TRA model in this study proved to be reliable in predicting entrepreneurial intentions with the addition of religiosity. The test results of all the hypotheses supported the argument of the TRA expansion model in this study, paving the way for its use as an inter subjectively certifiable item (HUNT, 1991) in other contexts. Although SEM is an explanatory model, an adequate explanation has the potential to be a prediction, or vice versa (HUNT, 1991).

For the second research purpose, we incorporated the application of SEM and the Rasch model to gain additional prescriptive insights from the verified extended TRA model. Applying the person-item map analysis to religiosity showed us that the level of religiosity of the respondents was exceptionally high compared to what can be measured by the items. Our respondents likely held a social desirability bias, based on the means distance of persons measure to the items measure in persons-items map. Unfortunately, to verify this one by one is very difficult, because we did a paper-based self-administered data collection. Future studies should note this.

Furthermore, we argue that the variation in the dependent variable, which indeed originates from the variation of the independent variables, can be better explained by providing an in-depth analysis of the variation of the independent variable. By analyzing critical independent variables -if more than one- we can provide a more precise explanation regarding the results of our hypotheses testing. In this study, the independent variable of concern was religiosity, which consisted of items: b1 (I believe Allah exists),b2 (I'm sure Allah is close),c8(I want to go on hajj), c7(I always pay zakat fitrah), c5 (I fasted in the month of Ramadan), c6 (I always try to eat halal food), e2 (I once felt guided by Allah when facing problems),e1 (I feel blessed by Allah). These items were arranged from the easiest to the most difficult to agree on.

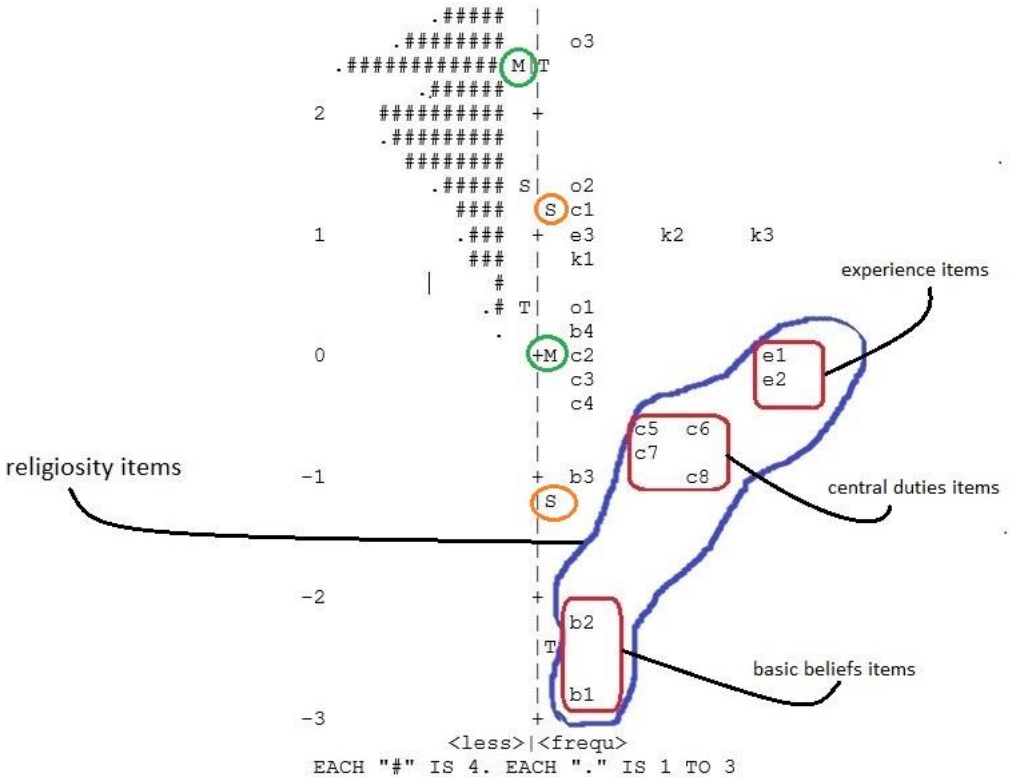

Figure 4 Cropped from figure 3
Source: Data calculated

Figure 4 shows that all the religiosity items in SEM were surrounded by a blue line. Then we see that the dimensions of experience, central tasks, and basic beliefs are grouped according to the level of difficulty in finding agreement about them. Remember, according to the Rasch model, items b1 and b2 were outliers because the position of the difficulty level was outside the standard deviation (S with the orange circle). But in SEM after LVS was done, these items were the compilers of basic belief. A basic belief is a valid manifest variable representing religiosity along with central duties and experiences. We can state that the chosen items for the dimension of religiosity were, grouped according to the level of difficulty of agreement about them. This is why we used all the items of religiosity in the analysis by the Rasch model. In this way, we can find out which items, according to the SEM and the Rasch model, represent the validity of the latent variables.

We obtained high-value serendipitous results from combining the SEM and Rasch models. The LVS technique converts the dimensions of religiosity into the manifest variables of religiosity, meaning that there was a change in the shape and quality of the variations of a number of manifest variables into one dimension. However, the empirical evidence in Figure 4 shows that a decrease in the quality of the variation does not occur. Manifest variables which represented their dimensions were grouping well (have close distance) when the condition of this dimension in SEM was the manifest variable. This empirical evidence reinforces the validity of using the LVS technique when the SEM model is very complex. With these surprising findings, we are confident in stating that variations on the dependent variable in the SEM model can be

explained better by explicating the independent variable, using the Rasch model. Our work opens a broad space for discussion and debate of the methods, ways of selecting independent variables, assumptions of the model, consistency of the researcher's position, measurement scale considerations, etc. However, we remain confident that the results of the SEM model make more sense, with additional insights from the Rasch model.

Becoming an entrepreneur after a long-time lag (as blue-collar workers are still working) would undoubtedly be a rationally chosen alternative as the TRA's assumption. Our findings provide sufficient empirical evidence to state that differences in the contextual and assumptive explanatory models were better explained using the Rasch model. The higher the religiosity of blue-collar workers, the higher the likelihood of their positive attitude toward entrepreneurial behavior while increasing their intention to become entrepreneurs

CONCLUSION AND SUGGESTION

Our findings proved that, in the context of blue-collar workers, religiosity has a significant influence on the formation of both attitude and entrepreneurial intention. Subjective norms also proved to influence blue-collar worker's entrepreneurial intentions. The extended TRA empirically proved to have satisfactory results in predicting the undoubtedly entrepreneurial intentions of blue-collar workers. We accomplished the intersubjectively certification for this model and encourage other researchers to do the same. We can also conclude that, based on the Rasch model's results, respondents in this study have a high level of religiosity concerning the scale items used. There is indeed a possibility that they experienced social desirability bias. This possibility is our explanation and cannot be verified by re-observation techniques because of our paper-based data collection procedure. With additional insights from the Rasch model, the SEM's test results became more transparent. In the context of blue-collar workers, the choice to become entrepreneurs, considering the time lag they will experience by still currently having a job, is very rational. This research opens discussions and debates related to the merging of the application of SEM and the Rasch model. Nevertheless, we believe that the development of such measurement techniques in behavioral science will be more precise and reliable. Regarding the interests of policymakers, the effect of religiosity on attitudes is greater than its effect on intention. They can use Islamic public figures, who are also entrepreneurs, to act as role models for blue-collar workers.

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REFERENCE

Ahrold, T. K., Farmer, M., Trapnell, P. D., & Meston, C. M. (2011). The Relationship Among Sexual Attitudes, Sexual Fantasy, and Religiosity. *Journal of Sexual Behavior*, *40*(3), 619–630. https://doi.org/10.1007/s10508-010-9621-4

Ajzen, I. (2010). Constructing a theory of planned behavior questionnaire. *Biofeed-back and Selfregulation*, *17*, 1–7. Retrieved from https://people.umass.edu/aizen/pdf/tpb.measurement.pdf

Ajzen, I. (2012). Martin Fishbein's Legacy. *The ANNALS of the American Academy of*

Political and Social Science, *640*(1), 11–27. https://doi.org/10.1177/0002716211423363

Al-Bukhari No. 590. (n.d.). Sahih Bukhari, Chapter: Loans, Payment of Loans, Freezing of Property and Bankruptcy. Retrieved from https://ahadith.co.uk/permalink-hadith-5770

Al Jahwari, D. S. (2015). *An Integrative Model of Muslim Students' Religiosity and Travelling Behavior to Gaming Destinations* (University of South Carolina). Retrieved from https://core.ac.uk/download/pdf/217680853.pdf

Alam, Syed. S., Janor, H., Zanariah, W., C. A. C., & Ahsan, M. N. (2012). Is Religiosity an Impportant Foctor in Influencing the ntention to Undertake Islamic Home Financing in Klang Valley?? *World Applied Science Journal*, *19*(7), 1030–1041.

Alam, Syed Shah, Janor, H., Aniza, C., & Wel, C. (2012). Is Religiosity an Important Factor in Influencing the Intention to Undertake Islamic Home Financing in Klang Valley ? *World Applied Science Journal*, *19*(7), 1030–1041. https://doi.org/10.5829/idosi.wasj.2012.19.07.392

Aleassa, H., Pearson, J. M., & McClurg, S. (2011). Investigating Software Piracy in Jordan: An Extension of the Theory of Reasoned Action. *Journal of Business Ethics*, *98*(4), 663–676. https://doi.org/10.1007/s10551-010-0645-4

Azwar, S. (2013). *Sikap Manusia Teori dan Pengukurannya* (2nd ed.). Yogyakarta: Pustaka Pelajar.

Barkan, S. E. (2014). Gender and Abortion Attitudes: Religiosity as a Suppressor Variable. *Public Opinion Quarterly*, *78*(4), 940–950. https://doi.org/10.1093/poq/nfu047

Bektaş, F. (2011). Entrepreneurial Intentions of Turkish University Students. *International Journal of Arts & Sciences*, *4*(8), 167–181.

Bond, T. G., & Fox, C. M. (2015). Applying the Rasch Model Fundamental Measurement in the Human Sciences. In Intergovernmental Panel on Climate Change (Ed.), *Climate Change 2013 - The Physical Science Basis* (3rd ed.). New York: Routledge.

Bogoviz, A. V., Osipov, V. S., Chistyakova, M. K., & Borisov, M. Y. (2019). Comparative Analysis of Formation of Industry 4.0 in Developed and Developing Countries. In E. G. Popkova, Y. V. Ragulina, & A. V. Bogoviz (Eds.), *Industrial Revolution of the 21st Century, Studies in Systems, Decision and Control 169*, (pp. 155–164). https://doi.org/10.1007/978-3-319-94310-7_15

El-Menouar, Y. (2014). The Five Dimensions of Muslim Religiosity. Results of an Empirical Study. *Method, Data, Analyses*, *8*(1), 53–78. https://doi.org/10.12758/mda.2014.003

Fishbein, M., & Ajzen, I. (2010). *Predicting and Changing Behavior*. https://doi.org/10.4324/9780203838020

Fishbein, M., & Ajzen, I. (1975a). Attitude formation. In *Belief, Attitude, Intention, and Behavior, An Introduction to Theory and Research* (pp. 216–287). https://doi.org/10.1016/B978-0-12-375000-6.00041-0

Fishbein, M., & Ajzen, I. (1975b). Attitude Theory. In *Belief, Attitude, Intention, and Behavior, An Introduction to Theory and Research* (pp. 21–52). https://doi.org/10.1016/B978-0-12-375000-6.00041-0

Grande, T. (2015). Identifying Multivariate Outliers with Mahalanobis Distance in SPSS. Retrieved from www.youtube.com website: https://www.youtube.com/watch?v=AXLAX6r5JgE

Gullatte, M. (2006). The Influence of Spirituality and Religiosity on Breast Cancer Screening Delay in African American Women: Application of Theory of Reasoned Action and Planned Behavior (TRA/TPB). *ABNF Journal*, *17*(2), 89.

Hair Jr., J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate Data Analysis. In *Pearson new international edition* (7th ed.). Retrieved from www.pearsoned.co.uk

Holdcroft, B. (2006). What is Religiosity ? *Catholic Education: A Journal of Inquiry and Practice*, *10*(1), 89–103.

Hunt, S. D. (1991). *Modern Marketing Theory: Critical Issues In The Philosophy Of Marketing Science* (T. E. Shaffer, Ed.). Cincinnati: South-Western Publishing Co.

Johnson, B. R., Jang, S. J., Larson, D. B., & DE LI, S. (2001). Does Adolescent Religious Commitment Matter? A Reexamination of the Effects of Religiosity on Delinquency. *Journal of Research in Crime and Delinquency*, *38*(1), 22–44. https://doi.org/10.1177/0022427801038001002

Khalek, A. A., & Ismail, S. H. S. (2015). Why Are We Eating Halal – Using the Theory of Planned Behavior in Predicting Halal Food Consumption among Generation Y in Malaysia. *International Journal of Social Science and Humanity*, *5*(7), 608–612. https://doi.org/10.7763/IJSSH.2015.V5.526

Lada, S., Harvey Tanakinjal, G., & Amin, H. (2009). Predicting intention to choose halal products using theory of reasoned action. *International Journal of Islamic and Middle Eastern Finance and Management*, *2*(1), 66–76. https://doi.org/10.1108/17538390910946276

Mahudin, N. D. M., Noor, N. M., Dzulkifli, M. A., & Janon, S. N. (2016). Religiosity among Muslims : A Scale Development and Validation Study. *Makara Hubs-Asia*, *20*(2), 109–120. https://doi.org/10.7454/mssh.v20i2.3492

McKenzie, D. (2012). *Relationship between Religiosity, Violent Behavior and Gang Activity among Economically Disadvantaged Adolescents* (University of Alabama). Retrieved from https://pqdtopen.proquest.com/doc/1287057889.html?FMT=ABS

Nawawi No. 2. (n.d.). An-Nawawi's 40 hadith _ the forty hadith. Retrieved from https://ahadith.co.uk/nawawis40hadith.php

Pozdnyakova, U. A., Golikov, V. V., Peters, I. A., & Morozova, I. A. (2019). Genesis of the Revolutionary Transition to Industry 4.0 in the 21st Century and Overview of Previous Industrial Revolutions. In E. G. Popkova, Y. V. Ragulina, & A. V. Bogoviz (Eds.), *Industrial Revolution ofthe 21st Century, Studies in Systems, Decision and Control 169*, (pp. 11–19). https://doi.org/10.1007/978-3-319-94310-7_2

Salzberger, T., & Koller, M. (2013). Towards a new paradigm of measurement in marketing. *Journal of Business Research*, *66*(9), 1307–1317. https://doi.org/10.1016/j.jbusres.2012.02.030

Schouten, C. M. D. D., & Graafland, J. (2014). Religiosity , CSR Attitudes , and CSR Behavior : An Empirical Study of Executives' Religiosity and CSR. *Journal of Business Ethics*, *123*, 437–459. https://doi.org/10.1007/s10551-013-1847-3

Shakona, M. Y. (2013). *The Influence of Religiosity on the Intention of United States Muslim Tourists to Choose a Shariah Compliant Hotel* (Graduate School of Clemson University). Retrieved from http://search.proquest.com.ezaccess.library.uitm.edu.my/docview/1499232994?accountid=42518

Slater, W. E., Hall, T. W., & Edwards, K. J. (2001). Measuring religion and spirituality: where we are and where are we going? *Journal of Psychology and Theology*, *29*(1), 4–21.

Souiden, N., & Rani, M. (2015). Consumer attitudes and purchase intentions toward Islamic banks: the influence of religiosity. *International Journal of Bank Marketing*, *33*(2), 143–161. https://doi.org/10.1108/IJBM-10-2013-0115

Sukhodolov, Y. A. (2019). The Notion, Essence, and Peculiarities of Industry 4.0 as a Sphere of Industry. In E. G. Popkova, Y. V. Ragulina, & A. V. Bogoviz (Eds.), *Industrial Revolution ofthe 21st Century, Studies in Systems, Decision and Control 169,* (pp. 3–10). https://doi.org/10.1007/978-3-319-94310-7_1

Sumintono, B., & Widhiarso, W. (2014). *Aplikasi Model Rasch untuk Penelitian Ilmu-Ilmu Sosial* (2nd ed.; B. Trim, Ed.). Retrieved from https://www.researchgate.net/publication/268688933_Aplikasi_Model_Rasch_untuk_Penelitian_Ilmu-Ilmu_Sosial_edisi_revisi

Sumintono, B., & Widhiarso, W. (2016). Aplikasi Model Rasch untuk Penelitian Ilmu-Ilmu Sosial (edisi revisi). In *Aplikasi Model Rasch untuk Penelitian Ilmu-Ilmu Sosia*.

Wibowo, H. A. (2017). The Effects of Indonesia Female Religiosity on Hijab - Wearing Behavior: An Extended of Theory of Reasoned Action. *International Review of Management and Business Research*, *6*(3), 1040–1050. https://doi.org/10.17605/osf.io/r4gjc

Wibowo, H. A., & Masitoh, M. R. (2018). Measuring religiosity and its effects on attitude and intention to wear a hijab: Revalidating the scale. In Badri Munir Sukoco, Rahmat Heru Setianto, Nidya Ayu Arina, Ade Gafar Abdullah, & R. H. Asep Bayu Dani Nandiyanto (Eds.), *Increasing Management Relevance and Competitiveness* (1st ed., p. 538). https://doi.org/10.1201/9781351241892-44

Wijanto, S. H. (2008). *Structural Equation Modeling dengan LISREL 8.8 Konsep & Tutorial* (1st ed.). Yogyakarta: Graha Ilmu

Yoon, C. (2011). Theory of Planned Behavior and Ethics Theory in Digital Piracy: An Integrated Model. *Journal of Business Ethics*, *100*(3), 405–417. https://doi.org/10.1007/s10551-010-0687-7

Appendix

A. Preliminary Analysis: Factor Analysis (SPSS software)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.839
Bartlett's Test of Sphericity	Approx. Chi-Square	585 1.2 63
	df	465
	Sig.	0.00

Source: Data analyzed

Rotated Component Matrix[a]								
	Component							
	1	2	3	4	5	6	7	8
b1						0.837		
b2						0.853		
b3						0.510		
c3								0.794
c4								0.686
c5				0.546				
c6				0.738				
c7				0.667				
c8				0.699				
e1							0.672	
e2							0.665	
e3							0.727	
k1					0.672			
k2					0.799			
k3					0.807			
o1					0.552			
o2					0.545			
s1			0.666					
s2			0.765					
s3			0.702					
s4			0.668					
s5			0.628					
n1	0.626							
n2	0.844							
n3	0.788							
n4	0.813							
n5	0.602							
i1		0.812						
i2		0.874						
i3		0.868						
i4		0.716						

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]
a. Rotation converged in 9 iterations.

Source: Data analyzed

B. Structural Equation Modelling results (LISREL 8.54 software)

Table 1. Convergent Validity & Reliability

Latent variables	Manifest variables	SLF	error	CR	AVE
Religiosity	Basic	0.57	0.68	0.73	0.48
	Cendut	0.86	0.25		
	Exprn	0.61	0.63		
Attitudes	s1	0.7	0.51	0.76	0.52
	s2	0.88	0.22		
	s4	0.54	0.71		
Subjective norms	n1	0.66	0.56	0.85	0.54
	n2	0.81	0.34		
	n3	0.79	0.37		
	n4	0.76	0.43		
	n5	0.64	0.59		
Entrep. intention	i1	0.8	0.37	0.91	0.77
	i2	0.94	0.11		
	i4	0.89	0.21		

Source: Data analyzed

Table 2. Discriminant Validity

Variables	Attitude	Intention	Religiosity	Sub. Norm
Attitude	**0.52**			
Intention	0.19	**0.77**		
Religiosity	0.14	0.14	**0.48**	
Sub. Norm	0.28	0.21	0.04	**0.54**

Source: Data analyzed

Table 3. Goodness of Fit

RMSEA	0.076
NFI	0.95
NNFI	0.95
CFI	0.96
IFI	0.96
RFI	0.93
GFI	0.92

Source: Data analyzed

Table 4. Hypothesistest results

Hypothesis	Path	Estimate	Std. Solution	t stats.	Decision
H1	Religiosity➔ Entrepreneural intention	0.3	0.25	4.16	Accepted
H2	Religiosity➔ attitude	0.46	0.42	6.66	Accepted
H3	Attitude➔ Entrepreneurial intention	0.2	0.18	3.34	Accepted
H4	Subjective norm➔ Entrepreneurial intention	0.38	0.32	6.2	Accepted

Source: Data analyzed

Table 5. Total influence todependent variable

No.	Variables	Direct influence to		Indirect influence to	Total influence
		Attitude	Intention	Intention	Intention
1	Religiosity	0.42	0.25	0.08	**0.33**
2	Attitude		0.18		**0.18**
3	Sub. norms		0.32		**0.32**
					0.83

Source: Data analyze

C. Rasch Model results (WINSTEP 3.73)

Table 6. Person measure order

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MODEL MEASURE	S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Person
435	105	21	4.98	1.55	0.03	-1.0	0.01	-1.1	0.00	0.17	100.0	98.0	435mS1
413	104	21	3.31	1.01	0.94	0.2	0.48	0.0	0.24	0.23	95.2	94.9	413mV1
424	104	21	3.31	1.01	0.58	0.3	0.15	-0.6	0.46	0.23	95.2	94.9	424mJ3
85	103	21	2.56	0.76	0.78	-0.2	0.81	0.2	0.35	0.29	90.5	90.5	085fP3
140	103	21	2.56	0.76	0.72	-0.3	0.48	-0.2	0.43	0.29	90.5	90.5	140mN2
383	103	21	2.56	0.76	0.78	-0.2	0.81	0.2	0.35	0.29	90.5	90.5	383fF1
410	103	21	2.56	0.76	1.05	0.3	0.61	-0.1	0.28	0.29	90.5	90.5	410mJ7
434	103	21	2.56	0.76	0.59	-0.5	0.26	-0.7	0.54	0.29	90.5	90.5	434fN1
225	102	21	2.07	0.64	1.47	1.0	2.86	1.7	-0.20	0.34	81.0	86.6	225mP1
344	102	21	2.07	0.64	1.02	0.2	0.66	-0.1	0.34	0.34	81.0	86.6	344fG3
374	102	21	2.07	0.64	0.64	-0.6	0.37	-0.6	0.55	0.34	90.5	86.6	374fS6
398	102	21	2.07	0.64	1.24	0.6	1.56	0.8	0.09	0.34	81.0	86.6	398mR3

107	101	21	1.70	0.57	2.00	1.8	0.83	0.0	0.51	0.38	90.5	83.0	107mS1
351	101	21	1.70	0.57	0.93	0.0	0.55	-0.4	0.44	0.38	76.2	83.0	351fF6
381	101	21	1.70	0.57	1.03	0.2	0.79	0.0	0.34	0.38	76.2	83.0	381fG2
414	101	21	1.70	0.57	0.65	-0.7	0.47	-0.6	0.56	0.38	85.7	83.0	414fN3
427	101	21	1.70	0.57	1.16	0.5	0.66	-0.2	0.52	0.38	90.5	83.0	427fF2
1	100	21	1.40	0.53	0.62	-0.9	0.46	-0.7	0.60	0.41	85.7	79.0	001mZ6
63	100	21	1.40	0.53	0.60	1.0	0.44	-0.8	0.61	0.41	85.7	79.0	063mM2
231	100	21	1.40	0.53	1.55	1.3	1.74	1.1	-0.08	0.41	66.7	79.0	231fI3
234	100	21	1.40	0.53	0.60	-1.0	0.44	-0.8	0.61	0.41	85.7	79.0	234fI1
267	100	21	1.40	0.53	1.24	0.7	1.16	0.5	0.19	0.41	66.7	79.0	267mN1
345	100	21	1.40	0.53	1.25	0.7	1.30	0.6	0.16	0.41	66.7	79.0	345mG3
379	100	21	1.40	0.53	0.86	-0.2	0.58	-0.5	0.59	0.41	85.7	79.0	379mT3
397	100	21	1.40	0.53	0.53	-1.2	0.38	-1.0	0.65	0.41	85.7	79.0	397fF6
403	100	21	1.40	0.53	0.67	-0.7	0.53	-0.6	0.56	0.41	76.2	79.0	403fI7
412	100	21	1.40	0.53	0.86	-0.2	0.57	-0.5	0.60	0.41	85.7	79.0	412fS6
423	100	21	1.40	0.53	1.08	0.3	0.79	-0.1	0.34	0.41	66.7	79.0	423fL1
428	100	21	1.40	0.53	0.60	-1.0	0.44	-0.8	0.61	0.41	85.7	79.0	428mI5
429	100	21	1.40	0.53	0.90	-0.1	0.53	-0.6	0.59	0.41	76.2	79.0	429fX1
432	100	21	1.40	0.53	0.60	-1.0	0.44	-0.8	0.61	0.41	85.7	79.0	432fH2
35	99	21	1.14	0.49	1.69	1.6	4.47	3.3	-0.35	0.43	57.1	75.7	035fF2
169	99	21	1.14	0.49	1.54	1.3	0.87	0.0	0.55	0.43	71.4	75.7	169fH4
175	99	21	1.14	0.49	0.98	0.1	3.36	2.6	0.35	0.43	85.7	75.7	175fb5
187	99	21	1.14	0.49	1.36	0.9	0.71	-0.3	0.62	0.43	81.0	75.7	187mI4
191	99	21	1.14	0.49	1.02	0.2	1.49	0.9	0.21	0.43	76.2	75.7	191fJ3
209	99	21	1.14	0.49	1.55	1.3	1.81	1.3	-0.09	0.43	57.1	75.7	209mP2
210	99	21	1.14	0.49	1.55	1.3	1.81	1.3	-0.09	0.43	57.1	75.7	210mP2
313	99	21	1.14	0.49	.87	-0.2	0.88	0.0	0.40	0.43	76.2	75.7	313mO3
385	99	21	1.14	0.49	1.73	1.6	0.90	0.1	0.61	0.43	90.5	75.7	385fI2
58	98	21	0.91	0.46	2.30	2.6	2.82	2.4	0.00	0.45	52.4	72.2	058mF2
77	98	21	0.91	0.46	1.50	1.3	2.50	2.1	-0.09	0.45	47.6	72.2	077mM3
90	98	21	0.91	0.46	1.21	0.6	0.72	-0.4	0.64	0.45	81.0	72.2	090mG4
108	98	21	0.91	0.46	1.39	1.0	3.23	2.8	-0.04	0.45	57.1	72.2	108mI1
111	98	21	0.91	0.46	3.32	4.0	1.75	1.3	0.55	0.45	71.4	72.2	111mV6
132	98	21	0.91	0.46	1.17	0.6	0.68	-0.5	0.66	0.45	81.0	72.2	132mN5
166	98	21	0.91	0.46	1.79	1.8	2.18	1.8	-0.29	0.45	38.1	72.2	166mF1
172	98	21	0.91	0.46	2.51	2.9	1.51	1.0	0.51	0.45	66.7	72.2	172mP2
270	98	21	0.91	0.46	1.37	1.0	1.42	0.8	0.08	0.45	57.1	72.2	270mJ3
304	98	21	0.91	0.46	1.60	1.5	1.89	1.5	-0.13	0.45	47.6	72.2	304fH2
309	98	21	0.91	0.46	1.18	0.6	1.14	0.4	0.23	0.45	57.1	72.2	309mI2
368	98	21	0.91	0.46	0.59	-1.1	0.41	-1.2	0.72	0.45	85.7	72.2	368fH1
378	98	21	0.91	0.46	1.36	1.0	1.69	1.2	-0.01	0.45	47.6	72.2	378fI1
399	98	21	0.91	0.46	0.94	0.0	0.73	-0.3	0.43	0.45	76.2	72.2	399mN1

411	98	21	0.91	0.46	1.37	1.0	0.82	-0.2	0.58	0.45	71.4	72.2	411mG5
420	98	21	0.91	0.46	1.03	0.2	0.71	-0.4	0.63	0.45	76.2	72.2	420mI4
135	97	21	0.71	0.44	1.16	0.5	2.90	2.7	0.04	0.47	52.4	70.7	135mV3
157	97	21	0.71	0.44	0.79	-0.5	0.79	-0.3	0.46	0.47	71.4	70.7	157mI1
159	97	21	0.71	0.44	1.94	2.1	1.06	0.3	0.61	0.47	81.0	70.7	159fU5
170	97	21	0.71	0.44	0.78	-0.5	0.83	-0.2	0.55	0.47	71.4	70.7	170fJ7
218	97	21	0.71	0.44	1.44	1.2	1.33	0.8	0.05	0.47	52.4	70.7	218fN2
230	97	21	0.71	0.44	0.92	-0.1	0.89	-0.1	0.49	0.47	61.9	70.7	230fF2
236	97	21	0.71	0.44	1.69	1.7	1.64	1.2	0.41	0.47	71.4	70.7	236mG1
244	97	21	0.71	0.44	1.06	0.3	0.90	0.0	0.56	0.47	71.4	70.7	244fN3
251	97	21	0.71	0.44	1.01	0.2	0.83	-0.2	0.37	0.47	71.4	70.7	251mJ2
260	97	21	0.71	0.44	0.47	-1.7	0.42	-1.3	0.71	0.47	81.0	70.7	260mc3
265	97	21	0.71	0.44	2.30	2.7	1.40	0.9	0.61	0.47	71.4	70.7	265fB2
266	97	21	0.71	0.44	2.30	2.7	1.40	0.9	0.61	0.47	71.4	70.7	266fB2
302	97	21	0.71	0.44	1.34	0.9	1.09	0.4	0.57	0.47	76.2	70.7	302mE2
307	97	21	0.71	0.44	0.90	-0.1	0.96	0.1	0.37	0.47	61.9	70.7	307mH1
332	97	21	0.71	0.44	0.54	-1.4	0.53	-0.9	0.64	0.47	81.0	70.7	332fI2
360	97	21	0.71	0.44	1.44	1.2	1.03	0.2	0.47	0.47	76.2	70.7	360fI1
371	97	21	0.71	0.44	1.05	0.3	0.72	-0.4	0.70	0.47	81.0	70.7	371mF2
430	97	21	0.71	0.44	0.49	-1.6	0.39	-1.4	0.76	0.47	81.0	70.7	430fC6
23	96	21	0.52	0.42	2.66	3.3	2.08	1.9	0.38	0.49	81.0	68.9	023mD1
37	96	21	0.52	0.42	1.39	1.1	2.09	1.9	-0.05	0.49	52.4	68.9	037md3
114	96	21	0.52	0.42	1.12	0.4	1.94	1.7	0.10	0.49	52.4	68.9	114mM3
137	96	21	0.52	0.42	1.77	1.9	1.03	0.2	0.62	0.49	71.4	68.9	137mM3
217	96	21	0.52	0.42	1.37	1.0	1.35	0.8	0.07	0.49	52.4	68.9	217mF2
241	96	21	0.52	0.42	0.92	-0.1	1.12	0.4	0.31	0.49	61.9	68.9	241mI1
279	96	21	0.52	0.42	1.90	2.1	1.94	1.7	0.40	0.49	71.4	68.9	279mF3
285	96	21	0.52	0.42	0.64	-1.0	1.32	0.8	0.57	0.49	81.0	68.9	285fP1
295	96	21	0.52	0.42	0.98	0.1	1.04	0.2	0.31	0.49	52.4	68.9	295mM3
299	96	21	0.52	0.42	1.17	0.6	1.28	0.7	0.16	0.49	52.4	68.9	299mP3
310	96	21	0.52	0.42	1.30	0.9	0.93	0.0	0.66	0.49	85.7	68.9	310mJ9
317	96	21	0.52	0.42	1.12	0.4	0.96	0.1	0.55	0.49	81.0	68.9	317fE5
323	96	21	0.52	0.42	1.08	0.3	1.19	0.5	0.22	0.49	61.9	68.9	323fF1
326	96	21	0.52	0.42	1.89	2.1	1.76	1.5	0.32	0.49	71.4	68.9	326fH1
327	96	21	0.52	0.42	1.15	0.5	1.34	0.8	0.15	0.49	52.4	68.9	327mM6
336	96	21	0.52	0.42	1.16	0.6	0.75	-0.4	0.69	0.49	76.2	68.9	336mM1
361	96	21	0.52	0.42	0.83	-0.4	0.75	-0.4	0.58	0.49	81.0	68.9	361fT2
362	96	21	0.52	0.42	2.01	2.3	1.16	0.5	0.63	0.49	71.4	68.9	362mX6
363	96	21	0.52	0.42	2.01	2.3	1.16	0.5	0.63	0.49	71.4	68.9	363fG4
364	96	21	0.52	0.42	2.01	2.3	1.16	0.5	0.63	0.49	71.4	68.9	364mH2
396	96	21	0.52	0.42	1.39	1.1	1.06	0.3	0.55	0.49	85.7	68.9	396fI3
409	96	21	0.52	0.42	0.61	-1.1	0.52	-1.1	0.68	0.49	81.0	68.9	409fH2

433	96	21	0.52	0.42	0.54	-1.4	0.47	-1.3	0.72	0.49	81.0	68.9	433fc4
34	95	21	0.35	0.41	3.23	4.1	2.48	2.5	0.42	0.50	76.2	67.0	034fe3
61	95	21	0.35	0.41	1.68	1.7	2.00	1.9	0.01	0.50	33.3	67.0	061fG1
80	95	21	0.35	0.41	1.35	1.0	1.05	0.3	0.61	0.50	76.2	67.0	080mL3
91	95	21	0.35	0.41	1.61	1.6	2.15	2.1	0.01	0.50	52.4	67.0	091mJ3
92	95	21	0.35	0.41	1.42	1.2	1.56	1.2	0.28	0.50	47.6	67.0	092fG2
104	95	21	0.35	0.41	1.79	1.9	1.08	0.3	0.64	0.50	61.9	67.0	104fJ8
139	95	21	0.35	0.41	1.20	0.7	1.07	0.3	0.56	0.50	71.4	67.0	139mC1
143	95	21	0.35	0.41	0.86	0.3	0.84	-0.2	0.60	0.50	61.9	67.0	143mF3
161	95	21	0.35	0.41	1.17	0.6	1.12	0.4	0.34	0.50	52.4	67.0	161fG1
165	95	21	0.35	0.41	1.01	0.2	1.67	1.4	0.18	0.50	61.9	67.0	165mR3
203	95	21	0.35	0.41	0.72	-0.7	0.66	-0.7	0.60	0.50	71.4	67.0	203fX2
204	95	21	.35	0.41	0.72	-0.7	0.66	-0.7	0.60	0.50	71.4	67.0	204fX2
287	95	21	0.35	0.41	1.17	0.6	0.83	-0.2	0.65	0.50	66.7	67.0	287mE3
335	95	21	0.35	0.41	0.92	-0.1	0.81	-0.3	0.58	0.50	52.4	67.0	335mH3
338	95	21	0.35	0.41	1.09	0.4	0.78	-0.4	0.68	0.50	66.7	67.0	338fG6
339	95	21	0.35	0.41	1.67	1.7	1.58	1.3	-0.16	0.50	33.3	67.0	339fM1
346	95	21	0.35	0.41	0.43	-1.9	0.41	-1.6	0.77	0.50	81.0	67.0	346fL2
353	95	21	0.35	0.41	1.29	0.9	1.01	0.2	0.63	0.50	85.7	67.0	353fH4
358	95	21	0.35	0.41	1.71	1.8	1.03	0.2	0.67	0.50	71.4	67.0	358mG5
367	95	21	0.35	0.41	1.13	0.5	1.26	0.7	0.16	0.50	52.4	67.0	367mH3
426	95	21	0.35	0.41	0.77	-0.6	0.64	-0.8	0.62	0.50	81.0	67.0	426fL3
8	94	21	0.19	0.40	1.19	0.6	0.95	0.0	0.71	0.51	71.4	65.1	008fG2
62	94	21	0.19	0.40	0.59	-1.2	0.61	-0.9	0.64	0.51	71.4	65.1	062mG1
89	94	21	0.19	0.40	1.44	1.2	1.12	0.4	0.68	0.51	85.7	65.1	089mZ1
134	94	21	0.19	0.40	1.75	1.8	1.28	0.8	0.54	0.51	47.6	65.1	134mG1
173	94	21	0.19	0.40	0.89	-0.2	0.84	-0.3	0.65	0.51	71.4	65.1	173fE2
190	94	21	0.19	0.40	0.95	0.0	1.05	0.3	0.28	0.51	52.4	65.1	190mN3
215	94	21	0.19	0.40	2.31	2.8	2.09	2.1	0.04	0.51	47.6	65.1	215mG1
223	94	21	0.19	0.40	1.07	0.3	1.13	0.4	0.20	0.51	42.9	65.1	223mN2
229	94	21	0.19	0.40	1.58	1.5	1.46	1.1	0.40	0.51	71.4	65.1	229mM1
268	94	21	0.19	0.40	0.64	-1.0	.56	-1.1	0.72	0.51	81.0	65.1	268mE3
275	94	21	0.19	0.40	1.12	0.5	1.06	0.3	0.43	0.51	42.9	65.1	275mF1
276	94	21	0.19	0.40	0.85	-0.3	0.91	-0.1	0.37	0.51	61.9	65.1	276mJ3
290	94	21	0.19	0.40	0.98	0.1	0.95	0.0	0.51	0.51	52.4	65.1	290mG1
296	94	21	0.19	0.40	1.38	1.1	1.30	0.8	0.03	0.51	47.6	65.1	296mI3
297	94	21	0.19	0.40	1.38	1.1	1.30	0.8	0.03	0.51	47.6	65.1	297mI3
305	94	21	0.19	0.40	0.87	-0.2	0.90	-0.1	0.58	0.51	76.2	65.1	305fI8
330	94	21	0.19	0.40	0.75	-0.6	0.70	-0.7	0.66	0.51	71.4	65.1	330fD6
348	94	21	0.19	0.40	1.31	0.9	0.93	0.0	0.71	0.51	76.2	65.1	348fI6
386	94	21	0.19	0.40	0.58	-1.3	0.70	-0.7	0.62	0.51	81.0	65.1	386mI2
407	94	21	0.19	0.40	1.08	0.3	0.78	-0.4	0.73	0.51	71.4	65.1	407mH1

416	94	21	0.19	0.40	0.35	-2.3	0.37	-1.9	0.80	0.51	90.5	65.1	416fF6
417	94	21	0.19	0.40	1.05	0.3	0.76	-0.5	0.74	0.51	71.4	65.1	417fE6
17	93	21	0.04	0.38	3.84	4.9	3.45	3.9	0.27	0.53	42.9	63.1	017mI2
30	93	21	0.04	0.38	1.35	1.0	1.02	0.2	0.67	0.53	81.0	63.1	030mE3
47	93	21	0.04	0.38	1.96	2.3	1.53	1.3	0.35	0.53	33.3	63.1	047mN3
68	93	21	0.04	0.38	0.97	0.0	1.43	1.1	0.18	0.53	57.1	63.1	068fJ3
94	93	21	0.04	0.38	1.79	1.9	1.54	1.3	0.47	0.53	57.1	63.1	094mF1
119	93	21	0.04	0.38	1.30	0.9	0.83	-0.3	0.66	0.53	71.4	63.1	119fU1
130	93	21	0.04	0.38	1.42	1.2	0.99	0.1	0.59	0.53	52.4	63.1	130mG1
153	93	21	0.04	0.38	2.53	3.2	2.65	3.0	0.32	0.53	71.4	63.1	153fF6
154	93	21	0.04	0.38	2.53	3.2	2.65	3.0	0.32	0.53	71.4	63.1	154fF6
155	93	21	0.04	0.38	2.53	3.2	2.65	3.0	0.32	0.53	71.4	63.1	155fF6
163	93	21	0.04	0.38	1.13	0.5	0.95	0.0	0.63	0.53	81.0	63.1	163mG1
180	93	21	0.04	0.38	1.26	0.8	0.99	0.1	0.70	0.53	71.4	63.1	180mf2
188	93	21	0.04	0.38	1.31	0.9	1.02	0.2	0.68	0.53	57.1	63.1	188mG3
222	93	21	0.04	0.38	0.99	0.1	2.07	2.2	0.15	0.53	71.4	63.1	222md3
232	93	21	0.04	0.38	1.71	1.8	1.58	1.4	0.47	0.53	57.1	63.1	232fG1
243	93	21	0.04	0.38	0.66	-1.0	0.73	-0.6	0.57	0.53	66.7	63.1	243fI2
249	93	21	0.04	0.38	0.84	-0.4	0.81	-0.4	0.39	0.53	57.1	63.1	249fF5
277	93	21	0.04	0.38	0.74	-0.7	0.70	-0.7	0.54	0.53	66.7	63.1	277mP7
288	93	21	0.04	0.38	1.50	1.4	1.32	0.9	-0.07	0.53	42.9	63.1	288mL3
298	93	21	0.04	0.38	0.77	-0.6	0.67	-0.8	0.67	0.53	66.7	63.1	298fL1
301	93	21	0.04	0.38	0.48	-1.7	0.46	-1.6	0.78	0.53	76.2	63.1	301fL2
306	93	21	0.04	0.38	0.80	-0.5	0.71	-0.6	0.69	0.53	66.7	63.1	306mV1
322	93	21	0.04	0.38	0.69	-0.9	0.73	-0.6	0.49	0.53	66.7	63.1	322fL1
329	93	21	0.04	0.38	0.80	-0.5	0.74	-0.6	0.64	0.53	57.1	63.1	329fV7
350	93	21	0.04	0.38	1.11	0.4	0.94	0.0	0.72	0.53	66.7	63.1	350mO2
356	93	21	0.04	0.38	0.62	-1.1	0.63	-0.9	0.70	0.53	66.7	63.1	356fH1
373	93	21	.04	0.38	1.01	0.2	0.81	-0.4	0.73	0.53	66.7	63.1	373fN4
392	93	21	.04	0.38	1.35	1.0	1.04	0.2	0.67	0.53	81.0	63.1	392mI5
395	93	21	.04	0.38	1.44	1.2	0.92	-0.1	0.74	0.53	71.4	63.1	395mG6
422	93	21	.04	0.38	0.84	-0.4	0.64	-0.9	0.80	0.53	76.2	63.1	422fJ3
425	93	21	0.04	0.38	0.68	-0.9	0.61	-1.0	0.76	0.53	85.7	63.1	425fL7
431	93	21	0.04	0.38	0.56	-1.4	0.51	-1.3	0.71	0.53	76.2	63.1	431fH2
436	93	21	0.04	0.38	0.31	-2.6	0.34	-2.1	0.81	0.53	85.7	63.1	436fE6
33	92	21	-0.11	0.37	2.39	3.0	2.52	2.9	0.01	0.54	42.9	61.8	033mR3
44	92	21	-0.11	0.37	2.99	3.9	2.75	3.2	0.45	0.54	57.1	61.8	044fF1
54	92	21	-0.11	0.37	1.80	2.0	1.50	1.2	0.63	0.54	76.2	61.8	054fF7
65	92	21	-0.11	0.37	1.10	0.4	1.78	1.8	0.05	0.54	47.6	61.8	065mC3
82	92	21	-0.11	0.37	1.59	1.6	2.47	2.8	-0.37	0.54	42.9	61.8	082mE2
83	92	21	-0.11	0.37	1.59	1.6	2.47	2.8	-0.37	0.54	42.9	61.8	083mE2
84	92	21	-0.11	0.37	1.59	1.6	2.47	2.8	-0.37	0.54	42.9	61.8	084mE2

93	92	21	-0.11	0.37	0.76	-0.6	1.13	0.5	0.53	0.54	66.7	61.8	093mX3
115	92	21	-0.11	0.37	1.70	1.8	1.33	0.9	0.71	0.54	66.7	61.8	115fG3
126	92	21	-0.11	0.37	1.72	1.8	1.24	0.7	0.59	0.54	61.9	61.8	126fM3
128	92	21	-0.11	0.37	0.55	-1.4	0.52	-1.4	0.80	0.54	85.7	61.8	128mJ3
158	92	21	-0.11	0.37	1.17	0.6	1.00	0.1	0.69	0.54	57.1	61.8	158fL6
181	92	21	-0.11	0.37	0.80	-0.5	0.72	-0.7	0.69	0.54	66.7	61.8	181fL6
192	92	21	-0.11	0.37	1.25	0.8	0.97	0.1	0.65	0.54	61.9	61.8	192fG3
196	92	21	-0.11	0.37	1.17	0.6	1.03	0.2	0.15	0.54	52.4	61.8	196fI1
202	92	21	-0.11	0.37	0.61	-1.2	0.63	-1.0	0.68	0.54	76.2	61.8	202fH1
214	92	21	-0.11	0.37	0.75	-0.7	0.67	-0.8	0.77	0.54	76.2	61.8	214fF6
248	92	21	-0.11	0.37	1.02	0.2	1.02	0.2	0.20	0.54	47.6	61.8	248mL3
282	92	21	-0.11	0.37	0.57	-1.3	0.53	-1.3	0.78	0.54	76.2	61.8	282mH3
283	92	21	-0.11	0.37	0.57	-1.3	0.53	-1.3	0.78	0.54	76.2	61.8	283mH3
325	92	21	-0.11	0.37	1.06	0.3	0.80	-0.4	0.74	0.54	81.0	61.8	325fV3
328	92	21	-0.11	0.37	0.68	-0.9	0.61	-1.1	0.80	0.54	76.2	61.8	328fH3
343	92	21	-0.11	0.37	0.78	-0.6	0.78	-0.5	0.65	0.54	57.1	61.8	343fE2
352	92	21	-0.11	0.37	0.86	-0.3	0.86	-0.3	0.34	0.54	57.1	61.8	352fL1
390	92	21	-0.11	0.37	0.75	-0.7	0.78	-0.5	0.42	0.54	57.1	61.8	390mT3
400	92	21	-0.11	0.37	0.69	-0.9	0.72	-0.7	0.47	0.54	66.7	61.8	400fE3
404	92	21	-0.11	0.37	1.33	1.0	1.10	0.4	0.05	0.54	42.9	61.8	404mI3
15	91	21	-0.24	0.36	2.39	3.0	1.89	2.0	0.59	0.55	38.1	60.3	015fF6
26	91	21	-0.24	0.36	1.22	0.7	0.87	-0.2	0.74	0.55	66.7	60.3	026fI6
39	91	21	-0.24	0.36	1.23	0.7	1.33	0.9	0.57	0.55	57.1	60.3	039mE6
41	91	21	-0.24	0.36	1.89	2.1	1.96	2.1	0.20	0.55	33.3	60.3	041fF1
42	91	21	-0.24	0.36	1.32	1.0	1.29	0.8	0.46	0.55	47.6	60.3	042mO1
86	91	21	-0.24	0.36	1.94	2.2	1.97	2.2	0.29	0.55	33.3	60.3	086mN2
99	91	21	-0.24	0.36	1.66	1.7	1.57	1.4	0.49	0.55	57.1	60.3	099mG4
100	91	21	-0.24	0.36	0.82	-0.4	0.79	-0.5	0.62	0.55	61.9	60.3	100fI1
178	91	21	-0.24	0.36	0.85	-0.3	0.72	-0.7	0.79	0.55	61.9	60.3	178mT2
183	91	21	-0.24	0.36	1.73	1.8	1.63	1.5	0.18	0.55	33.3	60.3	183fI1
212	91	21	-0.24	0.36	1.08	0.3	1.37	1.0	0.05	0.55	42.9	60.3	212mO3
235	91	21	-0.24	0.36	0.81	-0.5	0.73	-0.7	0.74	0.55	71.4	60.3	235fD1
237	91	21	-0.24	0.36	1.24	0.8	0.97	0.1	0.49	0.55	66.7	60.3	237fH1
300	91	21	-0.24	0.36	1.33	1.0	1.18	0.6	0.52	0.55	61.9	60.3	300mL3
324	91	21	-0.24	0.36	0.81	-0.4	0.75	-0.6	0.78	0.55	61.9	60.3	324mR6
347	91	21	-0.24	0.36	0.95	0.0	0.64	-1.0	0.78	0.55	76.2	60.3	347fI6
369	91	21	-0.24	0.36	0.93	-0.1	0.82	-0.4	0.68	0.55	52.4	60.3	369mI7
370	91	21	-0.24	0.36	0.55	-1.4	0.53	-1.4	0.78	0.55	81.0	60.3	370fF1
377	91	21	-0.24	0.36	0.67	-1.0	0.67	-0.9	0.48	0.55	71.4	60.3	377fJ5
387	91	21	-0.24	0.36	0.58	-1.3	0.50	-1.5	0.79	0.55	81.0	60.3	387fE1
394	91	21	-0.24	0.36	0.98	0.1	0.83	-0.3	0.73	0.55	52.4	60.3	394mI2
401	91	21	-0.24	0.36	1.26	0.8	0.99	0.1	0.75	0.55	57.1	60.3	401mD6

408	91	21	-0.24	0.36	0.87	-0.3	0.79	-0.5	0.69	0.55	85.7	60.3	408mP3
21	90	21	-0.37	0.36	1.95	2.3	1.88	2.0	0.37	0.56	76.2	59.9	021fF6
50	90	21	-0.37	0.36	1.80	2.0	1.61	1.5	0.15	0.56	57.1	59.9	050mR2
70	90	21	-0.37	0.36	2.28	2.9	2.29	2.7	0.40	0.56	57.1	59.9	070mI2
88	90	21	-0.37	0.36	1.07	0.3	0.85	-0.3	0.69	0.56	61.9	59.9	088fE1
98	90	21	-0.37	0.36	0.81	-0.5	0.75	-0.6	0.69	0.56	57.1	59.9	098mH7
121	90	21	-0.37	0.36	1.47	1.3	1.33	0.9	0.29	0.56	38.1	59.9	121fG4
150	90	21	-0.37	0.36	1.15	0.5	1.01	0.2	0.54	0.56	38.1	59.9	150mI2
189	90	21	-0.37	0.36	0.93	-0.1	0.85	-0.3	0.78	0.56	57.1	59.9	189fI3
205	90	21	-0.37	0.36	0.71	-0.8	0.61	-1.1	0.82	0.56	66.7	59.9	205fG2
233	90	21	-0.37	0.36	0.85	-0.3	0.81	-0.4	0.66	0.56	57.1	59.9	233mP3
238	90	21	-0.37	0.36	0.51	-1.6	0.55	-1.3	0.69	0.56	66.7	59.9	238mD1
253	90	21	-0.37	0.36	0.98	0.1	0.78	-0.5	0.63	0.56	71.4	59.9	253mE1
255	90	21	-0.37	0.36	0.75	-0.7	0.73	-0.7	0.50	0.56	47.6	59.9	255fF2
284	90	21	-0.37	0.36	0.60	-1.2	0.68	-0.9	0.53	0.56	57.1	59.9	284mI7
289	90	21	-0.37	0.36	0.90	-0.2	0.86	-0.3	0.63	0.56	57.1	59.9	289mR3
291	90	21	-0.37	0.36	1.06	0.3	0.89	-0.2	0.67	0.56	81.0	59.9	291fG1
293	90	21	-0.37	0.36	1.12	0.5	0.97	0.0	0.64	0.56	71.4	59.9	293mF4
320	90	21	-0.37	0.36	0.57	-1.4	0.55	-1.3	0.80	0.56	66.7	59.9	320fD2
341	90	21	-0.37	0.36	0.87	-0.3	0.86	-0.3	0.39	0.56	38.1	59.9	341fF1
342	90	21	-0.37	0.36	0.87	-0.3	0.86	-0.3	0.39	0.56	38.1	59.9	342fF1
375	90	21	-0.37	0.36	0.91	-0.1	0.79	-0.5	0.68	0.56	66.7	59.9	375mF3
380	90	21	-0.37	0.36	0.63	-1.1	0.61	-1.1	0.59	0.56	66.7	59.9	380fF6
391	90	21	-0.37	0.36	0.38	-2.3	0.45	-1.8	0.71	0.56	85.7	59.9	391fL3
393	90	21	-0.37	0.36	0.67	-1.0	0.64	-1.0	0.57	0.56	66.7	59.9	393fI2
405	90	21	-0.37	0.36	0.46	-1.9	0.41	-2.0	0.82	0.56	85.7	59.9	405fV5
418	90	21	-0.37	0.36	0.43	-2.0	0.43	-1.9	0.82	0.56	85.7	59.9	418fa6
419	90	21	-0.37	0.36	0.55	-1.5	0.57	-1.3	0.56	0.56	66.7	59.9	419fH1
32	89	21	-0.50	0.35	0.54	-1.5	0.53	-1.5	0.73	0.57	66.7	58.9	032mL6
36	89	21	-0.50	0.35	1.80	2.0	1.41	1.1	0.49	0.57	47.6	58.9	036mL1
48	89	21	-0.50	0.35	1.92	2.2	2.03	2.4	0.48	0.57	66.7	58.9	048mG1
76	89	21	-0.50	0.35	1.57	1.5	1.32	0.9	0.34	0.57	47.6	58.9	076mX2
106	89	21	-0.50	0.35	0.73	-0.8	0.67	-0.9	0.59	0.57	57.1	58.9	106fD6
131	89	21	-0.50	0.35	2.18	2.7	2.28	2.8	0.43	0.57	66.7	58.9	131mL2
144	89	21	-0.50	0.35	0.73	-0.7	0.66	-0.9	0.57	0.57	76.2	58.9	144fI4
176	89	21	-0.50	0.35	0.98	0.1	0.84	-0.4	0.65	0.57	61.9	58.9	176fG3
179	89	21	-0.50	0.35	1.19	0.6	1.09	0.4	0.68	0.57	28.6	58.9	179mG4
201	89	21	-0.50	0.35	1.43	1.2	1.26	0.8	0.53	0.57	52.4	58.9	201fH3
208	89	21	-0.50	0.35	1.01	0.2	0.95	0.0	0.68	0.57	61.9	58.9	208mI1
240	89	21	-0.50	0.35	1.09	0.4	0.94	-0.1	0.36	0.57	47.6	58.9	240mF4
340	89	21	-0.50	0.35	0.52	-1.6	0.53	-1.5	0.58	0.57	66.7	58.9	340fM1
365	89	21	-0.50	0.35	0.48	-1.8	0.49	-1.7	0.76	0.57	76.2	58.9	365fE6

384	89	21	-0.50	0.35	0.37	-2.4	0.41	-2.0	0.77	0.57	85.7	58.9	384fG5
402	89	21	-0.50	0.35	0.51	-1.6	0.47	-1.7	0.67	0.57	76.2	58.9	402mE2
6	88	21	-0.62	0.34	0.82	-0.4	0.78	-0.6	0.64	0.58	66.7	57.8	006mH6
16	88	21	-0.62	0.34	2.37	3.0	2.36	3.0	0.44	0.58	42.9	57.8	016fG2
64	88	21	-0.62	0.34	0.65	-1.0	0.72	-0.8	0.62	0.58	57.1	57.8	064fE5
75	88	21	-0.62	0.34	0.83	-0.4	0.75	-0.6	0.74	0.58	61.9	57.8	075fG1
102	88	21	-0.62	0.34	0.88	-0.2	1.25	0.8	0.39	0.58	57.1	57.8	102mJ2
105	88	21	-0.62	0.34	1.02	0.2	0.96	0.0	0.59	0.58	57.1	57.8	105mM3
112	88	21	-0.62	0.34	0.65	-1.0	0.65	-1.0	0.77	0.58	66.7	57.8	112fI3
118	88	21	-0.62	0.34	0.82	-0.4	0.84	-0.4	0.70	0.58	66.7	57.8	118mU1
123	88	21	-0.62	0.34	0.99	0.1	0.90	-0.2	0.68	0.58	52.4	57.8	123mG2
164	88	21	-0.62	0.34	0.81	-0.5	0.73	-0.7	0.64	0.58	57.1	57.8	164fD6
168	88	21	-0.62	0.34	0.78	-0.6	0.62	-1.1	0.73	0.58	71.4	57.8	168mD2
174	88	21	-0.62	0.34	1.08	0.3	0.84	-0.4	0.73	0.58	61.9	57.8	174mE4
221	88	21	-0.62	0.34	0.80	-0.5	0.70	-0.8	0.46	0.58	76.2	57.8	221fD1
224	88	21	-0.62	0.34	0.93	-0.1	0.69	-0.9	0.68	0.58	71.4	57.8	224mH3
226	88	21	-0.62	0.34	0.74	-0.7	0.65	-1.0	0.65	0.58	81.0	57.8	226fJ3
250	88	21	-0.62	0.34	1.88	2.2	2.05	2.4	0.42	0.58	66.7	57.8	250fF6
254	88	21	-0.62	0.34	0.55	-1.5	0.56	-1.4	0.55	0.58	76.2	57.8	254fH2
259	88	21	-0.62	0.34	0.73	-0.7	0.73	-0.7	0.72	0.58	47.6	57.8	259mJ2
273	88	21	-0.62	0.34	1.10	0.4	1.58	1.5	0.02	0.58	47.6	57.8	273fF7
274	88	21	-0.62	0.34	1.10	0.4	1.58	1.5	0.02	0.58	47.6	57.8	274fF7
280	88	21	-0.62	0.34	0.93	-0.1	0.83	-0.4	0.60	0.58	47.6	57.8	280mG3
315	88	21	-0.62	0.34	0.86	-0.3	0.73	-0.7	0.56	0.58	71.4	57.8	315mF2
321	88	21	-0.62	0.34	1.05	0.3	0.89	-0.2	0.73	0.58	61.9	57.8	321mV3
331	88	21	-0.62	0.34	0.78	-0.6	0.73	-0.7	0.77	0.58	47.6	57.8	331mI2
337	88	21	-0.62	0.34	0.81	-0.5	0.77	-0.6	0.70	0.58	57.1	57.8	337mE2
10	87	21	-0.73	0.33	1.43	1.2	1.25	0.8	0.34	0.58	52.4	56.3	010mY7
18	87	21	-0.73	0.33	3.42	4.6	3.32	4.4	0.43	0.58	23.8	56.3	018mZ2
19	87	21	-0.73	0.33	3.42	4.6	3.32	4.4	0.43	0.58	23.8	56.3	019mZ2
49	87	21	-0.73	0.33	0.85	-0.3	0.96	0.0	0.62	0.58	57.1	56.3	049mU6
71	87	21	-0.73	0.33	1.00	0.1	0.85	-0.3	0.54	0.58	66.7	56.3	071fV6
87	87	21	-0.73	0.33	1.19	0.6	1.29	0.9	0.40	0.58	57.1	56.3	087mF3
116	87	21	-0.73	0.33	1.08	0.4	0.88	-0.2	0.78	0.58	52.4	56.3	116fI1
149	87	21	-0.73	0.33	1.22	0.7	1.16	0.6	0.50	0.58	57.1	56.3	149mA6
185	87	21	-0.73	0.33	1.21	0.7	1.08	0.3	0.50	0.58	66.7	56.3	185mD2
197	87	21	-0.73	0.33	0.60	-1.2	0.78	-0.6	0.67	0.58	52.4	56.3	197fC6
198	87	21	-0.73	0.33	0.60	-1.2	0.78	-0.6	0.67	0.58	52.4	56.3	198fC6
199	87	21	-0.73	0.33	0.60	-1.2	0.78	-0.6	0.67	0.58	52.4	56.3	199fC6
200	87	21	-0.73	0.33	0.66	-1.0	0.76	-0.6	0.46	0.58	61.9	56.3	200fI1
219	87	21	-0.73	0.33	0.80	-0.5	0.63	-1.1	0.74	0.58	76.2	56.3	219fE1
227	87	21	-0.73	0.33	0.99	0.1	0.91	-0.2	0.56	0.58	66.7	56.3	227mH2

252	87	21	-0.73	0.33	1.40	1.2	1.57	1.5	-0.53	0.58	57.1	56.3	252mL3
308	87	21	-0.73	0.33	0.59	-1.3	0.59	-1.3	0.71	0.58	52.4	56.3	308fG2
333	87	21	-0.73	0.33	.49	-1.7	0.54	-1.5	0.70	0.58	81.0	56.3	333fE2
354	87	21	-0.73	0.33	1.00	0.1	0.71	-0.8	0.41	0.58	76.2	56.3	354mH1
382	87	21	-0.73	0.33	0.32	-2.7	0.36	-2.4	0.74	0.58	81.0	56.3	382fH6
24	86	21	-0.84	0.33	1.19	0.6	1.19	0.6	0.58	0.59	42.9	55.6	024fI2
25	86	21	-0.84	0.33	1.47	1.3	1.23	0.7	0.55	0.59	52.4	55.6	025fG3
67	86	21	-0.84	0.33	1.76	1.9	1.62	1.6	0.68	0.59	42.9	55.6	067mI1
79	86	21	-0.84	0.33	0.88	-0.2	0.82	-0.4	0.77	0.59	57.1	55.6	079mI4
81	86	21	-0.84	0.33	1.08	0.4	1.09	0.4	0.63	0.59	52.4	55.6	081fd7
110	86	21	-0.84	0.33	0.92	-0.1	0.92	-0.1	0.57	0.59	52.4	55.6	110fI2
146	86	21	-0.84	0.33	1.01	0.2	0.85	-0.3	0.71	0.59	61.9	55.6	146mC3
162	86	21	-0.84	0.33	0.65	-1.0	1.16	0.6	0.46	0.59	61.9	55.6	162fH6
211	86	21	-0.84	0.33	0.71	-0.8	0.70	-0.9	0.74	0.59	52.4	55.6	211mI2
257	86	21	-0.84	0.33	0.42	-2.1	0.44	-2.0	0.78	0.59	71.4	55.6	257fF6
281	86	21	-0.84	0.33	0.48	-1.8	0.64	-1.1	0.57	0.59	81.0	55.6	281fP6
286	86	21	-0.84	0.33	0.69	-0.9	0.72	-0.8	0.79	0.59	42.9	55.6	286fN6
312	86	21	-0.84	0.33	0.47	-1.8	0.50	-1.7	0.70	0.59	71.4	55.6	312mG3
318	86	21	-0.84	0.33	0.65	-1.0	0.72	-0.8	0.43	0.59	61.9	55.6	318mI1
319	86	21	-0.84	0.33	0.53	-1.5	0.55	-1.5	0.76	0.59	61.9	55.6	319mL8
357	86	21	-0.84	0.33	0.57	-1.4	0.63	-1.1	0.47	0.59	71.4	55.6	357fG1
372	86	21	-0.84	0.33	0.90	-0.2	0.89	-0.2	0.76	0.59	42.9	55.6	372mF2
389	86	21	-0.84	0.33	0.68	-0.9	0.63	-1.1	0.84	0.59	52.4	55.6	389fM6
20	85	21	-0.95	0.32	1.48	1.4	1.43	1.2	0.36	0.60	57.1	54.3	020mP2
27	85	21	-0.95	0.32	1.75	1.9	1.50	1.4	0.28	0.60	52.4	54.3	027fH2
38	85	21	-0.95	0.32	1.05	0.3	1.08	0.3	0.61	0.60	42.9	54.3	038mI2
73	85	21	-0.95	0.32	1.70	1.8	1.45	1.3	0.80	0.60	23.8	54.3	073fF2
74	85	21	-0.95	0.32	1.38	1.1	1.18	0.6	0.57	0.60	66.7	54.3	074fF6
133	85	21	-0.95	0.32	0.63	-1.1	0.58	-1.4	0.68	0.60	71.4	54.3	133mH3
152	85	21	-0.95	0.32	0.70	-0.9	0.60	-1.3	0.74	0.60	61.9	54.3	152fG3
182	85	21	-0.95	0.32	0.62	-1.2	0.66	-1.0	0.69	0.60	71.4	54.3	182mP3
206	85	21	-0.95	0.32	0.49	-1.8	0.46	-1.9	0.80	0.60	71.4	54.3	206fL3
213	85	21	-0.95	0.32	0.72	-0.8	0.72	-0.8	0.79	0.60	61.9	54.3	213fG2
216	85	21	-0.95	0.32	0.52	-1.6	0.48	-1.8	0.73	0.60	81.0	54.3	216fL3
220	85	21	-0.95	0.32	0.51	-1.6	0.48	-1.8	0.74	0.60	71.4	54.3	220fF1
246	85	21	-0.95	0.32	0.92	-0.1	0.98	0.0	0.72	0.60	52.4	54.3	246mH3
256	85	21	-0.95	0.32	1.10	0.4	0.97	0.0	0.84	0.60	33.3	54.3	256fG1
258	85	21	-0.95	0.32	0.73	-0.8	0.65	-1.1	0.79	0.60	61.9	54.3	258mH2
262	85	21	-0.95	0.32	0.95	0.0	0.88	-0.3	0.73	0.60	42.9	54.3	262mF2
303	85	21	-0.95	0.32	0.70	-0.9	0.63	-1.2	0.54	0.60	66.7	54.3	303mH1
311	85	21	-0.95	0.32	0.71	-0.8	0.69	-0.9	0.79	0.60	61.9	54.3	311fI3
314	85	21	-0.95	0.32	0.71	-0.8	0.66	-1.0	0.58	0.60	52.4	54.3	314mG3

11	84	21	-1.05	0.32	1.11	0.4	1.19	0.7	0.53	0.61	47.6	54.5	011mI2
14	84	21	-1.05	0.32	1.40	1.2	1.39	1.1	0.38	0.61	47.6	54.5	014mS2
45	84	21	-1.05	0.32	1.09	0.4	1.05	0.3	0.65	0.61	42.9	54.5	045fF1
46	84	21	-1.05	0.32	1.84	2.1	2.17	2.7	-0.10	0.61	33.3	54.5	046fX6
57	84	21	-1.05	0.32	1.28	0.9	1.21	0.7	0.41	0.61	52.4	54.5	057fI2
59	84	21	-1.05	0.32	1.14	0.5	1.12	0.4	0.42	0.61	61.9	54.5	059mM2
72	84	21	-1.05	0.32	1.03	0.2	1.07	0.3	0.50	0.61	57.1	54.5	072fP2
136	84	21	-1.05	0.32	1.25	0.8	1.17	0.6	0.69	0.61	52.4	54.5	136mE1
145	84	21	-1.05	0.32	1.09	0.4	0.99	0.1	0.80	0.61	38.1	54.5	145mG8
194	84	21	-1.05	0.32	1.75	1.9	1.84	2.1	0.35	0.61	57.1	54.5	194fE6
195	84	21	-1.05	0.32	0.79	-0.6	0.88	-0.2	0.56	0.61	61.9	54.5	195mN1
228	84	21	-1.05	0.32	0.81	-0.5	0.80	-0.5	0.82	0.61	52.4	54.5	228fG1
376	84	21	-1.05	0.32	0.35	-2.5	0.35	-2.5	0.77	0.61	76.2	54.5	376fF1
9	83	21	-1.15	0.31	2.34	3.0	2.30	3.0	0.40	0.61	47.6	53.0	009mH3
13	83	21	-1.15	0.31	1.33	1.0	1.34	1.0	0.41	0.61	52.4	53.0	013mP2
28	83	21	-1.15	0.31	2.06	2.6	2.13	2.7	0.59	0.61	38.1	53.0	028mJ5
78	83	21	-1.15	0.31	1.42	1.2	1.31	1.0	0.81	0.61	33.3	53.0	078fL1
95	83	21	-1.15	0.31	0.85	-0.3	0.79	-0.6	0.79	0.61	57.1	53.0	095fF5
127	83	21	-1.15	0.31	0.95	0.0	0.80	-0.5	0.70	0.61	66.7	53.0	127mH2
142	83	21	-1.15	0.31	0.49	-1.8	0.52	-1.6	0.80	0.61	66.7	53.0	142mG3
156	83	21	-1.15	0.31	1.37	1.1	1.52	1.5	0.54	0.61	66.7	53.0	156mN7
184	83	21	-1.15	0.31	0.69	-0.9	0.71	-0.9	0.66	0.61	47.6	53.0	184fH2
271	83	21	-1.15	0.31	0.73	-0.8	0.69	-0.9	0.54	0.61	61.9	53.0	271mD6
272	83	21	-1.15	0.31	0.73	-0.8	0.69	-0.9	0.54	0.61	61.9	53.0	272mD6
316	83	21	-1.15	0.31	0.54	-1.6	0.45	-2.0	0.68	0.61	76.2	53.0	316mI4
415	83	21	-1.15	0.31	0.71	-0.8	0.86	-0.3	0.18	0.61	61.9	53.0	415fI2
421	83	21	-1.15	0.31	0.31	-2.8	0.31	-2.8	0.79	0.61	85.7	53.0	421fF2
31	82	21	-1.24	0.31	0.60	-1.3	0.63	-1.2	0.74	0.62	57.1	52.8	031mG3
51	82	21	-1.24	0.31	1.25	0.8	1.47	1.4	0.15	0.62	42.9	52.8	051mI2
239	82	21	-1.24	0.31	0.36	-2.5	0.44	-2.0	0.74	0.62	76.2	52.8	239mJ2
334	82	21	-1.24	0.31	0.40	-2.2	0.44	-2.1	0.67	0.62	66.7	52.8	334fI2
366	82	21	-1.24	0.31	0.41	-2.2	0.46	-1.9	0.85	0.62	66.7	52.8	366fF6
388	82	21	-1.24	0.31	0.35	-2.5	0.30	-2.9	0.80	0.62	76.2	52.8	388mS1
406	82	21	-1.24	0.31	0.70	-0.9	0.81	-0.5	0.29	0.62	71.4	52.8	406mF3
4	81	21	-1.34	0.30	0.59	-1.3	0.66	-1.1	0.79	0.63	61.9	53.2	004mI3
29	81	21	-1.34	0.30	1.04	0.2	1.05	0.3	0.58	0.63	38.1	53.2	029fI2
109	81	21	-1.34	0.30	1.37	1.1	1.31	1.0	0.33	0.63	52.4	53.2	109fF1
113	81	21	-1.34	0.30	0.70	-0.9	0.73	-0.8	0.60	0.63	61.9	53.2	113fJ2
129	81	21	-1.34	0.30	0.64	-1.1	0.56	-1.5	0.80	0.63	61.9	53.2	129mN2
269	81	21	-1.34	0.30	0.59	-1.3	0.72	-0.8	0.44	0.63	76.2	53.2	269fI6
278	81	21	-1.34	0.30	0.87	-0.3	0.93	-0.1	0.18	0.63	57.1	53.2	278mI2
292	81	21	-1.34	0.30	0.78	-0.6	0.83	-0.4	0.65	0.63	66.7	53.2	292mH2

294	81	21	-1.34	0.30	0.59	-1.3	0.58	-1.4	0.77	0.63	61.9	53.2	294mD2
355	81	21	-1.34	0.30	0.22	-3.5	0.25	-3.2	0.89	0.63	81.0	53.2	355mE2
2	80	21	-1.43	0.30	0.88	-0.3	1.11	0.4	0.51	0.63	47.6	53.5	002fD2
101	80	21	-1.43	0.30	0.87	-0.3	0.82	-0.5	0.78	0.63	52.4	53.5	101fE1
193	80	21	-1.43	0.30	0.62	-1.2	0.80	-0.5	0.52	0.63	57.1	53.5	193fH2
263	80	21	-1.43	0.30	0.37	-2.5	0.54	-1.6	0.63	0.63	76.2	53.5	263fF7
264	80	21	-1.43	0.30	1.08	0.4	0.92	-0.1	0.44	0.63	52.4	53.5	264mQ7
359	80	21	-1.43	0.30	0.40	-2.3	0.32	-2.8	0.78	0.63	76.2	53.5	359fN3
7	79	21	-1.52	0.30	1.18	0.6	1.10	0.4	0.65	0.64	52.4	52.8	007mG3
52	79	21	-1.52	0.30	1.32	1.0	1.13	0.5	0.67	0.64	61.9	52.8	052mH1
117	79	21	-1.52	0.30	1.05	0.3	0.89	-0.3	0.65	0.64	66.7	52.8	117fE1
124	79	21	-1.52	0.30	0.64	-1.1	0.87	-0.3	0.55	0.64	57.1	52.8	124fE3
125	79	21	-1.52	0.30	0.64	-1.1	0.87	-0.3	0.55	0.64	57.1	52.8	125fE7
147	79	21	-1.52	0.30	0.81	-0.5	0.76	-0.7	0.76	0.64	61.9	52.8	147fE1
148	79	21	-1.52	0.30	0.81	-0.5	0.76	-0.7	0.76	0.64	61.9	52.8	148fE1
186	79	21	-1.52	0.30	0.70	-0.9	0.51	-1.7	0.69	0.64	71.4	52.8	186fE2
207	79	21	-1.52	0.30	0.28	-3.1	0.31	-2.8	0.89	0.64	76.2	52.8	207mN3
261	79	21	-1.52	0.30	0.68	-1.0	0.70	-0.9	0.70	0.64	71.4	52.8	261mI2
12	78	21	-1.60	0.29	1.44	1.3	1.71	1.9	-0.11	0.64	42.9	52.9	012fW6
66	78	21	-1.60	0.29	0.52	-1.7	0.55	-1.6	0.75	0.64	61.9	52.9	066fV6
97	78	21	-1.60	0.29	0.82	-0.5	0.87	-0.3	0.47	0.64	52.4	52.9	097mM2
171	78	21	-1.60	0.29	0.73	-0.8	0.76	-0.7	0.46	0.64	52.4	52.9	171fG2
53	77	21	-1.69	0.29	0.83	-0.4	0.99	0.1	0.62	0.65	52.4	52.7	053mJ1
120	77	21	-1.69	0.29	0.62	-1.3	0.68	-1.0	0.82	0.65	57.1	52.7	120mI1
167	77	21	-1.69	0.29	0.55	-1.6	0.63	-1.2	0.57	0.65	57.1	52.7	167mI6
242	77	21	-1.69	0.29	0.29	-3.0	0.40	-2.3	0.71	0.65	85.7	52.7	242fI6
5	76	21	-1.77	0.29	1.59	1.7	1.59	1.7	0.61	0.65	47.6	51.7	005mT1
69	76	21	-1.77	0.29	0.87	-0.3	0.86	-0.3	0.82	0.65	61.9	51.7	069fE1
122	76	21	-1.77	0.29	0.58	-1.5	0.59	-1.4	0.72	0.65	66.7	51.7	122fF3
349	76	21	-1.77	0.29	0.30	-3.0	0.29	-3.1	0.86	0.65	76.2	51.7	349fQ6
22	75	21	-1.85	0.28	0.62	-1.3	0.71	-0.9	0.78	0.66	52.4	51.4	022mE6
55	75	21	-1.85	0.28	0.42	-2.3	0.47	-2.0	0.85	0.66	61.9	51.4	055mG3
96	75	21	-1.85	0.28	0.59	-1.4	0.62	-1.3	0.75	0.66	61.9	51.4	096fF2
103	75	21	-1.85	0.28	0.55	-1.6	0.59	-1.4	0.79	0.66	76.2	51.4	103mF7
60	74	21	-1.93	0.28	0.47	-2.0	0.48	-1.9	0.69	0.66	61.9	50.8	060fT7
138	74	21	-1.93	0.28	0.80	-0.6	0.75	-0.7	0.70	0.66	57.1	50.8	138fI2
245	74	21	-1.93	0.28	0.47	-2.0	0.50	-1.8	0.82	0.66	66.7	50.8	245fN3
247	74	21	-1.93	0.28	0.87	-0.3	0.73	-0.8	0.76	0.66	76.2	50.8	247fI1
40	72	21	-2.08	0.28	0.71	-0.9	0.80	-0.6	0.72	0.67	47.6	49.0	040mN2
56	72	21	-2.08	0.28	0.77	-0.7	0.81	-0.5	0.52	0.67	57.1	49.0	056fG2
141	72	21	-2.08	0.28	0.48	-2.0	0.49	-1.9	0.79	0.67	57.1	49.0	141fE1
151	72	21	-2.08	0.28	0.40	-2.5	0.48	-2.0	0.85	0.67	66.7	49.0	151mJ4

177	71	21	-2.16	0.27	0.43	-2.3	0.43	-2.2	0.82	0.67	71.4 47.7	177mI2
160	70	21	-2.23	0.27	0.37	-2.6	0.40	-2.4	0.84	0.68	71.4 46.7	160mJ3
3	69	21	-2.31	0.27	0.53	-1.8	0.50	-1.9	0.75	0.68	71.4 47.2	003fZ3
43	67	21	-2.45	0.27	1.01	0.1	0.97	0.0	0.76	0.68	42.9 45.6	043fF6
MEAN	89.9	21.0	-0.22	0.38	1.06	0.1	1.02	-0.1			64.0 62.1	
S.D.	7.0	0.0	0.98	0.11	0.55	1.4	0.59	1.3			14.2 8.9	

Table 7. Item measure order

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MODEL MEASURE	S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	EXP.	EXACT MATCH OBS%	EXP%	Item
21	1317	436	2.51	0.06	1.59	8.0	1.66	8.6	0.42	0.61	33.6	42.5	o3
20	1612	436	1.49	0.06	1.00	0.0	1.06	0.9	0.55	0.55	47.1	50.5	o2
5	1661	436	1.29	0.07	1.07	1.0	1.16	2.2	0.55	0.54	43.0	52.4	c1
17	1706	436	1.1	0.07	0.66	-5.2	0.70	-4.5	0.56	0.52	60.2	54.0	k2
18	1712	436	1.7	0.07	0.69	-4.6	0.70	-4.5	0.61	0.52	60.0	54.0	k3
15	1732	436	0.98	0.07	1.33	4.0	1.37	4.6	0.44	0.52	53.1	54.5	e3
16	1787	436	0.70	0.07	0.68	-4.8	0.75	-3.7	0.56	0.50	68.5	56.1	k1
19	1835	436	0.44	0.08	1.04	0.6	1.01	0.2	0.54	0.48	54.5	57.2	o1
4	1886	436	0.14	0.08	1.00	0.0	0.99	0.0	0.50	0.46	63.4	58.7	b4
6	1896	43	0.08	0.08	0.74	-3.9	0.82	-2.5	0.52	0.45	63.4	58.8	c2
13	1916	46	-0.05	0.08	0.80	-2.9	0.81	-2.6	0.51	0.44	65.1	60.0	e1
14	1928	436	-0.14	0.08	0.84	-2.2	0.89	-1.4	0.46	0.44	64.1	60.9	e2
7	1931	436	-0.16	0.08	2.22	9.9	2.11	9.9	0.34	0.44	59.5	61.0	c3
8	1967	436	-0.42	0.09	0.87	-1.8	0.87	-1.5	0.46	0.42	69.4	63.4	c4
11	1988	436	-0.59	0.09	0.80	-2.9	0.79	-2.6	0.50	0.40	72.0	64.8	c6
9	1996	436	-0.66	0.09	0.81	-2.7	0.91	-1.0	0.44	0.40	71.0	65.9	c5
12	2012	436	-0.80	0.10	0.80	-2.8	0.84	-1.7	0.43	0.39	71.0	67.6	c7
10	2024	436	-0.91	0.10	0.96	-0.5	1.00	0.0	0.38	0.38	70.8	69.1	c8
3	2038	436	-1.05	0.10	0.91	-1.2	0.93	-0.7	0.39	0.36	73.6	71.4	b3
2	2122	436	-2.21	0.14	0.97	-0.2	0.95	-0.2	0.26	0.26	87.1	86.9	b2
1	2146	436	-2.82	0.18	0.95	-0.3	1.13	0.6	0.20	0.20	92.2	92.3	b1
MEAN	1867.2	436.0	**0.00**	0.09	0.99	-0.6	1.02	0.0			63.9	62.0	
S.D.	189.7	0.0	**1.21**	0.03	0.35	3.8	0.33	3.7			13.1	11.1	

Table 8. Validity and reliabity (Person and item)

SUMMARY OF 435 MEASURED (NON-EXTREME) Person

	TOTAL			MODEL	INFIT		OUTFIT	
	SCORE	COUNT	MEASURE	ERROR	MNSQ	ZSTD	MNSQ	ZSTD
MEAN	89.9	21.0	2.35	0.38	1.06	0.1	1.02	-0.1
S.D.	6.9	0.0	0.95	0.09	0.55	1.4	0.60	1.3
MAX.	104.0	21.0	5.94	1.05	3.84	4.9	4.83	4.4
MIN.	67.0	21.0	0.13	0.27	0.22	-3.5	0.16	-3.2

REAL RMSE	0.44	TRUE SD	0.85	SEPARATION	1.94	Person RELIABILITY 0.**79**
MODEL RMSE	0.39	TRUE SD	0.87	SEPARATION	2.22	Person RELIABILITY 0.**83**
S.E. OF Person MEAN = 0.05						

MAXIMUM EXTREME SCORE: 1 Person

SUMMARY OF 436 MEASURED (EXTREME AND NON-EXTREME) Person

	TOTAL			MODEL	INFIT		OUTFIT	
	SCORE	COUNT	MEASURE	ERROR	MNSQ	ZSTD	MNSQ	ZSTD
MEAN	89.9	21.0	2.36	0.38				
S.D.	7.0	0.0	0.98	0.11				
MAX.	105.0	21.0	7.22	1.85				
MIN.	67.0	21.0	0.13	0.27	0.22	-3.5	0.16	-3.2

REAL RMSE	0.44	TRUE SD	0.87	SEPARATION	1.96	Person RELIABILITY 0.**79**
MODEL RMSE	0.40	TRUE SD	0.89	SEPARATION	2.23	Person RELIABILITY 0.**83**
S.E. OF Person MEAN = 0.05						

Person RAW SCORE-TO-MEASURE CORRELATION = 0.96

CRONBACH ALPHA (KR-20) Person RAW SCORE "TEST" RELIABILITY = .82

SUMMARY OF 21 MEASURED (NON-EXTREME) Item

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	1867.2	436.0	0.00	0.09	0.99	-0.6	1.02	0.0
S.D.	189.7	0.0	1.21	0.03	0.35	3.8	0.33	3.7
MAX.	2146.0	436.0	2.51	0.18	2.22	9.9	2.11	9.9
MIN.	1317.0	436.0	-2.82	0.06	0.66	-5.2	0.70	-4.5

REAL RMSE	0.09	TRUE SD	1.20	SEPARATION 12.72 Item	RELIABILITY **0.99**
MODEL RMSE	0.09	TRUE SD	1.20	SEPARATION 13.16 Item	RELIABILITY 0.**99**
S.E. OF Item MEAN = 0.27					

UMEAN=.0000 USCALE=1.0000

Item RAW SCORE-TO-MEASURE CORRELATION = -0.95

9135 DATA POINTS. LOG-LIKELIHOOD CHI-SQUARE: 14926.10 with 8677 d.f. p=0.0000

Global Root-Mean-Square Residual (excluding extreme scores): 0.6106