Psychometric Properties of the Indonesian Version of the Academic Self-Concept and the Entrepreneurial Self-Efficacy Scales

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ABSTRACT

The study aims to verify the validity and reliability of the academic self-concept and the entrepreneurial self-efficacy in Indonesian context. The study also aims to verify whether the academic self-concept and the entrepreneurial self-efficacy are two distinct constructs. Questionnaires were administered to 120 participants who agreed to participate in the study. Confirmatory factor analysis was conducted to verify unidimensionality, convergent validity, and concurrent validity of the academic self-concept and the entrepreneurial self-efficacy. Item analysis and internal consistency procedure were also implemented to support confirmatory factor analysis. The study provides significant evidences about the validity and reliability of the Indonesian version of the academic self-concept and the entrepreneurial self-efficacy scales. Hence, those Indonesian version scales have successfully confirmed the context and broadened their generalization. Future researches are recommended to verify those scales in a wider context.

Keywords: Academic self-concept, entrepreneurial self-efficacy, confirmatory factor analysis, Indonesian version scales.

1. INTRODUCTION

The academic achievement or the academic performance of students has been a critical variable for several studies (e.g., Pajares & Miller, 1994; Choi, 2005; Kornilova et. al., 2009; Guay et. al., 2010). Kornilova et. al., (2009) asserted that scholars have attempted to predict the academic achievement or the academic

performance of students to provide recommendations for the teachers and the students about how to improve it.

Referring to Guay et. al., (2010) that the motivational factors (e.g., self-concept) were significant predictors for an academic achievement. The findings of the several studies (e.g., Pajares & Miller, 1994; Choi, 2005; Kornilova et. al., 2009) also showed similar results to Guay et. al., (2010). Self-concept is crucial for an academic achievement (e.g., Guay et. al., 2010), hence, the measurement of self-concept should be fit, in terms of its validity and reliability.

Further, the measurement of self-concept is correlated with the measurement of self-efficacy (Ferla et. al., 2009). Specifically, Ferla et. al., (2009) questioned whether self-concept and self-efficacy are two distinct constructs by verifying the structural relationships between self-concept and self-efficacy. They found that self-concept and self-efficacy are two different constructs within the same self-construct. They also found that self-concept is suitable for predicting the motivational variables, whereas self-efficacy is suitable for predicting an academic achievement.

Therefore, this study aims to verify the validity and reliability of self-concept and self-efficacy in Indonesian context. Specifically, this study verifies the Indonesian version of these three scales: the Liu-Wang-Parkins Academic Self-Concept Scale [the LWP_ASC scale] (Liu et. al., 2005), the Eccles-Wigfield Self-Concept Scale [the EW_SC scale] (Eccles & Wigfield, 1995), and the Kickul-Gundry-Barbosa-Whitcanack Entrepreneurial Self-Efficacy Scale [the KGBW_ESE scale] (Kickul et. al., 2009). In addition, this study also verifies whether self-concept and self-efficacy are two distinct constructs by using the Indonesian version of the three scales.

2. LITERATURE REVIEW

Academic Self-Concept

Liu and Wang (2005) composed the operational definition of academic self-concept as "an individual's perception of self, and the perceptions are said to be formed through experiences with the environment, interactions with significant others, and attributions of his or her own behaviour" (pp. 20-21). The essense of academic self-concept is "perception of ability" (Liu & Wang, 2005, p. 21) or "perception of competence" (Liu & Wang, 2005, p. 21; Hughes et. al., 2011). Bandura (1986) defined self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). However, self-concept differs from self-efficacy (Pajares & Miller, 1994). Pajares and Miller (1994) explained that "self-efficacy is a context-specific assessment of competence to perform a specific task, a judgment of one's capabilities to execute specific behaviors in specific situations" (p. 193), whereas self-concept "is not measured at that level of specificity and includes beliefs of self-worth associated with one's perceived competence" (p. 193).

The findings of the self-concept, in general, differ from the self-concept in schoolwork or the academic self-concept (Liu & Wang, 2005; Liu et. al., 2005). The study focuses on the academic self-concept, because a unique characteristic of the academic self-concept is found in previous studies (Liu & Wang, 2005; Liu et. al., 2005). The academic self-concept is found to be raising and declining over time following the student's grade (Liu & Wang, 2005; Liu et. al., 2005). The academic self-concept covers the academic confidence and the academic effort (Liu & Wang, 2005; Liu et. al., 2005). The academic confidence refers

to "students' feelings and perceptions about their academic competence", whereas the academic effort refers to "students' commitment to, and involvement and interest in schoolwork" (Liu & Wang, 2005, p. 22; Liu et. al., 2005, p. 573).

Entrepreneurial Self-Efficacy

Self-efficacy in general differs from entrepreneurial self-efficacy (e.g., Kickul et. al., 2009). The entrepreneurial self-efficacy refers to self-efficacy for venture development (e.g., Kickul et. al., 2009). Kickul et. al., (2009) explained the entrepreneurial self-efficacy as "participants' perceptions of their ability to perform many of the instrumental functions within each stage of the entrepreneurial life cycle" (p. 446).

Referring to the entrepreneurial life cycle, there are four dimensions of the entrepreneurial self-efficacy including searching, planning, marshalling, and implementation (Kickul et. al., 2009). De Noble and his colleagues (cited in Setiawan, 2014) also proposed the six dimensions of the entrepreneurial self-efficacy, including developing new product and market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with unexpected challenges, and developing critical human resources.

3. RESEARCH METHODS

Participants and Procedure

The participants were undergraduates at Universitas Ciputra, Indonesia. They were recruited to participate in this study through their entrepreneurship course, which was called as *Reboan* course. Questionnaires were administered to 200 participants who agreed to participate in the study. The participants and the data were treated confidentially. However, in completing the questionnaires, only 145 out of 200 participants, completed them. Moreover, out of 145 participants, 25 were found inconsistent in completing the questionnaires. Hence, only 120 participants were retained in the final analysis.

Instruments

The LWP_ASC scale (Liu et. al., 2005)

The LWP_ASC scale, developed by Liu et. al., (2005), was used to the measure academic self-concept. The LWP_ASC scale comprises of the Academic Confidence Subscale (AC subscale) and the Academic Effort Subscale (AE subscale) (Liu & Wang, 2005; Liu et. al., 2005). The AC subscale contains nine items, whereas the AE subscale contains 10 items, and each subscale comprises negative and positive items (Liu & Wang, 2005; Liu et. al., 2005). One item of the AC subscale (item number #5), which is "If I work hard, I think I can go to the Polytechnic or University", was omitted in this study, due to its irrelevance the participants.

The translation and back-translation procedure (Heilemann et. al., 2003; Shimazu et. al., 2008; García et. al., 2009; Santos et. al., 2014) was conducted. The LWP_ASC scale (English version) was translated into Indonesian language (*Bahasa Indonesia*), then, the translation was back-translated into English. This process was to ensure that the content of the translation (*Bahasa Indonesia*) stays the same as the original scale (English version) (Santos et. al., 2014). Referring to Heilemann et. al., (2003), Shimazu et. al., (2008), and Santos et. al., (2014), adaptations, in terms of words, meanings, and entrepreneurship course, were

also implemented in each item. As a result, the authors were able to obtain the adapted version of the LWP_ASC scale in *Bahasa Indonesia*. As Heilemann et. al., (2003), Shimazu et. al., (2008), and García et. al., (2009) did, the authors enclosed the adapted version in *Bahasa Indonesia* in Appendix A.

The EW_SC scale (Eccles & Wigfield, 1995)

The EW_SC scale, developed by Eccles and Wigfield (1995), is the second instrument of the academic self-concept, and it is a part of the Self-and-Task-Perception Questionnaire [STPQ] (Eccles & Wigfield, 1995). Referring to Ferla et. al., (2009), "ability/expectancy-related" items of the STPQ are recognized as items of the academic self-concept.[1] Based on those items, there are five positive items in the EW_SC scale.

The translation, back-translation, adaptation, and scoring procedures of the EW_SC scale were conducted, as well as the LWP_ASC scale. As a result, the authors were able to obtain the adapted version of the EW_SC scale in *Bahasa Indonesia* and enclosed in Appendix B.

The KGBW_ESE scale (Kickul et. al., 2009)

The KGBW_ESE scale, developed by Kickul et. al., (2009), is an instrument for measuring the entrepreneurial self-efficacy. The KGBW_ESE scale contains ten items and is based on the entrepreneurial life cycle, including searching, planning, marshalling, and implementing stages (Kickul et. al., 2009).

The translation, back-translation, adaptation, and scoring procedures of the KGBW_ESE scale were conducted, as well as the LWP_ASC and the EW_SC scales. As a result, the authors were able to obtain the adapted version of the KGBW_ESE scale in *Bahasa Indonesia* and enclosed in Appendix C.

Data Analysis

Confirmatory factor analysis was conducted to verify unidimensionality, convergent validity, and concurrent validity of the LWP_ASC, the EW_SC, and the KGBW_ESE scales. Item analysis and internal consistency procedure were also implemented to support the confirmatory factor analysis.

4. RESULTS

Item Analysis and Reliability

Item analysis was conducted by computing corrected item-total correlation coeficients and followed by deletion of items which have weak relationships between items and their scales (Heilemann et. al., 2003; Lewis, 2003; Hansen, 2004). Referring to Bruning and Kintz (1977), for sample size above 100, the weak relationships between items and their scales is determined by the low correlation coeficients (e.g., below than 0.20). However, 9 out of 18 items of the LWP_ASC scale were found to be deleted. Referring to Hansen (2004), the deletion of items of the LWP_ASC scale was conducted step-by-step (e.g., one-item by one-item), beginning from LWP_AE6 and following by LWP_AC1, LWP_AE5, LWP_AC6, LWP_AC2, LWP_AE3, LWP_AE4, LWP_AE9, and LWP_AC8 (see Appendix A). The other nine items of the LWP_ASC scale have corrected item-total correlation coeficients between 0.51 and 0.67 (see Table 1).

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[1] Ferla et. al., (2009) developed "Programme for International Student Assessment (PISA) Math Self-Concept Scale" based on "ability/expectancy-related" items of STPQ.

Table 1
Corrected Item-Total Correlation, Factor Loading, Average Variance Extracted, and
Composite Reliability of the Three Scales

	Corrected item-total correlation	Factor loading	t value	Average Variance Extracted	Composite Reliability
The LWP_ASC Scale					
LWP_AC3	0.57	0.69	8.28	0.47	0.89
LWP_AC4	0.58	0.70	8.22		
LWP_AC5	0.52	0.74	8.98		
LWP_AC7	0.63	0.78	9.73		
LWP_AE1	0.60	0.69	8.09		
LWP_AE2	0.54	0.73	8.89		
LWP_AE7	0.67	0.51	5.72		
LWP_AE8	0.51	0.61	7.04		
LWP_AE10	0.54	0.65	7.68		
The EW_SC Scale					
EW_SC1	0.62	0.79	9.29	0.58	0.87
EW_SC2	0.72	0.61	7.20		
EW_SC3	0.69	0.83	10.69		
EW_SC4	0.78	0.92	12.03		
EW_SC5	0.77	0.61	7.25		
The KGBW_ESE Scale					
KGBW_ESE1	0.60	0.77	9.54	0.47	0.90
KGBW_ESE2	0.50	0.64	7.53		
KGBW_ESE3	0.62	0.83	10.64		
KGBW_ESE4	0.67	0.85	10.98		
KGBW_ESE5	0.53	0.64	7.63		
KGBW_ESE6	0.63	0.70	8.57		
KGBW_ESE7	0.39	0.43	4.71		
KGBW_ESE8	0.50	0.54	6.21		
KGBW_ESE9	0.55	0.62	7.18		
KGBW_ESE10	0.61	0.75	9.25		

Note: Average Variance Extracted and Composite Reliability were computed manually based on the formulas written by Fornell and Larcker (1981), and Hair et. al., (2010).

In contrast, the good items were found in both the EW_SC and the KGBW_ESE scales. Hence, the item deleting process was not conducted for those scales. The EW_SC scale have corrected item-total correlation coeficients between 0.62 and 0.78, whereas the KGBW_ESE scale also have coeficients between 0.39 and 0.67 (see Table 1).

The reliability of scales was assessed using Cronbach's alpha. However, as found in Heilemann et. al., (2003) and Hansen (2004), Cronbach's alpha of the LWP_ASC scale increased after deleting the poor items. After deleting one item (LWP_AE6), Cronbach's alpha increased to 0.76, and after deleting nine items, Cronbach's alpha increased to 0.85. Further, Cronbach's alpha of the EW_SC and the KGBW_ESE

scales were 0.88 and 0.85 respectively. The Cronbach's alpha of those three scales indicated satisfactory internal consistency (Liu & Wang, 2005; Liu et. al., 2005; Lau, 2013).

Confirmatory Factor Analysis

Similar to the previous studies (e.g., Hansen, 2004; Taylor et. al., 2007), the initial fit indices of three scales were not particularly good. Those fit indices were therefore improved based on modification indices as recommended by Jöreskog and Sörbom (1996). The modification indices were directed to set the error covariance between two items (Jöreskog & Sörbom, 1996). The improved fit indices were then achieved and presented at Table 2.

Table 2
Fit Indices of the Three Scales

Fit index	The Recommended value	The LWP_ASC Scale	The EW_SC Scale	The KGBW_ ESE Scale
Chi-square ($\chi 2$)	Small	48.11	3.01	55.48
p value of $\chi 2$	> 0.05	0.00245	0.55654	0.00218
Ratio of $\chi 2$ to degrees of freedom ($\chi 2/df$)	≤ 3.00	2.00; df = 24	0.7525; df = 4	1.91; df = 29
Goodness of Fit Index (GFI)	≥ 0.90	0.92	0.99	0.91
Adjusted Goodness of Fit Index (AGFI)	≥ 0.90	0.85	0.96	0.84
Normed Fit Index (NFI)	≥ 0.90	0.89	0.99	0.91
Non-Normed Fit Index (NNFI)	≥ 0.90	0.90	1.0	0.92
Comparative Fit Index (CFI)	≥ 0.90	0.93	1.00	0.95
Root Mean Square Residual (RMR)	≤ 0.08	0.058	0.025	0.058
Root Mean Square Error of Approximation (RMSEA)	≤ 0.08	0.092	0.000	0.088

Note: Recommended values were based on Heilemann et. al., (2003) and Hair et. al., (2010).

This study found that only the EW_SC scale fulfills the recommended values of fit indices. The chi-square, as a fundamental absolute fit index should be insignificant (Hair et. al., 2010). However, this study found that the two chi-squares were significant. Referring to Cheng and Chen (2009), those chi-squares should be adjusted with the degrees of freedom by using the ratio of chi-square to degrees of freedom. After the adjustment was implemented, the ratio of chi-square to degrees of freedom for the LWP_ASC scale was 2.00 and for the KGBW_ESE scale was 1.91. Those ratios then fulfill the recommended value. Mostly, other indices (GFI, NNFI, CFI, and RMR) of the LWP_ASC and the KGBW_ESE scales also fulfill the recommended values. Overall, the LWP_ASC, the EW_SC, and the KGBW_ESE scales have the suitable fit indices. It is an evidence of the unidimensionality of those scales (e.g., Anderson et. al., 1987; Lewis, 2003; García et. al., 2009; Fried et. al., 2016).

The study found the factor loadings between 0.51 and 0.78 for the LWP_ASC scale, 0.61 and 0.92 for the EW_SC scale, and 0.43 and 0.85 for the KGBW_ESE scale (see Table 2). All factor loadings of each scale were significant at 0.01 level (t-value above 2.5). Referring to several studies (e.g., Bove et. al., 2009; Yi & Gong, 2013), all items of each scale originated from the same construct (i.e. LWP_AC3 to LWP_AE10 originated from the LWP_ASC scale, etc.), thus indicating convergent validity.

Further, only the average variance extracted of the EW_SC scale was found greater than the accepted value of 0.50 (Hair et. al., 2010), thus also indicated convergent validity (Lee et. al., 2005; Hair et. al., 2010). Both the LWP_ASC and the KGBW_ESE scales have the same average variance extracted of 0.47. However, the value of 0.47 was slightly below 0.50. Referring to the previous studies (e.g., Igbaria et. al., 1995; Mooradian et. al., 2006), the low average variance extracted should be compensated with the greater composite reliability. Composite reliability of each scale ranged from 0.87 to 0.90 and found greater than the accepted value of 0.70 (Hair et. al., 2010), thus proving the construct internal consistency (Bove et. al., 2009; Yi & Gong, 2013).

Furthermore, this study assessed concurrent validity of the scales. McCauley et. al., (2013) explained the concurrent validity as "a form of criterion-related validity in which an instrument correlates substantially with other validated measures of a given theoretically related construct" (p. 1508). Referring to McCauley et. al., (2013), concurrent validity is determined through intercorrelations among the LWP_ASC, the EW_SC, and the KGBW_ESE scales. The correlations between the LWP_ASC and the EW_SC, the LWP_ASC and the KGBW_ESE, and the EW_SC and the KGBW_ESE were 0.86 ($p < 0.01$), -0.13 ($p > 0.10$), and -0.08 ($p > 0.10$) respectively. Referring to McCauley et. al., (2013), two self-concept scales (the LWP_ASC and the EW_SC) demonstrate excellent concurrent validity.

High correlation between the LWP_ASC and the EW_SC means that the LWP_ASC and the EW_SC are equally suitable for measuring the academic self-concept. Insignificant correlations between the LWP_ASC and the KGBW_ESE, and the EW_SC and the KGBW_ESE also means that the academic self-concept and the entrepreneurial self-efficacy are two different constructs.

5. DISCUSSION

The study has developed and validated the academic self-concept scale for Indonesian context. The study confirms that the academic self-concept is both a single-dimensional construct and a two-dimensional construct. As a single-dimensional construct, academic self-concept was assessed by the EW_SC scale. The EW_SC scale was underlied by the ability perception items (Eccles & Wigfield, 1995; Ferla et. al., 2009). Further, as a two-dimensional construct, academic self-concept was assessed by the LWP_ASC scale. The LWP_ASC scale consists of two dimensions, namely the academic confidence and the academic effort (Liu & Wang, 2005; Liu et. al., 2005). Overall, the EW_SC and the LWP_ASC scales exhibit internal consistency reliability, convergent validity, and concurrent validity. Referring to Yi and Gong (2013), the EW_SC and the LWP_ASC scales have achieved the soundness conceptually, as well as the validity psychometrically.

The finding also suggests a practical implication. The academic self-concept is able to be assessed by a single-dimensional scale (the EW_SC scale) or a two-dimensional scale (the LWP_ASC scale). A single-dimensional scale is a short-version scale, whereas a two-dimensional scale is the long-version one. A short-version scale mainly focusses on the perception on ability (Eccles & Wigfield, 1995; Ferla et. al., 2009), whereas a two-dimensional scale refers to the academic confidence and the academic effort (Liu & Wang, 2005; Liu et. al., 2005). However, a long-version scale is more detailed than the short-version one. There is at least one advantage of using a long-version scale, which is achieving the improvement of academic self-concept through the academic confidence, or the academic effort, or both.

The study also has developed and validated the entrepreneurial self-efficacy scale (the KGBW_ESE scale) for Indonesian context. Basically, the KGBW_ESE scale is a multi-dimensional construct (Kickul et. al., 2009). The KGBW_ESE scale consisted of five dimensions based on the entrepreneurial life cycle, including searching, planning, marshalling, and implementing stages (Kickul et. al., 2009). Referring to Yi and Gong (2013), the KGBW_ESE scale also achieves the soundness conceptually, as well as the validity psychometrically, in terms of internal consistency reliability and convergent validity. Further, there is at least one practical implication of using the KGBW_ESE scale, which is achieving the improvement of entrepreneurial self-efficacy through the entrepreneurial life cycle components.

6. CONCLUSION

This study provides significant evidences about the validity and reliability of the Indonesian version of the academic self-concept and the entrepreneurial self-efficacy scales. Hence, the Indonesian version scales have successfully confirmed the context and broadened their generalization.

The LWP_ASC and the EW_SC are scales that equally suitable for measuring the academic self-concept. For measuring the academic self-concept properly, researchers can use the LWP_ASC scale (a long-version scale) or the EW_SC scale (a short -version scale). In addition, the academic self-concept and the entrepreneurial self-efficacy are two different constructs.

Validation of those Indonesian version scales are limited to the students in specific university. Hence, referring to several studies (e.g., Shimazu et. al., 2008; Lau, 2013), those Indonesian version scales would be called as the preliminary scales. Future researches are recommended to verify those scales in a wider context.

Appendix A

The LWP_ASC Scale in *Bahasa Indonesia* (adapted from Liu et. al., 2005)

Original numbers or codes	Codes in this study	Items	Mean	Std. Deviation
1	LWP_AC1**	Saya bisa mengikuti perkuliahan *entrepreneurship* dengan mudah.	3.63	0.79
2	LWP_AE1	Ketika mengikuti perkuliahan *entrepreneurship*, saya sering tidak fokus. *	3.22	0.96
3	LWP_AC2**	Saya bisa membantu rekan-rekan saya dalam perkuliahan *entrepreneurship*.	3.64	0.73
4	LWP_AE2	Saya seringkali kurang serius dalam mengerjakan tugas-tugas perkuliahan *entrepreneurship*. *	3.18	0.91
6	LWP_AE3**	Saya serius memperhatikan fasilitator saat perkuliahan *entrepreneurship* berlangsung.	3.72	0.70
7	LWP_AC3	Sebagian besar rekan-rekan di kelas saya lebih menguasai materi perkuliahan *entrepreneurship* dibandingkan dengan saya. *	3.12	0.93
8	LWP_AE4**	Saya belajar giat untuk menghadapi kuis atau ujian dari perkuliahan *entrepreneurship*.	3.68	0.69
9	LWP_AC4	Fasilitator saya menilai saya kurang menguasai dalam menyelesaikan tugas-tugas perkuliahan *entrepreneurship*. *	3.00	0.94

Original numbers or codes	Codes in this study	Items	Mean	Std. Deviation
10	LWP_AE5**	Saya antusias terhadap perkuliahan *entrepreneurship.*	3.42	0.92
11	LWP_AC5	Saya seringkali lupa dengan apa yang telah saya pelajari dari perkuliahan *entrepreneurship.* *	3.12	0.91
12	LWP_AE6**	Saya akan melakukan yang terbaik untuk lulus dari perkuliahan *entrepreneurship.*	4.01	0.70
13	LWP_AE7	Saya kadang-kadang merasa ingin berhenti mengikuti perkuliahan *entrepreneurship.* *	3.27	1.01
14	LWP_AC6**	Saya adalah baik dalam penguasaaan materi perkuliahan *entrepreneurship.*	3.59	0.70
15	LWP_AE8	Saya seringkali bosan dan menginginkan agar perkuliahan *entrepreneurship* cepat berakhir. *	3.68	0.96
16	LWP_AC7	Saya seringkali kurang menguasai dalam mengerjakan tugas-tugas perkuliahan *entrepreneurship.* *	3.22	0.95
17	LWP_AE9**	Saya tidak pantang menyerah ketika mengerjakan tugas-tugas perkuliahan *entrepreneurship* walau sesulit apapun.	3.81	0.73
18	LWP_AC8**	Saya dapat menyelesaikan tugas-tugas perkuliahan *entrepreneurship* lebih baik dibandingkan dengan rekan-rekan saya.	3.57	0.79
19	LWP_AE10	Saya tidak bersedia untuk melakukan upaya lebih keras dalam menyelesaikan tugas-tugas perkuliahan *entrepreneurship.* *	3.12	0.95

Note: *Negatively worded items; **Items were deleted during item analysis; Academic Confidence (AC) subscale items: 1, 3, 7, 9, 11, 14, 16, 18; Academic Effort (AE) subscale items: 2, 4, 6, 8, 10, 12, 13, 15, 17, 19; item number #5 was omitted; Response categories: 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree for positive items, whereas reversed score for negative items.

Appendix B

The EW_SC Scale in *Bahasa Indonesia* (adapted from Eccles & Wigfield, 1995)

Original numbers or codes	Codes in this study	Items	Mean	Std. Deviation
Item 8	EW_SC1	Dibandingkan dengan rekan-rekan yang ada di kelas Anda, seberapa besar **harapan** Anda terhadap keberhasilan Anda dalam menyelesaikan perkuliahan *entrepreneurship* saat ini?	3.74	0.76
Item 9	EW_SC2	Dibandingkan dengan rekan-rekan yang ada di kelas Anda, seberapa tinggi **peringkat** Anda dalam perkuliahan *entrepreneurship* saat ini?	3.52	0.72
Item 10	EW_SC3	Menurut prediksi Anda sebelumnya, seberapa **sukses** Anda dalam menyelesaikan perkuliahan *entrepreneurship* saat ini?	3.71	0.75
Item 11	EW_SC4	Seberapa baik **upaya** Anda dalam menyelesaikan perkuliahan *entrepreneurship* saat ini?	3.87	0.71
Item 12	EW_SC5	Seberapa baik **penguasaan** Anda terhadap perkuliahan *entrepreneurship* saat ini?	3.87	0.72

Note: Response categories: 1 = much worse, 2 = a little worse, 3 = about the same, 4 = a little better, 5 = much better (for EW_SC1 and EW_SC2); 1 = unsuccessful, 2 = mostly unsuccessful, 3 = sometimes unsuccessful/sometimes successful, 4 = mostly successful, 5 = successful (for EW_SC3); 1 = very poor, 2 = poor, 3 = fair, 4 = good, 5 = very good (for EW_SC4 and EW_SC5).

Appendix C

The KGBW_ESE Scale in *Bahasa Indonesia* (adapted from Kickul et. al., 2009)

Original numbers or codes	Codes in this study	Items	Mean	Std. Deviation
Task 1	KGBW_ESE1	Menemukan ide bisnis yang unik.	3.83	0.63
Task 2	KGBW_ESE2	Mengidentifikasi peluang pasar bagi bisnis.	4.01	0.54
Task 3	KGBW_ESE3	Merencanakan suatu bisnis baru.	3.91	0.69
Task 4	KGBW_ESE4	Menyusun rencana bisnis.	3.91	0.61
Task 5	KGBW_ESE5	Meningkatkan modal (uang) untuk menjalankan bisnis.	3.84	0.64
Task 6	KGBW_ESE6	Meyakinkan orang lain untuk berinvestasi dalam bisnis Anda.	3.88	0.74
Task 7	KGBW_ESE7	Meyakinkan bank untuk memberikan pinjaman pada bisnis Anda.	3.72	0.83
Task 8	KGBW_ESE8	Meyakinkan orang lain untuk ikut bekerja dalam bisnis Anda.	3.87	0.61
Task 9	KGBW_ESE9	Menjalankan (mengelola) bisnis.	4.16	0.57
Task 10	KGBW_ESE10	Menumbuhkan bisnis menjadi bisnis yang sukses.	4.16	0.62

Note: Participants rated their level of confidence for success regarding the activities on a 5-point Likert scale: 1 = not confident at all, 2 = slightly confident, 3 = moderately confident, 4 = confident, and 5 = completely confident.

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