The conditions of these two variables are also described in Graphs 1 and 2. Comparison between predictors shows that increase in internal learning.

C. Career Maturity

Research shows that more than half of the respondents have the condition of career entrepreneurship maturity at a high level (57.3%). This achievement indicates that students have sufficient maturity index to perform various explorations and planning according to the stage of career development. Nevertheless, exposure in Table 3 shows that more than 30% of students need a massive increase in career entrepreneurship maturity.

TABLE III
OVERVIEW OF CAREER MATURITY

Score Interval	Category	Frequency	%
≥ 67	Very high	26	12
54 - 66	High	125	57.3
41 - 53	Moderate	59	27
28 - 40	Low	8	3.7
≤ 27	Very Low	0	0
Total		218	100

The achievement of career maturity in entrepreneurship becomes one of the main standards in developing entrepreneurship-based education in higher education programs. Research shows some respondents with low levels of career maturity.

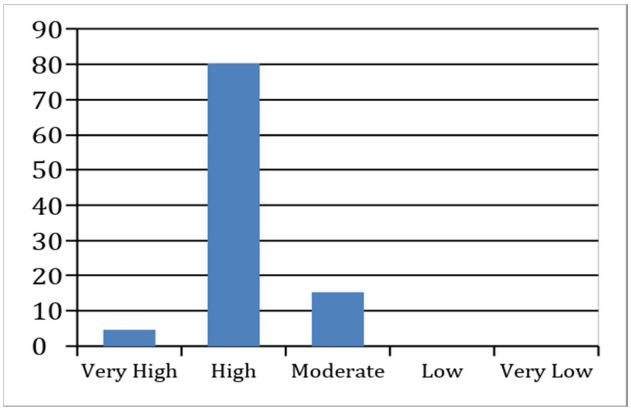

Fig. 1 Student's Internal Locus of Control (in 1-100 scale)

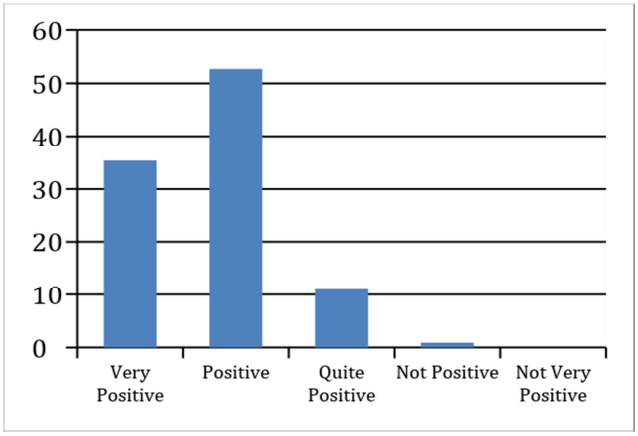

Fig. 2 Personal Self-Concept of Students (in 1-100 scale)

D. The contribution of Locus of Internal Control and Self Concept to Career Maturity

The internal contribution of Locus of Control and self-concept of career maturities were analyzed using multiple regressions and presented in Table 4. The achievement of R-value of 0.275 indicates regression between internal locus of control coefficient (X_1) on career maturity (Y) on P-value (significance) 0,000. The value of R Square (R^2) of 0.075, this means that 7.5% of the variation in the high-low career maturity can be explained by the internal locus of control, while the remaining 92.5% is explained by other variables. The achievement of R values indicates the self-condition that occurs in the individual effects of career maturity in entrepreneurship. This will have an impact on whether the individual is ready or not (in this case, the student who will enter the engineering college) in starting his career as an entrepreneur. The barometer that becomes the starting point of entrepreneurial success is the ability to respond to every opportunity and challenge so that with the internal locus of control is high; it will produce maturity in facing challenges as entrepreneurs. Research findings prove that the more dominant internal locus of control individuals, then contribute to the improvement of career maturity.

The relationship of self-concept with maturity is shown on multiple regression models X_2 - Y in Table 4. The model test produces the R-value of 0.268, which shows the regression coefficient between the concepts of career maturity, with a significant level of 0.000. The value of R Square (R^2) of 0.072; this means 7.2% variation in the high level of career maturity can be explained by self-concept. The contribution of self-concept to career maturity is an indicator of the impact of views, perceptions, and beliefs of individuals on improving the maturity of entrepreneurship career [39], [40]. Effectively, self-concept is related to physical dimension, individual character and motivation will give significant manifestation to the ready or not of students for entrepreneurship [41], [42]. Based on these findings, it can be implemented in a higher education context, where it can occur in higher education.

TABLE IV
OVERVIEW OF CAREER MATURITY

Model	R	R Square	Sig.
X_1-Y	0.275	0.075	0,000
X_2 –Y	0.268	0.072	0,000
X_1, X_2 - Y	0.332	0.110	0,000

Note. X_1: Internal locus of control, X_2: Self-concept, Y: Maturity career of engineering education students in entrepreneurship

Tests on two variables (X1 and X2) together with the level of entrepreneurship career maturity results is in a value of 0.332 which shows a double regression coefficient between internal locus of control and self-concept of career maturity, with P-value (significance) 0,000. When analyzed from the achievement of R-value, it can be interpreted that the coefficient value is sufficient level, so this indicates that together, internal locus of control and student self-concept has a significant contribution to the condition of career maturity in entrepreneurship. The power of the findings is also evident by the achievement of R Square (R2) of 0.110;

this means that 11% of the high variation in the low maturity of entrepreneurship can be explained together with by an internal locus of control and self-concept, while the remaining 89% is explained by other variables.

The acquisition of these values has been strong enough to be the basic reference in mapping the psychological conditions of entrepreneurship. An in-depth study of the internal dimensions of control and students' self-concept in preparation for entrepreneurship is a key indicator in assessing the readiness of students [43], [44]. The individual's self-confidence in self-achievement and its deep understanding of psychological factors determines the maturity of a career in entrepreneurship. The findings of psychological factors determining the maturity of an entrepreneurship career become the basis of entrepreneurship education. The study is in higher education engineering. The diagnosis of internal conditions of locus of control and self-concept in improving student career maturity in entrepreneurship in engineering higher education becomes the focus of study in the preparation of entrepreneurship-based curriculum [45], [46] and creative thinking skills, critical and logical [47].

Entrepreneurship careers in engineering education are also related to the curriculum and how to teach entrepreneurship. The entrepreneurial curriculum challenge, which is the difficulty in teaching students about entrepreneurship, is what educators in engineering education are sure to find because they practice that "theory is boring! College is boring! School is boring!", All theories, lectures, and schools can be relevant to the conditions that occur in the field. We as educators, can also be boring and irrelevant in the eyes of students! Students may not understand that learning theory can be very interesting. Unfortunately, the process that can be used to print entrepreneurship can be boring.

Classes become independent, modeled on learning styles. Classes become irrelevant because it makes us as educators fail to apply theory as a tool to answer student questions. A good theory can pass the test and can be applied in the field. If we fail to teach our students, what is wrong is that we as educators are not theories of discovery. Effective strategies for teaching students must be agreed upon by them and monitored by educators in this way to be more effective. If our goal is to help students become entrepreneurs based on theory, the most effective method is to use a system that allows students to practice the special skills needed. In other words, students can use practice with theory-based activities. The main role of educators is to study the appropriate contracts and identify theories that must be mastered. Questions for educators generally before teaching like this, "What will I teach today?" should "What will my students do today?" The task of educators can make it easier by delegating some of the responsibilities for the second question to students. Activities Delegation of learning to students who are more in-depth, into class, or each can reduce boredom. It also provides an opportunity for educators to work more with other students because they try to understand theories in carrying out their tasks in learning activities.

Entrepreneurship careers in engineering education are also related to the curriculum and how to teach entrepreneurship. If these two important parts are problematic, they will certainly have a negative impact on the Internal Control and Self Concept of engineering students, who have an influence on the maturity career of engineering education students in entrepreneurship.

IV. Conclusions

The acquisition of R Square value of 7.5%, and self-concept contributed is significant to the entrepreneurial students in engineering higher education. The career maturity is 7.2%. If the contribution of students in entrepreneurship is 11%, it can be interpreted that the two variables are contributing in the direction of improving student career maturity in entrepreneurship in higher engineering education.

These two psychological variables are indications that students are engineering higher education and increasing the maturity of students' career in entrepreneurship needs an analysis of the internal conditions of control and student self-concepts. Procedures for diagnosis are also required, especially in the early years of the lecture process so that entrepreneurship development programs can be prepared and enhanced the competitiveness of students upon completion of the later study.

Development and improvement of internal locus of control is the primary focus of school service providers, in this case, school counsellors. Testing and assessment of real student conditions at the beginning of learning activities is to increase locus of control. The long-term manifestation of this effort is the acquisition of internal locus of control at the end of the learning session, which significantly affects career planning and maturity. This also applies to the student's self-concept, which at the beginning of the learning session was done assessing the student's condition and knowledge of self-concept.

In order to develop entrepreneurship capability of prospective students, engineering colleges need proper regulation especially related to the condition of student abilities. The optimal development of student ability can be known as the psychological aspects of support, one of the internal locus of control and self-concept.

In addition, engineering colleges require the right curriculum and additional synergies in developing entrepreneurial skills so students produce mature entrepreneurial graduates. Entrepreneurship curriculum is related to how to teach entrepreneurship, namely the skills to teach entrepreneurship based on products. Entrepreneurship education in engineering education is only limited to theoretical and semi-practical conceptual orientation, not yet able to carry out learning innovations based on commercial potential. so that technical education is highly required to carry out entrepreneurial learning based on products that have the selling and needed value in the community.

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REFERENCES

[1] M. Syakir, A. Mahmud, and A. Achmad, "The Model of ICT-Based Career Information Services and Decision-Making Ability of Learners," Int. J. Environ. Sci. Educ., vol. 11, no. 13, pp. 5969–5979, 2016.

[2] Theresa, L. D, "Factors that Inform Students ' Choice of Study and Career". Journal of Education and Practice, Vol.6. no. 27, pp. 43–50, 2015.

[3] A. Atli, "The Effects of Trait-factor Theory Based Career Counseling Sessions on the Levels of Career Maturity and Indecision of High School Students," Univers. J. Educ. Res., vol. 4, no. 8, pp. 1837–1847, 2016.

[4] A. D. Bardick, K. B. Bernes, K. C. Magnusson, and K. D. Witko, "Junior High School Students' Career Plans for the Future," J. Career Dev., vol. 32, no. 3, pp. 250–271, 2015.

[5] S. Coertse and J. M. Schepers, "Some Personality and Cognitive Correlates of Career Maturity," J. Ind. Psychol., vol. 30, no. 2, pp. 56–73, 2004.

[6] A. Novakovic and N. A. Fouad, "Background, Personal, and Environmental Influences on the Career Planning of Adolescent Girls," J. Career Dev., vol. 40, no. 3, pp. 223–244, 2012.

[7] J. Usinger and M. Smith, "Career development in the context of self-construction during adolescence," J. Vocat. Behav., vol. 76, no. 3, pp. 580–591, 2010.

[8] S. R. Ting, Y. F. Leung, K. Stewart, A. C. Smith, G. L. Roberts, and S. Dees, "A Preliminary Study of Career Education in Middle School," J. Career Tech. Educ., vol. 27, no. 2, pp. 84–97, 2012.

[9] Central Bureau of Statistics, "Statistics News: Labor Indonesia in August 2016," Status No. 103/11 / Th.XIX, November 7, 2016.

[10] Central Bureau of Statistics, "Statistics News: Labor Indonesia in February 2017," Status No. 47/05 / Th.XX, May 5, 2017.

[11] A. Atli, "Five Factor Personality Traits as Predictor of Career Maturity," Eurasian J. Educ. Res., vol. 68, pp. 151–165, 2017.

[12] N. W. Hidayati, "Pengaruh Layanan Informasi Studi Lanjut terhadap Perencanaan Karir Siswa," Edukasi J. Pendidik., vol. 12, no. 88, pp. 94–101, 2016.

[13] L. Gaylor and J. J. Nicol, "Experiential High School Career Education , Self-Efficacy , and Motivation," Can. J. Educ., vol. 2, no. 2016, 2016.

[14] Z. J. Acs, L. Szerb, and A. Lloyd, "The global entrepreneurship and development index," in Global Entrepreneurship and Development Index 2017, Springer, 2017, pp. 29–53.

[15] Y. Liu, K. Z. Peng, Y. Mao, and C.-S. Wong, "Different forms of relationships between engineering interests and career maturity in Chinese context," J. Career Dev., vol. 44, no. 5, pp. 425–439, 2017.

[16] F. Chigunta, "Entrepreneurship as a Possible Solution to Youth Unemployment in Africa," Laboring Learn., pp. 433–451, 2017.

[17] C. Dodd, S. F. Odom, and C. T. Boleman, "The Career Maturity of 4-H Healthy Lifestyles Program Participants," J. Youth Dev., vol. 9, no. 3, pp. 1–13, 2014.

[18] W. R. Sterner, "Integrating Existentialism and Super ' s Life-Span , Life-Space Approach Existentialism and Career Counseling :," Career Dev. Q., vol. 60, no. June, pp. 152–162, 2012.

[19] Bakri, Norhayati,; Salleh, Tuan Salwani,; & Zin, Zalhan Mohd, "Designing an Integrated Teaching and Learning of Mathematics and Image Processing in Engineering Technology," International Journal on Advanced Science, Engineering and Information Technology, vol 6, no 4, pp. 548-552, 2016.

[20] Bawamohiddin, A B., & Razali, R, "Problem-based Learning for Programming Education," International Journal on Advanced Science, Engineering and Information Technology, vol 7, no 6, pp. 2035-2050, 2017.

[21] Lee, D H., Cho, S H., Kim, Y, "A Design and Development of the Learning Contents Management based on the Personalized Online Learning," International Journal on Advanced Science, Engineering and Information Technology, vol 8, no 4, pp. 1321-1326, 2018.

[22] I. Sari, Marjohan, and Neviyarni, "Locus of Control dan Perilaku Menyontek serta Implikasinya terhadap Bimbingan dan Konseling (Studi pada Siswa Sekolah Menengah Atas Padang Ganting)," Konselor, vol. 2, no. 1, pp. 267–272, 2013.

[23] S. Arslan and A. Akin, "Metacognition : As a Predictor of One ' s Academic Locus of Control," Educ. Sci. Theory Pract., vol. 14, no. 1, pp. 33–39, 2014.

[24] B. D. Pratama and Suharnan, "Hubungan Antara Konsep Diri Dan Internal Locus Of Control Dengan Kematangan Karir Siswa SMA," Pers. J. Psikol. Indones., vol. 3, no. 03, pp. 213–222, 2014.

[25] M. Çakır, "Investigating Prospective Teachers ' Perceived Problem-solving Abilities in Relation to Gender , Major , Place Lived , and Locus of Control," Univers. J. Educ. Res., vol. 5, no. 6, pp. 1030–1038, 2017.

[26] N. Widyastuti and A. Widyowati, "Hubungan Antara Locus of Control Internal dengan Kematangan Karir Pada Siswa SMK N 1 Bantul," Humanitas (Monterey. N. L)., vol. 12, no. 2, pp. 82–89, 2015.

[27] N. D. I. Prestiana and T. X. A. Putri, "Internal Locus of Control dan Job Insecurity terhadap Burnout pada Guru Honorer Sekolah Dasar Negeri di Bekasi Selatan," SOUL, vol. 6, no. 1, pp. 57–76, 2013.

[28] Suszek, Hubert., Fronczyk, Krzysztof., Kopera, Maciej., Maliszewski, Norbert, "Implicit and explicit self-concept clarity and psychological adjustment," Personality and Individual Differences, Vol.123, pp. 253-256, 2018.

[29] Prasasti and Laksmiwati, "Perbedaan Kematangan Karir Ditinjau Dari Konsep Diri dan Gender Pada Siswa Kelas X Di SMA PGRI 1 Kota Mojokerto," J. Psikol. Pendidik., vol. 4, no. 1, pp. 1–7, 2017.

[30] M. Olivera-Aguilar, S. H. Rikoon, O. Gonzalez, Y. Kisbu-Sakarya, and D. P. MacKinnon, "Bias, Type I Error Rates, and Statistical Power of a Latent Mediation Model in the Presence of Violations of Invariance," Educ. Psychol. Meas., vol. 78, no. 3, pp. 460–481, 2018.

[31] R. T. Munoz, S. Brady, and V. Brown, "The psychology of resilience: A model of the relationship of locus of control to hope among survivors of intimate partner violence.," Traumatology (Tallahass. Fla)., vol. 23, no. 1, p. 102, 2017.

[32] P. M. Hash, "Development and Validation of a Music Self-Concept Inventory for College Students," J. Res. Music Educ., vol. 65, no. 2, pp. 203–218, 2017.

[33] Hidayat, H, "How to Implement Technology Science for Entrepreneurship by Using the Product-Based Learning Approach and Participatory Action Learning System in Higher Education?" , Advanced Science Letters, 23, pp. 10918-10921. https://doi.org/10.1166/asl.2017.10186

[34] Hidayat, H., & Yuliana, "The Influence of Entrepreneurship Education and Family Background on Students' Entrepreneurial Interest in Nutritious Traditional Food Start Ups in Indonesia," International Journal of Engineering and Technology(UAE), vol. 7, no.4, pp. 118-122. 2018. https://doi.org/10.14419/ijet.v7i4.9.20631

[35] Hidayat, H., Herawati, S., Syahmaidi, E., Hidayati, A., & Ardi, Z., "Designing of technopreneurship scientific learning framework in vocational-based higher education in Indonesia," International Journal of Engineering and Technology(UAE), vol. 7, no. 4, pp. 123-127, 2018. https://doi.org/10.14419/ijet.v7i4.9.20632

[36] Ganefri, Hidayat, H., Kusumaningrum, I., & Mardin, A, "Needs Analysis of Entrepreneurship Pedagogy of Technology and Vocational Education with Production Based Learning Approach in Higher Education," International Journal on Advanced Science, Engineering and Information Technology, vol..7, no.5, pp. 1701-1707, 2017. http://dx.doi.org/10.18517/ijaseit.7.5.1510

[37] Sharf, Richard S, "Applying career development theory to counseling," Nelson Education, 2016.

[38] Salomone, Paul R, "Tracing Super's theory of vocational development: A 40-year retrospective." Journal of career development, vol. 22, no. 3, pp. 167-184, 1996.

[39] J. Schmutzler, V. Andonova, and L. Diaz-Serrano, "How Context Shapes Entrepreneurial Self-Efficacy as a Driver of Entrepreneurial Intentions: A Multi-level Approach," Entrep. Theory Pract., p. 1042258717753142, 2018.

[40] R. V Mahto and W. C. McDowell, "Entrepreneurial motivation: a non-entrepreneur's journey to become an entrepreneur," Int. Entrep. Manag. J., pp. 1–14, 2018.

[41] F. Liñán, F. Ceresia, and A. Bernal, "Who Intends to Enroll in Entrepreneurship Education? Entrepreneurial Self-Identity as a Precursor," Entrep. Educ. Pedagog., p. 2515127418780491, 2018.

[42] T. Mthanti and K. Ojah, "Entrepreneurial orientation (EO): Measurement and policy implications of entrepreneurship at the macroeconomic level," Res. Policy, vol. 46, no. 4, pp. 724–739, 2017.

[43] K. Ham and H. Lim, "Career Maturity and Quality of Life in Korean Adolescents: A Cross-Lagged Panel Design," Career Dev. Q., vol. 65, no. 3, pp. 250–263, 2017.

[44] K. A. Atitsogbe, I. A. Moumoula, S. Rochat, J.-P. Antonietti, and J. Rossier, “Engineering interests and career indecision in Switzerland and Burkina Faso: Cross-cultural similarities and differences,” J. Vocat. Behav., vol. 107, pp. 126–140, 2018.
[45] A. Yulastri and H. Hidayat, “Developing an Entrepreneurship Module by Using Product-Based Learning Approach in Engineering Education.,” Int. J. Environ. Sci. Educ., vol. 12, no. 5, pp. 1097–1109, 2017.
[46] I. Kusumaningrum and H. Hidayat, “Learning Outcomes in Engineering Education: A Business Plan Development by Production-Based Learning Model Approach.,” Int. J. Environ. Sci. Educ., vol. 11, no. 18, pp. 11917–11930, 2016. https://files.eric.ed.gov/fulltext/EJ1122558.pdf
[47] Amrina,Z., Desfitri,R., Zuzano,F., Wahyuni,Y., Hidayat,H., Alfino, J, "Developing Instruments to Measure Students’ Logical, Critical, and Creative Thinking Competences for Bung Hatta University Students," International Journal of Engineering and Technology(UAE), vol. 7, no.4, pp. 128-131, 2018. http://dx.doi.org/10.14419/ijet.v7i4.9.20633