The Influence of Self-efficacy and Individual Entrepreneurial Orientation on Technopreneurial Intention among Bumiputra Undergraduate Students

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INTRODUCTION

- Programs to encourage Bumiputra youths to embark on entrepreneurship:
  - Tunas Usahawan Belia Bumiputera (TUBE)
  - Industry Sponsorship Program
  - Prosper Young Entrepreneur Scheme
  - Entrepreneurship Action Plan 2016-2020

- However, the number of young entrepreneurs is still far below the expectation:
  - Three percent of Malaysian students became entrepreneurs.
  - 40% of registered Bumiputra companies in Malaysia.
  - Bumiputra entrepreneurs contributed less than 10% to the country's GDP.
The fourth industrial revolution (IR 4.0) and 5G technology are causing businesses to utilize information and communication technology (ICT).

However, technopreneurship is still considered a new breed of entrepreneurship.

Issues and challenges: creating, training, developing and growing of new technopreneurs.

Main objective of this study:

To examine the factors that influence Bumiputra youth’s technopreneurial intention.
Technopreneurship

- It encompasses technology, innovation and business (Ghazali, 2011).
- Technopreneurs continuously learn, improve and innovate to create disruptions for better performance and push the frontiers of innovations world-widely (Balachandran, 2018).
- It is related to ICT or multimedia and it is considered as a prospective career choice for the youths who just left their schools or universities (Ghazali, 2011).
- Creation of technopreneurs is subject to entrepreneurial motivation, which is an output of environmental factors and individual characteristics (Jusoh & Halim, 2006). It requires further investigation.
**Factors Influencing Technopreneurial Intention**

- Technopreneurial intention as the motivational factor that influences an individual to embark on technopreneurship.
- **Self-efficacy**, a construct in Bandura’s social cognitive theory, is a factor that increases a person’s entrepreneurial intention (e.g.: Saraih, Aris, Mutalib, Ahmad, Abdullah & Amlus, 2018; Utami, 2017; Sitaridis & Kitsios, 2019).
- **Individual entrepreneurial orientation (IEO)** consists of three elements, namely innovativeness, risk-taking and proactiveness. It built one’s entrepreneurial intention (e.g.: Bolton, 2012; Yurtkoru, Acar & Teraman, 2014; Embi, Jaiyeoba & Yussof, 2019).
- The application of both self-efficacy and IEO in determining intention towards technopreneurship is still scarce. As such, this study attempted to develop a new model which consisted of ICT self-efficacy, IEO and technopreneurial intention.
Research Model and Hypotheses

- ICT Self-efficacy
- Risk-taking
- Innovativeness
- Pro-activeness

Technopreneurial intention

H1: There is a significant positive influence of ICT self-efficacy on technopreneurial intention.
H2: There is a significant positive influence of risk-taking on technopreneurial intention.
H3: There is a significant positive influence of innovativeness on technopreneurial intention.
H4: There is a significant positive influence of pro-activeness on technopreneurial intention.
**Quantitative research method**

**Population:** final-year undergraduate students

**Sampling method:** proportionate stratified
Size: 138

**Data collection:** through electronic questionnaires

**Data analysis:** Multiple regressions

**Self-administrative questionnaire**
7-point Likert scale
RESULTS

- Total respondents = 138 (Response rate = 69.00%).
  - Female (68.84%; n=95).
  - Faculty of Business and Management (26.81%; n=37).
  - Urban areas (68.12%; n=94).
  - Family members (52.17%; n=72) and friends (62.32%; n=86) did not own any business.
  - Received financial aides (54.35%; n=75).
  - Experienced as e-commerce sellers or buyers (87.68%; n=121) or both seller and buyer (12.32%; n=17).
### RESULTS

- **Descriptive and correlation analysis**

<table>
<thead>
<tr>
<th></th>
<th>α</th>
<th>m</th>
<th>sd</th>
<th>ICT</th>
<th>RT</th>
<th>IV</th>
<th>PA</th>
<th>INT</th>
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<td>5.74</td>
<td>0.69</td>
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<td></td>
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<tr>
<td>RT</td>
<td>0.83</td>
<td>5.01</td>
<td>0.98</td>
<td>0.32**</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>IV</td>
<td>0.81</td>
<td>5.20</td>
<td>0.83</td>
<td>0.37**</td>
<td>0.67**</td>
<td>1</td>
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<tr>
<td>PA</td>
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<td>5.42</td>
<td>0.81</td>
<td>0.49**</td>
<td>0.27**</td>
<td>0.57**</td>
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<tr>
<td>INT</td>
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<td>4.58</td>
<td>1.15</td>
<td>0.31**</td>
<td>0.48**</td>
<td>0.32**</td>
<td>0.34**</td>
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</table>

ICT: ICT self-efficacy; RT: Risk taking; IV: Innovativeness; PA: Pro-activeness; INT: Technopreneurial intention

** Significant at <0.01

ICT: ICT self-efficacy; RT: Risk taking; IV: Innovativeness; PA: Pro-activeness; INT: Technopreneurial intention

** Significant at <0.01
## Multiple regressions analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Std. β</th>
<th>T-value</th>
<th>Sig.</th>
<th>VIF</th>
<th>Tolerance</th>
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<td>RT</td>
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<td>&lt;0.01</td>
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<td>1.96</td>
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<tr>
<td>IV</td>
<td>0.22</td>
<td>1.71</td>
<td>0.09</td>
<td>0.39</td>
<td>2.58</td>
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<tr>
<td>PA</td>
<td>0.27</td>
<td>2.55</td>
<td>0.01</td>
<td>0.55</td>
<td>1.81</td>
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<td>F-statistics</td>
<td>11.87 (sig. &lt;0.01)</td>
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<td>R-squared</td>
<td>0.41</td>
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</tbody>
</table>

Dependent variable: INT: Technopreneurial intention
ICT: ICT self-efficacy; RT: Risk taking; IV: Innovativeness; PA: Pro-activeness
The influence of risk-taking on technopreneurial intention was positive and significant.

- It supported Yurtkoru et al. (2014) and Embi et al. (2019).
- Risk-taking is crucial because technopreneurs operate their businesses in a highly competitive and rapidly change environment due to fast development of technology.
- Universities could attempt to provide hands-on and actual entrepreneurial experience to students in recognizing and overcoming risks.
The influence of pro-activeness on technopreneurial intention was positive and significant.

- It supported Bolton (2012) and Yurtkoru et al. (2014).
- Being pro-active is vital in identifying profitable business opportunities and become technopreneurs.
- Students should be equipped with capability to recognize business opportunities through business plan preparation.
The influence of ICT self-efficacy on technopreneurial intention was positive and significant.

- It supported Saraih et al. (2018), Utami (2017) and Harsono (2013).

- ICT education plays an important role in developing technopreneurs because technopreneurs require ICT capabilities to create, manage and expand their businesses.

- Science, technology, engineering and mathematics (STEM) education is important in imparting technology-related knowledge.
CONCLUSION

- **Conclusion:** risk-taking, pro-activeness and ICT self-efficacy positively and significantly influenced technopreneurial intention. However, innovativeness was not a significant influencing factor of technopreneurial intention.

- **Contributions:** literary, this study enriched the extant literature. Practically, it highlighted the roles of HLIs, STEMS and TVET education in encouraging embarkation of technopreneurship among the students.

- **Limitations:** results could not be generalized, sample size was rather small, did not integrate external or environmental factors into the research model.

- **Recommendations for future researchers:** expand the sample size and extend the research model.
ACKNOWLEDGEMENT

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THANK YOU

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