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# Social entrepreneurial intentions and its influential factors: A comparison of students in Taiwan and Hong Kong

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## ABSTRACT

This empirical study adds to the literature by investigating the influences of the personality traits, creativity, and social capital of Taiwan and Hong Kong university students on social entrepreneurial intentions. A total of 301 valid survey responses from Taiwan and 147 from Hong Kong were collected. The results indicated that original creativity and bonding social capital positively affected social entrepreneurial conviction in both groups of students. Conscientiousness negatively affected and original creativity positively affected social entrepreneurial preparation in Taiwanese students, whereas openness negatively affected and original creativity positively affected social entrepreneurial preparation in students from Hong Kong.

## KEYWORDS

Creativity; entrepreneurial intention; Hong Kong; personality; social capital; social entrepreneurship; Taiwan

## Introduction

Social enterprises in Taiwan (TW) and Hong Kong (HK) are emerging due to the need of reducing social inequality, while environmental constraints and government policies have been a major impact on the development of social enterprises among the two regions (Chan, Kuan, & Wang, 2011; Liang, Chang, Liang, & Liu, 2017). However, despite their cultural similarities, substantial differences exist between TW and HK in political structure, social environment, and pattern of economic development; for example, TW enjoys a much greater level of sovereignty and autonomy than does HK (Kaeding, 2014). Because of the social differences between TW and HK, the factors affecting social entrepreneurial intention also differ between them (Chan et al., 2011). The question of what are the influencing factors of entrepreneurial intention among young people in TW and HK and how entrepreneurial intentions are different have become a focus of interest (Ip, Wu, Liu, & Liang, forthcoming; Liang, Chang, Peng, & Liang, forthcoming).

Numerous studies have reported that individuals who exhibit high levels of extraversion, openness, and conscientiousness and low levels of neuroticism and agreeableness tend to exhibit higher levels of entrepreneurial intention (Brandstätter, 2011; Zhao, Seibert, & Lumpkin, 2010). Research also has indicated that people with high creativity tend to exhibit high entrepreneurial intention (Chia & Liang, 2016; Zampetakis, 2008). Several scholars have

suggested that access to social capital affects entrepreneurial intention (De Carolis & Saporito, 2006; Liñán & Santos, 2007). Especially for young people entrepreneurial activity is closely linked to the possession of social capital (Sharma, 2014). However, little research has examined the relationship of the three factors in an integrated manner. The present study investigated the impact of personality traits, creativity, and social capital on social entrepreneurial intentions (SEI) of TW and HK students and examined the differences between TW students and HK students.

## Literature review

### *Social enterprises and entrepreneurial intention*

Social enterprise is defined as a business created to fulfil a social purpose (Vitiello & Wolf-Powers, 2014). While creating social benefits is the priority of social entrepreneur, some scholars also emphasise that the economic need is the secondary purpose (York & Venkataraman, 2010). The social benefits mentioned above may include environment sustainability, employment, social development, economic growth, and preserve cultural assets and social value (Mander, Wiggering, & Helming, 2007).

Thompson (2009) defines entrepreneurial intention as having the conviction and readiness to establish an enterprise, and deciding to do so after considering the views of other parties and appraising one's capabilities. Researchers have viewed entrepreneurial intention as a predictor of planned behaviour and as an intermediary in stimulating action (Fayolle, Gailly, & Lassas-Clerc, 2006; Krueger, Reilly, & Carsrud, 2000). Mair and Noboa (2006) stated that social entrepreneurs' intention is the desire to increase the stock of social capital and strengthen community bonding. Pittaway and Cope (2007) argued that entrepreneurial intention in the small- and medium-sized enterprise and not-for-profit enterprise sectors differ from entrepreneurial intention with respect to regular business enterprises. Wang, Peng, and Liang (2014) developed an assessment scale for entrepreneurial intention which they divided entrepreneurial intention into two factors: conviction and preparation.

### *Personality traits and entrepreneurial intention*

The five factor model is a highly developed theory of personality traits, namely extroversion, openness to experience, neuroticism, conscientiousness, and agreeableness (Wang, Chang, Yao, & Liang, 2016). Zhao and Seibert (2006) indicated that entrepreneurs tend to demonstrate high levels of extroversion, which help them to win investors' support. Zhao and Seibert also suggested that entrepreneurs enjoy exploring innovative ideas and using creativity to solve problems and associated them with openness to experience. The literature indicates that entrepreneurs have a strong belief in their ability to control outcomes in their environments (Simon, Houghton, & Aquino, 2000), a trait related to low levels of neuroticism. Prior studies indicated that entrepreneurs are highly motivated to succeed, which demonstrate conscientiousness (Stewart & Roth, 2004). Additionally, entrepreneurs tend to demonstrate higher levels of competitiveness than do other types of business owner, reflecting a lack of agreeableness (Brandstätter, 2011). Therefore, the first two hypotheses were proposed:

H1. Extraversion, conscientiousness, and agreeableness positively affect SEI.

H2. Openness and neuroticism negatively affect SEI.

### ***Creativity and entrepreneurial intention***

Since 1900, numerous scholars have described creativity as requiring originality and usefulness (Chang, Peng, Lin, & Liang, 2015; Runco & Jaeger, 2012). Lin, Hsu, and Liang (2014) suggested that the originality of creativity implies the ability to produce innovative idea and behaviour, and that the usefulness of creativity implies the ability to produce an appropriate, effective, or valuable idea and behaviour. Cropley (2015) suggested that creativity must embody the elegance and genesis. Thus, present study adopted elements from the study of Lin et al. (2014) and Cropley (2015) in developing measurement. Campus entrepreneurship plays an essential role in universities and in society because it helps not only to stimulate the development of creative ideas and technologies but also economic value (Prodan & Drnovsek, 2010). Moreover, studies have indicated that creative personality and creativity training can enhance entrepreneurial intention (Chang, Yao, Chen, King, & Liang, 2016; Chia & Liang, 2016). Thus, the third hypothesis was proposed:

*H3. Entrepreneurial creativity positively affects SEI.*

### ***Social capital and entrepreneurial intention***

Bourdieu (1986) defined social capital as an individual's network of relationships and the sum of the resources possessed by the members of this network. Several scholars reported that social capital facilitates entrepreneurial activity, particularly to identifying business opportunities, building relationships, and enhancing performance (De Carolis & Saporito, 2006; Lechner & Dowling, 2003). Liñán and Santos (2007) suggested that social capital can strengthen entrepreneurs' ambition to establish their own business. Particularly in the case of young people, an individual's network of social capital strongly influences entrepreneurial intention and choice of career (Karimi, Biemans, Lans, Aazami, & Mulder, 2016; Sharma, 2014). In addition, Internet users often form groups based on shared interests; the utilisation of online social capital can strengthen community integration and extend external relationships (Johnson & Kaye, 2009). Furthermore, Williams (2006) conceptualised social capital as two types of self-perceived networks – bridging and bonding – and used this as the basis for developing a social capital assessment scale. The fourth hypothesis was thus proposed:

*H4. Social capital positively affects SEI.*

## **Research methodology**

### ***Research participants and process***

The study distributed both online and paper survey to university students in TW and HK during October 1 to November 15, 2016. In total, 400 completed questionnaires were returned by TW students and 160 by HK students. After invalid questionnaires were deleted, 448 valid responses remained. SPSS 18.0 was used for statistical analysis. The sample data obtained from the questionnaires were subjected to an independent samples *t* test and multiple regression analysis to clarify the differences between the variables and their impact. The descriptive analysis is shown in Table 1.

**Table 1.** Descriptive analysis.

Variable	TW ( <i>n</i> = 301)		HK ( <i>n</i> = 147)	
	Frequency	%	Frequency	%
Gender				
Female	180	59.8	97	66.0
Male	121	40.2	50	34.0
Degree				
Junior undergraduates	111	36.9	56	38.1
Senior undergraduates	125	41.5	57	38.8
Master postgraduates	61	20.3	28	19.0
PhD postgraduates	4	1.3	6	4.1

## Research tools

The scale items were measured using 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The Big Five personality traits items were adapted from Thompson (2008), creativity originated from Lin et al. (2014) and Cropley (2015), social capital adapted from Williams (2006), and SEI adapted from Wang et al. (2014) respectively.

## Data analysis

### Exploratory factor analysis

An eigenvalue greater than 1 and a factor loading greater than 0.3 were the criteria applied for factor retention. As Table 2 shows, of the 20 questions, five factors could be extracted,

**Table 2.** Factor analysis of personality traits.

Factor/Item	E	O	N	C	A	M	SD	$\alpha$	% of variance
Extroversion (E)								.876	21.145
Talkative	.814					4.199	1.175		
Outgoing	.846					3.911	1.271		
Reserved	.845					3.424	1.109		
Shy	.828					3.582	1.129		
Openness to experience (O)								.709	13.425
Creative				.813		3.904	1.033		
Philosophical				.656		4.438	1.013		
Unimaginative				.782		4.062	1.075		
Unintellectual				.502		4.016	1.136		
Neuroticism (N)								.776	12.110
Anxious			.640			4.007	1.154		
Jealous			.754			3.183	1.220		
Unworried			.807			3.815	1.156		
Unenvious			.829			3.620	1.044		
Conscientiousness (C)								.768	8.754
Systematic		.839				3.989	.977		
Careful		.743				3.949	1.040		
Disorganised		.838				4.042	.960		
Inefficient		.566		.313		4.033	1.104		
Agreeableness (A)								.639	6.363
Sympathetic					.693	4.625	.930		
Not harsh					.648	4.183	1.065		
Unkind					.696	4.578	.989		
Rude					.692	3.925	1.229		
Total variance explained									61.797

Notes: A factor loading less than .3 is omitted.  $\chi^2 = 3407.622$ ,  $p < .001$ ; KMO: 0.750.

explaining 61.797% of the variance, which are: extroversion, openness to experience, neuroticism, conscientiousness, and agreeableness.

As Table 3 shows, of the 12 questions regarding creativity, two factors could be extracted, explaining 63.634% of the variance, which are: originality and usefulness.

As Table 4 shows, of the 10 questions regarding social capital, two factors could be extracted, explaining 58.870% of the variance, which are: bonding and bridging.

As Table 5 shows, of the 8 questions regarding creativity, two factors could be extracted, explaining 73.360% of the variance, which are: conviction and preparation.

### *Analysis of the disparities in SEI*

The results of the *t* test revealed significant differences between TW and HK students in all factors except agreeableness (Table 6). Among these determinants, TW students scored significantly higher than HK students in all but neuroticism. TW students' SEI was significantly higher than that of HK students, regardless of conviction or preparation.

### *Analysis of the impact on SEI*

For the TW sample, multiple regression analysis was performed with conviction and preparation as the dependent variables (Table 7). Both models reached the level of statistical significance ( $p < .001$ ). The results revealed that only original creativity and bonding social capital affect conviction. As for preparation, both conscientiousness (a negative effect) and original creativity reached the significance threshold. Therefore, H1, H2, H3, and H4 were partially supported.

**Table 3.** Factor analysis of creativity.

Factor/Item	O	U	M	SD	$\alpha$	% of variance
Originality (O)					.920	53.241
I am able to work out an unconventional business plan	.843		3.507	1.030		
I am able to work out a business plan that is unique from others	.854		3.491	1.025		
I am not good at identifying new market needs	.593		3.538	.955		
I am good at proposing innovative ideas based on market needs	.772	.344	3.721	.934		
I am able to work out a business plan that can bring about a market spotlight	.861		3.543	.861		
I am able to work out a business plan that can lead the market	.836		3.467	.938		
I am able to work out a business plan that attracts investors' attention	.604	.572	3.663	.925		
Usefulness (U)					.762	10.393
I am able to understand the diverse needs of various customers	.333	.675	4.181	.913		
I am unable to adapt flexibly to market changes		.529	3.850	.911		
I am able to consider the preference of target consumers		.820	4.438	.766		
I am able to work out a business plan that meets the target market's demand	.510	.644	3.868	.876		
My business plan can adapt to different markets after adjustments	.426	.569	3.809	.812		
Total variance explained						63.634

Notes: A factor loading less than .3 is omitted.  $\chi^2 = 3567.240$ ,  $p < .001$ ; KMO: 0.899.

**Table 4.** Factor analysis of social capital.

Factor/Item	O	R	M	SD	$\alpha$	% of variance
Bonding (O)					.820	43.183
There are several people I trust to help solve my problems	.812		4.621	.978		
There is someone I can turn to for advice about making very important decisions	.796		4.670	.952		
If I needed an emergency loan of NT\$10,000 (HK\$2,500), I have no one I can turn to	.628		3.719	1.225		
The people I interact with would put their reputation on the line for me	.750		3.842	1.121		
The people I interact with would help me fight an injustice	.758		4.496	.974		
Bridging (R)					.751	15.687
Interacting with people makes me interested in things that happen outside of my town	.337	.766	4.790	.890		
Interacting with people online/offline makes me want to try new things		.809	4.886	.850		
Talking with people does not make me curious about other places in the world		.378	4.386	1.278		
Interacting with people makes me feel like part of a larger community		.748	4.480	1.01		
Interacting with people makes me feel connected to the bigger picture		.828	4.790	.820		
Total variance explained						58.870

Notes: A factor loading less than .3 is omitted.  $\chi^2 = 2109.778$ ,  $p < .001$ ; KMO: 0.796.

**Table 5.** Factor analysis of SEI.

Factor/Item	C	P	M	SD	$\alpha$	% of variance
Conviction (C)					.835	59.464
I wish to start a social enterprise that assist in alleviating environmental issues		.719	4.208	1.219		
I have a preliminary idea for a social enterprise on which I plan to act in the future		.857	3.612	1.243		
My professional goal is to become a social entrepreneur		.835	3.400	1.255		
I am going to do anything to become a social entrepreneur	.577	.591	3.384	1.246		
Preparation (P)					.896	13.895
I expect that at some point in the future I will be involved in launching an organisation that aims to promote environmental sustainability	.771	.451	3.252	1.252		
I expect that at some point in the future I will be involved in launching an organisation that aims to help disadvantaged groups	.860		3.270	1.243		
I will act as a professional manager in getting involved in management of a social enterprise through promotion	.843		3.272	1.257		
If I am going to inherit my family's business, I will plan to transform it into a social enterprise	.822		3.420	1.260		
Total variance explained						73.360

Notes: A factor loading less than .3 is omitted.  $\chi^2 = 2226.298$ ,  $p < .001$ ; KMO: 0.879.

Regarding the HK sample, multiple regression analysis was performed using conviction and preparation as the dependent variables (Table 8). Both models reached the level of statistical significance ( $p < .001$ ). Results showed that only original creativity and bonding-type of social capital have impact on conviction. As for preparation, both openness to

**Table 6.** Independent samples *t* test.

Variable	TW ( <i>n</i> = 301)		HK ( <i>n</i> = 147)		<i>t</i>	<i>p</i> -value	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Personality traits							
Extroversion	3.939	.995	3.452	.934	4.954	.000***	446
Openness to experience	4.177	.785	3.957	.746	2.833	.005***	446
Neuroticism	3.526	.896	3.922	.804	−4.536	.000***	446
Conscientiousness	4.060	.740	3.887	.860	2.208	.028*	446
Agreeableness	4.375	.758	4.231	.673	1.961	.051	446
Creativity							
Originality	3.663	.735	3.353	.840	4.003	.000***	446
Usefulness	4.104	.576	3.875	.660	3.766	.000***	446
Social capital							
Bonding	4.358	.785	4.087	.817	3.386	.001**	446
Bridging	4.726	.686	4.544	.704	2.615	.009**	446
SEI							
Conviction	3.885	.908	3.172	1.056	7.017	.000***	446
Preparation	3.391	1.098	3.124	1.069	2.438	.015*	446

\**p* < .05.; \*\**p* < .01.; \*\*\**p* < .001.**Table 7.** Regression analysis of the impact on social entrepreneurial intention (TW).

Variable		Social entrepreneurial intention					
		Conviction			Preparation		
		$\beta$	<i>t</i>	<i>p</i>	$\beta$	<i>t</i>	<i>p</i>
Independent variable	(Constant)	1.120	1.889	.060	.717	1.064	.288
Personality traits	Extroversion	−.013	−.237	.813	−.021	−.338	.735
	Openness experience	−.035	−.414	.679	−.110	−1.140	.255
	Neuroticism	.074	1.294	.197	.089	1.382	.168
	Conscientiousness	−.034	−.461	.645	−.169	−1.993	.047*
	Agreeableness	.077	1.129	.260	.125	1.606	.109
Creativity	Originality	.447	4.588	.000***	.876	7.921	.000***
	Usefulness	.097	.838	.403	−.056	−.425	.671
Social capital	Bonding	.141	1.985	.048*	.126	1.562	.119
	Bridging	−.030	−.383	.702	−.103	−1.156	.249
Summary	<i>R</i> <sup>2</sup>		.180			.276	
	<i>F</i>		7.101			12.350	
	<i>p</i>		.000***			.000***	

\**p* < .05.; \*\**p* < .01.; \*\*\**p* < .001.

experience (a negative effect) and the original creativity reached the significance threshold. Therefore, H1, H2, H3, and H4 were partially supported.

Overall, no significant difference was observed between the TW and HK students in the factors influencing SEI conviction; however, slight differences between them were evident in the factors influencing SEI preparation.

## Discussion

Previous studies have demonstrated that personality traits, creativity, and social capital affect entrepreneurial intention. This study examined how these factors are involved in social enterprises. SEI was divided into conviction and preparation (Chang et al., 2016; Wang et al., 2014) and personality traits were divided into five factors, creativity into two, and social capital



**Table 8.** Regression analysis of the impact of social entrepreneurial intention (HK).

Variable		Social entrepreneurial intention					
		Conviction			Preparation		
		$\beta$	$t$	$p$	$\beta$	$t$	$p$
Independent variable	(Constant)	.717	.853	.395	1.101	1.213	.227
Personality traits	Extroversion	-.021	-.230	.819	.002	.021	.984
	Openness to experience	-.231	-1.931	.056	-.361	-2.793	<b>.006**</b>
	Neuroticism	.018	.184	.854	-.012	-.109	.913
	Conscientiousness	-.082	-.943	.348	.066	.700	.485
Creativity	Agreeableness	.045	.391	.696	-.004	-.035	.972
	Originality	.795	6.324	<b>.000***</b>	.684	5.046	<b>.000***</b>
	Usefulness	.008	.051	.959	.110	.621	.536
Social capital	Bonding	.254	2.327	<b>.021*</b>	.184	1.560	.121
	Bridging	-.052	-.402	.689	-.049	-.349	.728
Summary	$R^2$		.394			.266	
	$F$		9.916			6.893	
	$p$		.000***			.000***	

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

into two (Brandstätter, 2011; Chang et al., 2016; Chia & Liang, 2016), in accordance with previous research.

Although Thompson (2009) thoroughly defined entrepreneurial intention, relevant studies have treated it as a single concept (Fayolle et al., 2006; Krueger et al., 2000; Liñán & Santos, 2007). As previously stated, the current study successfully distinguished conviction and preparation as the two facets of SEI, which helped clarify the different stages of SEI and allowed for further exploration of the precursors of each facet. For example, in this study, bonding-type social capital was found to influence SEI conviction, and particular personalities were identified as contributing to SEI preparation.

The effects of personality traits on SEI preparation differed between students in TW and HK. Conscientiousness negatively affected TW students, whereas openness to experience negatively affected HK students. These findings are in contrast to those of previous studies (Brandstätter, 2011; Zhao et al., 2010), which found that people who score higher in conscientiousness and openness have stronger entrepreneurial intention. This clearly demonstrates the difference between profit-driven business and social enterprises. Further explanations are provided as follows.

Starting a social enterprise requires passion, courage, and a commitment to justice. TW students who displayed higher conscientiousness were more likely to carefully evaluate the costs and risks associated with establishing a social enterprise. Unlike that of a traditional enterprise, the focus of a social enterprise (social impact) is likely to hinder profit margins. Furthermore, given the relative lack of economic stability in Taiwan, young people with higher levels of conscientiousness are more likely to be wary of establishing a social enterprise, potentially discouraging them from doing so.

In highly urbanised and internationalised HK, students have access to more information and can more easily apply social capital rather than rely on social enterprises to solve relevant problems. Moreover, HK has many multinational corporations operating within its territory, translating to more employment opportunities and higher salaries that attract young people.

Students who are more open to experience also tend to have more attractive career opportunities open to them, and social entrepreneurship may consequently be of less interest.

For both samples, original creativity and bonding social capital were determined to have significant impacts on SEI, with that of original creativity being more pronounced than that of bonding social capital. Original creativity strongly influenced SEI conviction and preparation. Because social problems are unique, complicated, and diverse among different regions, successful models of social enterprises are difficult to copy (Mander et al., 2007). Social entrepreneurs must identify problems within their cultures and societies and create numerous innovative approaches to solving them. Therefore, originality and creativity are critical in SEI.

With regard to bonding social capital, social entrepreneurs depend on close collaboration between like-minded individuals who can maintain their ideals in the long term to enable the enterprise to operate in a sustainable manner. Bonding social capital represents precisely this type of partnership, characterised by a high level of homogeneity and close linkages (Williams, 2006). Social entrepreneurs tend to use more bonding social capital during their initial formation phase (Lorenz, 2008), explaining the results of the present study.

## Conclusion

In summary, the results indicated that original creativity and bonding social capital positively affect the SEI conviction of students in both TW and HK. Conscientiousness negatively affected and original creativity positively affected the SEI preparation of TW students, whereas openness negatively affected and original creativity positively affected the SEI preparation of HK students.

This study extended SEI research, revealing that the impact of personality traits, creativity, and social capital on social entrepreneurial intention may vary depending on the region, political and economic environment, and prevailing social ethos. The results provide a useful reference for boosting entrepreneurial intention in TW and HK. Accordingly, governments and universities can design various teaching and guidance strategies for entrepreneurship education, formulate measures to assess their impact, and encourage and support young people to create social enterprises.

The study has some limitations. First, due to resource limitations, the number of samples from TW was over twice that from HK, which may have led to inference bias. Second, some questionnaires were collected online, making it difficult to verify respondents' identities. Third, the study was unable to conduct in-depth research on specific topics. The use of self-report questionnaires in which respondents are asked to describe themselves also leaves the study open to the risk of common method bias.

Future research in this area could address the following four aspects: (1) researching variables other than personality traits, creativity, and social capital – for example, past work experience, self-efficacy, and moral courage; (2) expanding questionnaire use to a wider range of universities; (3) implementing transnational research in different countries – for example, comparing Asian and Western countries or people of different ethnic groups or with different religious affiliations; and (4) using qualitative research methods to undertake in-depth research on the significance of the disparities between TW and HK.

## Disclosure statement

No potential conflict of interest was reported by the author.

## Notes on contributors

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## References

- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York, NY: Greenwood Press.
- Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, 51, 222–230.
- Chan, K.-T., Kuan, Y.-Y., & Wang, S.-T. (2011). Similarities and divergences: Comparison of social enterprises in Hong Kong and Taiwan. *Social Enterprise Journal*, 7, 33–49.
- Chang, C.-C., Peng, L.-P., Lin, J.-S., & Liang, C. (2015). Predicting the creativity of design majors based on the interaction of diverse personality traits. *Innovations in Education and Teaching International*, 52, 371–382.
- Chang, C.-C., Yao, S.-N., Chen, S.-A., King, J.-T., & Liang, C. (2016). Imagining garage startups: Interactive effects of imaginative capabilities on technopreneurship intention. *Creativity Research Journal*, 28, 289–297.
- Chia, C.-C., & Liang, C. (2016). Influence of creativity and social capital on the entrepreneurial intention of tourism students. *Journal of Entrepreneurship, Management and Innovation*, 12, 151–167.
- Cropley, A. J. (2015, April). *Transferable criteria of creativity: A universal aesthetic*. Paper presented at the New Zealand Creativity Challenge: Creativity crosses boundaries, Wellington, NZ.
- De Carolis, D. M., & Saporito, P. (2006). Social capital, cognition, and entrepreneurial opportunities: A theoretical framework. *Entrepreneurship Theory and Practice*, 30, 41–56.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30, 701–720.
- Ip, C. Y., Wu, S.-C., Liu, H.-C., & Liang, C. (Forthcoming). Social entrepreneurial intentions of students from Hong Kong. *Journal of Entrepreneurship*.
- Johnson, T. J., & Kaye, B. K. (2009). In blog we trust? Deciphering credibility of components of the internet among politically interested internet users. *Computers in Human Behavior*, 25, 175–182.
- Kaeding, M. P. (2014). Challenging Hongkongisation: The role of Taiwan's social movements and perceptions of post-handover Hong Kong. *Taiwan in Comparative Perspective*, 5, 120–133.
- Karimi, S., Biemans, H. J.A., Lans, T., Aazami, M., & Mulder, M. (2016). Fostering students' competence in identifying business opportunities in entrepreneurship education. *Innovations in Education and Teaching International*, 53, 215–229.
- Krueger, N. F. J., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411–432.
- Lechner, C., & Dowling, M. (2003). Firm networks: External relationships as sources for the growth and competitiveness of entrepreneurial firms. *Entrepreneurship & Regional Development*, 15, 1–26.
- Liang, C., Chang, C.-C., Liang, C.-T., & Liu, Y.-C. (2017). Imagining future success: Imaginative capacity on the perceived performance of potential agrisocio entrepreneurs. *Thinking Skills and Creativity*, 23, 161–174.
- Liang, C.-T., Chang, C.-C., Peng, L.-P., & Liang, C. (Forthcoming). The moderating effect of intrinsic motivation on rural practice: A case study from Taiwan. *Innovations in Education and Teaching International*. doi:10.1080/14703297.2016.1212723

- Lin, W.-S., Hsu, Y., & Liang, C. (2014). The mediator effects of conceiving imagination on academic performance of design students. *International Journal of Technology and Design Education*, 24, 73–89.
- Liñán, F., & Santos, F. J. (2007). Does social capital affect entrepreneurial intentions. *International Advances in Economic Research*, 13, 443–453.
- Lorenz, G. (2008). The implementation of social capital features in social auditing procedures to secure community accountability of social enterprises in the third sector. Retrieved February 28, 2017 from [http://base.socioeco.org/docs/social\\_audit\\_conscise-usti2008.pdf](http://base.socioeco.org/docs/social_audit_conscise-usti2008.pdf)
- Mair, J., & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In J. Mair, J. Robinson, & K. N. Hockerts (Eds.), *Social entrepreneurship* (pp. 121–135). Basingstoke: Palgrave MacMillan.
- Mander, Ü., Wiggering, H., & Helming, K. (Eds.). (2007). *Multifunctional land use: Meeting future demands for landscape goods and services*. New York, NY: Springer.
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, 25, 479–510.
- Prodan, I., & Drnovsek, M. (2010). Conceptualizing academic-entrepreneurial intentions: An empirical test. *Technovation*, 30, 332–347.
- Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24, 92–96.
- Sharma, L. (2014). Impact of family capital & social capital on youth entrepreneurship: A study of Uttarakhand state, India. *Journal of Global Entrepreneurship Research*, 4, 1–18.
- Simon, M., Houghton, S. M., & Aquino, K. (2000). Cognitive biases, risk perception, and venture formation: How individuals decide to start companies. *Journal of Business Venturing*, 15, 113–134.
- Stewart, W. H., & Roth, P. L. (2004). Data quality affects meta-analytic conclusions: A response to Miner and Raju (2004). Concerning entrepreneurial risk propensity. *Journal of Applied Psychology*, 89, 14–21.
- Thompson, E. R. (2008). Development and validation of an International English Big-Five Mini-Markers. *Personality and Individual Differences*, 45, 542–548.
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33, 669–694.
- Vitiello, D., & Wolf-Powers, L. (2014). Growing food to grow cities? The potential of agriculture foreconomic and community development in the urban United States. *Community Development Journal*, 49, 508–523.
- Wang, J.-H., Peng, L.-P., & Liang, C. (2014). Developing and testing the psychological influence, rural practice, and entrepreneurial intention scales. *Review of Agricultural Extension Science*, 31, 72–95.
- Wang, J.-H., Chang, C.-C., Yao, S.-N., & Liang, C. (2016). The contribution of self-efficacy to the relationship between personality traits and entrepreneurial intention. *Higher Education*, 72, 209–224.
- Williams, D. (2006). On and off the 'Net: Scales for social capital in an online era. *Journal of Computer-Mediated Communication*, 11, 593–628.
- York, J. G., & Venkataraman, S. (2010). The entrepreneur-environment nexus: Uncertainty, innovation, and allocation. *Journal of Business Venturing*, 25, 449–463.
- Zampetakis, L. A. (2008). The role of creativity and proactivity on perceived entrepreneurial desirability. *Thinking Skills and Creativity*, 3, 154–162.
- Zhao, H., & Seibert, S. E. (2006). The Big Five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91, 259–271.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36, 381–404.