Career Adaptability among College Students in Macao

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Introduction

Background about Macau

Economic and employment markets in Macao

• A small city of approximately 30 sq km and 655,500 people (Statistics and Census Service, 2016a)
• A Portuguese colony for about 400 years and returned to China in 1999 as a Special Administrative Region
• Opening up of the gaming industry in 2002
• UNESCO World heritage site in 2006

Economic and employment markets in Macao

• Surpassed Las Vegas as the world's biggest gambling center in 2006 (Barboza, 2007)
• 30 million+ visitors each year (Statistics and Census Service, 2017)
• GDP per capita rose to USD93,376 in 2013, ranking number four in the world (World Bank, 2014)
**Background about Macau**

Economic and employment markets in Macau

- Unemployment rate of 4.4% (Statistics and Census Service, 2015)
- Shift of workforce (Statistics and Census Service, 2015a)
  - In 2002, a total of 23,930 workers in recreational, cultural, gaming and other services, covering 12.4% of the total workforce
  - In 2014, the figures went up to 34,600 and 27.6% respectively

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**Macao as a small state**

Definition of small state

- Population
  - 3 million to 3.5 million as small states (Sultana, 2010)
  - 3 million or less as micro states (Bacchus, 2008)
  - 33 of its 54 members of British Commonwealth are small states (Commonwealth Secretariat, 2014)
  - 51 of the 177 countries in the world are small states (Bacchus, 2008)
  - Small nation states as well as small territories, e.g. Macao SAR (Morrison, 2006)
  - Unique ecology – not just a "scaled down" version of larger states (Sultana, 2006)

Characteristics of small states and their implications on career development

- Openness to fluctuations
  - Limited economic diversification
  - Reliance on external economies
  - Slowing of economic growth and anti-corruption initiatives in China drove down the gaming revenue in Macao by 34.3% in 2015 (Gaming Inspection and Coordination Bureau, 2015)

- Labor market elasticity
  - Boom-and-bust culture in the labor market
  - Among the 39,200 job changers in 2008 (Statistics and Census Service), the recreational, cultural, gaming and other services attracted 16,900, with over 50% of the inflow coming from other industries
  - The number of people employed in the manufacturing industry dropped from 22.3% of the workforce in 2002 to 2.1% in 2014 (Statistics and Census Service, 2015c)
  - Extreme difficulty in long-term planning and policy for workforce development (Baldacchino, 1995)

- Easy saturation of specialists
  - Too small of a demand to sustain a sizeable pool of highly trained personnel (Bray, 1995)
  - Lack of local specialists "in reserve" to fully occupy the positions when they become available (Baldacchino, 1995)
  - Expatriates account for 24% of the workforce in the occupation category of Legislators, Government Officials, Association Leaders, Company Directors and Managers, as well as 48% in the category of Professionals (Statistics and Census Service, 2015b)

- Brain drain
  - Individuals have to study abroad to develop their specializations (Sultana, 2010)
  - Among those who went on higher education, 45.4% studied overseas (Education and Youth Bureau, 2015) who may become reluctant to return home

Characteristics of small states and their implications on career development

- Occupational multiplicity (Sultana, 2010)
  - Occupational identity cannot afford to be as fixed as it often is in other environments where the labor market is more stable
  - Workers “wear more than one hat,” having multiple occupations either simultaneously or successively

- Multi-functionality (Sultana, 2010)
  - Lack of all trades – professionals handling both specialist and non-specialist tasks
Macao as a small state

Characteristics of small states and their implications on career development

- Flexible specializations
  - Pursuit of several skill sets, either simultaneously or successively, is advantageous (Sultana, 2010)
  - Integrating specialization and generalization helps individuals stay adaptable in face of economic fluctuations and labor market changes (Baldacchino, 1995)
- Familiarity (Sultana, 2010)
  - Everybody knows everybody else
  - “It is who you know, not what you know”
- Macau has the highest population density in the world, 21,352 sq km (CIA, 2016)

Career adaptability

- Career construction theory (Savickas, 2005, 2011a, 2013)
  - Human development as a process of adaptation to a social environment with the aim of person-environment integration
  - Career development as a process of implementing a self-concept in work roles by adaption to the social environment
  - Distinction among adaptivity, adaptability, adapting, and adaptation (Savickas & Porfeli, 2012; Savickas, 2013)

Career adaptability

- Adaptation
  - Outcomes
    - The goodness of fit between the internal and the external, as indicated by development, satisfaction and success
  - Adapting
    - Behaviors
    - Orientation, exploration, establishment, management, and disengagement
  - Adaptivity
    - Willingness to change
    - Personality trait of flexibility situated at the core of an individual

Career adaptability

- Adaptability
  - Self-regulation capacities for coping with vocational tasks, occupational transitions, and work traumas
  - Psychosocial resources at the intersection of the person and environment
  - More changeable than personality traits

Career adaptability

- An individual with the willingness (adaptivity) and resources (adaptability) to perform behaviors which address the changing context (adapting) is expected to achieve better outcomes (adaptation).
- Analogy to sitting in an airplane emergency exit row
Career adaptability

• Career Adaptability Scale (CAAS-International; Savickas & Porfeli, 2012)
  • Concern
  • Control
  • Curiosity
  • Confidence

Career adaptability

Career adaptability is related to
  • career identity (Porfeli & Savickas, 2012)
  • calling and career decision self-efficacy (Douglass & Duffy, 2015)
  • career satisfaction and performance evaluations (Zacher, 2014)
  • proactive career behaviors (Taber & Blankemeyer, 2015)
  • higher employment quality in the school-to-work transition (Koen, Klehe, & Van Vianen, 2012)
  • well-being (Maggiori, Johnston, Krings, Massoudi, & Rossier, 2013)
  • breath of interests and quality of life (Soresi, Nota, & Ferrari, 2012)
  • meaning in life (Yuen & Yau, 2015)

Career adaptability

Career adaptability can be enhanced through training (Koen et al., 2012) and learning (Brown et al., 2012)

Research Purpose

• To explore the nature of career adaptability in Macao
• To develop a culturally sensitive measurement of career adaptability in Macao
**Research questions & hypotheses**

Q.1 - From the perspective of recent college graduates, what are their experiences of career adaptability?

1.1 What self-regulatory, psychosocial resources do recent college graduates in Macao possess and utilize to construct their career?

1.2 How do these self-regulatory, psychosocial resources influence the career development of recent college graduates in Macao?

**Research questions and hypotheses**

Q.2 - What dimensions of career adaptability can be identified among Macao college students?

- Hypothesis 2.1 In addition to the original dimensions of concern, control, curiosity and confident, the additional dimension of cooperation can be identified.

- Hypothesis 2.2 The five-dimension career adaptability will have good model fit.

**Conceptual framework**

- Environment in Macao

  - Career adaptability
    - Concern
    - Control
    - Curiosity
    - Confidence
    - Relational resource

**Methodology**

**The mixed method research design**

Exploratory sequential mixed methods design (Creswell & Clark, 2007)

- Study 1 - qualitative study to investigate the in-depth experience from an indigenous perspective (answering Research Question 1)

- Study 2 – quantitative study to develop a contextualized measurement of career adaptability based on the findings from Study 1 (answering Research Question 2)

**Study 1 – Qualitative study**

- Participants
  - Purposeful sampling (Patton, 2002)
  - Recent college graduates are information-rich participants
    - school-to-work transition
    - fresh memory of their college experience
**Study 1 – Qualitative study**

**Participants**
- Selection criteria
  - Graduated from college for 24 months or less
  - Permanent Macao resident
  - Minimum sample (Patton, 2002)
    - 12 (Morrow, 2007)

**Data Collection**
- Interview procedure
  - Individual semi-structured interview
  - 60 minutes

**Interview guide**
- Experience of choosing and studying college majors
- Experience of study-to-work transition
- Future career goals and strategies

**Data analysis**
- Thematic Analysis (Braun & Clarke, 2006, 2012)
  - Method for identifying, analyzing, and reporting patterns (or themes) within data
  - 6-step procedure
    - Familiarizing with the data
    - Generating initial codes
    - Searching for themes
    - Reviewing themes
    - Defining and naming themes
    - Producing the report

**Study 2 – Quantitative study**

**Development of Career Adaptability Scale - Macau Expanded Form (CAAS-Macao2.0)**
- Original items from CAAS-Macao (Tien et al., 2014), which is identical to CAAS-International (Savickas & Porfeli, 2012)
- New items generated from the findings of Study 1

**Participants**
- 500 undergraduate students

**Proposed method of analysis**
- Exploratory Factor Analysis (using first half of the sample)
  - Only items with highest loading on its respective factor and low cross-loadings on other factors for each scale will be retained (Clark & Watson, 1995)
  - 6-item to be retained in each subscale
- Confirmatory Factor Analysis (using second half of the sample)
  - Standardized root mean squared residual (SRMR) < .08 (Hu & Bentler, 1995)
  - Root mean squared error of approximation (RMSEA) < .06 (Hu & Bentler, 1995)
  - Tucker-Lewis Index (TLI) > .95 (Hu & Bentler, 1995)
Questions?