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The Transition to Adulthood: The Case of the Millennial Generation in Taiwan

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Abstract

This study aims to explore the life-course trajectories of millennials from late adolescence to early adulthood in Taiwan, both before and after the Global Financial Crisis (GFC) in 2008. We selected four milestones based on relevant literature and Taiwanese contexts, including pursuing postgraduate education (Master degree, MA degree, or above), getting married, working full time, and living independently at ages 25 and 31. We utilized data from Taiwan Education Panel Survey (TEPS) and Taiwan Educational Panel Survey and Beyond (TEPS-B) to address our research questions. These panel studies, representing two millennial generations—a senior high school sample (SH sample, individuals born in 1984-1985) and the Core Panel sample (CP sample, individuals born in 1988-1989)—captured individuals who graduated from college under the impact of the GFC versus those who graduated during the world's recovery from the GFC. Latent class analysis and other statistical methods were applied to analyze differences between the SH and CP samples. Our findings indicated the impact of the GFC on the SH sample, forcing them to become working single adults living with their parents or working married adults with a neolocal residence. In contrast, the CP sample, benefiting from the world's recovery from the GFC, exhibited a more diverse life-course pattern. They were more inclined to achieve resource-intensive milestones, such as pursuing postgraduate education and living independently.

Keywords: millennials, life-course trajectories, Global Financial Crisis, TPES and TPES-B

I. Introduction

Taiwan's millennials born in the 1980s grew up in an era of rapid industrialization and tremendous economic growth. For example, Taiwan's GDP per capita increased from $397 in 1970 to $8,216 in 1990 (National Development Council 2019). Millennials also experienced dynamic democratization and the expansion of higher education in the 1990s. In 1987, Taiwan lifted martial law, which had been imposed for nearly 40 years. As a result, citizens regained the civil liberties of organizing political parties, holding public rallies, publishing and broadcasting, and traveling abroad and to Mainland China (Tien and Shiau 1992). In 1989, the fall of the Berlin Wall ushered in the end of the Cold War and the unprecedented expansion of democracies across the world. Regarding access to higher education in Taiwan, the Ministry of Education (2013) reported a net tertiary education enrolment rate of merely 19.4% before 1990, increasing to 84.0% in 2017.

However, Taiwan's millennials did not grow up without challenges. For instance, the 2007-2008 Global Financial Crisis (GFC) struck while they were enrolled in or about to graduate from college. The crisis compounded Taiwan's severe problems that have emerged over the last 20 years, such as an extremely low fertility rate, a rapidly aging population, economic stagnation, and China's growing political threat and economic competition (S. S. Lin 2016). These macrostructural forces have shaped millennials' choices and developmental trajectories in many aspects from adolescence to young adulthood.

This paper profiles and analyzes the transition to adulthood of the millennial generation in Taiwan. The adulthood transition describes how

young people reach milestones in their life courses such as completing education, leaving home, starting a job, and getting married. In short, these milestones are indicators of a young person becoming an adult.

The adulthood transition has become more complex over time (Furstenberg et al. 2005). Moreover, the GFC has tremendously affected young adults globally and further complicated the millennial generation's completion of these milestones (Altundemir 2012; Junankar 2015). Therefore, many countries have proposed policy tools to help this generation. For example, to address the rapidly rising unemployment rate, the Taiwan government launched several projects to assist young people in surviving the adverse effects of the GFC. These projects included relief packages, subsidies, and skill strengthening programs (Hsueh and Chang 2016). However, critics have doubted the effectiveness of these projects and proposed a concept called "broken generations (崩世代)" to capture young peoples' dire situations since the GFC in Taiwan (T.-H. Lin et al. 2011). The present study empirically examined how the GFC affected millennials' developmental trajectories, broken or not. These trajectories may imply different strategies that young people adopt to manage the pressure caused by the GFC.

This study investigated the developmental trajectories of Taiwan's millennials and the effects of the GFC on their adulthood transition patterns by comparing two birth cohorts who were studied since 2001 in the Taiwan Education Panel Survey (TEPS) and its follow-up, the Taiwan Education Panel Survey and Beyond (TEPS-B). One cohort born in 1984-1985 was directly affected by the GFC when they graduated from college around 2007; the other cohort born in 1988-1989 graduated from college a few years later, when the world had gradually recovered from the crisis. Comparing two birth cohorts can help us understand their general adulthood

transitional patterns and how their life-course patterns may have differed because of the GFC.

The rest of this paper will first briefly review the literature on the transition to adulthood and the GFC's effects on young adults. Then, it will introduce the dataset and methods applied to profile the patterns of the transition to adulthood among young people in Taiwan and analyze the GFC's effects on these life-course patterns. Finally, this paper will present the findings and draw some conclusions.

II. Literature Review

The Transition to Adulthood

In ancient Chinese society, the "capping ceremony" (kuanli, 冠禮) performed on a man's 20th birthday and the "hair-pinning ceremony" (jili, 笄禮) performed on a woman's 15th birthday symbolized the coming of age. However, even in ancient times, adulthood was conceived not as a state of attainment but as a process of becoming. For instance, men were required to marry and become fathers in their thirties to become fully participating members of society (Tu 1976). Similarly, contemporary scholarship has proposed the transition to adulthood as a concept to understand how teenagers transform into adults (Hogan and Astone 1986). Researchers have also suggested the idea of milestones to index the accomplishments required for young people to claim they have achieved adulthood (Cepa and Furstenberg 2021; Furstenberg et al. 2005; Gagné et al. 2022; Park 2013). For example, Shanahan (2000) used five indicators, such as leaving full-time education, holding a paid job, living independently from parents, having a consistent relationship, and becoming a parent, to address how youth fulfill

the milestones and transition to adulthood. Depending on different social contexts, researchers may add milestones such as becoming financially independent or having children to describe the complex transition (Park 2013).

Following on what Shanahan (2000) and Park (2013) have argued, the present study chose pursuing an advanced degree (master's degree or above), having a full-time job, getting married, and living independently (i.e., not living with parents) as the four main milestones of millennials' transition to adulthood. These markers, such as having a full-time job, living independently, and getting married, are the basic milestones discussed by Furstenberg et al. (2005). However, in contrast with Weng and Hsieh's (2018) study and considering the expansion of higher education in Taiwan, the present study chose pursuing an advanced degree (master's degree or above) as another milestone to explore adulthood transition patterns in Taiwan.

By doing so, it reflects the fact that almost 90% of high school students have enrolled in college after the expansion, and 72.93% of youth (25-29 years old, which includes the CP cohort) and 63.88% of youth (same age range, which includes the SH cohort) hold at least a college degree, according to official statistics. These significant figures show that college education in Taiwan has been transformed from a symbol of elite status to a common requirement for youth. As for master's degree holders, the official statistics indicate that 12.73% of the CP cohort and 10.24% of the SH cohort hold at least a master's degree. Therefore, this study believes that holding a master's degree or above has certain important social meaning for Taiwanese youth, and hence it is worth addressing this marker as an index of finishing full-time education.

We believe that these separate milestones form different life-course patterns among young people. These patterns may offer insight into the

developmental trajectories of the adulthood transition holistically. Hence, the present study's first two objectives were to investigate how each main adulthood milestone and the patterns formed by these milestones relate to young people's characteristics and family backgrounds.

Effects of the GFC and Gender

We also explored the effect of the 2008 GFC on the adulthood transition in Taiwan. The GFC in 2007-2008 is believed to be the most severe economic crisis since the Great Depression of the 1930s (Antonopoulos 2009). According to Pew Research Center (2011), in the United States alone, the GFC caused an average income loss of $5,080 per family, resulted in nearly 5.5 million people losing their jobs, and compelled the government to spend $74 billion to mitigate its impact. Globally, many governments launched flexible labor policies to reduce the financial burden on nearly bankrupt corporations by allowing them to use less strict labor contracts. As a result, many employers could easily dismiss employees or hire workers under temporary work agreements to reduce corporate budgets. Young people were most affected by such changes in labor policy, making their unemployment rate higher than that of any other group (Fadda and Tridico 2013). During the crisis, many governments also adopted austerity measures that reduced welfare and social spending (Horton 2016), making the livelihoods of young people even more insecure.

The GFC has altered young lives globally, making their development much more complex than in earlier generations. For instance, the GFC changed young people's values (Sortheix et al. 2019), altered their well-being (Parker et al. 2016), and affected their homeownership patterns (Lennartz et al. 2016). In the United States, the crisis made young people downgrade their educational aspirations and spending and select public

universities over private ones, or opt for regional institutions over flagships (Geiger 2010). It also hurt their economic prospects mainly by increasing their unemployment rate and reducing their monthly incomes (Junankar 2015). Examining the impact of the crisis on each main milestone in adulthood is essential for understanding how the crisis affects the adulthood transition.

Investigating the effects of the GFC on the life-course patterns composed of these milestones in early adulthood is also crucial. A cross-national study (Witteveen 2021) indicated that adverse macroeconomic events such as the GFC are associated with staying in or reenrolling in higher education. However, this association may vary across countries. For instance, in the United States, students in higher education became less likely to remain enrolled in response to a recession. In Sweden, however, no macroeconomic indicator of slowdown was related to a change in the probability of educational reenrollment (Witteveen 2021).

Studies have also indicated that the influence of the GFC differs between young men and women. For example, Antonopoulos (2009) argued that if government bailout policies meant to help those affected by the GFC aggravate inequalities, they would also affect gender equality in society. Cowling et al. (2020) demonstrated that female business owners were less willing to apply for bank loans than male business owners were, but when they did apply for loans, their businesses were more successful. Regarding the transition to adulthood processes, Cattaneo et al. (2017) compared male and female Italian students between 2003 and 2012 and for two subperiods before (2003-2008) and after (2009-2012) the GFC. The authors found that male students became more career centered after the GFC in their university selections and family roles. Female students, by contrast, focused more on the educational experience than on future employability prospects, which

might have placed them at a disadvantage compared with male students in the labor market. In short, the study of Cattaneo et al. (2017) suggested that the GFC maintained or even strengthened gendered social roles. Whether Taiwan millennials are similarly affected by the GFC is vital to investigate.

III. Data and Methods

This study aims to understand the effects of the GFC on the life course patterns of Taiwanese millennials. From a comparative perspective, this study compares two cohorts: one influenced by the GFC and one not. The primary empirical data source is the TEPS and its follow-up survey, TEPS-B. TEPS and TEPS-B are national representative datasets that have collected information on the educational process and the link between education and the labor market for the millennial generation in Taiwan, from 2001 to 2019. This study uses two cohorts within the dataset, labeled as the SH and CP samples.

The information from these cohorts was surveyed using the same questionnaires at specific time points, such as when they were in the 2nd, and 3rd grades in high school, and at ages 21, 25, and 31. This approach provides a foundation for comparing these two cohorts. The only differences between the CP and SH cohorts are their birth years and whether they were influenced by the GFC. The SH sample consists of individuals born in 1984-1985, first surveyed in the 11th grade, the second year of senior high school (hence the abbreviation "SH"). This cohort, that graduated from college around 2007, was directly affected by the 2008 GFC. The CP sample consists of individuals born in 1988-1989, first surveyed in the 7th grade, the first year of junior high school. This cohort was surveyed again in the 9th, 11th, and 12th grades and is called the core panel of TEPS (hence the

abbreviation “CP”). The young respondents in this cohort graduated from college around 2011, when the world had recovered from the GFC.

This study chose the time points for assessing whether individuals had completed life-course milestones based on career development theory (Super and Jordaan 1973). We focused on ages 25 and 31 as two critical time points to assess the GFC’s impact on the adulthood transition of the two samples. According to Super and Jordaan (1973), at age 25, individuals complete their exploration period and are ready for the establishment phase. Age 31 is early in the establishment phase. TEPS-B includes data on both cohorts at ages 25 and 31. Data for the SH and CP samples at age 25 were gathered from in-person interview surveys conducted in 2010 and 2014, respectively. Data at age 31 were collected through follow-up telephone surveys conducted in 2015 for the SH sample and in 2019 for the CP sample. The total number of valid analytical cases is 2,721 in the CP sample and 3,977 in the SH sample.

For the selection of milestones, using Shanahan’s (2000) more flexible definition, this study chose the first instance of living independently (meaning the first time living in a permanent place after graduation), the first full-time job, getting married, and finishing a master’s degree as the four milestones for the transition to adulthood. Benefiting from the TEPS and TEPS-B questionnaires, which provided event history-like information on job, education, living, and marriage history, researchers can identify whether the interviewees had achieved these milestones by the ages of 25 and 31.

This study applied latent class analysis (LCA) to identify different life-course patterns in the transition to adulthood. Additionally, the Inverse Probability Treatment Weighting (IPTW) method was used to address the

attrition problem in the data gathered between ages 25 and 31.[1] Usually, the simplest method to deal with dropout from the study is to eliminate those cases from the analysis. However, one thing researchers can't guarantee is whether there is a specific pattern to the dropout, which could introduce selection bias. Scholars have proposed that by assigning different weights to participants based on their probabilities of remaining in the sample, this method can account for some dropout cases occurring in previous surveys through creating a mimic of random sampling. Hence, it can avoid selection bias caused by confounding certain features of interviewees that lead to their dropout from the survey (Seaman and White 2013).

In this study, however, we don't have clear clues about why interviewees drop out from the survey, i.e. whether it may have something to do with interviewees' social demographic features, family backgrounds, and school features. Hence, during the construction of our IPTW weights, this study applied interviewees' gender, ethnicity, residency in each survey, parental educational level, parental occupation, family income, school type (public or private), and school track (academic or vocational) as the dimensions of consideration.

A multinomial logistic regression of the same set of predictors was conducted on life-course patterns in the transition to adulthood. Scholars have pointed out that there are many aspects can affect the process of transitioning to adulthood among youth, including family background (Smith et al. 2016) and school performance (Ladhani et al. 2019). These predictors were categorized into three groups of variables.

1 The data attrition rate for the CP sample from the wave 1 in 2001 to the last wave in 2019 is 36.14%, the attrition rate for the SH sample from the 1st wave to the last wave in 2018 is 62.29%.

The first group comprised the respondents' sociodemographic features, including gender and ethnicity. The second group contained family background information gathered in 12th grade, such as parental marital status, sibling size (number of siblings in the family), and indicators of family socioeconomic status (SES), including parental education, occupation, and family monthly income. Scholars have found that more disadvantaged families tend towards more diverse patterns in the transition process (Smith et al. 2016). Finally, the third group contained indicators of the respondents' educational achievement, including 12th-grade academic performance measured using item response theory (IRT) and the types of universities attended. These three groups of predictors provide an understanding of how gender, family SES, and education contribute to the variation in patterns of the transition to adulthood.

IV. Results

The research findings are reported in this paper in three parts: (1) Outcomes based on the descriptive analysis and the LCA results of the CP and SH samples, (2) discussion about the factors affecting the composition of transitions to adulthood in the CP and SH samples, and (3) discussion about the effect of the GFC and gender differences on adulthood transition patterns.

Before discussing the outcomes from the LCA analysis, this study will explain the criteria for choosing the proper distinctions from LCA results. The criteria applied in this study are the lowest Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), and highest entropy values (Sinha et al. 2021). For both the CP and SH cohorts, this study tested at least six combinations before choosing the suitable number of categories based on the AIC, BIC, and entropy values provided by M-plus.

The LCA results indicated that for the CP sample, the three-group distinction is the most suitable (with relatively low AIC and BIC values and the highest entropy value) at age 25, and the five-group distinction is the most suitable (with the lowest AIC and BIC values and the highest entropy value) at age 31. For the SH sample, the results indicated that the three-group distinction is the most suitable (with relatively low AIC and BIC values and the highest entropy values) at age 25, and the four-group distinction is the most suitable (with relatively low AIC and BIC values and the highest entropy values) at age 31.

The Outcomes From Latent Class Analysis

Profile of the CP Sample's Transition to Adulthood

We present the findings of the CP sample first. The CP is the younger birth cohort whose transition to the labor market was not directly affected by the GFC. Hence, the findings of the CP sample may be used for comparison with those of the SH sample, which was directly affected by the GFC, to speculate what would have happened if the SH cohort had not faced the crisis.

Table 1 shows that most respondents in the CP sample at age 25 lived independently (86.8%) and had a full-time job (72.6%). More than 60% had white-collar jobs, and approximately 15.1% worked as professionals or managers. Moreover, 25.5% of respondents at age 25 had a graduate degree, and only 2.9% were married. At age 31, the proportion of CP respondents with a graduate degree increased slightly to 28.0%. Most respondents (56.6%) still had full-time jobs, but the percentage of respondents working full time decreased by approximately 16%. As expected, most respondents working full time still held white-collar jobs. However, the percentage of

Table 1. Descriptive statistics for the CP sample ($N = 2{,}721$)[a,b] (Unit: %)

Family background		At age 25		At age 31	
Male	52.6				
Ethnicity		Adulthood milestones			
Minnan	72.1	Married	2.9	Married	20.0
Hakka	10.2	MA degree or above	25.5	MA degree or above	28.0
Mainlander	12.1	Full-time job	72.6	Full-time job	56.6
Indigenous	1.9				
Other	3.6	Living independently	86.8	Living independently	29.8
Parental occupation		Occupation			
Agricultural or nonskilled worker	6.3	Agricultural or nonskilled worker	6.9	Agricultural or nonskilled worker	3.1
Semiskilled or service worker	37.0	Semiskilled or service worker	20.5	Semiskilled or service worker	53.0
Clerical	9.5	Clerical	22.3	Clerical	13.7
Semiprofessional	11.5	Semiprofessional	25.4	Semiprofessional	37.9
Professional or managerial	33.1	Professional or managerial	15.1	Professional or managerial	23.8
Other	2.6	Other	9.7	Other	6.2
Parental education		Life-course patterns			
Senior high or below	26.5	Working single adult with postgraduate education	24.2	Working single adult with postgraduate education	25.0
College	54.5	Working single adult without postgraduate education	73.0	Working single adult living with parents	28.4
MA or above	16.4			Working married adult with postgraduate education and neolocal residence	0.6
Other	2.6	Working married adult with neolocal residence	2.8	Working married adult with neolocal residence	11.4

Table 1. Descriptive statistics for the CP sample ($N = 2,721$)[a,b] (Unit: %) (continued)

Family background		At age 25	At age 31	
			Missing	34.7
Parental marital status		Monthly income (in thousands, NT$)		
Married	87.5	4.087 (2.173)	7.110 (3.305)	
Widowed	4.3			
Divorced	6.1			
Cohabitating	1.2			
Other	1.0			
Performance in 12th grade				
1st Quintile	17.3			
2nd Quintile	18.6			
3rd Quintile	20.0			
4th Quintile	21.6			
5th Quintile	22.6			
College type				
Public university	26.7			
Private university	36.7			
Public S&T university	8.4			
Private S&T university	21.5			
No college diploma	6.4			
Family income (per month in thousands, NT$)				
10.707 (5.675)				
Sibling size				
1.614 (1.049)				

Note: [a]Statistics shown are proportions except for family income, monthly income, and sibling size, which are means and standard deviations (in parentheses). [b]Due to considerations of sample attrition, our results at age 31 include those who did not respond in this wave; hence, the proportion of these milestones should be carefully treated.

respondents in semiprofessional, professional, and managerial positions increased, reflecting upward job mobility that was accompanied by increased monthly incomes from approximately NT$40,000 at age 25 to NT$62,000 at age 31. Although the proportion of respondents living independently decreased to 29.5% (vs. 35.4% living with parents and 35.2% missing),[2] the percentage of married respondents increased to 20.0%.

The descriptive statistics in Table 1 reveal that Taiwan's millennials born in 1988-1989 were highly educated; consequently, the majority held white-collar jobs. However, most of them remained single and did not consider marriage until their early 30s. For many of them, their living arrangements and work status had changed since completing their education. These changes may be related to marriage and gender differences, as the following analysis reveals.

We used LCA to identify common life-course patterns from complex variations in individuals' transitions to adulthood. Table 1 presents three groups that we could distinguish in the CP sample at age 25. Nearly three-fourths of the sample (73.0%) was composed of working single adults without postgraduate education. The second-largest group was single adults with postgraduate education (24.2%), comprising nearly a quarter of the sample. The third and smallest group (2.8%) was the working married adults with a neolocal residence (i.e., living separately from either spouse's parents). As expected, the life-course patterns became more diverse by age 31. The LCA resulted in five groups. Apart from the respondents with missing information (34.7%), who offered insufficient information or could not be reached in the follow-up survey at age 31, the two largest groups

2 Due to the consideration of the sample attrition rate, readers should carefully compare the proportions at age 25 and age 31.

were working single adults living with their parents (28.4%) and working single adults with postgraduate education (25.0%). The remaining two groups were working married adults with a neolocal residence (11.4%) and married adults with postgraduate education and a neolocal residence (0.6%).

Profile of the SH Sample's Transition to Adulthood

Table 2 shows that at age 25, compared with the younger cohort, slightly fewer respondents in the SH sample lived independently (81.4%) or had an advanced degree (20.5%), but slightly more of them had full-time jobs (76.8%) and were married (4.3%). Regarding occupations held at age 25, more than 65% of the SH sample had white-collar jobs, of whom 15.1% held professional jobs or managerial positions; this figure was approximately 5% lower than that in the younger cohort. However, both birth cohorts had similar overall profiles of milestones reached by age 25.

When the SH sample turned 31, the largest change was a decrease in the percentage of respondents living independently, from 86.8% to 21.5% (approximately 8% lower than the younger cohort at the same age). Notably, the percentage of respondents living with their parents was 41.2%, which was somewhat higher than that of the CP cohort (35.4%).[3] Those with full-time jobs also decreased from 76.8% to 66.3% (remaining approximately 10% higher than the younger cohort at the same age). The percentage of respondents pursuing an MA or higher degree remained largely unchanged. The percentage of those who married increased to 25.9%, which was approximately 5% higher than that in the younger cohort.

3 Due to the consideration of the sample attrition rate, with a missing value of 40.1%, readers should carefully compare the proportions at age 25 and age 31.

Table 2. Descriptive statistics for the SH sample (N = 3,977)[a,b] (Unit: %)

Family background		At age 25		At age 31	
Male	49.4				
Ethnicity		Adulthood milestones			
Minnan	77.2	Married	4.3	Married	25.9
Hakka	10.6	MA degree or above	20.5	MA degree or above	21.7
Mainlander	10.3	Full-time job	76.8	Full-time job	66.3
Indigenous	0.6				
Other	1.1	Living independently	81.4	Living independently	21.9
Parental occupation		Occupation			
Agricultural or nonskilled worker	14.2	Agricultural or nonskilled worker	8.8	Agricultural or nonskilled worker	5.9
Semiskilled or service worker	21.1	Semiskilled or service worker	20.0	Semiskilled or service worker	15.5
Clerical	25.6	Clerical	26.4	Clerical	19.9
Semiprofessional	6.8	Semiprofessional	29.5	Semiprofessional	32.7
Professional or managerial	31.1	Professional or managerial	10.0	Professional or managerial	21.6
Other	1.2	Other	5.5	Other	5.2
Parental education		Life-course patterns			
Senior high or below	68.2	Working single adult with postgraduate education	20.4	Working single adult with postgraduate education	13.9
College	27.8	Working single adult without postgraduate education	75.3	Working single adult living with parents	47.9
MA or above	2.5	Working married adult with neolocal residence	4.3	Working married adult with neolocal residence	14.2
Other	1.6			Missing	24.0
Parental marital status		Monthly income (in thousands, NT$)			
Married	89.8	3.985 (1.905)		6.175 (2.779)	
Widowed	3.3				

Table 2. Descriptive statistics for the SH sample (N = 3,977)[a,b] (Unit: %) (continued)

Family background	At age 25	At age 31
Divorced 4.3		
Cohabitating 1.2		
Other 1.3		
Performance in 12th grade		
1st Quintile 16.7		
2nd Quintile 19.5		
3rd Quintile 19.9		
4th Quintile 22.0		
5th Quintile 21.9		
College type		
Public university 16.4		
Private university 32.6		
Public S&T university 9.7		
Private S&T university 27.8		
No college diploma 13.4		
Family income (per month in thousands, NT$)		
6.566 (4.673)		
Sibling size		
1.699 (.933)		

Note: [a]Statistics shown are proportions except for family income, monthly income, and sibling size, which are means and standard deviations (in parentheses). [b]Due to considerations of sample attrition, our results at age 31 include those who did not respond in this wave; hence, the proportion of these milestones should be carefully treated.

In the LCA based on the SH sample, three patterns shown at age 25 were similar to those of the CP sample. First, the largest group was that of working single adults without postgraduate education, comprising approximately 75.3% of the SH sample, which was about 2% higher than

that in the younger cohort at the same age. Second, working single adults with postgraduate education comprised approximately one-fifth of the sample (20.4%), which was about 4% lower than that in the younger cohort. Finally, approximately 4.3% of adults in the SH sample were working and married with a neolocal residence. At age 31, only four latent patterns were identified in the SH sample, compared with the five patterns identified in the younger cohort at the same age. The largest group was working single adults living with their parents (47.9%). The other three groups were working single adults with postgraduate education (13.9%), working married adults with a neolocal residence (14.2%), and those with missing data (24.0%). As in the CP sample, the "missing" group includes respondents who offered insufficient information or could not be reached in the follow-up survey at age 31.

Comparison of LCA Result From CP and SH Sample

The LCA of the CP and SH samples indicated similar transition patterns at age 25. The same groups were identified for both the CP and SH samples, namely working single adults without postgraduate education, working single adults with postgraduate education, and working married adults with a neolocal residence. However, the transition patterns for the two birth cohorts at age 31 differed somewhat. Apart from the respondents with missing data, the LCA revealed the same three groups for the CP and SH samples at age 31: working single adults with postgraduate education, single adults living with their parents, and working married adults with a neolocal residence. Although the two cohorts had the same life-course patterns, more respondents in the SH sample than in the CP sample were single and living with their parents at age 31 (48.9% vs. 28.4%). Moreover, the LCA revealed one additional group in the CP sample: working married

adults with postgraduate education and a neolocal residence. The differences between the transition patterns of the CP and SH samples from age 25 to 31 may be related to the GFC and are further investigated in the following sections through multinomial logistic regression to illustrate the effects of gender differences and the GFC.

In general, the descriptive statistics alone reveal similarities and differences between the two millennial cohorts. Regarding the similarities, Figure 1 illustrates similar overall tendencies in reaching the four adulthood milestones from age 25 to 31. The percentage of respondents who were married increased from age 25 to 31 in both cohorts. The same increasing or decreasing trends were observed in the percentages of respondents with postgraduate education, full-time jobs, and lived independently were similar in both cohorts. Figure 2 also indicates that the distribution of three life-course patterns was similar between the cohorts.

Regarding the differences between the two cohorts, Figure 1 shows that in the SH sample, somewhat fewer respondents pursued postgraduate

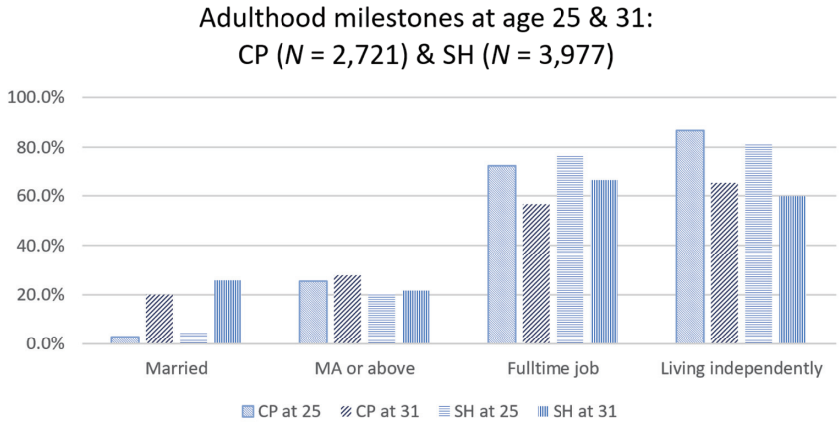

Figure 1. Adulthood milestones attained at age 25 and 31: CP and SH samples

Note: See the online version (https://doi.org/10.6191/JPS) for the full-colored figure.

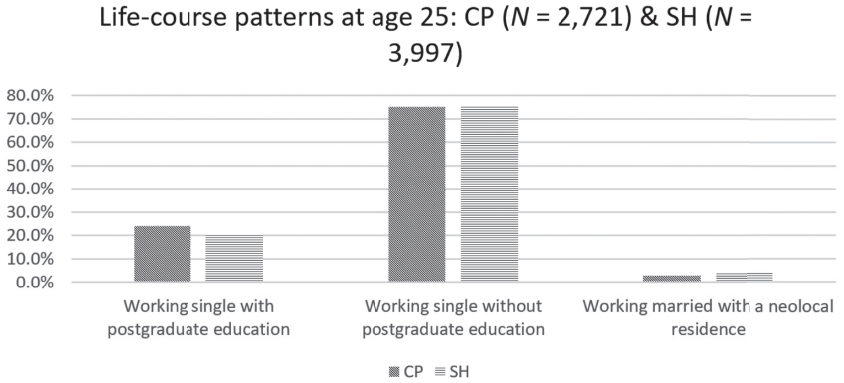

Figure 2. Life-course patterns at age 25: CP and SH samples

education, more had full-time jobs, and fewer were living independently at age 25 compared with the CP sample. These differences might be related to the GFC; fewer people in the SH sample had attained resource-intensive milestones, such as pursuing postgraduate education and living independently, compared with the CP sample. Figure 2 also indicates a similar pattern of differences between cohorts. The percentage of working single adults with postgraduate education in the SH sample was lower than that in the CP sample. In addition, the percentage of working married adults with a neolocal residence in the SH sample was higher than that in the CP sample.

Figure 3 further shows the differences between the CP and SH cohorts. Compared with the CP sample, respondents in the SH cohort sample were more likely to be working single adults living with their parents or working married adults with a neolocal residence. Moreover, Figure 3 reveals that the life-course patterns of the CP cohort were more diverse than those of the SH cohort. An additional group of working married adults with postgraduate education and a neolocal residence was identified in the CP cohort.

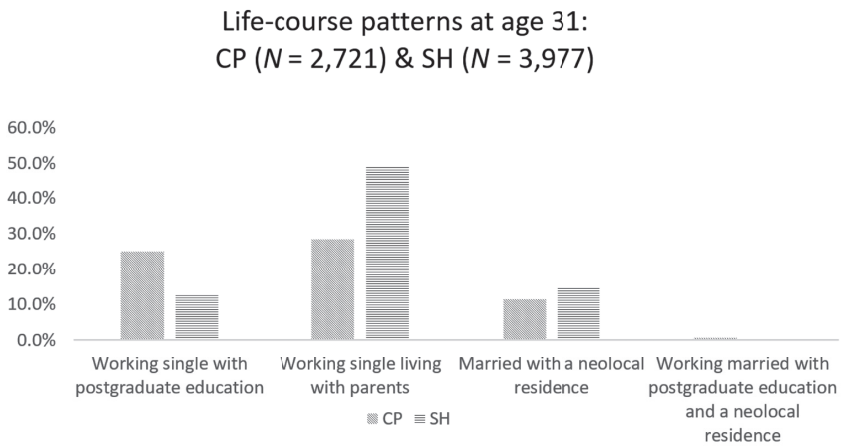

Figure 3. Life-course patterns at age 31: CP and SH samples

Factors Related to the Life-Course Patterns of Both CP and SH Sample

Factors Related to the Life-Course Patterns of the CP Sample

The multinomial logistic regression results for the relationship of individual demographic characteristics and family background with life-course patterns in the CP sample are presented in Table 3 (age 25) and Table 4 (age 31). At age 25, in contrast to the group of working single adults without postgraduate education (the base outcome group for comparison), men were more likely to be working single adults with postgraduate education (odds ratio, short as *OR*: 2.210) and less likely to be working married adults with a neolocal residence (*OR*: .542).

Moreover, compared to the reference group in college type (public university), all other university types (private university's *OR*: .611, public S&T university's[4] *OR*: .507, and private S&T university's *OR*: .135) have

4 S&T university means the science and technology university.

Table 3. Multinomial logistic regression of life-course patterns for the CP sample at age 25[a]

	Working single adult with postgraduate education	Working married adult with neolocal residence
Male	2.210***	.542*
	(.231)	(.150)
Ethnicity (Ref. Minnan)		
Hakka	1.037	1.457
	(.171)	(.585)
Mainlander	.729*	.923
	(.116)	(.457)
Indigenous	.227	3.165*
	(.172)	(1.657)
Other	.927	1.039
	(.310)	(.678)
Parents Married	.833	1.151
	(.080)	(.189)
Sibling Size	.900	1.099
	(.052)	(.099)
Parental education (Ref. Senior high or below)		
College	1.067	1.529
	(.149)	(.494)
MA or above	1.187	1.390
	(.219)	(.828)
Other	1.163	1.183
	(.411)	(1.273)
Parental occupation (Ref. Agricultural and nonskilled worker)		
Semiskilled or service worker	.813	.822
	(.214)	(.376)
Clerical	.849	.751
	(.259)	(.481)
Semiprofessional	1.079	.635
	(.314)	(.403)
Professional or managerial	1.222	.876
	(.337)	(.476)
Other	1.216	1.139
	(.538)	(1.065)

Table 3. Multinomial logistic regression of life-course patterns for the CP sample at age 25[a] (continued)

	Working single adult with postgraduate education	Working married adult with neolocal residence
Family income (monthly, in thousands, NT$)	1.020 (.011)	1.011 (.027)
Performance in 12th Grade	1.155** (.052)	.736* (.096)
College type (Ref. Public university)		
Private university	.611*** (.071)	.504 (.240)
Public S&T university	.507*** (.101)	1.707 (.883)
Private S&T university	.135*** (.030)	1.107 (.517)
No college diploma	.000 (.000)	1.916 (1.027)
Overseas university	3.540 (2.581)	.000 (.001)
N	660	76

Note: [a]Base outcome group: working single adult without postgraduate education. Estimates shown are relative risk ratios. Standard errors are in parentheses.

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

less chance to be working single adults with postgraduate education. By contrast, college type did not affect the chance of being a working married adult with a neolocal residence. Regarding academic performance in 12th grade, higher performance increased the possibility of being a working single adult with postgraduate education and reduced the chance of being a working married adult with a neolocal residence.

The factors related to the life-course patterns in the CP sample at age 31 are presented in Table 4. Compared to working single adults with postgraduate education, men are less likely to be working and married with neolocal residence (*OR*: .677). As for the indigenous group, they are more

Table 4. Multinomial logistic regression of life-course patterns for the CP sample at age 31[a]

	Working married adult with postgraduate education and neolocal residence	Working single adult living with parents	Working married adult with neolocal residence	Missing
Male	5.630	1.049	.677*	.880
	(5.103)	(.131)	(.103)	(.101)
	Ethnicity (Ref. Minnan)			
Hakka	.000***	.988	.764	.968
	(.000)	(.203)	(.205)	(.181)
Mainlander	2.242	.873	1.420	1.028
	(1.822)	(.179)	(.316)	(.183)
Indigenous	5.266*	.827	1.198	1.105
	(3.803)	(.418)	(.784)	(.528)
Other	3.853	.969	.424	.845
	(4.212)	(.344)	(.265)	(.287)
Sibling size	1.206	.967	1.018	.967
	(.119)	(.053)	(.065)	(.054)
Parents married	1.145	1.205	1.071	1.084
	(.924)	(.244)	(.283)	(.206)
	Parental education (Ref. Senior high or below)			
College	.357	.711*	1.139	.873
	(.268)	(.110)	(.233)	(.128)
MA or above	.000***	.465**	1.047	.742
	(.000)	(.112)	(.298)	(.157)
Other	.000***	1.016	1.380	1.021
	(.000)	(.456)	(.709)	(.396)
	Parental occupations (Ref. Agricultural and nonskilled worker)			
Semiskilled or service worker	1.249	1.223	1.161	1.256
	(1.541)	(.319)	(.383)	(.320)
Clerical	5.414	1.530	.625	1.246
	(6.831)	(.495)	(.267)	(.388)
Semiprofessional	4.359	1.679	.917	1.360
	(5.456)	(.521)	(.364)	(.406)
Professional or managerial	1.063	1.413	.870	1.320
	(1.453)	(.415)	(.320)	(.372)

Table 4. Multinomial logistic regression of life-course patterns for the CP sample at age 31[a] (continued)

	Working married adult with postgraduate education and neolocal residence	Working single adult living with parents	Working married adult with neolocal residence	Missing
Other	2.380 (2.908)	.301* (.147)	.379 (.234)	.567 (.239)
Family income (monthly, in thousands, NT$)	1.079 (.053)	.994 (.013)	1.018 (.016)	.997 (.012)
Performance in 12th grade	1.279 (.426)	.830** (.047)	.953 (.066)	.901* (.047)
College type (Ref. Public university)				
Private university	.875 (.710)	.894 (.150)	.796 (.150)	.962 (.140)
Public S&T university	1.142 (1.153)	.947 (.237)	1.209 (.351)	1.070 (.242)
Private S&T university	6.409 (7.098)	1.257 (.280)	.962 (.264)	1.195 (.251)
No college diploma	2.988 (3.167)	1.184 (.398)	1.068 (.499)	1.275 (.413)
Overseas university	.000*** (.000)	.000*** (.000)	1.020 (.899)	.840 (.730)
Life course patterns at age 25 (Ref. Working single adult without postgraduate education)				
Working single adult with postgraduate education	2.115 (1.394)	.000*** (.000)	.521*** (.092)	.409*** (.055)
Working married adult with neolocal residence	.000*** (.000)	12.812* (13.270)	32.970*** (34.317)	13.147* (13.634)
N	15	722	298	951

Note: [a]Base outcome group: Working single adult with postgraduate education. Estimates shown are relative risk ratios. Standard errors are in parentheses.

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

likely to be working married adult with neolocal residence (*OR*: 5.266). The parental education background contributes to a lower chance of being working single while living with parents (*OR*: .711) and has less chance of being in same category when one of the parents has an MA or above degree (*OR*: .465). Additionally, higher student performance is associated with a lower chance of being working single adult living with parents (*OR*: .830).

If we consider the previous life course patterns' effect at age 25 on their life-course patterns at age 31, the results indicated that: Compared to working single adults without postgraduate education at age 25, those who are working single adults with postgraduate education have less chance of being working single adults living with their parents (*OR*: .000) and being working married with neolocal residency (*OR*: .521) at age 31. On the other hand, those who are categorized as working married with neolocal residency at age 25 have a lower chance of being working married with postgraduate education and neolocal residency (*OR*: .000) at age 31. However, their chances of being working single adults living with parents (*OR*: 12.812) and working married with neolocal residency (*OR*: 32.970) are higher than those of working single adults without postgraduate education at age 25.

Regarding the effects of educational performance and achievement on the early adulthood transition, Tables 3 and 4 show that high performers in high school and those who attended prestigious public universities in Taiwan were more likely to be working single adults with a postgraduate degree at age 25. However, by age 31, those who attended a private science and technology university or did not attend college were more likely to be working single adults living with their parents than they were to be working single adults with postgraduate education.

The result from multinomial logistic regression revealed that family background has a negligible effect on adulthood milestones reached and life-course patterns. However, family background strongly influences academic performance and educational achievement (Coleman et al. 1966; Shavit and Blossfeld 1993; Sirin 2005; Tam et al. 2004). Hence, we interpreted the effects of family background on adulthood milestones and life-course patterns to be primarily indirect and mediated by their influence on academic performance and educational achievement in young adults.

Factors Related to the Life-Course Patterns of the SH Sample

The outcomes of the multinomial logistic regression on life-course patterns for the SH sample are presented in Table 5 (age 25) and 6 (age 31). At age 25, with working single adults without postgraduate education used as the base comparison group, male respondents were more likely to be working single adults with postgraduate education (*OR*: 2.147) and less likely to be working married adults with a neolocal residence (*OR*: .457). These findings are again consistent with those obtained for the CP sample at age 25. Regarding college type, Table 5 also indicates that those who attended public universities were more likely to be working single adults with postgraduate education, comparing to other college types (private university's *OR*: .458, public S&T university's *OR*: .613, and private S&T university's *OR*: .156). The effect of academic performance in 12^{th} grade also showed that the higher the respondents' performance, the more likely they were to be working single adults with postgraduate education (*OR*: 1.259) and the less likely they were to be working married adults with a neolocal residence (*OR*: .832).

Table 5. Multinomial logistic regression of life-course patterns for the SH sample at age 25[a]

	Working single adult with postgraduate education	Working married adult with neolocal residence
Male	2.147***	.457***
	(.200)	(.084)
Ethnicity (Ref. Minnan)		
Hakka	.926	.900
	(.140)	(.259)
Mainlander	.962	.792
	(.141)	(.291)
Indigenous	.375	.000
	(.300)	(.000)
Other	1.682	1.022
	(.959)	(.635)
Parents married	.912	.942
	(.083)	(.113)
Sibling size	1.013	1.013
	(.057)	(.080)
Parental education (Ref. Senior high and below)		
College	1.471***	.440**
	(.165)	(.134)
MA or above	1.384	1.073
	(.358)	(.848)
Other	1.407	2.787
	(.822)	(1.826)
Parental occupation (Ref. Agricultural and nonskilled worker)		
Semiskilled or service worker	1.081	1.658
	(.184)	(.461)
Clerical	.846	1.609
	(.139)	(.450)
Semiprofessional	1.044	.630
	(.225)	(.401)
Professional or managerial	1.044	1.673
	(.171)	(.508)
Other	.987	.923
	(.561)	(.732)

Table 5. Multinomial logistic regression of life-course patterns for the SH sample at age 25[a] (continued)

	Working single adult with postgraduate education	Working married adult with neolocal residence
Family income (monthly, in thousands, NT$)	1.019 (.010)	1.012 (.022)
Performance in 12th grade	1.259*** (.052)	.832* (.067)
College type (Ref. Public university)		
Private university	.498*** (.055)	.940 (.427)
Public S&T university	.613** (.097)	2.044 (.998)
Private S&T university	.156*** (.027)	2.040 (.888)
No college diploma	.000 (.000)	5.806*** (2.586)
Overseas university	.000 (.000)	.000 (.000)
N	811	171

Note: [a]Base outcome group: working single adult without postgraduate education. Estimates shown are relative risk ratios. Standard errors are in parentheses.

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

Table 6 presents the relationship of individual characteristics and family background with life-course patterns in the SH sample at age 31. Male respondents' chance of being working married adults with a neolocal residence was lower than that of their female counterparts (*OR*: .452). Furthermore, the indigenous group is less likely to be working and single with a postgraduate degree (*OR*: .000). If one of the parents has an MA degree, the chance of respondents being working and married with neolocal residence is higher (*OR*: 2.153). If one of the parents has a professional and managerial job, the chance of being working and single with a postgraduate degree is higher (*OR*: 2.179). Regarding college type,

our multinomial logistic regression indicated that if respondents attended a public university (academic track), their chance of being working and single with a postgraduate degree is higher than for other college types (private university's *OR*: .625, private S&T university's *OR*: .353, and no college diploma: .109).

If we consider the previous life course patterns' effect at age 25 on their life-course patterns at age 31, the results indicated that: Compared to working

Table 6. Multinomial logistic regression of life-course patterns for the SH sample at age 31[a]

	Working married adult with neolocal residence	Working single adult with postgraduate education	Missing
Male	.452***	.938	.797*
	(.051)	(.143)	(.072)
Ethnicity (Ref. Minnan)			
Hakka	.990	1.523	.979
	(.170)	(.355)	(.144)
Mainlander	.990	1.106	1.030
	(.184)	(.283)	(.165)
Indigenous	2.387	.000***	1.402
	(1.519)	(.000)	(.705)
Other	2.496	.118	1.331
	(1.278)	(.183)	(.570)
Parents married	.874	1.115	.949
	(.159)	(.289)	(.139)
Sibling size	1.145*	1.069	1.026
	(.065)	(.091)	(.051)
Parental education (Ref. Senior high or below)			
College	1.004	.941	1.001
	(.142)	(.178)	(.114)
MA or above	2.153*	1.214	1.111
	(.814)	(.528)	(.416)
Other	.840	.291	.847
	(.418)	(.356)	(.381)

Table 6. Multinomial logistic regression of life-course patterns for the SH sample at age 31[a] (continued)

Parental occupation (Ref. Agricultural or nonskilled worker)			
Semiskilled or service worker	.926	1.199	.916
	(.163)	(.339)	(.131)
Clerical	.964	1.444	.928
	(.165)	(.394)	(.129)
Semiprofessional	.771	1.670	.844
	(.203)	(.575)	(.181)
Professional or managerial	.818	2.179**	.927
	(.147)	(.618)	(.137)
Other	.928	6.826*	.980
	(.496)	(5.404)	(.480)
Family Income (monthly, in thousands, NT$)	1.019	.993	1.003
	(.013)	(.016)	(.011)
Performance in 12th Grade	1.041	1.004	.967
	(.049)	(.069)	(.038)
College types (Ref. Public university)			
Private university	1.179	.625*	.966
	(.222)	(.119)	(.144)
Public S&T university	1.486	.846	1.083
	(.349)	(.214)	(.213)
Private S&T university	1.569*	.353***	1.034
	(.316)	(.097)	(.173)
No college diploma	1.275	.109**	1.029
	(.311)	(.083)	(.195)
Overseas university	-	-	-
	-	-	-
Life course patterns at age 25 (Ref. Working single adult without postgraduate education)			
Working single adult with postgraduate education	.258***	.535	.612*
	(.056)	(.336)	(.147)
Working married adult with neolocal residence	.028***	22.205***	1.373
	(.016)	(14.143)	(.382)
N	563	554	956

Note: [a]Base outcome group: working single adult without postgraduate education. Estimates shown are relative risk ratios. Standard errors are in parentheses.

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

single adults without postgraduate education at age 25, those who are working single adults with postgraduate education have a lower chance of being a working married adult with neolocal residence (*OR*: .258). On the other hand, those who are categorized as working married with neolocal residency at age 25 have a lower chance of being a working single adult with postgraduate education (*OR*: .028), while their chances of being working single adult with postgraduate education is higher (*OR*: 22.205). Besides, there is no effect of such a group at age 25 to other groups at age 31.

The Effect of GFC and Gender Difference in CP and SH Sample

Effect of the GFC: Comparing the Life-Course Patterns of the CP and the SH Sample

The LCA revealed consistent life-course patterns for the CP and the SH samples at age 25. The effects of individual characteristics and family background on these patterns were also similar between the two cohorts. However, we identified some differences in the distribution of life-course patterns. For instance, the CP sample had a higher percentage of respondents pursuing advanced degrees or living independently than the SH sample had at age 25. These differences may be related to the GFC, which affected the SH cohort when many of its members completed their college education and entered the labor market. To determine whether the GFC affected the adulthood transition, we further applied the model comparison method to investigate the chance differences between the two birth cohorts in any of the three life-course patterns at age 25. This study used the post-estimation function provided by Stata's "mlogit" command to estimate cohort and gender differences.

Table 7 presents the outcomes of the cohort comparison. Compared with the CP cohort, respondents in the SH cohort were more likely to be being working single adults without postgraduate education. By contrast, members of the SH cohort were less likely to be working single adults with postgraduate education or working married adults with a neolocal residence. In other words, SH cohort members were less likely to pursue advanced degrees or marry.

According to the findings in Table 7, the GFC may have discouraged the SH cohort from pursuing postgraduate education. The negative impact

Table 7. Probability and gender differences in life-course patterns between the SH and CP cohorts at age 25

	Probability difference	Std. Err.	95% confidence interval	
Cohort comparison (SH vs. CP)				
Working single adult without postgraduate education	.734***	.010	.754	.715
Working single adult with postgraduate education	-.520***	.013	-.495	-.544
Working married adult with a neolocal residence	-.215***	.009	-.197	-.232
Gender comparison (Male vs. female)				
Working single adult without postgraduate education				
CP	-.115***	.014	-.143	-.086
SH	-.026***	.004	-.032	-.019
Working single adult with postgraduate education				
CP	.095***	.014	.068	.122
SH	-.053***	.013	-.078	-.029
Working married adult with a neolocal residence				
CP	.020***	.003	.014	.026
SH	.079***	.012	.055	.102

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

of the GFC on the SH cohort's desire to pursue postgraduate education might be related to the financial burden of investing more in graduate education and uncertainty regarding the payoff of graduate degrees when entering a possibly shrinking labor market for the foreseeable future. By contrast, the CP cohort had more favorable prospects in the labor market upon graduating from college compared with the SH cohort. Therefore, the CP cohort worried less than the SH cohort did about entering the labor market directly after college and had time to explore other options. This tendency was also detected in the life-course patterns at age 31, with the CP cohort having more diversified life-course patterns than the SH had.

Gender Differences

Using a similar comparison method, we further explored whether the impact of the GFC on life-course patterns at age 25 was gendered. The results presented in Table 7, which indicate that the male sample in CP has a lower chance of being a working single adult without postgraduate education and a higher chance of being a working married adult with a neolocal residence compared to their female counterparts. Similarly, this pattern can also be observed when comparing the male and female groups in the SH cohort. The only difference in gender comparisons between the CP and SH cohorts lies in the working single adults with postgraduate education. The comparison results indicate that in the CP cohort, male respondents are more likely to be working single adults with postgraduate education, whereas in the SH cohort, the result is the opposite. Based on the previous result, we can conclude that the GFC affected the SH cohort by making men less likely than women to pursue postgraduate education and more likely to start a nuclear family sooner than men in the CP cohort did.

Table 7 reveals the gendered effects of the GFC on life-course patterns.

The results are also consistent with the finding of Cattaneo et al. (2017) that men and women in Italy used different strategies to cope with the effects of the GFC, with women being more flexible in their strategies compared with men. Male respondents in the SH cohort at age 25 tended to search for a job and start a family sooner than men in the CP cohort did, whereas their female counterparts appeared to be less traditional by pursuing a graduate degree and remaining single.

V. Conclusion and Discussion

This study aimed to define the life-course trajectories of millennials from late adolescence to early adulthood in Taiwan. It also examined the impact of the GFC on millennials' transition to adulthood. We selected four milestones at age 25 and 31 to index the adulthood transition: pursuing postgraduate education (MA degree or above), getting married, working full time, and living independently. The millennials studied were in two birth cohorts surveyed by the TEPS and TEPS-B, which followed the SH sample (born in 1984-1985) and the CP sample (born in 1988-89) since 2001. The GFC directly affected millennials in the SH cohort as they graduated from college. By contrast, when the CP cohort graduated from college, the adverse effects of the GFC had subsided. Therefore, our comparison of these two survey cohorts shed light on how the GFC affected Taiwan's millennial generation.

The analysis of two millennial cohorts reveals both similarities and differences in their life course patterns. Both cohorts showed comparable trends in reaching key adulthood milestones between ages 25 and 31, such as marriage, postgraduate education, full-time employment, and independent living. However, differences emerged, based on the descriptive

statistics, particularly with the SH cohort showing fewer individuals pursuing postgraduate education and living independently by age 25, likely influenced by the GFC.

We then used LCA to identify life-course patterns composed of these milestones. At age 25, the patterns of the CP and SH samples were quite similar; their life-course patterns were the same. These patterns included: working single without postgraduate education, working single with postgraduate education, and working married with a neolocal residence. However, at age 31, the patterns diverged. The CP cohort generated five groups, while the SH cohort also generated five groups. The additional pattern in the CP cohort is working married adults with postgraduate education and a neolocal residence. Hence, we concluded that one of the effects of the GFC on millennials is to limit their life choices.

We also explored the gendered effects of the GFC. The multinomial logistic regression analysis revealed that gender and educational achievement affect the attainment of adulthood milestones and adoption of life-course patterns. For example, in both cohorts, men were more likely to pursue postgraduate education and remain single at both ages 25 and 31 compared with women. They were also less likely to work full-time and live independently at age 25. Our finding is similar to that of Cattaneo et al. (2017); men worked or pursued postgraduate education to cope with the adverse effects of the GFC, whereas women adopted more diverse patterns in response to the GFC. However, by age 31, men were more likely to work full time and less likely to live independently. Men were also more likely to be working single adults with postgraduate education at both ages 25 and 31.

Moreover, respondents who had higher academic performance in 12^{th} grade and attended public universities were more likely to pursue

postgraduate education and less likely to be married at both ages 25 and 31. More academically devoted millennials were also more likely to be working single adults with postgraduate education at age 25. Besides, regarding the possible effects of the GFC on millennials' adulthood transition, we also compared the chance of having any of the three life-course patterns between the SH and the CP cohorts at age 25. Respondents in the SH cohort were more likely to be working single adults without postgraduate education. In other words, the SH cohort was less likely to pursue advanced degrees or marry. The lower chance of the SH cohort in the present study to pursue postgraduate education in response to the GFC seems to support the hypothesis that macroeconomic downturns cause young people to prefer work over education (Witteveen 2021).

This study is only an initial effort to understand the adulthood transition of millennials in Taiwan. Many more topics require further investigation by using the rich data offered by the TEPS and TEPS-B. We propose two topics for further study. First, we are interested in the long-term effects of the GFC on millennials' later adulthood transition. The present study revealed that the GFC had somewhat limited the SH cohort in pursuing postgraduate education and starting full-time work in early adulthood. These limitations may affect their life choices and opportunities in their 40s or 50s compared with the slightly younger CP cohort. Follow-up surveys of these two millennial cohorts would be required to address this phenomenon. Second, we call for a comparison of the patterns of adulthood transition across East Asian societies, which have similar cultural heritage and socioeconomic developmental trajectories. In conclusion, this study provides only a limited understanding of the transition to adulthood in Taiwan. Further analysis is needed to deepen our insights into these generational dynamics and cross-cultural differences.

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Research Note

金融海嘯對「轉大人」的影響：以臺灣千禧世代爲例

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摘要

本文探索臺灣千禧世代在2008年金融危機前後「轉大人」的生命軌跡。本文按照過往相關文獻與臺灣的脈絡選擇了四個里程碑：唸研究所、結婚、全職工作以及獨立生活，並在其25歲和31歲時探索受訪者是否達成前述四項里程碑。本文的經驗資料來自於臺灣教育長期追蹤資料庫以及臺灣教育長期追蹤資料庫後續調查。本文使用該資料庫中的高中樣本（出生於1984-1985年間）作為大學畢業時受到金融危機影響的代表，另核心樣本（出生於1988-1989年間）則是作為大學畢業時，金融危機已逐漸遠去的代表。本文使用潛在類別分析以及多項羅吉斯迴歸作為本文主要的分析方法。我們的研究結果顯示金融危機對高中樣本的影響在於迫使他們成為與父母同住的工作單身成年人，或者是擁有新本地住所的已婚工作成年人。相反，在他們大學畢業時金融危機的影響已開始減弱，核心樣本的生命歷程更加多樣化，

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且他們更傾向於實現資源密集型的里程碑，例如追求研究所學歷和獨立生活。

關鍵詞：千禧世代、生命歷程、金融海嘯、臺灣教育長期追蹤資料庫