Family Migration and Wellbeing of Migrant Workers' Children

Evidence of China's Vocational High School

Inaugural-Dissertation

zur Erlangung der Doktorwürde

der

Philosophischen Fakultät

Der

Rheinischen Friedrich-Wilhelms-Universität

zu Bonn

vorgelegt von

Ling Tang

Aus Hunan, China

Bonn, 2022

Gedruckt mit der Genehmigung der Philosophischen Fakultät
der Rheinischen Friedrich-Wilhelms-Universität Bonn

Vorsitzender:
Prof. Dr. Clemens Albrecht
Betreuer und Gutachter:
Prof. Dr. Jörg Blasius
Gutachterin:
PD Dr. Eva Youkhana
weiteres prüfungsberechtigtes Mitglied:
Prof. Dr. Maximilian Mayer

Tag der mündlichen Prüfung: 05. April 2022

Abstract

The reforms and opening-up policy in China have brought high migration within the country, mainly from rural to urban areas. This mass movement of more than 200 million rural workers to China's urban areas is regarded as the most significant internal migration in history. The migrant workers either left their children behind in rural areas or brought them to their target cities. Relatively lower income, insufficient educational resources, and parents' care cause mental health problems for the children of migrant workers. This study aims to find out the impacts of family migration on the wellbeing of migrant workers' children. It explores a new method of psychology therapy for migrant workers' children, based on Chinese students' collectivism characteristics and the social cognitive wellbeing model.

This research aims to clarify the wellbeing of migrant workers' children in vocational education and training (VET) schools at the family level. The study has three main parts: descriptive analysis, quantitative research and qualitative research. The descriptive analysis part aims to identify what variables influence and are influenced by family arrangements; the quantitative part focuses on finding out what factors impact the wellbeing of Chinese migrant workers' children from four dimensions. The qualitative research part aims to establish why these factors impact the wellbeing of Chinese migrant workers' children.

In the descriptive analysis part, this study found that the family arrangements of migrant families influence family relationships as well as the wellbeing of migrant workers' children. Parents' migration, the distance from the parents' working place to their hometown, parents' education level, parents' time of migration, parents' age, parents' marital status and family economic status impact family arrangements. Participants who live in urban areas have a higher possibility of living together with both parents. Additionally, children who live with both parents have better parent-child communication and a higher level of physical health.

The structure for quantitative and qualitative research are based on the life course theory, which includes four dimensions (time, space, relations, and self-adjustment). The first dimension discusses the parents' migration time and the social cognitive wellbeing of migrant workers' children (time). The second dimension explores the differences in wellbeing between three groups (left-behind children, youngsters from non-migrant families and migrant youngsters) in outbound (mostly rural) areas and inbound (mostly urban) areas and the reasons (space). The third dimension is focused on the impacts of interpersonal relationships (family relationship, caregiver-child relationship, fellow relationship and teacher-student relationship) on migrant workers' social cognitive wellbeing (relation). The fourth dimension discusses how to adjust social cognitive wellbeing through the interrelations among family relation variables and social cognitive variables (through structural equation modeling) and what other self-adjustable factors impact the wellbeing of migrant workers' children. In terms of the methods, linear regression was used in the first three dimensions, and for the fourth

dimension, structural equation modeling was used in the quantitative part. Moreover, the research adopted the use of in-depth interviews in the qualitative part.

The results from the study of time dimension shows that the time children spend together with parents matters, especially with fathers. Also, this study found that, as the time period of the father's migration passes by, male students obtain higher lifelong satisfaction, self-efficacy and academic satisfaction than female students. This means the female students in this study suffer more from the separation with their parents than males do. Conditions caused by the excessively long working hours and the lack of communication between fathers and their children, in turn, makes children crave their father's attention. In general, children miss the love and emotional support provided by their parents. In addition, this study also found female teenagers have more expectations of their father than males do, so they are more sensitive to the absence of fatherly love. Therefore, the researcher encourages parents, especially fathers, to devote more time together with their children especially daughters, since it is very helpful to increase the SCWB of their children. In terms of the overtime work, the government could improve this condition by offering financial support or decrease the tax or some other practical way to encourage companies and manufactories to allow migrant workers to have their national holidays with payment as other occupations have.

From the results on the study of space, the migrant workers' children in inbound areas usually have higher social cognitive wellbeing than those in the outbound areas. This is because of their higher economic status and higher level of education quality; they also have more face-to-face communication with their parents in inbound (urban) areas than children in the outbound areas. Also, the children from non-migrants' families have a higher social cognitive wellbeing than those from migrant families. Due to the regional imbalance of development and under the current household registration system, migrant workers' children who do not have local household registration can only enjoy minimal social welfare, educational services, and medical insurance in migrant cities. In order to decrease the parent-child separation and improve the wellbeing of left-behind children in outbound areas, the government should offer financial support and training to attract industries, companies and skilled workers to help with the development of the rural areas, create more opportunities for local employment, and encourage rural parents to work locally. In inbound areas, further reforms of the household policy should be conducted according to the situations in each stage. Substantial improvement in educational service, medical care and social services for migrant workers who worked certain years in urban areas should be undertaken.

The results of the study on the relation dimension proved that family relationship variables have positive impacts on the social cognitive wellbeing of migrant workers' children, such as family coactivity, attachments, communication, caregiver-child trust and communication, and coactivities. Specifically, caregiver-child coactivities and caregiver-child trust & communication positively influence participants' life satisfaction, self-efficacy, academic

satisfaction, goal progress, and positive affect. Furthermore, caregiver-child alienation negatively affects life satisfaction, self-efficacy, goal progress, and positive affect, but positively influences negative effects, which also meets the expectation of the research hypothesis. In addition, the qualitative research results also show that participants who have better relationships and more communication with their parents get a higher level of social cognitive wellbeing. Also, fellow relationships and teacher-student relationships can impact the wellbeing of migrant workers' children. Additionally, the caregiver-child relationships and communication are very critical for left-behind children in the outbound area. Therefore, encouraging parents and caregivers to communicate more with their children and improve family relationships can increase the wellbeing of migrant workers' children.

In the self-adjustment dimension, two family-based social cognitive models and their paths have been tested from the dimension of self-adjustment. The first model included caregiver-child coactivity, communication frequency, and regulation; most of the paths in this model are significant. The second model added caregiver-child trust & communication, alienation, and conflicts. Also, the main paths of this model have been tested for significance. Therefore, the family-related variables (caregiver-child coactivity, communication frequency, regulation, trust & communication, alienation, and conflicts) can adjust social cognitive variables (self-efficacy, outcome expectations, academic satisfaction, goal progress, and lifelong satisfaction) for migrant workers' children. The qualitative part of the study found that students who identify their personality traits and character strength, and with a clear goal or a highly focused mental state are helpful characteristics that improve their SCWB. Students can be guided and encouraged to learn more about their personality traits, characteristics and cultivate more hobbies and help them to find their flow.

Keywords: Migrant Workers' Children, Social Cognitive Wellbeing, Vocational High Schools, Family Relationship, Internal Migration in China

Zusammenfassung

Die Reformen und die Öffnungspolitik in China haben zu einer hohen Migration innerhalb des Landes geführt, vor allem aus ländlichen in städtische Gebiete. Diese Massenbewegung von mehr als 200 Millionen Landarbeitern in die städtischen Gebiete Chinas gilt als die bedeutendste Binnenwanderung der Geschichte. Die Wanderarbeiter ließen ihre Kinder entweder auf dem Land zurück oder brachten sie in ihre Zielstädte. Ein relativ niedrigeres Einkommen, unzureichende Bildungsressourcen und die Fürsorge der Eltern verursachen bei den Kindern von Wanderarbeitern psychische Probleme. Diese Studie zielt darauf ab, die Auswirkungen der Familienmigration auf das Wohlergehen der Kinder von Wanderarbeitern herauszufinden. Es untersucht eine neue Methode der psychologischen Therapie für Kinder von Wanderarbeitern, die auf den Merkmalen des Kollektivismus chinesischer Studenten und dem Modell des sozialen kognitiven Wohlbefindens basiert.

Ziel dieser Untersuchung ist es, das Wohlergehen von Wanderarbeiterkindern in Berufsausbildungsschulen auf Familienebene zu klären. Die Studie besteht aus drei Hauptteilen: deskriptive Analyse, quantitative (Forschung) und qualitative Forschung. Der Teil der deskriptiven Analyse zielt darauf ab, zu ermitteln, welche Variablen die Familiengestaltung beeinflussen und von diesen beeinflusst werden. Der quantitative Teil konzentriert sich darauf, herauszufinden, welche Faktoren das Wohlergehen der Kinder chinesischer Wanderarbeiter aus vier Dimensionen beeinflussen. Der qualitative Forschungsteil zielt darauf ab, herauszufinden, warum sich diese Faktoren auf das Wohlergehen der Kinder chinesischer Wanderarbeiter auswirken.

Im deskriptiven Analyseteil stellte diese Studie fest, dass die Familiengestaltung von Migrantenfamilien die familiären Beziehungen sowie das Wohlergehen der Kinder von Wanderarbeitern beeinflussen. Die Migration der Eltern, die Entfernung vom Arbeitsplatz der Eltern zum Wohnort, das Bildungsniveau der Eltern, der Zeitpunkt der Migration der Eltern, das Alter der Eltern, der Familienstand der Eltern und der wirtschaftliche Status der Familie wirken sich auf die Familiengestaltung aus. Teilnehmer, die in städtischen Gebieten leben, haben eine höhere Möglichkeit, mit beiden Elternteilen zusammenzuleben. Darüber hinaus haben Kinder, die bei beiden Elternteilen leben, eine bessere Eltern-Kind-Kommunikation und eine höhere körperliche Gesundheit.

Die Struktur der quantitativen und qualitativen Forschung basiert auf der Lebenslauftheorie, die vier Dimensionen umfasst (Zeit, Raum, Beziehungen und Selbstanpassung). Die erste Dimension befasst sich mit der Migrationszeit der Eltern und dem sozial-kognitiven Wohlbefinden der Kinder von Wanderarbeitern (Zeit). Die zweite Dimension untersucht die Unterschiede im Wohlbefinden zwischen drei Gruppen (zurückgelassene Kinder, Jugendliche aus Nicht-Migrantenfamilien und Migrantenjugendliche) in abgehenden (meist ländlichen) Gebieten (Outbound-Gebieten) und ankommenden (meist städtischen) Gebieten (Inbound-Gebieten) und die Gründe (Raum). Die dritte Dimension konzentriert sich auf die

Auswirkungen zwischenmenschlicher Beziehungen (Familienbeziehung, Bezugsperson-Kind-Beziehung, Mitschüler-Beziehung und Lehrer-Schüler-Beziehung) auf das soziale kognitive Wohlbefinden (Beziehung) von Wanderarbeitern. Die vierte Dimension diskutiert, wie das soziale kognitive Wohlbefinden durch die Wechselbeziehungen zwischen Familienbeziehungsvariablen und sozialen kognitiven Variablen (durch Strukturgleichungsmodellierung) angepasst werden kann und welche anderen selbstregulierenden Faktoren das Wohlbefinden der Kinder von Wanderarbeitern beeinflussen. In Bezug auf die Methoden wurde in den ersten drei Dimensionen eine lineare Regression und für die vierte Dimension im quantitativen Teil eine Strukturgleichungsmodellierung verwendet. Darüber hinaus hat die Forschung im qualitativen Teil den Einsatz von Tiefeninterviews übernommen.

Die Ergebnisse der Studie zur Zeitdimension zeigen, dass die Zeit, die Kinder gemeinsam mit den Eltern verbringen, von Bedeutung ist, insbesondere mit den Vätern. Diese Studie ergab auch, dass männliche Studenten im Laufe der Zeit der Migration des Vaters eine höhere lebenslange Zufriedenheit, Selbstwirksamkeit und akademische Zufriedenheit erreichen als Studentinnen. Das bedeutet, dass die Studentinnen in dieser Studie stärker unter der Trennung von ihren Eltern leiden als die Männer. Diese Zustände, verursacht durch zu lange Arbeitszeiten und die fehlende Kommunikation zwischen Vätern und ihren Kindern, wiederum lassen Kinder, sich nach der Aufmerksamkeit des Vaters sehnen. Im Allgemeinen vermissen Kinder die Liebe und die emotionale Unterstützung ihrer Eltern. Des Weiteren ergab diese Studie auch, dass weibliche Teenager mehr Erwartungen an ihren Vater haben als Männer, sodass sie empfindlicher auf das Fehlen väterlicher Liebe reagieren. Daher ermutigt die Forscherin Eltern, insbesondere Väter, mehr Zeit mit ihren Kindern, insbesondere Töchtern, zu verbringen, da es sehr hilfreich ist, den SCWB ihrer Kinder zu erhöhen. Was die Überstunden angeht, könnte die Regierung diesen Zustand verbessern, indem sie finanzielle Unterstützung anbietet, die Steuern senkt oder auf andere praktische Art und Weise Unternehmen und Manufakturen ermutigt, Wanderarbeitern, wie in anderen Berufen, bezahlte Feiertage zu gewähren.

Aus den Ergebnissen der Raumforschung geht hervor, dass die Kinder der Wanderarbeiter in den ankommenden Gebieten (Inbound-Gebieten) in der Regel ein höheres soziales kognitives Wohlbefinden aufweisen als die Kinder in den abgehenden Gebieten (Outbound-Gebieten). Dies liegt an ihrem höheren wirtschaftlichen Status und der höheren Bildungsqualität; sie haben auch mehr persönliche Kommunikation mit ihren Eltern in ankommenden (städtischen) Gebieten (Inbound-Gebieten) als Kinder in den abgehenden Gebieten (Outbound-Gebieten). Auch Kinder aus Nicht-Migrantenfamilien haben ein höheres soziales kognitives Wohlbefinden als Kinder aus Migrantenfamilien. Aufgrund des regionalen Ungleichgewichts in der Entwicklung und im Rahmen des derzeitigen Haushaltsregistrierungssystems können Kinder von Wanderarbeitern, die keine lokale Haushaltsregistrierung haben, in Migrantenstädten nur minimale Sozialleistungen, Bildungsdienste und

Krankenversicherungen genießen. Um die Eltern-Kind-Trennung zu verringern und das Wohlergehen der zurückgelassenen Kinder in den abgehenden Gebieten (Outbound-Gebieten) zu verbessern, sollte die Regierung finanzielle Unterstützung und Ausbildung anbieten, um Industrien, Unternehmen und qualifizierte Arbeitskräfte anzuziehen, die bei der Entwicklung der ländlichen Gebiete helfen, mehr Beschäftigungsmöglichkeiten vor Ort schaffen und ländliche Eltern ermutigen, vor Ort zu arbeiten. In ankommenden Gebieten (Inbound-Gebieten) sollten je nach Situation in jeder Phase weitere Reformen der Haushaltspolitik durchgeführt werden. Es sollten erhebliche Verbesserungen des Bildungsdienstes, der medizinischen Versorgung und der sozialen Dienste für Wanderarbeiter, die gewisse Jahre in städtischen Gebieten gearbeitet haben, vorgenommen werden.

Die Ergebnisse der Studie zur Beziehungsdimension zeigten, dass familiäre Beziehungsvariablen positive Auswirkungen auf das soziale kognitive Wohlbefinden der Kinder von Wanderarbeitern haben, wie etwa Familienkoaktivität, Unterstützung, Kommunikation, Vertrauen und Kommunikation sowie Koaktivitäten zwischen Betreuer und Kind. Insbesondere Koaktivitäten (zwischen Betreuer und Kind) sowie Vertrauen und Kommunikation zwischen Betreuer und Kind beeinflussen die Lebenszufriedenheit, Selbstwirksamkeit, schulische Zufriedenheit, den Zielfortschritt die positive Wirkung der Teilnehmer positiv. Außerdem beeinflusst die Entfremdung von Betreuer und Kind die Lebenszufriedenheit, Selbstwirksamkeit, den Zielfortschritt und die positive Wirkung negativ, negative Effekte jedoch positiv, was auch den Erwartungen der Forschungshypothese entspricht. Des Weiteren zeigen die qualitativen Forschungsergebnisse auch, dass Teilnehmer, die bessere Beziehungen und mehr Kommunikation mit ihren Eltern haben, ein höheres soziales kognitives Wohlbefinden erzielen. Außerdem können sich gegenseitige Beziehungen und Lehrer-Schüler-Beziehungen auf das Wohlergehen der Kinder von Wanderarbeitern auswirken. Zusätzlich sind die Beziehungen zwischen Betreuer und Kind und die Kommunikation für zurückgelassene Kinder in abgehenden Gebieten (Outbound-Gebieten) sehr wichtig. Daher kann die Ermutigung von Eltern und Betreuern, mehr mit ihren Kindern zu kommunizieren und die familiären Beziehungen zu verbessern, das Wohlergehen der Kinder von Wanderarbeitern steigern.

In der Selbstanpassungsdimension wurden zwei familienbasierte sozialkognitive Modelle und deren Wege aus der Selbstanpassungsdimension getestet. Das erste Modell umfasste die Koaktivität zwischen Betreuer und Kind, Kommunikationshäufigkeit und Regelungen; die meisten Wege in diesem Modell sind signifikant. Das zweite Modell fügte Vertrauen und Kommunikation zwischen Betreuer und Kind, Entfremdung und Konflikte hinzu. Außerdem wurden die Hauptwege dieses Modells auf Signifikanz getestet. Daher können die familienbezogenen Variablen (Koaktivität zwischen Betreuer und Kind, Kommunikationshäufigkeit, Regelungen, Vertrauen und Kommunikation, Entfremdung und Konflikte) sozial-kognitive Variablen (Selbstwirksamkeit, Ergebniserwartungen, akademische Zufriedenheit, Zielfortschritt und lebenslange Zufriedenheit) für Kinder von Wanderarbeitern anpassen. Der qualitative Teil der Studie ergab, dass Schüler, die ihre

Persönlichkeitsmerkmale und Charakterstärken -identifizieren und ein klares Ziel oder einen stark fokussierten mentalen Zustand haben, hilfreiche Eigenschaften sind, die ihr SCWB verbessern. Die Schüler können angeleitet und ermutigt werden, mehr über ihre Persönlichkeitsmerkmale und Eigenschaften zu erfahren, mehr Hobbys zu pflegen und sich selbst zu helfen, ihren Weg zu finden.

Schlagwörter: Kinder von Wanderarbeitern, Sozialen Kognitiven Wohlbefindens, Berufsschulen, Familienbeziehungen, Binnenmigration in China

Contents

Abstract ..... **I**
List of Tables ..... **X**
List of Figures ..... **XII**
List of Abbreviations ..... **XIII**
Acknowledgement ..... **XIV**
Preface **1**
Chapter 1 Introduction **4**
1.1 The Main Concepts 6
1.1.1 Wellbeing 6
1.1.2 Migrant Workers' Children 6
1.1.3 Life Course Theory 6
1.2 Research Objectives 8
Chapter 2 Background **10**
2.1 Household Registration Policy and Reforms 11
2.2 Migrant Workers in China 13
2.3 Migrant Workers' Children in China 19
2.4 Vocational Education in China 22
Chapter 3 Literature Review **28**
3.1 Migrant Workers' Children 28
3.2 Family Relations 30
3.3 Vocational School Students' Mental Health Studies 31
3.4 Wellbeing Studies 32
3.4.1 Typical Wellbeing Research Models 32
3.4.2 Social Cognitive Wellbeing Model (SCWB) 34
3.4.3 Chinese Perspective of Wellbeing 40
3.4.4 Research of Wellbeing and Intimate Relations 42
3.4.5 Comments and Limitations of Previous Wellbeing Studies 44
3.4.6 Modified Social Cognitive Wellbeing Model Based on Chinese VET School Students Characteristics 46
3.4.7 Measures of Wellbeing and Intimate Relationships 49
3.5 Research Questions: Wellbeing of Migrant Workers 53
3.5.1 Time Dimension: Migration Duration of Parents and Wellbeing of Migrant Workers' Children 55
3.5.2 Space Dimension: Wellbeing of Students from Migrant and Non-migrant Families in Both Outbound and Inbound Areas. 56
3.5.3 Relations Dimension: Family Relationship and Social Cognitive Wellbeing 58
3.5.4 Self-adjustment: Family-Related Modified Social Cognitive Wellbeing Models 59
Chapter 4 Sampling and Descriptive Analysis **62**
4.1 Sample Design 62
4.1.1 Participants 62
4.1.2 Information on the Chosen Cities 63
4.1.3 The Pilot Studies 64
4.1.4 Sample Size 64
4.1.5 Data Privacy Protection 65
4.1.6 Sampling Report 65
4.2 Who Has Higher Possibilities of Living Together with Both Parents 68

4.2.1 Factors Influencing Family Arrangement 68
4.2.2 Social Cognitive Wellbeing, Family Relationships and Family Arrangement.. 75
4.2.3 Correlation Tests and Model Measurement 91
Chapter 5 Wellbeing of Chinese Migrant Workers' Children 93
5.1 Factors Impacting the Wellbeing of Chinese Migrant Workers' Children from Four Dimensions 93
5.1.1 Time: Time With Parents Matters, Especially With Father 93
5.1.2 Space: Students in Inbound Area Achieve Higher Wellbeing than Outbound 107
5.1.3 Relationship: A Better Relationship with Parents Improves Wellbeing 118
5.1.4 Self-adjustment: Self-Adjustment Factors Influence Wellbeing 134
5.1.5 Results and Implications 141
5.2 Why Do These Factors Impact the Wellbeing of Chinese Migrant Workers' Children, and How? 144
5.2.1 Time: Paying the Price of Migration, Long-Term Parent-Child Separation .. 146
5.2.2 Space: Migration Trap of Regional Unbalanced Development – Difficult to Stay and Harder to Return 150
5.2.3 Relationships: Family Attachment and Relationship-Based View of Wellbeing 154
5.2.4 Self-Adjustment: Wellbeing Self-improvement – Identify Character Strength and Find the Flow..... 159
5.2.5 Results and Implications 161
Chapter 6 Conclusion and Implications.....164
6.1 Conclusion..... 164
6.2 Suggestions and Clinical Implications 168
6.2.1 Dimension of Time 168
6.2.2 Dimension of Space..... 169
6.2.3 Dimension of Relations 170
6.2.4 Dimension of Self-adjustment 170
6.3 Innovation 172
6.4 Limitations and Direction for Further Studies..... 173
References.....174
Appendix 187
Appendix I Questionnaires 187
Appendix II Interview Questions.....195

List of Tables

Table 1. Main Policy and History of Migrant Workers in China....16
Table 2 Types of Child Family Support in 2015 20
Table 3. Policies and Development of China's Vocational Education and Related Regulations....22
Table 4. Introduction to Vocational Schools and Colleges 23
Table 5. Family Migration Arrangement Types 29
Table 6 Research Models of Wellbeing 33
Table 7. Two Dimensions of Wellbeing Orientations and Their Characteristics 41
Table 8. Dimensions of Wellbeing....44
Table 9. The Table of Family Migration Arrangement Types 57
Table 10. Social and Economic Conditions of the Stratified Sample Areas (2019)....63
Table 11. Sample Size of Some Previous Well-being Studies 64
Table 12. Schools included in Sample 65
Table 13. Migration Family Arrangement in Sampling....66
Table 14 Variables With Most Missing Values 67
Table 15. Missing Value in Cases....67
Table 16. Participants' Demographic Nominal Variables 69
Table 17. Participants' Ordinal Demographic Variables 70
Table 18. Participants' Numeric Demographic Variables 71
Table 19. Nominal Demographic Variables of Participants' Parents....72
Table 20. Ordinal Demographic Variables of Parents 74
Table 21. Analysis of Life-Long Satisfaction I....76
Table 22. Analysis of Life-Long Satisfaction II....76
Table 23. Analysis of Academic Satisfaction I....77
Table 24. Analysis of Academic Satisfaction II....77
Table 25. Analysis of Self Efficacy I....78
Table 26. Analysis of Self-Efficacy II....78
Table 27. Analysis of Outcome Expectation I 79
Table 28. Analysis of goal progress I 79
Table 29. Analysis of Goal Progress II....80
Table 30. Analysis of Positive Affect I....80
Table 31. Analysis of Negative Affect I 81
Table 32. Statistical Analysis of Negative Affect....81
Table 33. Analysis of Environmental Support I....82
Table 34. Analysis of Environmental Support II....82
Table 35. Analysis of Analysis of Caregiver-Child Regulations/ House Rules I 83
Table 36. Analysis of Caregiver-Child Regulations/ House Rules II 84
Table 37. Analysis of Caregiver-Child Alienation I 84
Table 38. Analysis of Caregiver-Child Trust & Communication I 85
Table 39.. Analysis of Caregiver-Child Trust & Communication II 86
Table 40. Analysis of Caregiver-Child Co-Activities I 86
Table 41. Analysis of Caregiver-Child Co-Activities 87
Table 42. Analysis of Caregiver-Child Co-Activities I 87
Table 43. Analysis of Caregiver-Child Frequency of Communication II 88
Table 44. Analysis of Caregiver-Child Conflicts I....88
Table 45. Correlation Coefficients for Demographic Variables 91
Table 46. Correlation Coefficients for SCWB and Caregiver-Child Relationship Variables....92
Table 47. Dimensions, Variables and Methods I 95
Table 48. Regression estimates of migration time and social cognitive wellbeing: Youngsters' life satisfaction (Dependent variable in this table is life satisfaction)....96

Table 49. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Self-Efficacy. 98
Table 50. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Academic Satisfaction 99
Table 51. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Outcome Expectation 100
Table 52. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Goal Progress 101
Table 53. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Environmental Support 102
Table 54. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Negative Affect 104
Table 55. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Positive Affect 105
Table 56. Dimensions, Variables and Methods II 108
Table 57. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Life Satisfaction 109
Table 58. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Self-Efficacy 110
Table 59. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Academic Satisfaction 111
Table 60. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Outcome Expectation 113
Table 61. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Goal Progress 114
Table 62. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Environmental Support 115
Table 63. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Negative Affect 116
Table 64. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Positive Affect 117
Table 65. Dimensions, Variables and Methods III 119
Table 66. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Life Satisfaction 120
Table 67. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Self-Efficacy 122
Table 68. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Academic Satisfaction 124
Table 69. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Outcome Expectation 126
Table 70. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Goal Progress 127
Table 71. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Environmental Support 129
Table 72. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Negative Affect 130
Table 73. Regression Estimates of Child-Caregiver Relations, Co-Activities and Social Cognitive Wellbeing: Positive Affect 132
Table 74. Significant Differences on Standardized Structure Path Coefficients Model I 136
Table 75. Significant Differences on Standardized Structure Path Coefficients Model II 140
Table 76. General Information of Interviewees 145

List of Figures

Figure 1: Life Course Theory Framework (Elder, 1998) 7
Figure 2 Migrant Workers in China (Millions) 13
Figure 3. Locally Employed and Migrant Workers (Millions) 14
Figure 4. Average monthly income of migrant workers from 2015-2019 (CNY)* 14
Figure 5. Average monthly income of migrant workers by industry, 2015 - 2019 (CNY) 15
Figure 6 Map of China, Hunan Province in Red 17
Figure 7 Map of the Pearl River Delta in Guangdong Province 18
Figure 8 Migrant Workers Children Population 2000 – 2015 (Millions) 19
Figure 9. Number of Chinese Migrant Workers' Children per Educational Level, 2015 (Millions) 20
Figure 10. The Education System in China 23
Figure 11. Students in Chinese High Schools 2007-2018 (Millions) 25
Figure 12. Percentage of Students per Chinese High School System 2007-2017 25
Figure 13. Students per Teacher in VET and Senior High Schools 26
Figure 14. School Investments in Secondary High School Level (Billion CNY) 26
Figure 15.Government Investment per High School Student (Thousand CNY) 27
Figure 16. Social Cognitive Wellbeing Model 34
Figure 17 The Paths of Social Cognitive Model of Wellbeing 37
Figure 18 Social cognitive model of wellbeing of academic and global wellbeing for college students in China 37
Figure 19 Collectivism social cognitive model of wellbeing for Chinese migrant workers' children 46
Figure 20 Family related social cognitive model of wellbeing considering for Chinese migrant workers' children 47
Figure 21 Family related social cognitive model of wellbeing considering for Chinese migrant workers' children 54
Figure 22 Frame of research questions based on life course theory 54
Figure 23 Family related social cognitive wellbeing model based on the characteristics of Chinese migrant workers' children (Part I) 60
Figure 24 Family related social cognitive model of wellbeing considering for Chinese migrant workers' children (Part II) 61
Figure 25 The Map of Areas and Cities that Involved in this Research 62
Figure 26 Family Related Modified Social Cognitive Model I 134
Figure 27 Family Related Modified Social Cognitive Model I-Path Coefficients 135
Figure 28 Family Relationship and Social Cognitive Model II 138
Figure 29 Family Relationship and Social Cognitive Model II -Path Coefficients 139

List of Abbreviations

AS: Academic Satisfaction
CCAAD: Caregiver-Child-Attachment: Alienation Subscale
CCATR Caregiver-Child-Attachment: Trust and Communication Subscale
CCCA: Caregiver-Child-Coactivity
CNY: China Yuan
CHRD: Caregiver-Child- Regulations/House Rules
CCCF: Caregiver-Child-Frequency of Communication
CFLT: Caregiver-Child-Conflicts
ESP: Environmental Support
GP: Goal Progress
LS: life Satisfaction
NA: Negative Affect
OE: Outcome Expectation
PA: Positive Affect
PCA: Principal Components Analysis
PRC: People's Republic of China
SE: Self-Efficacy
SCCT: Social Cognitive Career Theory
SCWB: Social Cognitive Wellbeing
USD: US Dollar
VET: Vocational and Training School

Acknowledgement

I feel grateful and excited that I made the decision and started my PhD research five years ago. When I was in college 10 years ago, I never thought I would resign from a stable job and study abroad at the age of 30. I gained a lot during the process of my PhD study. I am thankful from the bottom of my heart to many individuals and institutions that offered me help in this process.

My greatest gratitude is dedicated to Prof. Dr. Jörg Blasius for his inspiration, exceptional academic guidance, and advice. I am grateful for his guidance as a mentor from the bottom of my heart, for encouraging my study, and for assisting me in my development as a researcher. His advice and counsel have been invaluable in both my PhD studies and my further career. I am grateful to PD Dr. Eva Youkhana from the bottom of my heart for agreeing to be my second supervisor for the dissertation evaluation. I'd also like to express my gratitude to Prof. Dr. Clemens Albrecht and Prof. Dr. Maximilian Mayer for their priceless guidance and suggestions for improvement on my doctoral dissertation.

Also, I feel very grateful to the financial support from the China Scholarship Council (CSC). Thanks to their help, I was able to complete the thesis wholeheartedly. Moreover, during the field research period, I volunteered as a psychology teacher in a rural vocational high school in Anhua county, Hunan Province for a half year. I got lots of help from my previous colleagues there and teachers in Guang Dong Province, they are Pan Zi Mian, Wang Yong Zhi, Ren Ping, Jiang Xue Bin, Liu Zhi Ming, Wang Fang, Liu Shang Nan, Deng Xian, Ji Lin, Zhang Di, Wang Zi Hao, Ji Ling, Xie Yu Shan, Zhao Zhi Yang and Wang Jian Xiong. I am indebted to all above individuals for their help with the questionnaire distribution, without their help I can hardly get all the data in this research.

I am also own my sincere thanks to the friends and staff in ZEF who offered me opportunity to attend their lessons for international PhD candidates, even if I am not a member from ZEF. I especially thank Dr. Guido Luecher, and Dr. Wolfram Laube for their suggestions on my dissertation. I am also very much indebted to Diane Bowden, Kevin Liu, Marwa Pappas and Alejandro Gaza Gonzales, who helped me with the proofreading work in the final stage.

I feel grateful from my bottom heart to my mother Liu Chun Tao, my father Tang Hua Xing, grandmother Zhang Ju Ying, and grandfather Tang Zheng An for their company and support on my study. Without their mental and financial supports, it is impossible for me to receive higher education and study in Germany. I am grateful to my uncle Nuo Hai Ren and Aunt Tang Mei Zhen for their suggestions during my field research. I would like to express my warm thanks to my sister Tang Wen and my brother Tang Ting Ci, for their emotional support. I wish all of you a happy and healthy life.

I'd want to convey my heartfelt gratitude to all the institutions and individuals who have assisted me in my research, and I accept full responsibility for any flaws.

Preface

My parents migrated from a small county in the rural area of Hunan Province to a city. My grandparents took care of me before I was six years old. Therefore, I was a left-behind child myself when I was in my childhood. That is one of the reasons why I chose this topic. Moreover, after my graduation from college I worked as a teacher in a vocational high school for three years in Dongguan city, Guangdong Province. I found many of my students were migrant workers' children. During this period, I visited many students' families to know more about these students.

The following descriptions are about two students from migrant families I visited. Tong was a 16 years old boy, he and his family migrated from Liuzhou to Dongguan city seven years ago. He and his family lived in a self-built "house" near a construction site. The house was built using the waste material from the construction site. His mother was working as a cook in the canteen of the construction site and his father whose leg injured badly in the previous job was working as a temporary worker there also. The parents were having dinner when we visited together with their daughter (Tong's elder sister, a single mother with two children) and grandchildren. Their home was not big but filled with daily necessities everywhere, there was only a narrow path in the room. Therefore, we have no place to sit. Tong's mother let us to sit on their bed (the only bed for the whole family) which was also occupied with clothes and other personal belongs. We asked Tong's parents how often do you talk to your son? His mother answered that, *"we are working from the early morning to the night, after come back I also need to cook, take care of the children of my daughter. Tong is no longer a kid now; he can take care of himself. I want him to obey the rules in school and listen to the teachers. That is our only requirement on him."*

When we asked Tong *"What do you think of your family life?"* He answered "*My parents work too hard to make a living. So, they have no time to care about me. I can fully understand and I do not want bother them with my issue."* When we let him talk something about his school life, he said "*I don't know what I can learn from the school. But I made some good friends in school and we have same hobbies. Sometimes we play computer games together."*

Qiao was a 17-year-old boy, and his family had migrated from Hunan Province to Dongguan three years ago. His parents are both sanitation workers. He has an elder brother with serious mental disorder. His younger brother was sent to the hospital to their hometown in the company of his father when we visited his family. His mother is 43 years old with lots of grey hair. The local government provided their family with minimal living guarantee (240 CNY = 40 USD per month) which is only given to the people in severe poverty. They were living in a rented apartment with one room and a small dining room. *"There is no toilet in this apartment, we need to go to the public toilet."* Qiao introduced to us.

And when we asked his mother *"How Qiao behaves at home?"*

His mother answered:

> *"He is too much addicted to computer games. And always came back home very late or even does not come back for a whole night. I and his father are both sanitation workers and we need to wake up at 4:00 am in the morning. Therefore, we need to sleep earlier after dinner. We have been exhausted for his brother and our work he only needs to study, but still make us worried. I am thinking about send him to a factory as a worker instead of*

wasting time in school, so he could do something helpful to our family and somehow release our burden."

Qiao was also asked about the question *"what do you think of your family life?"* And *"why you do not come back sometimes at night and what are you doing then?"*
He answered me that *"My family is poor. And I can hardly understand my parents and they also do not understand me. We quarrel with each other a lot, therefore I do not want to come back so as to escape from their complaining and cold-shoulder. And I always stay in the net pub when I do not want to come back home."*
Then we continue questioning *"Net pub charge for money? Where did you get the money?"*
Qiao answered with a smiling face *"I am doing part time jobs so I can get money for the daily cost of myself. I never ask for money from them [parents]."*
Regarding to the question *"What do you think of your school life?"* Qiao answered *"I think it is no meaning for me to go to school and its boring. I don't know how long I will stay in that school."*
One and a half year later in November 2019, when I connected them again Tong and Qiao both dropped out from the school. And Tong worked as a waiter in a night pub, he said *"Even the work is not very stable. I am satisfied with the salary, and I will save some money and give it to my parents."* Qiao worked as a staff member in a supermarket; his job is to carry the cargo from the track and put them into the warehouse of the supermarket. And sometimes he also needs to help the other workers to manage and put the goods on the shelf in the supermarket. When we asked him *"How satisfactory of your present life?"* He responded that *"The work is sometimes tiring, but I need a job so that I can survive."* When we asked information about his family, he said *"My mother continues her work as sanitation worker; my father came back to our hometown as a farmer and takes care of my brother. Sometimes I give some of my money to my mother but not much."*
Some migrant workers' children dropped out from school to support their families, some others dropped out, because of difficulty in learning and due to losing their motivation for academic works. They can hardly get a satisfying job without a diploma and struggle to make a living and most of them repeat the migrant life as their parents. That is the other reason I chose this topic of my study; it aims to find out what specific reasons decrease or improve the wellbeing of migrant workers' children in VET school.
There are about 280 million migrant workers in China, and near 100 million of migrant workers' children. And that is about 20% of China's total population, which is a large quantity. They work the hardest and contribute to China's substantial economic growth within the past 40 years, but with generally lower family income, less parent-child communication in their families, social discrimination and the limitations of the household registration system. From the descriptions of the previous studies, there are higher proportion of misbehaviors and crime commitment rate among migrant workers' children than children from non-migrant families. And many of the unsocial behavior is due to mental health problems caused by lack of proper parental guidance. The majority of the previous studies were about migrant workers' children in early childhood, but this research focuses on their time as teenagers. In order to clear, the research will study how migrant or left-behind experiences influence their psychological status, personality, characteristics and their conditions of interpersonal

relationship. How these together have been influenced their lives. It not only interested me, but is also worth studying.

Chapter 1 Introduction

"My parents are not home for the whole year. They work somewhere else. And I seldom talk with them, so we don't have a strong relationship. My grandparents are taking care of me, but the relationship between my grandparents and me is not good."

Teenager living with her grandparents in Anhua County, Hunan Province, China

"I live with my parents, but they are too busy to spend time with me. It is as if we were strangers to each other."

Migrant teenager in Zhongshan, Guangdong Province, China

At the end of the 20th century, urbanization and modernization brought millions of Chinese workers from rural to urban areas of China. These people search for a better life and usually have no choice but to migrate. Millions of Chinese migrant workers devote their youth and energy to the construction of modern China. They are regarded as *"the cost of the Chinese economy*" because of their limited income and lack of time to take care of their children. Migrant workers either left their children behind in their hometown in the rural areas or brought them with them to the city. The quality of life and social welfare of urban citizens and rural citizens differ. Even when migrant workers devote all their energy to living in the host cities, it is challenging for them to settle down and adapt, as well as for their children. Also, due to the long absences of migrants from their farm work in their place of origin, they struggle to make a living when they return to their hometown. This phenomenon has been described as *"the price of the Chinese economic development".*

There were up to 288.36 million internal migrants in China in 2018 (National Bureau of Statistics of People's Republic of China (PRC), 2019), which is the largest rural-urban migration in human history when taking into consideration its sheer size and speed (Meng & Manning, 2010). Due to the trend in migration over the last 30 years, there were 69.7 million left-behind children in 2016 (Ministry of Civil Affairs of People's Republic of China, 2018), and more than 13.67 million children migrating with their parents (Wu & Li, 2016).

According to a national survey of Chinese migrant workers' children, left-behind children often go through long-term separation from their parents (Chan & Crothall, 2009). Many studies have revealed that left-behind children are more vulnerable to accidents (e.g., animal bites, falls, cuts or piercing, traffic accidents, and burns or scalds) and crime (e.g., abduction, sexual offenses and theft) than other rural children (Goe et al., 2018). Left-behind children are usually defenseless against sexual violence because they lack the perception and capacity to defend themselves from molesters (Zhao et al., 2007). Separation from parents produces a form of mental distress for the majority of left-behind children. Based on a survey of Hunan, Anhui, and some other provinces in China, more than 80% of the left-behind children have mental health problems (China Youth Daily, 2008). Moreover, according to a survey in Sichuan Province, 60% of the left-behind children reported that their caregiver(s) did not treat them as well as their parents, and the same amount of children do not want their parents to leave home or to work in the cities (China Youth Research Centre, 2006). The relatives, normally the grandparents, who take care of the left-behind children have difficulties in fulfilling the psychological and emotional needs of the developing children (Goe et al., 2018). Another survey found that 68% of the left-behind children seldom talk to their caregivers (Guang'an Municipal Party, 2006).

In addition, according to previous studies, due to the absence of parental care, the left-behind children are more likely to suffer from negative emotions, such as loneliness (Liu et al., 2010) and depression (Chen & Chan, 2016), to be easily irritated, intransigent, and have low self-esteem (Goe et al., 2018) and anxiety (Dai & Chu, 2018). Left-behind children are also more likely to have low academic performance; drop out from school; participate in public disturbances, theft (Gao et al., 2010) and engage in conflicts with teacher and peers; and to conduct suicidal behaviors (Valtolina & Colombo, 2012).

Poor mental health brings behavioral problems. According to the results of two surveys conducted by the National Public Security Bureau of China in 2004, 80% of state teenage crimes took place in rural areas, and mostly involved left-behind teenagers (Wang, 2006). Data from the Chinese Supreme Court research department shows there has been a 13% annual rise in adolescents' crime after 2000, and 70% of the criminals are left-behind adolescents (China Gate, 2007).

A study by Ling (2015) found that even when migrant youth live and study in urban areas (or are even born there) with their parents, their urban household registration ("chengshi hukou") status causes problems. The Compulsory Education Law of the PRC (revised June 29th of 2006) dictates that *"Nine years of compulsory education should be provided to all children regardless of gender, race, religion and wealth* ***under an equal environment****"* (emphasis added). But "*equal environment"* is not defined with precision, therefore, governments in different cities have various interpretations of the phrase. Migrant workers normally have to pay additional school fees to enroll their children in local schools. In addition, the educational system in China is highly competitive and **test oriented**. To be among the prestigious schools and acquire higher fees and donations, schools strive to maintain high academic standards. The children of migrant workers are usually regarded as academically inferior and usually allocated to ordinary or low-quality schools (Dragon Tiger Net, 2005). In order to support the education of their children and also manage their family expenses, migrant parents normally need to work overtime, with the result that they have less time and communication with their children in comparison to the local families.

Lower family income, less parent-child communication, social discrimination and the limitations of the household registration system (which include marginalization, an unfavorable path to schooling, unfavorable social and medical welfare, and barriers preventing engagement in urban life), lead to a higher degree of mental health problems in migrant youth and a higher probability of them being victims of, or of performing, crime. Moreover, negative outcomes emerge in the migrant youth because of their new and unstable living environments, often causing trauma, possibly leading to inappropriate behaviors (Valtolina & Colombo, 2012). Notwithstanding enormous unfairness and hardships, migrant workers increasingly choose to bring their children with them instead of leaving them behind in rural areas (Goe et al., 2018). All these facts reveal the importance of mental healthcare for both left-behind children and the migrant youth.

1.1 The Main Concepts

The main concepts of this research are wellbeing and migrant workers' children, while life course theory offers structure to the research questions.

1.1.1 Wellbeing

By the end of the 20th century, wellbeing was already a well-studied subject (Lent, 2004) and had already been subject to several definitions. For Myers and Diener, it refers to one's own perception of whether life, at the present moment, or as a whole, is fulfilling, meaningful and pleasant (Myers & Diener, 1995). From a general perspective, wellbeing is a complex concept containing multiple dimensions that cannot be easily quantified or aggregated. According to positive psychology researchers, wellbeing can be defined as *"satisfaction through one's life-span in specific domains (mainly in work and school)"* (Lent et al., 2014). In this research, wellbeing will refer to academic realization and to the feeling of fulfillment from life as a whole.

Diener et al. (1999) explain wellbeing as a "*view or concept"* and also as a *"feeling"* of satisfaction or happiness. The feeling of satisfaction ties to the individual's pursuit of happiness, which includes emotions, positive affection, negative affection and the fulfillment of one's current state (Emmons & Diener, 1986). While the concept of wellbeing is related to the recognition and pursuit of a good life, it contains a whole set of beliefs related to values, attitudes, and behavioral intentions (Lu et al., 2016). It is a sophisticated element of happiness subject to one's culture and tradition (Ryan, 2011). From a philosophical perspective, Feuerbach (1866) describes happiness as *"the 'healthy, normal' state of contentment or well-being experienced by an organism that is able to satisfy the needs and drives that are constitutive of its individual, characteristic nature and life*" (P.172). According to his perspective, every human motivation (or *drive*) is a manifestation of the drive-to-happiness. In this research, wellbeing is a concept within a socio-psychological context.

1.1.2 Migrant Workers' Children

Migrant workers' children will fall into the categories of *"migrant children"* or *"left-behind children"* according to their residence. *Migrant children,* or *migrant youth,* are those youngsters who move and live together with their parents (the *migrant workers*), which belong to the migrant population. Migrant youngsters between the ages of 13 and 18 will be also referred to as migrant teenagers, or migrant adolescents. The term *left-behind children* will refer to those children living in rural areas who were left behind by their parents and who live in geographically split families. Left-behind children between the ages of 14 and 18 will also be referred as left-behind teenagers (National Bureau of Statistics of People's Republic of China, 2018).

A "*migrant worker*" in China is also known as a "*peasantry worker*" (nong min gong) or "*rural worker*" (wai xiang ren). Therefore, the children of migrant workers are also called "*children of peasantry workers*" or "*children of rural workers*" (National Bureau of Statistics of People's Republic of China, 2018). In the previous research "*the children of migrant workers*" are a social category (Jenkins, 2014), a status rather than an identity, due to the household registration system ("hukou") in China (Xiong, 2009).

1.1.3 Life Course Theory

The life course theory of Elder (1998) aims to study the development of human beings through

a particular social and historical context in their life course. *"It focuses on ways of thinking about social change, life pathways, and individual development as modes of behavioral continuity and mobility"* (Elder, 1998, p. 1). These pathways are followed by individuals and groups in a specific social context, reflecting the social trajectories of family, work and education. Life course theory contains the following four elements or principles (Elder, 1998):

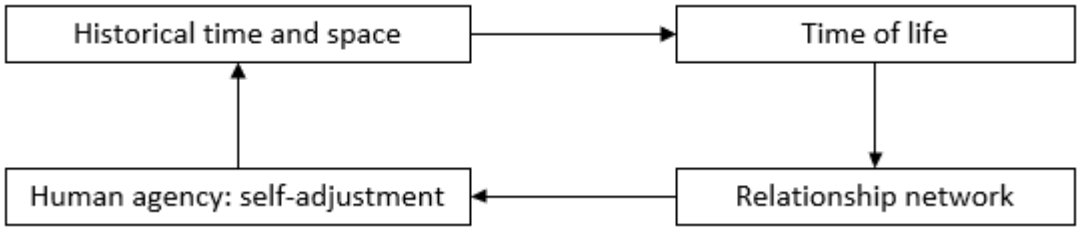
A. Historical Time and Space: the history and events of the society in the geographic locations which shape an individual's life experiences.

B. Time of Life: the moment in one's life in which a particular event occurs.

C. Relationship Network or linked lives: the set of interdependent relationships through which socio-historical influences are expressed.

D. Human Agency (Self-Adjustment): the choices, adjustment of goals and seizing of opportunities that an individual takes according to changing circumstances.

Figure 1. Life Course Theory Framework



Note: Life course theory structure from Elder (1998)

The life course framework studies the change of individual lives under historical periods and their identity in a specific group (e.g., family members, school students, or company workers) using dynamic and processual approaches (Bengtson & Allen, 2009). The wellbeing of teenagers can be closely related to the historical time and space in which they live (Nahkur & Kutsar, 2019).

In this research, the context of the historical time and space (A) will be that of the colossal migration phenomenon happening within China from rural to urban areas at the beginning of the 21st century (Huang et al., 2018). The factor of time of life (B) will be based on the time migrant workers migrated from their rural hometowns to seek higher wages in the city, and will also consider the duration of time away from their hometown. Linked lives or relationship networks (C) will be considered in the nature of the family relations (the parent-child relation and the caregiver-child relation); and human agency and self-adjustment (D) will describe how the migrant youth and the left-behind children adjust after the family migration occurs and the family relationships change.

1.2 Research Objectives

This research explores how family migration and family relationships influence the social cognitive wellbeing of Chinese migrant workers' children in vocational education and training schools (VET schools) based on life course theory. It aims to identify the influence of family migration on students' wellbeing. Non-migrant VET school students were also included as a reference in comparison.

Firstly, it will find out if the duration of the parents' migration impacts the social cognitive wellbeing of migrant workers' children **(time dimension)**. More specifically, it will discover how this impacts the social cognitive wellbeing of migrant workers' children. Moreover, the study will establish whether some demographic variables could mediate parents' migration time and the social cognitive wellbeing of migrant workers' children.

It has been indicated in previous findings that American college students' satisfaction can be predicted by social cognitive variables (e.g., goal progress, outcome expectations, environmental resources) (Lent, 2004). Moreover, students' academic satisfaction and life satisfaction in different times at school showed unprecedented variance (Lent & Brown, 2006).

Also, social cognitive factors have been identified that in different contexts have different interactions. In Chinese culture in an interdependent context, participants pay more attention to the interpretation of relationships. Migrant workers' children are forced to migrate to the cities with their parents or are left behind by parent(s). Therefore, it is essential to identify the length of time they migrate with their parents or are left behind by their parents.

Secondly, it will find out the differences between the wellbeing of migrant youngsters in inbound (mostly urban) areas and left-behind youngsters in outbound (mostly rural) areas, migrants and non-migrants. In addition, the influence of family migration arrangements, household registration type and living place that affect the wellbeing of migrant workers' children **(space dimension)** will be considered.

The wellbeing of migrant workers' children may be affected by the place and environment in which they live. The left-behind youngsters live and study in rural areas, which are commonly not as good as the conditions experienced by migrant youngsters in urban areas, while migrant teenagers suffer from the changing environment. Who has a higher level of satisfaction, the migrant youngster or left-behind youngster; non-migrant youngsters in the rural areas or left-behind youngsters; non-migrant youngsters in the inbound areas or migrant youngsters?

The family arrangements of migrant workers impacts their children's wellbeing (Chen et al., 2017). There are several arrangements for migrant workers' families: a. children left behind by both parents (usually, with grandparents as primary caregivers); b. children left behind by father; c. children left behind by mother; d. migrant with both parents; e. migrant with only one parent; f. non-migrant family. The research aims to compare differences among these conditions and find out which arrangement brings greater benefits to the children's wellbeing. (To find out results of wellbeing comparisons for the following groups: migrant youngster vs left-behind youngster; child from non-migrants in the outbound (mostly rural) areas vs left-behind youngster; non-migrant youngster in the inbound areas vs migrant youngster.)

Thirdly, it will investigate how the family relations (caregiver-child attachment, coactivity, communication frequency, rules and conflicts, caregiver-child relations, parents-child

relations) and school relations influence the wellbeing of migrant workers' children **(relationship dimension)**.

Neither time nor space can block the emotional connection between family members. But how do family relations influence the wellbeing of migrant workers' children since different caregivers look after left-behind children and migrant youngsters (Song et al., 2018)? So, what are the kinds of emotional ties between caregivers and left-behind children, and how do they impact the growing process of the children? Does the frequency of communication and contact with their parents adjust the relationships among parent-child relations, caregiver relations and the wellbeing of children of migrant workers?

Fourthly, it will find out how family relations mediate or adjust the social cognitive factors of migrant workers' children (academic environmental support, progress towards goals, outcome expectations, self-efficacy, negative & positive affect, academic satisfaction and life satisfaction) **(self-adjustment dimension)**.

The previous three objectives aim to find out the relations between each social cognitive wellbeing variable and demographic variables mainly from time, space, and family relationship dimensions—the fourth research objective is to study the interrelationship of all these variables. The social cognitive wellbeing model will be introduced in this research according to the characteristics of the children of migrant workers. Family relations, which contain a caregiver-child attachment, coactivity, communication frequency, rules and conflicts, will also be introduced to the modified social cognitive wellbeing model. It explores the interrelations with social cognitive factors (e.g., self-efficacy, outcome expectations, goal progress, academic satisfaction, and lifelong subjective satisfaction). This research also wishes to determine how the children of migrant workers adjust to social cognitive factors to improve their wellbeing and how family relations mediate social cognitive aspects.

Chapter 2 Background

In 2009, the Ministry of Education of the People's Republic of China (PRC) implemented a tuition-free policy in vocational high schools for students from rural areas. Since then, more and more migrant children and teenagers have attended vocational high schools (Ministry of Education of the People's Republic of China, 2018a).

Ling (2015) points out that migrant students in Vocational education and training (VET) schools suffer from discrimination. Most of these students carry a low academic record before enrolling in a VET school (Jiang & Zhang, 2012). According to Zhao (2016), students from vocational schools are perceived by their peers as having low academic performance, lacking intelligence and discipline, and even as being immoral people (Zhao, 2016). Migrant youngsters that study and live with their parents in host cities (sometimes even born in these cities) suffer from systemic discrimination for their "rural resident" status (Ling, 2015) dictated by the national household policy ("*hukou*" in Mandarin).

As opposed to regular high schools, VET schools do not restrict their enrollment based on the residential status of the teenagers that apply to study. For this reason, migrant teenagers generally choose to enroll in VET schools. Many of the left-behind children also choose a VET school to learn certain skills and to support their families after graduation. Studies show that due to the absence of parental care, left-behind children may more likely suffer from anxiety (Dai & Chu, 2018), depression (Chen & Chan, 2016), loneliness (Liu et al., 2010) and lack of confidence (Murphy et al., 2016). Therefore, it is essential to pay attention to the mental health of migrant workers' children in VET schools.

2.1 Household Registration Policy and Reforms

The establishment of China's household registration system has a history of nearly three thousand years. In China's agricultural society, the growth of social wealth mainly came from the combination of people and land. The household registration system allows human resources and land resources to be almost "perfectly" combined at the family level. After the family became the carrier of national taxes and services, the household registration system became the hub linking the land system, taxes and services (land taxes, military taxes, military service, and labor) systems (Xu, 2011). The long-term nature of China's household registration lies in the long-term nature of China's agricultural society. To a certain extent, the family-based society in China also came from the large-scale operation of agriculture. The reason why the household registration system still exists and works is actually because of the limitations of China's industrialization and urbanization (Lin, 2013).

China's urbanization has travelled forwards in the past 40 years; it is an unbalanced process in which urbanization lags behind industrialization. Also, it is an unregulated process in which land urbanization is faster than population urbanization (Liu, 2014). Moreover, it is based on restraining the economic interests of rural areas, agriculture, and farmers to support urban development. This uncoordinated process cannot balance efficiency and fairness, which is non-sustainable only pursuing the quantity and scale of urban development at the expense of the ecological environment (Wu, 2002). Now the Chinese government has begun to pay attention to these problems and hopes to gradually solve them.

After 1840, the modern industrial civilization marked by machine production was implanted in China. The traditional Chinese social and economic structure began to change; the individual's ability to be independent of the family's resources continued to improve, and the control unit began to shift from the family to the individual (Lin, 2013). A simple rural household registration system was established in 1954 (Wang, 2002). After 1958, the household registration system played a large role in the management and restriction of citizen migration. The government used administrative means to divide citizens into two major types in order to ensure full employment in cities and towns, and to implement social security and social welfare. In rural areas, farmers have been emotionally and economically attached to their lands for several centuries. After the implementation of the household registration system, it began to take the role of allocator of government benefits due to differences in the development between provinces. After 1963, the classifications of "agricultural hukou" and "non-agricultural hukou" began to be implemented (in this research non-agricultural hukou is referred to as "household registration type"). Strict control was imposed on the migration of rural populations to large cities, and especially to megacities (Liu, 2014).

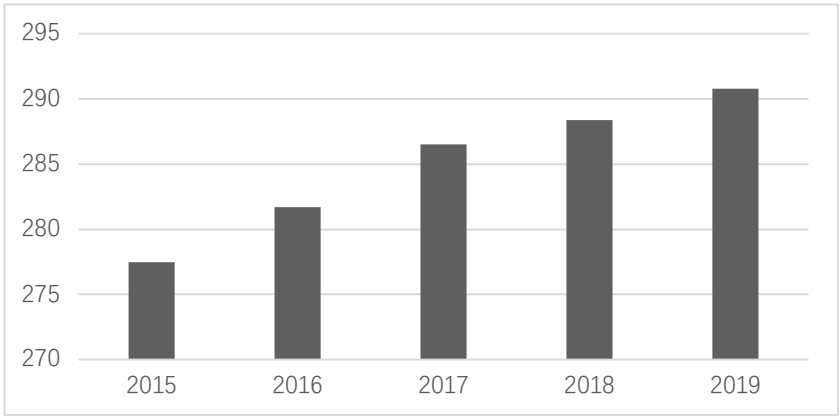
After 1983, 14 coastal cities such as Tianjin and Shanghai were opened. In 1985, the first wave of foreign investment took place. Attracted by the income gap, various talents and skilled workers have migrated on a large scale; at the same time, a large number of farmers went to these cities in search of a better life, and the first "migrant labor wave" happened in 1987 (Chan & Crothall, 2009). In September 1985, the Twelfth Session of the Standing Committee of the Sixth National People's Congress passed the "*Regulations on Resident Identity Cards*" and mainland China formally implemented the Resident Identity Card System, in which individuals obtain equal personal rights independent of their families or specific organizations (Lin, 2013).

The household registration policy promotes the start and development of China's national industries. Even though it has played a huge historical role in China, the establishment of this dual household registration system has gradually solidified and its social disadvantages have been gradually emerging (Wang, 2002). It suffocates social development, hinders the process of urbanization, and aggravates China's dual social structure to a certain extent. With the establishment of the market economy, the current household registration system has become increasingly unsuitable for the needs of China's social and economic development. Its shortcomings have become increasingly apparent and have severely affected China's modernization process (Liu, 2014). The current Chinese household registration system is not only an institutional arrangement for registering population information such as births, deaths, and marriages, but also a combination of the land system, taxation system, and social welfare distribution, giving specific rights and obligations to specific individuals or groups in specific household registrations. Therefore, the household registration system becomes the node of individual rights and social management, and changes in the household registration system also reflected the logic of the evolution of individual rights and social management to a certain extent (Xu, 2011).

2.2 Migrant Workers in China

Workers who migrate within China are generally classified in the residential category. These are rural citizens with leased farming fields, but mainly engaged in non-agricultural industries and with wages as their primary source of income (Xiong & Ye, 2011). Therefore, most of the Chinese migrant workers are peasant workers. After China's Economic Reform at the end of the 1970s, several industries developed rapidly, and the enormous demand for laborers brought migrants from rural to urban areas.

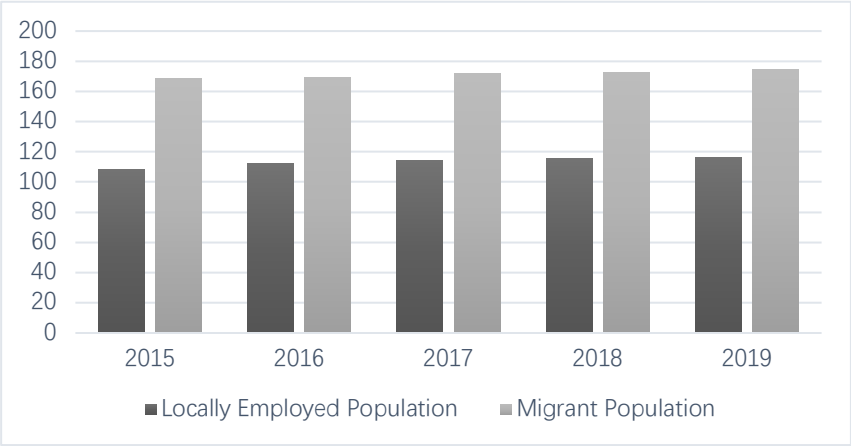
Figure 2. Migrant Workers in China (Millions)



Source: Self-made figure based on the data from National Bureau of Statistics of the PRC from 2016 to 2020

The peasant workers' population, shown in Figure 2, has increased gradually in the past five years. There were 277.47 million migrants in 2015 (National Bureau of statistics of the People's Republic of China, 2016), and 290.77 million in 2019. The growth rate is not that stable; it develops from 1.3% to 1.7% of the first three years from 2015 (National Bureau of statistics of the People's Republic of China, 2017) to 2017 (National Bureau of statistics of the People's Republic of China, 2018). In 2018, the growth rate decreases to 0.6%, which is about one-third of the previous year's growth (National Bureau of statistics of the People's Republic of China, 2019b). It then increases slightly from 2018 to 2019 (National Bureau of statistics of the People's Republic of China, 2020a). Some of the peasant workers are employed in rural areas but most are migrant workers. In recent years, the amount of locally employed people and of migrant workers both increased slightly. The rate of increase and population for each group are shown in Figure 3.

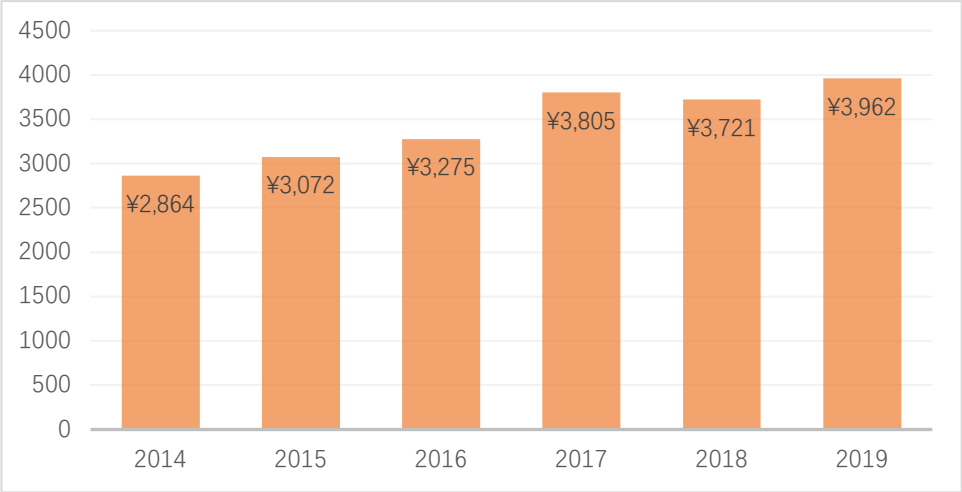
Figure 3. Locally Employed and Migrant Workers (Millions)



Source: Self-made figure based on the data from National Bureau of Statistics of the PRC from 2016 to 2020

The number of peasant workers employed in their hometowns rose steadily from 2015 to 2019. The situation is similar among the population of migrant workers. The growth rate for locally employed peasant workers rose from 2.7% to 3.4% from 2015 to 2016 and then decreased rapidly to 0.9% for the next two years. The growth rate is steadier from 2018 to 2019, which changed from 0.9% to 0.7%. On the other hand, the growth rate of migrant peasant workers rose sharply from 0.3% to 1.5% from year 2016 to 2017, after a slight decline from 0.4% to 0.3% in 2016. It decreases sharply the following year from 1.5% to 0.5%, and then rises to 0.9% in 2019 (National Bureau of Statistics of People's Republic of China, 2016 to 2020).

*Figure 4. Average Monthly Income of Migrant Workers from 2015 to 2019 (CNY)**



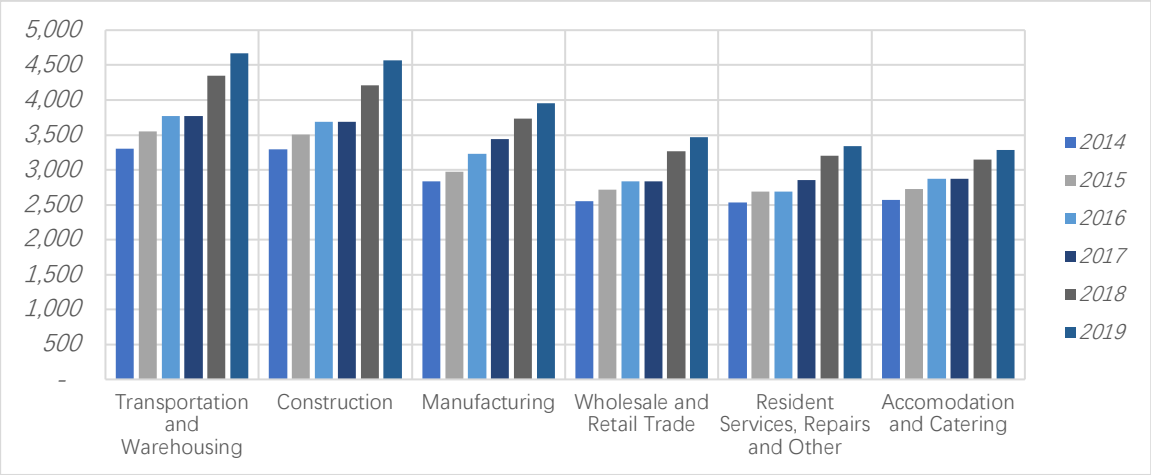
Source: Self-made figure based on the data from National Bureau of Statistics of the PRC from 2016 to 2020

The average monthly income for Chinese migrant workers in 2014 was of ¥2,864 CNY[1]. This amount grew the following three years, reaching ¥3,805 CNY in 2017, and decreased to ¥3,721

[1] *USD/CNY average annual exchange rates: 1 USD = 6.14 CNY (2014); 6.23 CNY (2015); 6.64 CNY (2016); 6.75 CNY (2017); 6.88 CNY (2018) and 6.98 CNY (2019).* Source: *National Bureau of Statistics of the PRC from 2016 to 2020.*

CNY in 2018. It afterward improves to ¥3,962 CNY in 2019 (National Bureau of statistics of the People's Republic of China, 2020a).

Figure 5. Average Monthly Income of Migrant Workers by Industry, 2015-2019 (CNY)



Source: Self-made figure based on the data from National Bureau of Statistics of the PRC 2016 to 2020

The monthly income in the transportation and warehousing industry ranks as the highest among the most common industries in which migrants work (from ¥3,300 to ¥4,600 CNY from 2014 through 2019) (National Bureau of Statistics of People's Republic of China, 2019b), followed by construction (from ¥3,200 to ¥4,500 CNY) and manufacturing (from ¥2,800 to ¥4,000 CNY) in the same period. The migrant workers of the other three industries (accommodation and catering, wholesale and retail trade, and resident services, repairs and others) obtained a similar average monthly income, between ¥2,500 and 3,000 CNY for the past six years (National Bureau of Statistics of People's Republic of China, 2018a).

Fei (1968) described the point of view of German sociologist Oswald (1926) put forward in his book *The Decline of West*, which classified cultures into two types. The first type, Apollonian, believe that the world is in its perfect order, and that people cannot really do anything to change it and must rather accept the events that happen in their lives (Fei, 1968). The second type, Faustian, attach more importance to social contradictions and believe people should actively seek to meet their own needs and wishes. For people who live within a Faustian culture, life is a process full of creation and innovation (Spengler, 1991). Before the Chinese Economic Reform of 1978, China subsisted mainly on the peasant economy, which had lasted for thousands of years. In this peasant economy, people seldom left their hometowns and lands. During this period, the Chinese culture could be described as Apollonian (Fei, 1968). After the economic reform, China experienced rapid changes in the market economy. Millions of peasants left their hometown and worked in the cities pursuing new lifestyles, thus making China gradually transition into a Faustian society. The history and process of migrant workers of the previous century can be seen in Table 1.

Table 1. Main Policy and History of Migrant Workers in China

Year	Main Policies and History of Migrant Workers in China
1949	Article 5 of the 'China Common Program of the People's Political Consultative Conference' adopted by the First Plenary Session of the Chinese People's Political Consultative Conference as a constitutional interim regards free migration as one of the 11 freedom rights of citizens.
1950-1951	The first national policy conference was held in November 1950. The conference established that the duty of the household registration "Hukou" policy is to ensure the residents' freedom of migration and relocation. Moreover, the Ministry of Public Security promulgated and implemented the Interim Regulations on the Administration of Urban Hukou, which regulates demographic movement and protects people's freedom of residence and migration. These interim regulations authorized the household registration to be implemented nationwide for the first time.
1956	The nation's first Household Registration Working Conference stipulated that the three basic tasks of the household registration system were "to certify citizenship, to facilitate citizens to exercise their rights, and to fulfill their obligations; as well as to provide statistical data on population size for the national economy, culture and defense."
1961	On December 9, the Ministry of Public Security forwarded the 'Report on Current Hukou Situation', requesting a thorough inspection and rectification of the Hukou management institution. The statistical indicator "non-agricultural household" was changed to "non-agricultural residents' household". This made the classifications of "non-agricultural hukou" and "non-agricultural residents" to be widely used in China.
1983-1988	With the Chinese Economic Reform, the agricultural labor force transferred to cities and other industries. Thus, the township companies gradually took over the state-owned industrial sector to stimulate economic growth.
1989	During the initial period of the Chinese Economic Reform, the rural migrant labor force rapidly increased from less than 2 million to 30 million.
1993	The number of migrant workers reached more than 62 million, an increase of more than 32 million from 1989, among which about 22 million were inter-provincial migrants. Without changing their household registration type and without receiving the social welfare of the city, farmers created a new model of immigration (National Bureau of Statistics of People's Republic of China, 2015b).
2004	According to a survey of rural migrants working for more than three months, the number of migrant farmworkers in non-agricultural industries was more than 200 million; 118 million migrant workers were working in cities and 136 million worked in township enterprises.
2008	Since 2008, China has successfully promulgated a series of policies to upgrade the academic level and technical skills of the new generation of peasant workers (born after the 1980s). They will gradually become the front-line workers of China's manufacturing industries (Wen & Lin, 2012).
2016	According to the '2016 National Survey Report on Migrant Workers' published by the National Bureau of Statistics in April 2017, the total number of migrant workers in 2016 reached 281.71 million, an increase of 4.24 million more than the previous year (National Bureau of Statistics of People's Republic of China, 2018a).
2019	On April 8, the National Development and Reform Commission of China issued a notice stating that, except for 13 large cities and megacities with a population of more than 5 million all urban areas would be fully opened to domestic migrants.

Since the creation of the PRC's migration policies, there is a trend towards a less restrictive nature. Results from recent research show that about 75% of migrant workers were employed in the manufacturing, construction, wholesale and retail trade, hotels and catering services,

and other tertiary services in China (Patton et al., 2016). Most migrant workers' jobs belong to the 3Ds ("difficult," "dirty," and "dangerous"). These are also low-paying jobs, consequently limiting the economic support they can provide for their children's education (Xiong, 2009).

In this study, the migrant workers' place of origin, where the migrant workers and their children come from, is referred to as the outbound area (mostly rural). The destination where the migrant workers and their children move to is referred to as the inbound area (mostly urban). Yiyang in the Hunan Province and Shantou in the Guangdong Province were selected as samples for the rural/outbound area, and the Pearl River Delta in Guangdong Province was selected as the urban/inbound area.

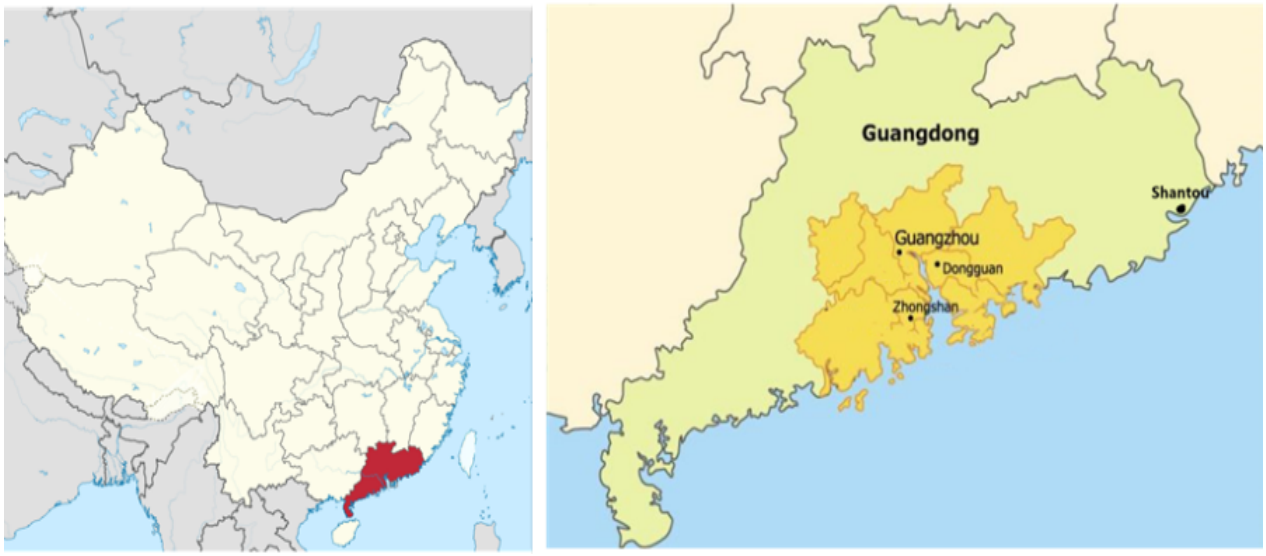
The Hunan Province is located in the center in south China (Figure 6). The two areas of study were selected because of the dynamic between rural areas and urban cities in China. Hunan is the province with the largest population movement towards Guangdong and the Pearl River Delta, which was one of the first regions to transform economically. In 2017, 17.764 million migrants originated from the Hunan Province, representing 20% of the internal migration from central China in the same year (National Bureau of statistics of the People's Republic of China, 2018) In Guangdong Province (Figure 6), there are also a large number of internal migrants traveling from rural areas to metropolitan areas, mainly to the Pearl River Delta.

Figure 6. Map of China, Hunan Province in Red

Source: Google Maps. Google. Retrieved 2014-07-02.

Guangdong Province is in south-eastern China. The Pearl River Delta is in the center of Guangdong Province's coast, as shown in Figure 7. It is the economic, political and cultural center of Guangdong Province, also known as the Golden Delta, which includes 11 cities (Guangzhou, Shenzhen, Zhuhai, Foshan, Dongguan, Zhongshan, Jiangmen, Huizhou, Zhao Qing, Hong Kong, and Macau).

Figure 7. Map of the Pearl River Delta in Guangdong Province



Note: (Self-made map based on resource from Google Maps. Google). Guangzhou, Dongguan and Zhongshan in the Pearl River Delta are the inbound cities in Guangdong Province. Shantou is the outbound city in the southeast of Guangdong Province.

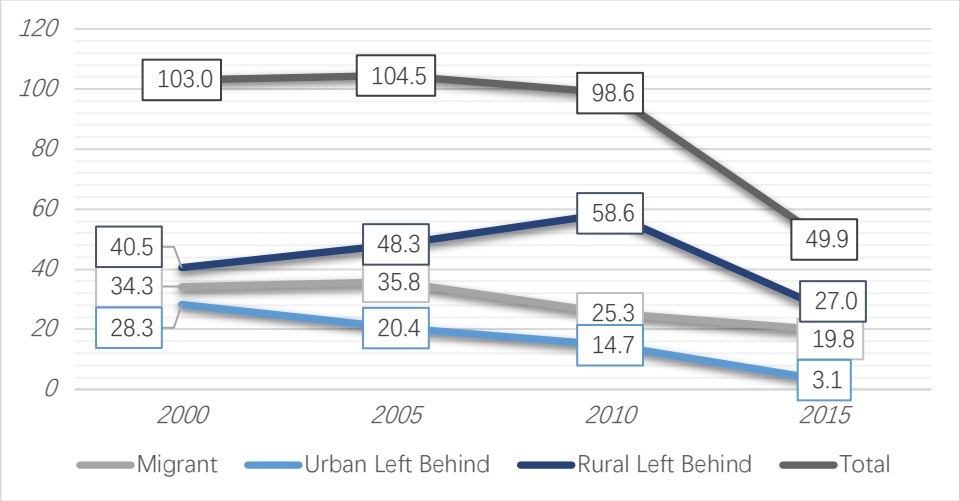
Since the conditions of vocational education are quite different in Hong Kong and Macau because of the 'one country two systems' policy, these two cities will be excluded from this study. Three of the cities in the Pearl River Delta have been chosen among the other nine cities according to their population and economic status. The Pearl River Delta is one of three destinations experiencing the largest migration in China. Within this area alone, there were about 50.72 million migrant workers in 2018, about 64% of the amount in Guangdong Province (National Bureau of statistics of the People's Republic of China, 2019). This number has decreased to 44.18 million in 2019 (National Bureau of Statistics of People's Republic of China, 2020). Even if the migrant population has decreased during the previous year, the number is still significantly large.

2.3 Migrant Workers' Children in China

The internal migration flow is increasing nationwide, which causes large-scale family space-separation, especially in developing areas (Zhao et al., 2017). The left-behind children are also one of the consequences of migration. This study considers the conditions of both, those who also migrate and those who are left behind.

In 2015, there were 34.26 million migrant children nationwide and 68.77 million left behind. The total number of children affected by migration was 103 million, accounting for 38% of China's total child population. About four out of every 10 children in China are directly affected by population movements, which can be seen in Figure 8 (National Bureau of Statistics of People's Republic of China, 2016).

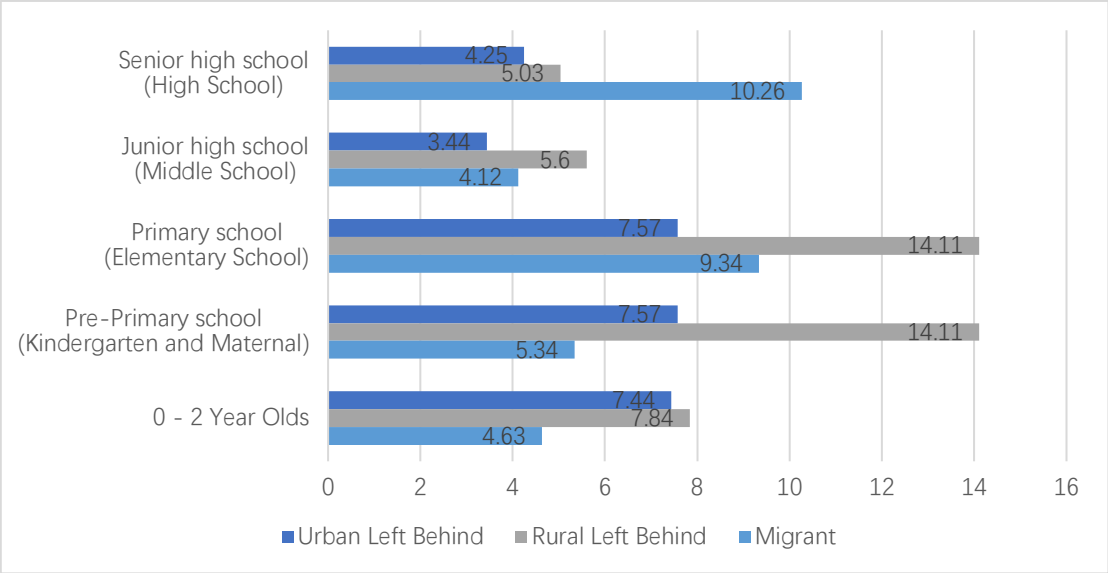
Figure 8. Migrant Workers Children Population 2000–2015 (Millions)



Source: National Bureau of Statistics of the People's Republic of China *(2016)*

In 2015, the total number of children in migrant families was 49.9 million less than that in 2010. However, it is still a considerable number. Among all the above migrant workers' children, the number of rural left-behind children ranks the highest from 2000 to 2015. It reached its highest peak of 58.6 million in 2010. And it declined into half this amount (27.0 million) within the next five years. The number of migrant children was of 34.3 million in the year 2000. It then rose slightly to 35.8 in 2005 but declined steadily in the next 10 years and reached 19.82 million in 2015. The amount of urban children left behind was the lowest between the three categories of migrant workers' children; it was 28.3 in 2000, and then dropped to 3.1 million by 2015 (National Bureau of statistics of the People's Republic of China, 2016). This study will mainly focus on the previous two categories.

Figure 9. Number of Chinese Migrant Workers' Children per Educational Level, 2015 (Millions)



Source: National Bureau of Statistics of the People's Republic of China *(2016)*

As shown in Figure 9, the number of migrant children attending senior high school was 10.26 million. In addition, there were also 5.03 million rural left-behind children and 4.25 million urban left-behind children in senior high school level. Most of the rural left-behind children are in primary school or in kindergarten. Therefore, many studies on Chinese left-behind children are focused on these levels. There are also more than seven million urban and seven million rural left-behind children below the age of two (National Bureau of statistics of the People's Republic of China, 2016).

Migrant workers' children could be left behind by both parents, left behind by the mother, left behind by the father, move and live together with both parents, and migrate with only one parent. Even as the overall Chinese economy is proliferating, many families from the rural areas are still living in poverty (Xu et al., 2019). Secondly, despite the one-child policy of the last decades, the birth rate in Chinese rural areas has been commonly higher than that of urban areas; many rural families have more than one child. Thirdly, the traditional Confucian culture advocates for men to work to economically support their family while women stay at home to take care of the family. This structure is still the norm among Chinese rural families. Therefore, a father-only migration is the most common migration arrangement in rural households (Yue et al., 2017).

Table 2. Types of Child Family Support in 2015

	Total	**Male**	**Female**	**Left Behind**	**Migrant**
Number (millions)	271	147	124	68.77	34.26
Composition of residence (%)					
Live with both parents	64.7	65.1	64.4		45.0
Not living with both parents	35.3	34.9	35.6	100.0	55.0
Live with only father	11.2	11.3	11.2	22.8	10.6
Live with only mother	11.9	11.7	12.2	30.8	11.6
Live with grandparents	5.5	5.7	5.3	19.4	2.1
Live alone	0.7	0.8	0.7	2.5	0.7
Live with others	9.4	9.0	9.9	24.5	34.3

Source: National Bureau of Statistics of the People's Republic of China *(2016)*

There were 271 million children aged from 0 to 17 in 2015, among which 147 million were male, and 124 million were female. Moreover, there were 68.77 million children left behind (40.51 rural and 28.26 urban), and 34.26 million who migrated with at least one parent. Statistics show 35.3% of the affected children do not live with both parents, and among this group more children live with mothers (10.5% of the total) than live with fathers (9.1% of the total). Since the divorce rate and mortality rate of parents are comparatively low, therefore, many of the children living with only one parent are the left-behind children. Moreover, 2.5% of left-behind and 0.7% of migrant children live alone (National Bureau of statistics of the People's Republic of China, 2016) . Regarding different genders, more females (35.6%) do not live with both parents than males (34.9%).

The economic development among the Chinese regions is uneven, and the developed cities are always the destination of migrant workers as well as of their children. At the same time, most of the underdeveloped rural areas are the point of origin of migrant workers. Nationwide, 34.1% of the migrant children move to towns within their province, 37.1% move to cities or counties within the province and 28.8% move across provinces (National Bureau of Statistics of People's Republic of China 2018b).

Migrant children in large cities such as Beijing, Shanghai, and Tianjin, have mostly migrated from another province. On the other hand, provinces such as Guangdong, Fujian and Jiangsu mostly attract migrants from within the province. Hunan has migrant children with origins from within and from outside the province (National Bureau of Statistics of People's Republic of China, 2019).

There is a higher probability that children who are left behind will suffer from mental health problems. Left-behind children are also more likely to commit crime in comparison to other children. On the other hand, migrant children usually study in underprivileged migrants' schools because of restrictions caused by the household registration policy. They are forced to visit unlicensed healers when they need to see a doctor due to the inadequate healthcare system and their family's low household income. Moreover, their parents have little time to talk and spend time with them because of their excessively long working periods in strenuous jobs. The anachronistic household registration policy makes the migrant children face systemic discrimination (Chan et al., 2009).

2.4 Vocational Education in China

The advancing technology and the increasing skill requirements of China's manufacturing industries are increasingly demanding skilled labor (Sleezer & Denny, 2004). This causes VET schools to be increasingly more challenging, exerting a higher level of pressure on the students, and impacting their mental health and wellbeing (Arum & Shavit, 1995). The demand of VET schools is growing faster than ever in China.

Table 3. Policies and Development of China's Vocational Education and Related Regulations

Year	Development and Main Policy of Vocational Education in China
1917	The vocational education system and the Chinese Vocational Education Association was established.
1949	The first political conference formulated the underlying policy for education in China and highlighted that investment must be made in vocational training.
1950	The first national education conference with a focus on vocational education policy was held. It included some ideas from the former Soviet Union to establish a socialist education system.
1966-1976	Under the impact of The Great Proletarian Cultural Revolution, Chinese vocational education shrank sharply. Student enrollment reduced to 38,000, the lowest in Chinese history since 1949 (Wu, 2008).
1978	The new Chinese Economic Reform indicated that vocational education should adapt to economic development and to the changing industry.
1985	The Communist Party of China and the Central Committee promoted the training of educators as a strategic part of the development of vocational education.
1996	The Chinese government enacted the 'Law of the People's Republic of China on Vocational Education', which generated a period of rapid development for vocational education and has gradually placed China's vocational education on the track of the law.
1999	The 'Plan for Educational Revitalization for the 21st Century' issued by the Ministry of Education drove policies to increase enrollment in colleges and universities. After the promotion of higher education, the gap in higher education opportunities between urban and rural communities has been further intensified (Li, 2011).
2002	The National Vocational Education Working Conference advocated to substantially increase central government funding to vocational education.
2012	According to the 2012 Chinese Government Report as well as the National Education Reform and Long-Term Development Program (2012–2020), VET schools should be tuition-free.
2016	The Chinese Government Report established policies that support students in setting up businesses and encouraging innovation in the working environment.

The growth of the national economy and the increasing demand for skilled labor created competition within the vocational education system. In 2017, there were 10.7 thousand vocational schools nationwide, with an annual enrollment of 5.82 million students, with 40.1% of the total number of students in the country at the same level. Among these, more than half are migrant workers' children (Ministry of Education of the People's Republic of China, 2018b). Table 3 shows a brief review of the development and history of China's vocational education system in this century.

The modern education system for vocational training started 100 years ago. It has played different roles in each developing stage, adapting to the economic and political changes in China. After the opening of China in the late 1970s, vocational education has played an increasingly important role in the country, due to increasing need for skilled labor, especially in manufacture. Through the decades, vocational education has become more specialized for each industry.

Figure 10. The Education System in China

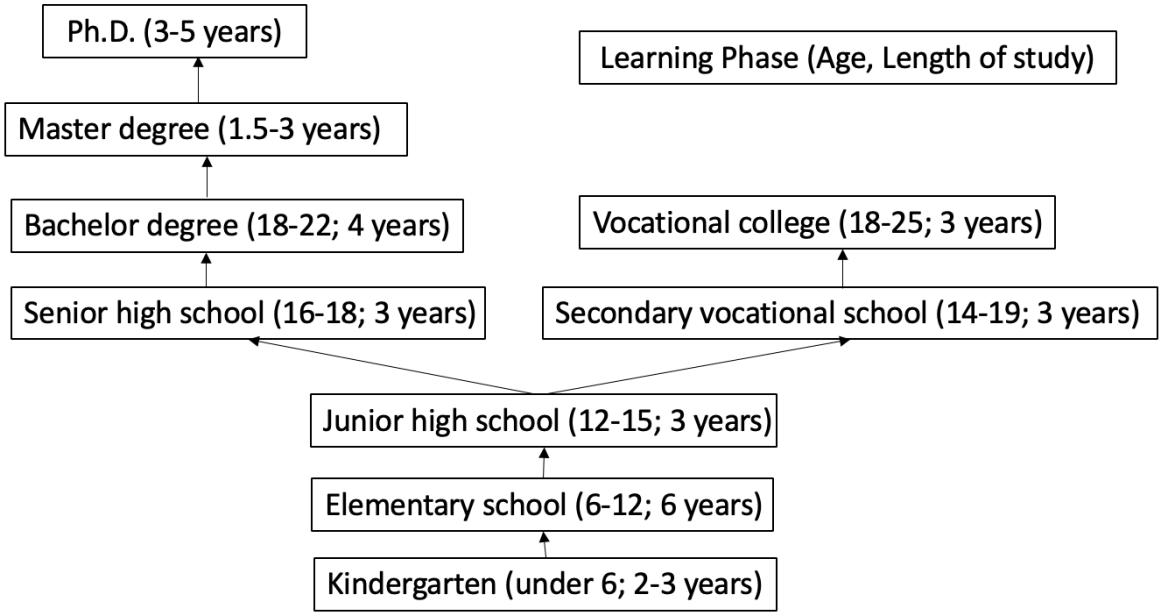


Figure 10 shows the education system in China. The educational alternatives split on the ninth year of compulsory education. Vocational education and general education are set independently from each other and offer different teaching styles, as they have different objectives and subject matter (Jiang, 2011). The concerns of this research will focus on the secondary vocational schools (Regular Specialized Secondary Schools, Adult Specialized Secondary Schools, Vocational High Schools, and Skilled Worker Schools).

Table 4. Introduction to Vocational Schools and Colleges

	Vocational Schools	**Vocational Colleges**	**Technical Universities (Under Planning)**
Requirements for Enrollment	Elementary school graduates; secondary school graduates	Vocational school graduates; high school graduates	Vocational school graduates with academic excellency; high school graduates; vocational college graduates
Goal	Prepare junior skilled workers	Prepare senior skilled workers	Capacitate engineers
Educational Framework	3 years: the first 2 years in school and the 3rd year in a company	3 years: 1–2 years in campus and 1–2 years in a company (flexible)	4 years: 3 years in campus and one year in a company
Content	1. Practical training 2. Theory 3. General lessons: Chinese, Math, English, PE, Music etc.	1. Advanced practical training 2. Theory 3. General lessons: Chinese, Math, English, PE, Music etc. 4. Social activities	1. Specialized knowledge of the profession 2. Advanced theory 3. Practical training 4. Project management and operation

Source: Ministry of Education of the People's Republic of China (2015b)

Table 4 shows the students allowed to enroll, goals, educational framework, and content of Chinese vocational schools, vocational colleges, and technical universities (under planning). The different educational levels have different requirements and goals in these four aspects, but they all attempt to prepare students in a field of study. Chinese vocational education can be divided into two parts: vocational secondary education (our topic) and vocational college education. Currently, the Chinese government is developing a new level for VET training, technical universities, to foster advanced techniques in workers. More details are shown in Table 4. In China, there are three levels of institutions for vocational education.

Under the general education system, the fields of study can generally be divided into two categories: Bachelor of Arts (BA) (e.g., fashion design, nursing, international business, e-commerce) and Bachelor of Science (BSc) (e.g., computer science, mechatronics, biological engineering, mechanical & electrical engineering, agricultural engineering) (Ministry of Education of the People's Republic of China, 2019a).

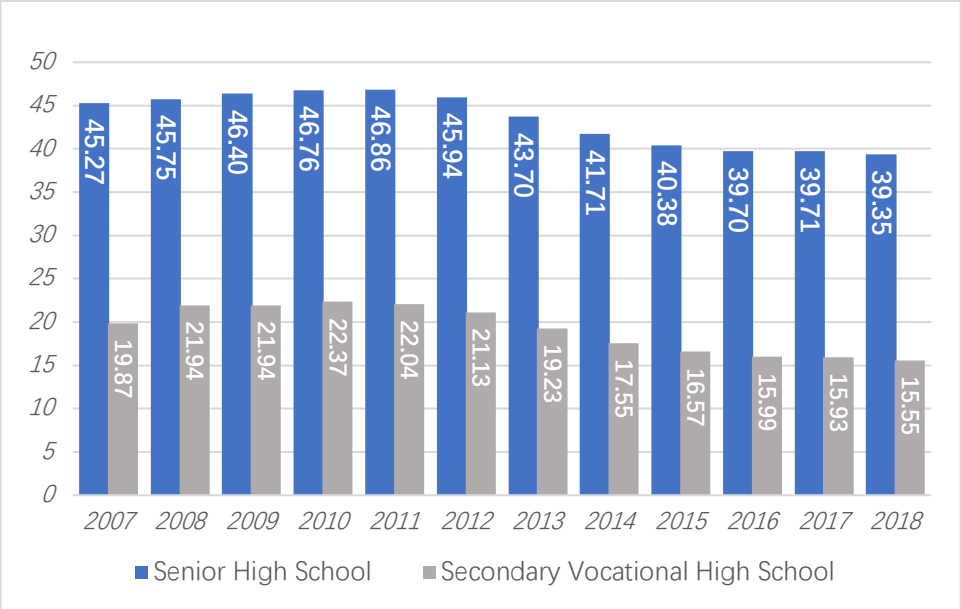
The academic qualifications received by VET students on completion of their studies is neither a BA nor BSc degree. The developing Chinese vocational education system is based on the French Occupational Spectrum Theory, which was published by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1981. According to previous research, technical occupations can be divided into three categories: craftsmanship, technique, and engineering. Each group has different professional requirements (Spaulding, 1987). The craftsman holds practical skills, while the technician needs practical skills and specific technical knowledge, and the engineer must have specialized theoretical experience within a particular profession (Spaulding, 1987).

Moreover, Chinese official documents assign a different award or qualification to Chinese VET students for each of the levels (Ministry of Education of the People's Republic of China, 2018c). Students in vocational schools are trained to be "craftsmen" through practical skills. After that, VET graduates can further their studies in vocational colleges and be trained as "technicians" with both practical skills and professional theory. Lastly, students enrolled in a technical university can become engineers with specialized theoretical knowledge and a particular technique in a specific subject matter. This research focuses on students in secondary vocational school, or secondary VET.

Even as the Chinese government attaches more importance to the development of vocational education, it is still in an inferior state compared to general education. This is somewhat due to the social perception of vocational education in China (Zhang et al., 2015). Ling (2015) pointed out that Chinese VET schools carry a social stigma and that the students are perceived to have a lower social status than those in general high schools due to cultural and historical reasons. Contrary to popular belief, students do not choose VET schools because they are incompetent and unable to attend a university. One study found that a reason why Chinese students attend VET schools is because they are not accepted in a high school in their region (for their academic performance or other factors) and even if they wanted to work, they are still under the legal age to be hired by a company (Jiang & Zhang, 2012).

Figures 11 and Figure 12 show the number of students in Chinese high schools from 2007 to 2018 per system: senior high school and secondary vocational high school. Figure 11 reveals the number of students in both senior high schools and secondary vocational schools.

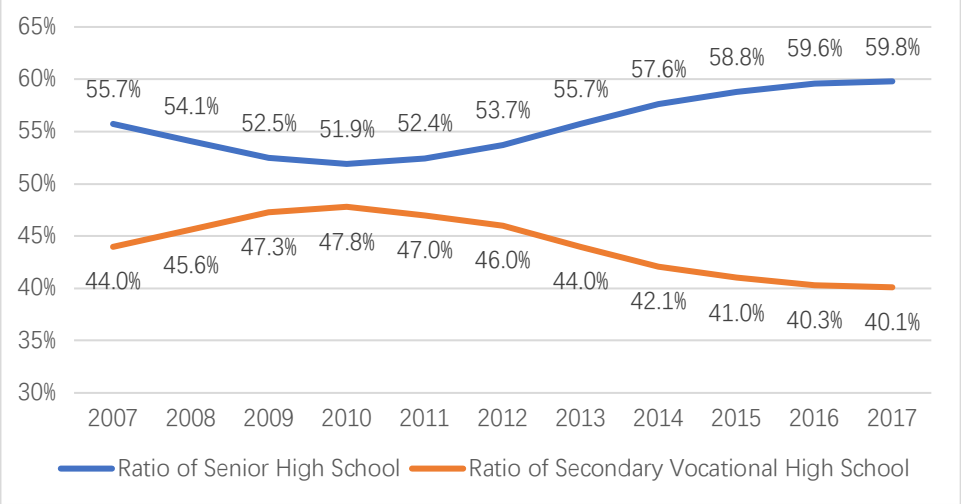
Figure 11. Students in Chinese High Schools 2007–2018 (Millions)



Source: Ministry of Education of the People's Republic of China (2019b)

According to Figure 11, the total number of secondary high school students (including both senior high schools and vocational secondary high schools) increased slightly from 2007 to 2010, while it dropped from 68.9 million to 54.9 million from 2011 to 2018. The development of Chinese secondary VET students appears to follow a similar trend to the total number of senior high school students; there were 19.87 million VET school students in 2007, and the numbers increased gradually in the following three years from 21.94 to 22.37 million, then declined in the following seven years from 22.04 to 15.93 million. In 2018, the number of VET students was of 15.55 million (Ministry of Education of the People's Republic of China, 2019b).

Figure 12. Percentage of Students per Chinese High School System 2007–2017

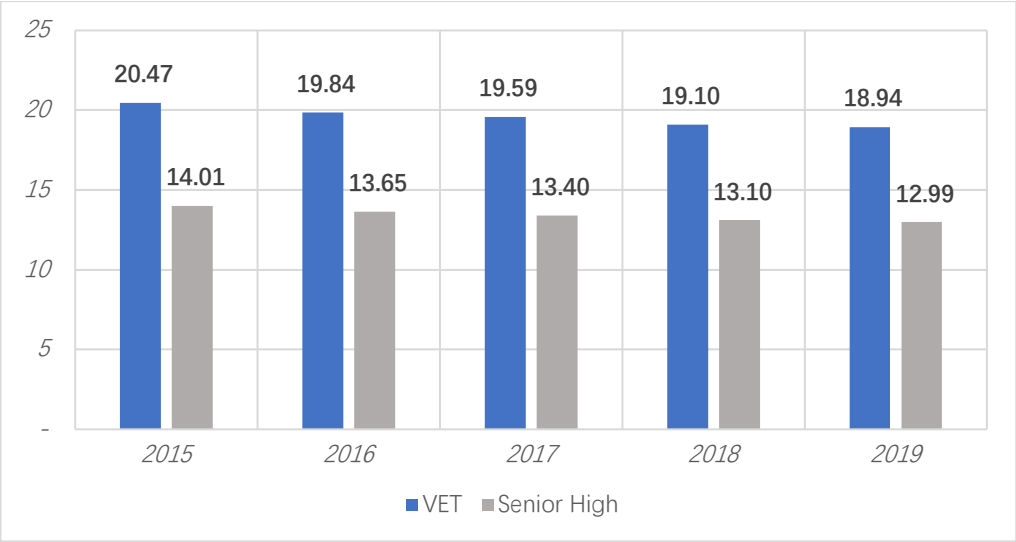


Elaborated by author (2021), Source: Ministry of Education of the People's Republic of China (2019a)

Figure 12 shows the percentage of students in Chinese secondary high schools per school system. The rate for senior high students has been higher than that of VET students during the whole past decade. During the past 10 years, generally over 40% of all students in this grade were in VET schools. Numbers increased from 2007 to 2010 (Ministry of Education of the People's Republic of China, 2015b) and gradually lowered further from 2011 to 2017

(Ministry of Education of the People's Republic of China, 2017). During this period, the Chinese government published policies to facilitate student enrollment in vocational schools with measures such as making VET school tuition-free in 2012 and opening possibilities for students to enroll in VET schools without restrictions due to local household registration status (which still varies from province to province).

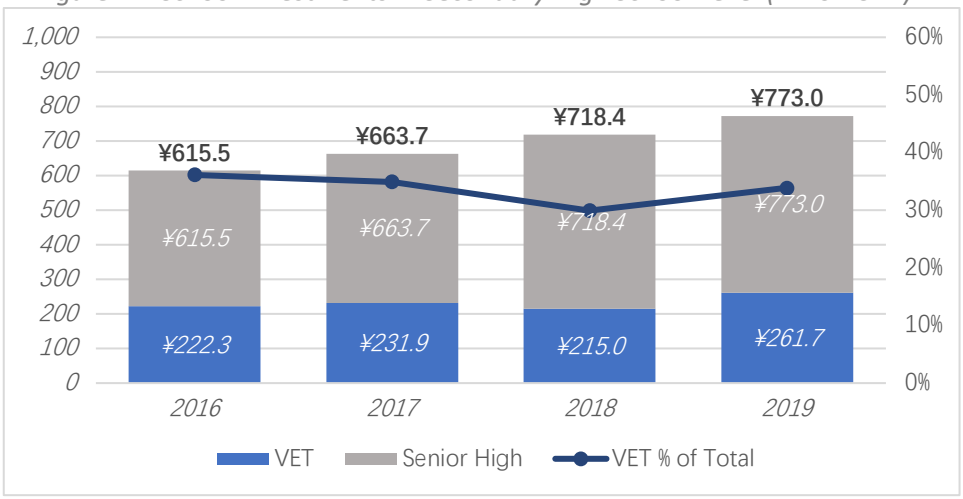
Figure 13. Students per Teacher in VET and Senior High Schools



Elaborated by author (2021), Source: Ministry of Education of the People's Republic of China (2019c)

The teacher-student ratio for senior high schools is generally higher than that of VET schools. Figure 13 reveals that there is one VET teacher per every 19 VET students, while there is one senior high school teacher per 13 senior high students. Even as the teacher-student ratio in VET schools has improved gradually in the past five years, the measure in senior high schools is still much lower than that of the VET schools (Ministry of Education of the People's Republic of China, 2019).

Figure 14. School Investments in Secondary High School Level (Billion CNY)[2]

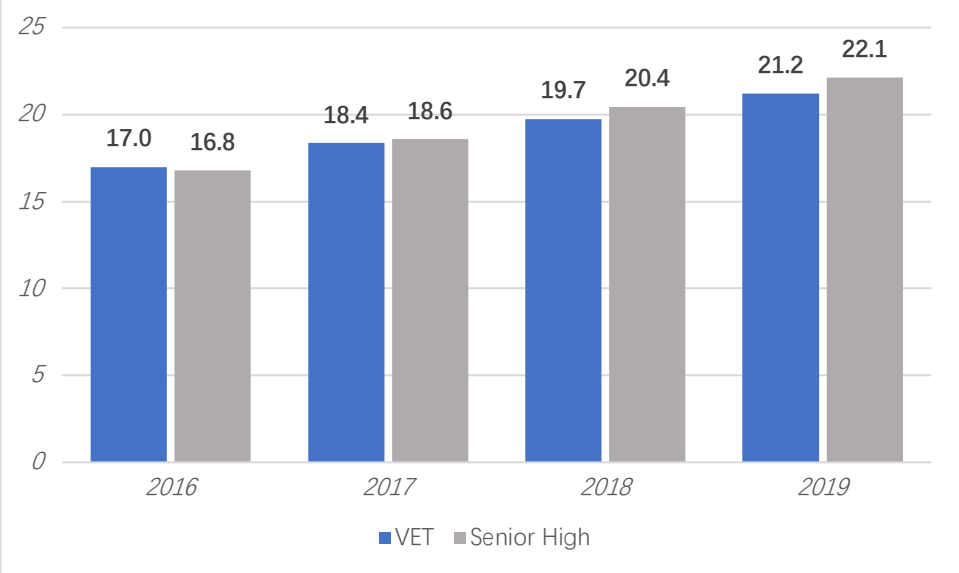


Elaborated by author (2021), Source: Ministry of Education of the People's Republic of China (2019c)

[2] USD/CNY average annual exchange rates: 1 USD = 6.14 CNY (2014); 6.23 CNY (2015); 6.64 CNY (2016); 6.75 CNY (2017); 6.88 CNY (2018) and 6.98 CNY (2019). *Source:* National Bureau of statistics of the PRC from 2016 to 2020.

Figure 14 shows the Chinese national investment in high school education from 2016 to 2019. The total investment in high school education has increased gradually in the past four years from ¥615.5 to ¥773 billion Yuan. Investment for VET schools rose from ¥ 222.3 to ¥231.9 billion Yuan from 2016 to 2017, and then it lifted to ¥261.7 billion Yuan in 2019 after a decline to ¥215 billion in the previous year. On average, investment for VET schools has been 33.7% of the total investment in the senior high level (Ministry of Education of the People's Republic of China, 2018d).

Figure 15.Government Investment per High School Student (Thousand CNY)



Source: Ministry of Education of the People's Republic of China (2019c)

Figure 15 shows the Chinese government investment per student at high school level. The investment for both VET students and senior high students has gradually increased during the past four years (for VET students from ¥16.985 to ¥21.203 thousand Yuan; and for senior high students from ¥16.781 to ¥22.1 thousand Yuan). The investment per VET student has been lower than that of the senior high students in recent years, except for 2016 (Ministry of Education of the People's Republic of China, 2018b).

Currently, China's educational investment as a percentage of its GDP is lower than the international standard. In China, the average of this percentage has been 4.15% (Xinhua News Agency, 2014) from 2015 to 2019 (National Centre for Education Statistics, 2020). It decreased in 2020 from 4.26% to 4.04%. On the other hand, the world average for this proportion was of 4.9%, that is, 5.1% for developed countries and 4.1% for developing countries in 2019. Therefore, the Chinese investment in education as a proportion of its GDP has been below the international average for the previous five years. Furthermore, the investment in VET schools is less than that of senior high schools (National Centre for Education Statistics, 2020).

Based on the information in Figures 11 and 12, the percentage of students in VET schools is more than 40% of the total students at high school level (National Centre for Education Statistics, 2020), and yet, the amount of available teachers, government investment and government investment per student place VET schools in a significantly disadvantaged position in comparison to senior high schools of the conventional system.

Chapter 3 Literature Review

There are increasing numbers of research studies related to the children of Chinese migrant workers. Some studies focus on the children's mental health while some emphasize school students' wellbeing in vocational education. This study focuses on the social cognitive wellbeing of migrant workers' children in vocational schools. To be more specific, four keywords in the research topic will be introduced in the literature review: migrant workers' children, family relations, vocational school students and wellbeing. The research questions are based on the problems that were identified in the previous studies.

3.1 Migrant Workers' Children

The living conditions of migrants and their children is a topic studied worldwide. For example, it is estimated there are 8.8 million to 9 million children in the Philippines, who have been separated from one or both parents. In 2002, 13% of Mexicans and nearly 22% of Salvadorans immigrated to the United States, leaving their children in their country of origin (Lin et al., 2016) . A study using data from the 1996 Socioeconomic Survey indicates that at least one family member from 18% to 40% of rural households migrates to work in the cities in Bangladesh (Pan & Ye, 2009).

In the previous literature, it has been found that migrant children are troubled with an "identity crisis"(Moskal, 2014), because they need to adapt to a new school, new dialects and new customs. However, for most rural migrant youngsters, a new life in urban areas is not only a big challenge but also a good opportunity for the acquisition of social skills and other skills (Chen, 2014). Also, there is proof to show that school relationships (Armsden & Greenberg, 1987), which include teacher-student relations (Amato, 1994) and peer relations (Brown, 2004), are very important to migrant youngsters' satisfaction and mental health.

Green (2003) did a research study about the education of migrant children in America. It identified that social and educational opportunities are commonly limited by frequent mobility and poverty. Language barriers and cultural variations add to the difficulties created by moves (Green, 2003). Another study relates to policy reform for migrant children (Elias & Kemp, 2010); the study concentrates on administrative and policy actions after 2003 that cope with the adoption of undocumented migrant children in Israel. The poor circumstances of these migrants in need of residency status who were categorized as appropriate for expulsion, as well as the dominant Jewish ethnonational role of the Israeli status, make these actions and policy propositions especially remarkable (Elias & Kemp, 2010). A Sri Lankan study shows that the absence of maternal care as a single factor caused a double increase in children's psychological health problems (Senaratna et al., 2011).

Previous research studies on the children of Chinese migrant workers have focused on demography, education, sociology, and psychology. It has been recorded that there are around 100 million children of migrant workers in China (Wang, 2011). Most of the studies are about left-behind children and some on migrant children. Due to the absence of parental care and parental affection (Jia & Tian, 2010), left-behind children may be more likely to suffer from negative effects such as anxiety (Dai & Chu, 2018), victimization (Chen et al., 2017), depression (Chen & Chan, 2016) and loneliness (Liu et al., 2010) and emotional trouble (Jia & Tian, 2010) than children from non-migrant families (Lu et al., 2019). Meanwhile, the left-behind children of migrant workers in rural areas are encouraged to study agricultural-related majors in VET schools. The government offers an allowance and no tuition fees for rural

students enrolled into VET schools (Ministry of Education of the People's Republic of China, 2008).

Also, migrant workers' children have been studied and compared through different identities, which are based on family migration arrangement types. Generally, there are the following categories of family migration (shown in Table 5):

Table 5. Family Migration Arrangement Types

	Live with	**Migrant with**	**Left behind by**
Live_with_parents	Both parents	Both parents	Not applicable (Non-migrants)
Live_with_1_parent	Only Father; Only Mother	Only Father; Only Mother	Only Mother; Only Father
Live_with_others	Grandparent(s); Siblings; Others	Others	Both parents
Live_alone	No one	Migrant alone	Both parents

Zhao et. al (2007) pointed out adolescents left behind by both parents are more likely have mental difficulties in different aspects, such as emotions, social behavior and peer relationships (Zhao et al., 2017). Jorden and Graham (2012) found that children left behind by their mother seem to be particularly unsatisfied in comparison with children in non-migrant families (Jordan & Graham, 2012). Moreover, in the research of Cortes (2015) children left behind by their mother are less happy and more likely to suffer from detrimental effects than children left behind by their fathers. Graham & Jordan (2011), in a study of left-behind children in Thailand and Indonesia, found that children left behind by their father are more likely to be unhappy. In the research of Mazzucato et al. (2015) children left behind by both of their parents seem worse in psychological health than those left behind by only one parent. Also, Chen and his coworker (Chen & Chan, 2016) find that left-behind children living in a divorced family or a single-parent family have more risks of depression and negative emotions. In the current wellbeing literature, the left-behind children are more often compared to the non-left behind (Zhao et al., 2007; Graham & Jordan, 2011; Jordan & Graham, 2012; Mazzucato et al., 2015), while studies comparing left-behind children with migrant youngsters are still limited.

In general, research studies on the migrant workers' children have the following characteristics: firstly, many of the previous studies pay attention to individuals' early childhood (Ling, 2015), such as students in primary school (Liu et al., 2010) and children below junior high school (Chai et al., 2019). Even though adolescence is an essential part of an individual's development and wellbeing (Patton et al., 2016; Moore et al., 2018), little research focuses on migrant youngsters or left-behind adolescents. Secondly, some existing wellbeing studies are only concerned with migrant youngsters (Ling, 2015; Wu & Li, 2016), while others only include left-behind children (Liu et al., 2010; Dai & Chu, 2018). Limited wellbeing studies are concerned with both migrant youngsters and left-behind adolescents with regard to their family arrangements and relations. Even where the research included both (Huang et al., 2018), the study was made from the perspective of parents. Thirdly, even in cases where some research focuses on the migrants' children the studies concentrate on children's mental (Moore et al., 2018) and physical health (Langton & Berge 011) in schools. It has been proved that migrant children may be affected by negative emotions due to family migration (Xiong & Ye, 2011).

3.2 Family Relations

For adolescents, the relationship network is mainly composed of two parts: family relations and school relationships (peer relations and teacher-student relations). The family provides the first environment in which adolescents may grow and is one of the main sources of psychological emotions. Moreover, the initial child-parent connection has impacts on the child's interpersonal relationships over their lifetime (Schneider et al., 2001). Therefore, the integrity of the family structure, family relations and interaction between family members directly affect the mental health of youth. It is clarified that when the parent-child communication is poor, negative emotions appeared in adolescents (Liu et al., 2020).

A survey among the children of Chinese migrant workers notes that the migrant conception about adulthood reflected Chinese traditional social obligations and family relations (Zhong & Arnett, 2014). Family relations here mainly refer to parent-child relations and caregiver-child relations. Some researchers pointed out that the parental care for adolescents does not seem as important as it is in early childhood, but the belief of commitment from their parents is very crucial for adolescents (Parkes & Stevenson-Hinde, 1982). According to previous studies, many found left-behind adolescents' wellbeing relates to their attachment (Nahkur et al., 2017) and sense of security with parents or caregivers (Parkes & Stevenson-Hinde, 1982 ; Armsden & Greenberg, 1987; Kobak & Sceery, 1988). Parent-child relationships may covertly impact adolescents' cognitive and social development throughout adolescence as well as adulthood (Kobak & Sceery, 1988). Also, adolescents' life satisfaction can be predicted by their self-concept in family relations (Dew & Huebner, 1994). Moreover, children's wellbeing has been linked with the parents' congruent or differential treatment between them and their siblings (Mchale et al., 1995). Additionally, female adolescents are found to hold a stronger association with parenting characteristics than males (Shek, 1999). According to previous studies, the experience of an adolescent with nonparents as caregiver(s) also affects the quality of other social relations (Davis, 2006). According to Xiang et al. (2018) parental support can moderate the relation between discrimination and conscientiousness.

Migrants aim to promote family income through migration, while it also weakens family ties, for example, children may feel abandoned by their migrant parents and estranged from their family relations (McLaughlin et al., 2017). Children left behind by parents are more easily suffer from negative influences (Fischer, 2009) than any other kind (Tomşa & Jenaro, 2015). Also, some studies noted that conditions for migrant youngsters are not ideal. Commonly, migrant youngsters suffer from structural barriers in host cities, for example, substantial difficulties in the arrangement of adequate childcare and schooling (Chen et al., 2017), live in poor housing conditions and belong to a marginal group in society (Huang et al., 2018). Thus, even migrant children enjoy the reunion with their parents and have better economic support than left-behind children, their migrant parents can hardly offer high-quality parenting.

All in all, the wellbeing and cognitive development of migrant workers' children has been found to be closely related to the bond with their nuclear family and its competence of support (Zhao et al., 2017). Relationships between family relations and wellbeing have been well-documented, while less information is available on Chinese migrant workers' children, as well as a wellbeing comparison between migrant youngsters and left-behind children. Moreover, the quality of parenting has a strong influence on children's cognitive development (Yeung & Gu, 2016), while there is little evidence of the exploration of relationships among family relations and social cognitive factors.

3.3 Vocational School Students' Mental Health Studies

From the results of two national surveys (Ministry of Education of People's Republic of China, 2019a) about Chinese vocational school students, we can have a brief view of the situation and problems that are in front of the Chinese vocational school students (Fan & Li, 2020).

Firstly, in the past few years from 2015 to 2018, more than 600,000 students in secondary vocational schools across the country dropped out, which is calculated on the basis of a survey among 1,200 schools (Ministry of Education of People's Republic of China, 2019b). The drop out number is equivalent to the student size of 500 schools. It is caused by several reasons; first it is due to the influence of prejudice about vocational education in the society. Second, children drop out due to the problems caused by neglecting management within the school system and the lower quality of teaching in some areas and schools. The student questionnaire survey shows that 32% of the students have insufficient confidence in their vocational qualifications in the employment market; and 25% of them are dissatisfied with the school management. In addition, 42% of the students think that academic difficulties are the main problems for them at school (Ministry of Education of the People's Republic of China, 2019c).

Secondly, vocational schools in poverty-stricken areas are struggling with cooperation over the development of schools, due to economic development and other factors. Half of the schoolteachers have no teacher training practice and 60% of the schools have no guidance on how to train students. This does not only influence the educational quality, but also the self-efficacy and learning motivation of VET school students in rural areas (Ministry of Education of the People's Republic of China, 2018b).

Thirdly, VET school students generally suffer from poor mental health conditions. According to the results of a survey with 2,543 students from 14 secondary vocational schools in Qujing City in Yunnan Province, lower marks than the national average were recorded in psychological health status tests of secondary vocational school students (Fan & Li, 2020). And it is also found that 64.2% of VET school students experience mental health problems, which was higher than the national average also. Furthermore, gender factors, grade factors and physical health conditions were all found to significantly affect students' mental health status (Fan & Li, 2020) . A national survey with 48,499 VET school students in 2017, shows that current secondary vocational students have a lack of self-identity and mental fragility (Yi, 2019) . Moreover, they have a weak sense of respect for life and low trust in families and schools. Since many adolescents attend VET schools in China, their parents' migration has been found to be of significant influence on adolescents' wellbeing in previous studies (Chan & Crothall, 2009).

Generally speaking, many of the studies about VET school students show students have poor mental health and negative emotions, for example burnout (Gerber et al., 2015), depression (Garvik et al., 2014) and anxiety (Happell et al., 2014), which caused behavioral problems. The previous research studies show mental health education and psychological consulting services need to be improved in China's VET schools.

3.4 Wellbeing Studies

Wellbeing will be discussed in the context of psychology in this research. There are two most popular wellbeing research models in this field: subjective wellbeing (SWB) (Diener et al., 1985) and psychological wellbeing (PWB) (Ryff, 1995). These two concepts will be introduced in the following section. The social cognitive wellbeing (SCWB) model is a comparatively new wellbeing research model which combines the previous two models (PWB and SWB).

3.4.1 Typical Wellbeing Research Models

From the perspective of psychology, wellbeing is a multidimensional and multifaceted subjective experience, based on the actor's own defined criteria for an overall assessment of their life quality (Shin et al., 2011). However, Diener et al. (1985) argued that subjective wellbeing includes not only cognitive evaluation but also positive emotions and negative emotions, which contain both cognitive and emotional aspects. Moreover, others also argued that wellbeing could be examined according to an individual's health condition, self-perception, academic attainment, and depression (Wang et al., 2019).

The subjective wellbeing model (SWB) is based on hedonic outcomes and represented by Diener et al. (1985). It strengthens personal happiness and satisfaction from an individual's secret world. Also, it can be simplified as "feeling good" (Diener et al., 1999; Pavot & Diener, 2008). SWB consists of three parts (shown in Table 6): life satisfaction, positive affect, and negative affect (affect being used here to mean feelings or emotions) (Diener et al., 1999). According to Kahneman & Deaton (2010), subjective wellbeing can be separated into two parts: emotional wellbeing and life evaluation. Emotional wellbeing refers to feeling good emotionally or not in everyday experiences. Life evaluation refers to an individual's opinions about his/her life (Fredrickson & Joiner, 2002).

The second model is psychological wellbeing (PWB), which is mainly proposed by Ryff and Singer (1998). It includes six components (shown in Table 6): purpose, growth, self-acceptance, autonomy, positive social relations, and environment mastery. PWB is focused on Eudemonic results and pursuing a "good and meaningful life". Based on this, it criticizes SWB and believes that wellbeing is not just the feelings of the individual but also the complex concept of an individual's mental health, self-improvement, and quality of life. Lent (2004) describes PWB as an integrative model that consists of clinical aspects, mental health, and an individual's lifelong growth.

Another approach was to combine both SWB and PWB research models as: *"wellbeing is probably the best conceived as a multidimensional phenomenon which contains factors of both subjective wellbeing (hedonic) and psychology wellbeing (Eudemonic)"* (Ryan, 2011). *"It is somehow attractive to envision SWB and PWB as reflecting two necessary aspects or rhythms of human experiences as a sort of yin and yang"* (Lent, 2004).

Therefore, Lent (2004) combined these two research models (Hedonic and Eudemonic) and promoted a "social cognitive model of wellbeing (SCWB)". It is also called "normative wellbeing" and includes components of both "Hedonic" and "Eudemonic" wellbeing models (personality & trait positive affectivity, self-efficacy, domain satisfaction, environmental support & resource, outcome expectations goal progress, and lifelong satisfaction, shown in Table 6) based on psychology. This framework proposes people "feeling good" in each life domain and also "perusing a good life". Moreover, just like the SWB and PWB models, SCWB

criticizes and develops wellbeing studies from a different perspective. It offers possibilities of clinical consultants and the practice of applied psychology.

Table 6. Research Models of Wellbeing

Model of Wellbeing & Major Researcher	**Main Components**	**Philosophical Ground & Definition**	**Measure**
Subjective Wellbeing (SWB) (Diener et al., 1985)	Life Satisfaction Positive affect Negative affect	Hedonic (feeling good): affectivity & cognition (Diener et al., 1985).	SWLS (Diener et al., 1985); PANAS (Watson et al., 1988).
Psychology Wellbeing (PWB) (Ryff, 1995)	Purpose; Growth; Self-acceptance; Autonomy; Positive; Social relations; Environment mastery	Eudemonic (good life): striving for perfection that represents the realization of one's true potential (Ryff & Singer, 1998).	Psychology wellbeing; Self-acceptance; Environmental mastery; Positive relations with others; Personal growth; Autonomy
Social Cognitive Model of Wellbeing (SCWB)/ Normative Wellbeing (Lent, 2004)	Personality & trait positive affect; Lifelong satisfaction; Domain satisfaction; Environment support & Resource; Self-efficacy; Outcome expectations; Goal progress	Hedonic and Eudemonic (feeling good in each domain and perusing a good life): goal pursuit offers one potentially important route toward hedonic wellbeing (Lent, 2004).	Personality & trait positive affect; Lifelong satisfaction; Domain satisfaction; Environment support & resource; Self-efficacy expectations; Outcome expectations; Goal progress

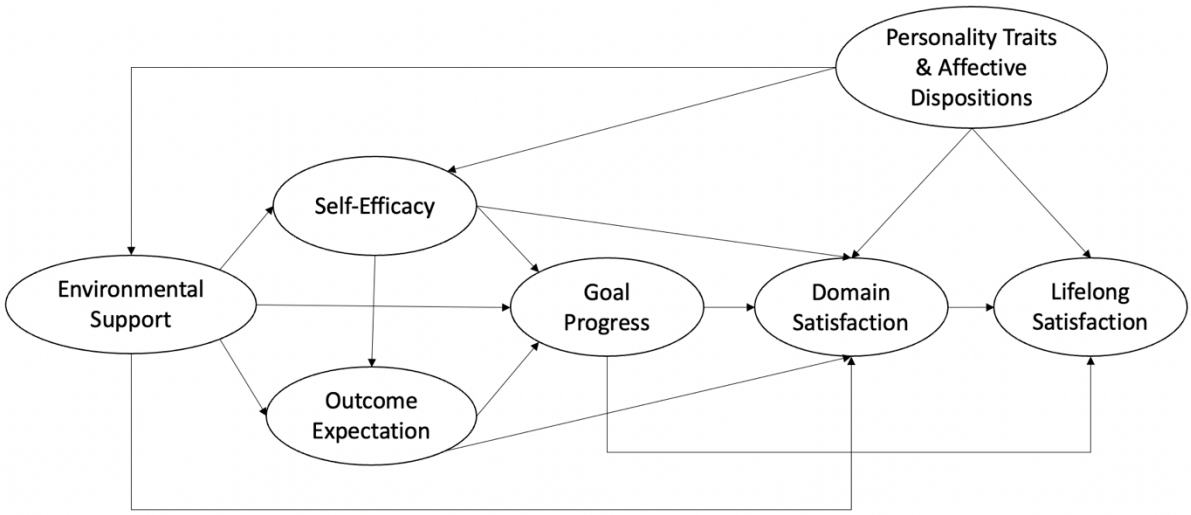
Notice: PANAS (Positive and Negative Affect Schedule); SWLS (Subjective Wellbeing Satisfaction with Life Scale). The first two parts based on research of Lent (2004, p. 485) the description of the "Defining and Measuring Wellbeing: Major Philosophical Positions and their Wellbeing Definitions"

Table 6 introduced and compared SWB, PWB and SCWB from their main components, philosophical ground and measures. It clearly shows that SCWB combined the previous two models in all three components. So far, the three models in the above table are the most well-accepted wellbeing research models in the context of psychology. Wellbeing has also been explored in other contexts: wellbeing is regarded as a generalized concept, such as in social welfare and health (Fischer, 2009), justice, autonomy, etc. This research mainly studies school adolescents' wellbeing in a social psychological context.

3.4.2 Social Cognitive Wellbeing Model (SCWB)

Theoretically, the social cognitive model of wellbeing originated from social cognitive career theory (SCCT) (Lent et al. 1994), and SCCT is based on Bandura general social cognitive theory (Bandura, 1997). The SCCT emphasis in on interactions among person, including behavioral influences in work-related progress and the environment (Lent et al., 1994). Moreover, the social cognitive wellbeing model extends the self-efficiency theory (Bandura, 1986) by adding the learning experiences, outcome expectations, and the relationships among the constructs to predict satisfaction in a career (Fouad & Guillen, 2006). The social cognitive wellbeing model creates a framework among seven elements, shown in Figure 16, self-efficacy expectations, outcome expectations, personality traits & affective dispositions, domain satisfaction, environmental support & resources, goal progress and lifelong satisfaction (Lent, 2004). In addition, it draws out the paths and inner relationships among these seven elements which can be shown in the Figure 16.

Figure 16. Social Cognitive Wellbeing Model



Note: the above figure is based on Lent's (2004, p. 500) description of social cognitive model.

The social cognitive wellbeing model focuses on the joint participation of environmental, behavioral, cognitive, and affective factors that combine to advance people's satisfaction (Lent, 2004) in a particular domain (especially in education and careers) and whole life (Ezeofor & Lent, 2014).

Self-efficacy refers to people's perceptions of their abilities to arrange and accomplish a series of activities required to achieve designated types of performances (Bandura, 1986). It should be highlighted that self-efficacy is recognized as a growing set of self-beliefs connected to proper performance and activities (Lent et al., 2005). These perceptions are regarded to be fundamental determinants of belief and behavior in social cognitive theory (Lent & Brown, 2006). Also, self-efficacy is defined as a set of dynamic self-beliefs tied to specific performance domains and activities (Lent, 2005) .

There are several concepts and measures of self-efficacy in previous studies. The most common ones based on social cognitive theory are task-specific self-efficacy and coping

efficacy. The former refers to ideas in one's ability to achieve the specific tasks required to succeed under regulating states in a specified domain. The latter (coping efficacy) focuses on one's capacity to deal with obstacles in a particular domain. Additionally, another pattern of self-efficacy commonly investigated in the career literature might be named the process efficacy or observed ability to handle general tasks required for occupation arrangements (Griffin & Hesketh, 2005).

According to Lent (2004), self-efficacy theories are considered to be obtained and updated by four principal informational sources: (a) physiological and affective dispositions; (b) vicarious learning; (c) social conviction; and (d) individual accomplishments (Bandura, 1999). Generally, personal achievements potentially have the most significant impact on self-efficacy e.g., failure experiences tend to reduce self-efficacy regarding an assigned task (and success experiences will promote).

Outcome expectations are beliefs about the outcomes or results of taking particular actions. Whereas self-efficacy pays attention to one's capacities (e.g., can I do this?), outcome expectations concern perceived consequences of specific fields of action (e.g., if I try doing this, what will happen?) (Lent et al., 2005). There are various forms of outcome expectations, for instance, predicted social (e.g., gain of individual's family), economical (e.g., income and financial support), and self-assessment (e.g., self-recognition) outcomes (Bandura, 1986). The direction and intensity of the evaluation of expected outcomes are also different. For example, people may get positive, negative, or neutral results from participating in an activity. Assume that people tend to try behavior that they believe are likely to achieve high-value results, and avoid actions that may lead to especially unfavorable consequences (Lent et al., 2005).

Goal progress can be described as the advancement towards completing a particular activity or attaining a specific outcome (Bandura, 1986). Two types of goals are concerned in the social cognitive model, first (a) choice-content goals, pointing to the kind of activity domain the individual wants to proceed. Choice goals motivate individuals to pursue their favored educational or vocational possibilities. And second (b) performance goals, that is, the level or quality of performance to which one seeks within a given domain. Performance goals support determining the level of success that people realize at chosen assignments (Phillips & Gully, 1997).

Personality traits & affective dispositions: include two parts: personality (long-term and stable characteristics of individuals: emotions and affections), emotions/affective dispositions (short-term feelings of individuals) and biological variables are grouped together. In this tradition, personality traits and emotional tendencies are generally considered to be derived from gene-based biological mechanisms that existed at birth and are sometimes considered relatively unaffected by environmental influences or personal control efforts. This concept of immutable characteristics and emotional tendencies are strong in previous researches (Lent, 2004). In this research only disposition factors due to emotions were included.

In this research positive and negative affect will be introduced instead of personality traits and affective dispositions. The positive and negative affect are proved to be factors that impact an individual's domain and lifelong satisfaction in Asian counties (Watson et al., 1988), such as in Singapore (Sheu et al., 2014), China (Sheu et al., 2017) and Turkey (Işık et al., 2018). Positive and negative affect refer to self-reported mood conditions. Concisely, positive affect (PA) indicates the degree a person feels passionate, energetic, and alert. High PA is a state of high

enthusiasm, adequate strength, and pleasurable commitment, in contrast, low PA is identified by grief and apathy. Negative affect (NA) is a general dimension of subjective anxiety and unpleasurable engagement that encompasses a series of detestable moods, such as anger, disgrace, hatred, guilt, panic, and nervousness, with low NA being a state of relaxation and peace (Watson et al., 1988).

Life satisfaction refers to satisfaction with life as a whole (Shin & Johnson, 1978). Moreover, it is an assessment of an individual's quality of life, which is a hallmark of life satisfaction that centers on an individual's judgment, not upon some criterion or standard from others (Diener et al., 1985b). In the context of social cognitive theory, subjective wellbeing (SWB) equals life satisfaction. SWB focuses on hedonic results, such as individual enjoyment and feeling good. It is understood that an individual's lifelong satisfaction is impacted by satisfaction in specific domains (Lent, 2004; 2005).

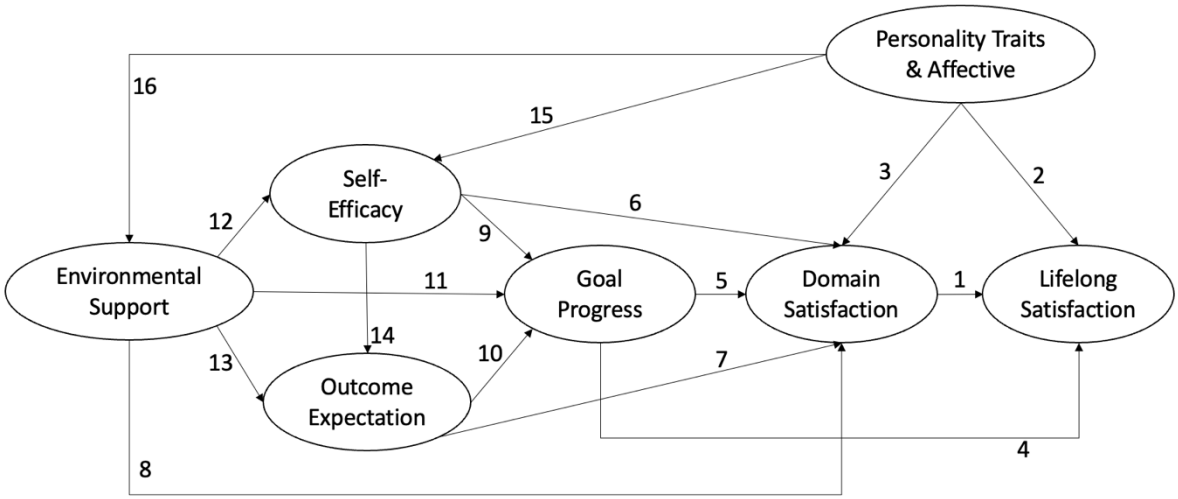
Domain satisfaction is an assessment of an individual's growth, promotion, happiness and quality of life in a certain domain (e.g., school or work): academic satisfaction and work satisfaction (Lent, 2004). This study is concerned with migrant workers' children in vocational high school. Therefore, it refers to academic satisfaction which is the assessment of the quality of school life for the children of migrant workers (Diener et al., 1985). It is identified that adolescents (who might be studying in school) are living through an important period which connects childhood and adulthood. The satisfaction in this period can influence the wellbeing of a human being's life satisfaction in early adulthood or even his or her whole life (Lent, 2004; Sheu et al., 2014).

Environmental support refers to the environmental-related factors that support individuals. For students in school, we mainly consider the environmental support and resources, for example support from teachers, classmates and parents (or family members). More support from environmental circumstances (presence of high support and low barriers) are supposed to improve goals and their probability of being realized (Lent, 2004). The social cognitive theory investigated the influences from the environment or particular context to an individual's wellbeing.

Model Structure

In the social cognitive model, each of the seven components are interrelated (this can also be seen in Figure 17). Such as, personality traits/affective disposition, which include both positive and negative affection have an impact on the confidence of one's competence (self-efficacy) to achieve goals and one's satisfaction in a specific domain (Lent, 2004). Also, self-efficacy is both the source and cause of goal progress and lifelong satisfaction (Duffy & Lent, 2009). Many studies proved that when people make progress towards personal goals, the sense of satisfaction and happiness (Lent, 2004) would be improved (Işık et al., 2018). Some other researchers found that it is only adaptable when the goal is out of one's inner motivation (Belle, 2013). Outcome expectations as well as environmental support (support from teacher/school/classmates), promote students' goal progress (path 13 and path 10). Moreover, environmental support can also be positively affected by students' positive affections (path 16) (Lent et al., 2005). This model has been tested in many countries and areas, such as America (Lent, 2004), Portugal (Lent et al., 2009), Italy (Lent et al., 2011b), Singapore (Sheu et al., 2014), Spain (Lent et al., 2017), China (Sheu et al., 2017) and Turkey (Işık et al., 2018). All the tests showed a structural model that generated a great fit for these samples.

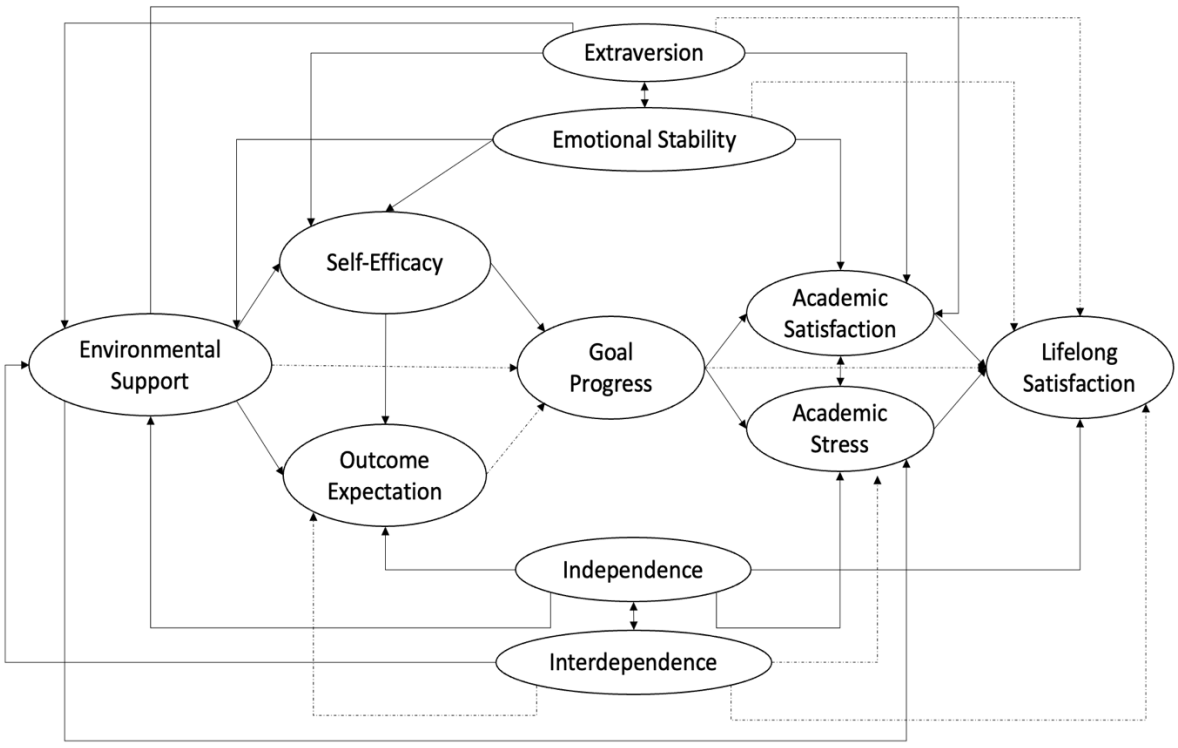
Figure 17 The Paths of Social Cognitive Model of Wellbeing



Note: the above figure is based on the work and research of social cognitive model (Lent, 2004, p. 500).

The social cognitive model is based on the Western cultural context. Sheu et al. (2017) explored the social cognitive model in an Eastern context. China is one of the target countries involved. They modified the model of social cognitive wellbeing from Lent (2004) based on the characteristics of Eastern culture and the structure of the modified model is as follows in Figure 18:

Figure 18 Social Cognitive Model of Wellbeing of Academic and Global Wellbeing for College Students in China



Note: The solid line in the above structure diagram represents the relationship path that has been proven. The dotted line is the author's inferred relationship path, but it has not been confirmed in the sample test (Sheu et al., 2017, p. 145).

Figure 18 shows the social cognitive wellbeing model of academic and lifelong satisfaction for college students in China. Sheu et al. (2017) included the self-construal factor (independence and interdependence) and academic stress in the SCCT model. Self-construal is a concept normally used in a cross-cultural context. Briefly, there are two categories of self-construal: interdependence and independence. Generally speaking, individual lives in Eastern culture exhibit interdependence in self-construal, while Western culture regards individuals as independent (Ezeofor & Lent, 2014). The categories of interdependence and independence replaced the personality traits & affective dispositions factor in emotional stability and extraversion. The model was tested with a two-step structural equation modeling (SEM) technique. Firstly, the variables were loaded on their related latent factors, and most of them were allowed to covary freely. Secondly, the structural model has an excellent fit for the full sample. The above modified model has also been tested in some other Asian countries and regions, for instance, Singapore and Taiwan (Sheu et al., 2014). This is a trial of modification on the social cognitive wellbeing model used in the Eastern cultural context. In this research, the author also aims to introduce the Eastern cultural factors into the social cognitive wellbeing model, especially the inter-personal relationships (e.g., family relationships and school relationships) .

Review of Social Cognitive Wellbeing Research

The social cognitive model of wellbeing has been identified in research studies in different countries, such as America (Duffy & Lent, 2009), Portugal (Lent et al., 2009), Italy (Lent et al., 2011b), Spain (Lent et al., 2017), China (Sheu et al., 2017) and Turkey (Işık et al., 2018). From the perspective of participants, most existing research studies focus on college students (Lent et al., 2009; 2017; Lent et al., 2012; Sheu et al., 2014; 2017; Işık et al., 2018), with some also about college teachers (Duffy et al., 2009). Meanwhile, it has been examined in cross-cultural studies, for example, Taiwan & Singapore (Sheu et al., 2014), Turkey (Işık et al., 2018) and Caucasian, Asian & Latino American ethnic groups (Sheu et al., 2016).

The research of Işık et al. (2018) revealed that the wellbeing model was a good match for the data and the variance in overall life satisfaction, academic satisfaction and academic goal progress in Turkey was estimated at 45%, 61%, and 66% respectively. A study of Portuguese college students found that self-efficacy and environmental support were predictive of academic regulation and goal progress. Also, academic satisfaction was predictive of students' life satisfaction. Opposite to goal progress, outcome expectations did not predict academic regulation or life satisfaction (Lent et al., 2009).

Even where there are some wellbeing/satisfaction studies based on social cognitive career theory (SCCT) in China (Sheu et al., 2017), there is little study of this topic and even fewer concern vocational school students. The results of these Chinese studies imply that higher environmental support improves self-efficacy, and promotes goal progress in the academic field, and are especially beneficial for improving the wellbeing of Chinese college students (Sheu et al., 2017). Jiang & Zhang (2012) found that many Chinese students go to vocational schools to acquire skills to find a job early in life and support their families with relevantly lower job satisfaction and wellbeing (Jiang & Zhang, 2012). The study included self-efficacy measures, academic interests, outcome expectations, academic goals, and social support related to the students' academic achievements in the social cognitive wellbeing model. The data presented a sufficient fit to the primary social cognitive career model across gender and

homeplace (rural and urban). Despite this, self-efficacy and outcome expectations did not directly predict academic goals.

Overall, the research in cross-cultural studies provided evidence for the use of the social cognitive wellbeing model in China. Generally speaking, environmental support, self-efficacy, and goal progress act as a mediator of the relationship between personality, cultural variables and expectation outcomes. Different statistical techniques are used to analyze data in these studies (e.g., structural equation modeling [SEM], regression analysis and correlations), most of which include college students and high school students.

Consulting and Therapy

Lent (2004) points out there are two categories of psychological consulting on wellbeing: hedonic and eudaimonic. a) Hedonic consulting aims to relieve and to improve patients' life satisfaction. A typical reason for this type of consulting is where patients experience intense frustration, or negative affect (such as failure in career or study). b) Eudaimonic consulting is used to improve the patients' concerns about pursuing the meaning and purpose of life (for the desire to grow, develop, or learn).

In the new model, in addition to the previous two consultation services, relationship consulting is added as the third condition. c) Relationship consulting is concerned with the desire to establish harmonious interpersonal relations between individuals and their surroundings or in a specific group (school, company, and family, etc.) The aim of relationship consulting is to help the patients improve their satisfaction through developing or adjusting relations with others or the environment.

In terms of therapy, Lent (2004) also points out that in many conditions, hedonic and eudaimonic consulting need to be combined and both may convert to each other during different consultation stages. Developmental and preventive interventions, such as career development workshops, and psychological education programs are primarily aimed at achieving educational goals, such as improving skills to promote efficiency in certain life domains. However, most of the wellbeing models (no matter whether hedonic, eudaimonic or a social cognitive model) originate in Western culture and are rooted in this context. Since Chinese teenagers hold collectivism orientations the consulting therapy should be based on Chinese people's characteristics. In this research, hedonic, eudemonic, and relationship consulting will all be included to establish a mental health consultation in a collectivist culture and improve the wellbeing of Eastern patients/clients in a given life domain.

There are a rising number of mental health related studies of migrant workers' children. For example, a study based on a national survey on a Chinese education panel (2013 to 2014) shows that there is a raising and urgent tendency for mental health consultation needs among the children of Chinese migrant workers as they exhibit much more serious psychological problems than other teenagers (Liu et al., 2020) . Also, another study reported the increasing trend of severe mental health problems in both migrant children and left-behind children as well as the growing need for psychological support and a consulting service (China Labor Bulletin, 2021).

Moreover, counselling psychologists have long explored the relations among parental involvement (Obrien & Zamostny, 2003), students' educational development (Qin, 2008) and psychosocial wellbeing (Cripps & Zyromski, 2009). A study with a sample of 293 parent-child

pairs showed the parent-child relationship impacts the self-esteem of children during late adolescence (Roberts & Bengtson, 1993). Also, another study (Gecas & Schwalbe, 1986) found that the teenagers' identifications of self-esteem, self-efficacy and self-worth are more closely correlated with their views on their parents' involvement. The American School Counselor Association (ASCA) suggested to middle school counsellors that family life could positively impact parent-adolescent relations and teenagers' self-perceptions (American School Counselor Association, 2003). Qin (2008) did a longitudinal research study of 38 Chinese American migrant families and found that parent-child relations, communication and parental expectations influence adolescents' academic performance and psychological wellbeing. People who feel more satisfaction and enjoy their lives bring benefits for the society as a whole, because they are healthier, prosocial and productive (Helliwell et al., 2015). Since social cognitive wellbeing contains indicators on psychological wellbeing, the correlations among social cognitive indicators and parent-adolescent relations are also worth investigation in consulting psychology, and this will be the discussed and focused on during this research.

3.4.3 Chinese Perspective of Wellbeing

Since wellbeing research originated in Western culture, which emphasizes individualism, while China is a typical collectivist culture of the East, the conditions for wellbeing in individuals could be quite different.

In Chinese culture there are both reflections of wellbeing descriptions from Confucianism, Taoism, and Buddhism (the three most influential philosophical thoughts/theories in China).

According to Confucianism, instead of satisfying oneself in a particular life domain, it is more essential to be a person with a spiritual realm. It is believed that wellbeing should not be a short-lived, superficial pleasure, but the results of continuous and profound moral cultivation. Moreover, Confucianism believes that life satisfaction is not material-oriented but moral (Lu, 2007). Based on the analysis of the most famous Confucianism book, *Analects of Confucius*, the wellbeing that conforms to personal development and "desire without greed" promotes social harmony and true happiness (Wang, 2014). Differently from Confucius's view of the wellbeing of virtue, which is modelled on "Confucian wellbeing", Mencius (one of the other most excellent Confucian sages) proposed "Gentleman wellbeing" directed by Confucian gentlemen. It indicates "Heart satisfaction" led by the inner mind, and "the joy of the people's livelihood" directed by the surroundings of the individual. It runs through the confrontation and integration between moral wellbeing and utilitarian happiness. It contains not only the wellbeing ideal of the moral elite but also the pursuit of the general public, covering both internal dimensions and an external level of wellbeing (Zhang, 2012).

Compared with Confucianism, Taoism has shifted from focusing on the level of people in the social strata to pursuing the idyllic existence of people on the natural scale. Although Taoism opposes wellbeing as a product of material satisfaction, it also counters the view of Confucianism, which regards wellbeing as a process of continually self-cultivating to achieve a state of moral perfection. But Taoism advocates that wellbeing is the liberation of the individual from all human desires, through inaction, smoothly, naturally, accepting destiny calmly, finally facing life with a peaceful heart and realm. In this way, the ultimate happiness of integration with the universe can be achieved: it is called "Heaven and Man". For Taoism, wellbeing is not a kind of enjoyment, but the epiphany and transcendence of mind. Laozi thinks that all the goods are complicated, and the things you get are not as good as your own body and mind (Gao et al., 2010).

Buddhism originated from India, and it has been passed down in China since the Tang Dynasty. After entering China, Buddhism also incorporates many Chinese philosophies, cultures, and traditions. Buddhism believes that life has no absolute eternal happiness, all living beings' life is suffering, and only when it reaches "Nirvana" can it be genuinely detached. Physical and mental practice, contemplating meditation, giving and eliminating all desires can help the soul of individuals enter the realm of Nirvana and achieve happiness or wellbeing. In general, the wellbeing of Buddhism is one being clear-minded, pursuing the original self, and harmony with society (Lu, 2007).

All in all, based on Chinese philosophies, the Chinese view of wellbeing emphasizes people's roles and obligations in society (e.g., achieving accomplishment through doing good things or being good morally, benefiting others). Moreover, instead of personality, Chinese people place much value on harmonious relations in society and view wellbeing as seeking a balance between an individual's inner world and social relationships (Lu, 2007). According to Gao et al. (2010), the Chinese view of wellbeing starts from a social-oriented self while in Western culture it starts from an individual-oriented person (see Table 7):

Table 7. Two Dimensions of Wellbeing Orientations and Their Characteristics

	Social-oriented	**Individual-oriented**
Context	Eastern culture	Western culture
	Differential pattern	Group pattern
Principle	Adhere to social rules and norms	Personal feelings and attitudes are guides to behavior.
	Behavior stems from the suitability of others' responses or reactions;	Accept and value personal preferences and expression.
	Suppress and control individual desires and feelings.	
Feature	Social obligations	Personal accountability
	Dialectical equilibrium	Direct pursuit
Value	Collectivism: Stressing group welfare, no hesitation in sacrificing personal interests.	Individualism: Emphasizing independent existence. Priority pursuit for personal goals in a group.
	Require individuals to play well in their roles and complete social responsibility.	Pay attention to the inherent qualities of individuals' self-realization.

Note: Table 7 is based on the work by Lu (2007) and Gao et. al (2010)

According to Lu (2007), on the one hand, Western culture rewards democracy, equality, and respect for individual rights. Therefore, great opportunities and freedom exist in law for the pursuit of fortunes and personal accomplishment, regarding wellbeing as a supremely good value. On the other hand, the individual has not only rights but also obligations for their wellbeing (self-responsibility). Therefore, it has characteristics of personal accountability and direct pursuit. It emphasizes independent existence and the priority pursuit of an individual's own goals in a group. Personal feelings and attitudes are guides to behavior (Yang & Lu, 2005).

An Eastern culture has "differential pattern" (Fei, 1968), take China as an example, wellbeing has two features, social obligations and dialectical equilibrium shown in Table 7. First, a "social obligation" means Chinese people behave according to social rules and norms and the suitability of others' responses. On some occasions it is essential to suppress and control individual wishes and feelings in a group. According to Yang & Lu (2005) the influence of emotions and affections on wellbeing for Chinese people is not as significant as that in

Western cultures (Yang & Lu, 2005). Moreover, the social-oriented-self stresses group welfare and encourages individuals not to hesitate to sacrifice personal interests. Also, it requires individuals to play well in their roles and exercise complete social responsibility (Kitayama & Markus, 2000). Secondly, "dialectical equilibrium" emphasizes that in the social-oriented-self dimension, wellbeing is a kind of harmonious relation between individuals and the environment. It is also a dynamic process of achieving and maintaining a balance between the individuals' inner world and the surroundings (Lu, 2007).

In principle, it is found that wellbeing in China is very different from that in Western cultures. Western culture regards short-lived affection and emotions (e.g., passion and excitement) as essential elements for wellbeing, while in the Chinese culture, it is not that important, and peace seems to be the keynote. Also, instead of only focusing on personal feelings and the purpose of a good life, it seems more likely that Chinese people's view on wellbeing prefers to combine individuals' inner world with surrounding and family obligations (Zhong & Arnett, 2014).

3.4.4 Research of Wellbeing and Intimate Relations

There are abundant research studies in this field related to intimate relations and wellbeing, for example, one research study (Nahkur et al., 2017) uses a four-level structure (individual, dyadic, community, and social level) to measure relations of interpersonal destructiveness and adolescents' wellbeing. According to previous literature on adolescent's wellbeing (Armsden & Greenberg, 1987; Amato, 1994; Brown, 2004), parents' care and family relationships are essential factors that influence adolescents' wellbeing. Also, it has been proved that the role of an intimate environment is vital for migrant workers' children to define social behavior (Chen et al., 2009).

A research study by Li et al. (2012) discussed subjective wellbeing and interpersonal relations in Shenzhen. They found that family and school relations have been proved positively related to adolescents' satisfaction (Li et al., 2012). Moreover, research has found children in both biological-parent families have higher satisfaction than other types of family structures (Langton & Berger, 2011). Also, some other researchers pointed out the importance of the father's involvement. For example, Wilson & Prior (2011) noted that the higher the father's higher engagement, the higher the wellbeing of the adolescents.

Attachment Theory

Attachment is about a sense of security among certain intimate relations (Schneider et al., 2001). Research in family and children psychology studies have depicted the absence of parents and caregivers in the case of psychopathology, especially in the context of attachment theory (Kobak & Madsen, 2008; Zhao et al., 2017).

In current attachment-related relationship research, there are several indicators for adolescents' attachment. According to Schneider et al. (2001), the following variables can affect adolescents' attachment, including aggression, social withdrawal, and popularity, while Armsden & Greenberg (1987) describe adolescents' parental and peer attachment in three dimensions, which include trust, communication and alienation. Moreover, closeness and conflict are related to the student-teacher attachment (Pianta, 2001), according to Pianta (2001). In this section, the attachment theories of Armsden & Greenberg (1987) and Pianta (2001) will be included to analyze left-behind VET students' wellbeing.

Attachment theory has been used to study three relationships (child-parents, student-teacher, and peer relations) as well as their interrelationships (Gregoriadis & Tsigilis, 2008) with wellbeing in many of the previous studies (Yu et al., 2019; Gregoriadis & Tsigilis, 2008; Koomen et al., 2012; Çelik, 2019; Hertzig & Farber, 2013; Schneider et al., 2001). In addition, there are some attachment research studies connected with school (Yu et al., 2019; Gregoriadis & Tsigilis, 2008; Koomen et al., 2012) and family relationships (Çelik, 2019; Hertzig & Farber, 2013; Schneider et al., 2001) among adolescents, including migrant youngsters (Wong et al., 2009) and left-behind children (Ding et al., 2019). There are still limited studies that delineate the three relations and their interrelations with wellbeing. Moreover, even where there is some hypothesis about "good things come together" (Hertzig & Farber, 2013), there is still a lack of evidence.

It has been noted the status of the parent-child attachment was significantly associated with psychological wellbeing. Teenagers rated as securely attached were better in behavior. Research has also shown that teenagers defined by anxious parent-child attachment were more susceptible to the harmful consequences of cynical life-changes on wellbeing (Armsden & Greenberg, 1987). Moreover, a research study by Parkes & Stevenson-Hinde (1982) showed that a stronger parent-child attachment related to a weaker level of parent-rated offense, lower levels of social pressure, and higher levels of self-esteem. Also, it highlighted the significance of parent-child attachment on children's behavior and emotions, especially in boys.

The Quality of Family Relations

The quality of family relations is an emerging concept to help understand and improve the relations, wellbeing, and quality of family life (Boelsma et al., 2017). According to a research study by Sheeber et al. (1997), the quality of family relations depends on family conflicts and support. Moreover, Lu et al. (2018) notes that positive family relations promote adolescents' wellbeing while negative family relations decrease their wellbeing (Lu et al., 2019).

Many of the previous studies find that left-behind adolescents' wellbeing relates to their attachment with their parents (Parkes & Stevenson-Hinde, 1982), caregivers (Armsden & Greenberg, 1987) and other family members (Nahkur et al., 2017). In this research, the quality of family relations for migrant workers' children will be included and tested through parent-child relations, caregiver-child relations (based on attachment theory), caregiver-child communication frequency, parental rules, and parent-child coactivities (based on the characteristics of migrant workers' children).

Cultural Factors Based on Self-construal Theory

Wellbeing research in the field of psychology are rooted in Western culture (Christopher, 1999). Therefore, in terms of cultural effectiveness, Christopher (1999) criticized both two supporters of SWB and PWB. In the opinion of other researchers, the SWLS (Diener et al., 1985) forms "life satisfaction factors in general" and PANAS (Watson, 2002) contains positive and negative effects across different cultures (Lent, 2004). Furthermore, Lent (2004) argued that under SWLS, two predictors – social norms and affective variables – functioned equally in life satisfaction within the collectivist samples (samples in collectivist culture or society). Although cultural differences may profoundly influence people's life satisfaction (Diener et al., 2002), some cross-cultural similarities are also worth noting (Diener et al., 2003). Under the

consideration of within-culture diversity, *"pancultural and culture-specific predictors of wellbeing"* should also be included (Lent, 2004, p. 488).

Thus, cultural factors are also an essential part of the social ecology framework, and self-construal (Hardin et al., 2004) is one of the most popular concepts for cross-cultural studies (Ezeofor & Lent, 2014). Self-construal can be categorized into two parts, interdependence and independence, and is widely applied in cross-cultural studies between collectivism culture and individualism culture (Markus & Kitayama, 1991; Sheu et al., 2014). As mentioned in the above descriptions, Markus & Kitayama (1991) identified independent self-construal in people who value individualism and uniqueness. In most Western countries, including the United States, Great Britain, Germany, and other European countries, individuals show independent self-construal. According to the previous study, unlike independent self-construal, which emphasizes personal space and individualism, individuals with interdependent self-construal attain collective spirits and mutual relations among a group of people (Markus & Kitayama, 1991). Moreover, individuals use interdependent self-construal in most Eastern counties, such as China, Japan, Korea, Indonesia, and most of the south-eastern Asian countries (Hitokoto & Uchida, 2015).

Furthermore, according to Sheu et al. (2014), interdependent self-construal is closely correlated happiness with support from the surroundings, while independent self-construal reacts more with personal judgment (Sheu et al., 2016).

3.4.5 Comments and Limitations of Previous Wellbeing Studies

The extant wellbeing studies can be classified into several categories based on different dimensions of wellbeing. According to Lent (2004), there are three main wellbeing dimensions, which include Temporal, Contextual, and Cultural (shown in Table 8).

Table 8. Dimensions of Wellbeing

Temporal Dimension	Contextual Dimension	Cultural Dimension
Global lifelong wellbeing	Context free	Universalist Vs Cultural-specific
Intermediate term wellbeing (e.g., last week, today, yesterday)	Domain-specific (e.g., school, career and home life)	Individualism Vs Collectivism
Immediate "on-line" wellbeing	Role-specific (e.g., student, worker and family member)	Individualism Vs Collectivism

Firstly, from temporal dimensions, there is global lifelong wellbeing which is context free. This is followed by intermediate term wellbeing which lasts for a certain period (school, career or home life) as well as immediate "on-line" wellbeing for a current role of an individual (student, worker or family members).

Then, the cultural dimensions for wellbeing mainly include universalist, individualism and collectivism (Lent, 2004). Western culture is defined as individualism, while Eastern culture as collectivism (Lent, 2004; Sheu et. al., 2014).

Western culture emphasizes individualism and the view of wellbeing in Western culture is more like a personal oriented inner interaction, while in Eastern culture, an individual's wellbeing may very likely be influenced by their surroundings and relations in a particular group.

The definition of wellbeing in the social psychological literature stems from Western culture. In the previous research (Christopher, 1999), most studies focus on an individual's feelings (SWB), purpose (PWB), or both (SCWB). Even though SCWB mentions environmental support, while it seems very general. It may work well in Western culture. But in an Eastern culture like China, a typical collectivist society, people's wellbeing is very much connected to the relations in certain groups (Lent, 2004). Therefore, none of the current research models (SWB, PWB, and SCWB) can correctly explain the wellbeing condition in a collectivist culture due to a lack of detailed information on their group relations and surroundings.

Most of the existing wellbeing literature on migrant workers' children focus on preschool children or children in their early childhood (Celeste & Puritz, 2002; Chen et al., 2017; Chai et al., 2019). Related studies for adolescents still need more supplements, which is in contrast to the reality that mental health disorders and psychological problems are pervasive in adolescence (Aneshensel & Sucoff, 1996). Moreover, there are limited wellbeing research studies concerned with migrant youngster classification (migrants with both parents, migrant only with mother and migrant only with father) and comparison among them. So, this study will compare the differences among those adolescents: a. left behind by both parents, grandparents, or other caregivers as primary caregivers; b. only the father migrates (left behind by father); c. only mother migrates (left behind by mother); d. migrates with both parents; e. migrant with only one parent; f. non-migrant family in rural areas; g. non-migrant family in urban areas. For instance, teenagers migrate with mother vs left-behind youth living with mother only in rural areas; migrate with both parents vs non-migrant family in rural areas.

Previous wellbeing literature and its limitations, offers several directions for this research study. Firstly, relations and surrounding factors should be added to the current wellbeing models when research participants are from an Eastern culture. Secondly, previous findings require additional verification with data from other domains of students' life (such as social, family, and financial (Sheu et al., 2014). In comparison with other relations, family relations could be essential to the wellbeing of the migrant workers' children. In contrast, systematic family-related wellbeing research of migrant workers' children still lack evidence. Thirdly, it is essential to extend study to more diverse participants in different ages and life contexts (such as adolescents in high school, employees, retired workers (Lent et al., 2005). Fourthly, it would be useful to tell insightful stories of those factors that carry in-depth knowledge of family relations and wellbeing. Furthermore, mixed methods which combine both qualitative and quantitative study are also essential to expand current studies (Işık et al., 2018). Fifthly, although quite a few research studies on self-construal are found in the previous wellbeing literature, fewer research studies concern Chinese migrant workers' children or VET school students.

Moreover, even though there is normally a consultancy center providing certain consulting services to students in VET schools in China, especially urban areas, there are limited VET schools concerned with mental health consultation for migrant youngsters. In some rural areas, the local governments have set up centers for left-behind children to provide a consulting service for them, however, they are normally not professional and lack scientific consulting tools and mostly concentrate on the left-behind children in their early childhood instead of adolescents.

3.4.6 Modified Social Cognitive Wellbeing Model Based on Chinese VET School Students Characteristics

A new model has been made based on previous wellbeing studies (primarily the normative wellbeing model: SCWB) and the characteristics of migrant workers' children in VET schools.

Figure 19. Collectivism Social Cognitive Model of Wellbeing for Chinese Migrant Workers' Children

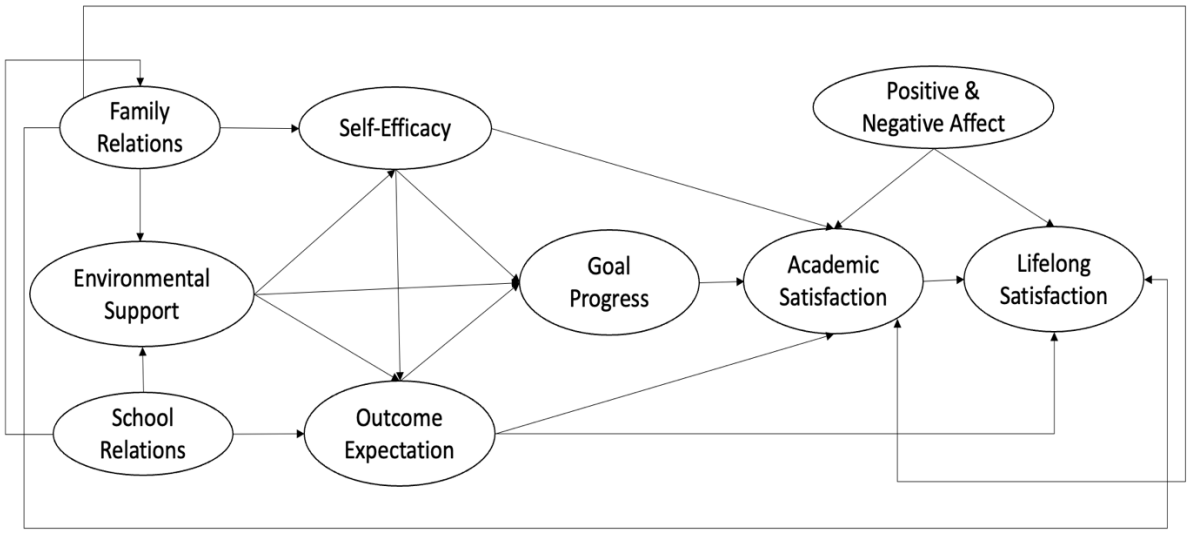
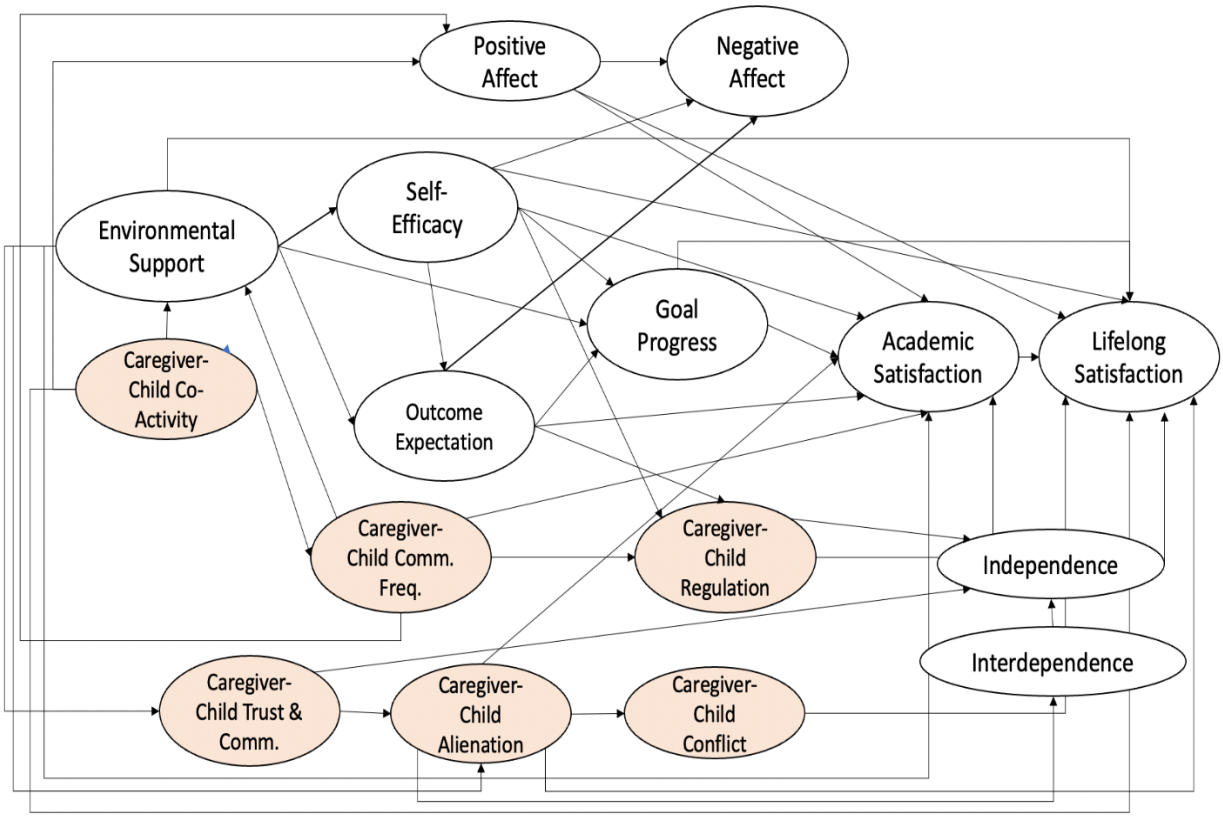


Figure 19 based on the previous studies (Schaufeli, 1996; Lent, 2004; Lent & Brown, 2006; Hu & Schaufeli, 2009; Sheu et al., 2017) describes a Collectivism social cognitive model of wellbeing (Schaufeli, 1996). In an Eastern cultural context, people place much value on harmonious relations in society and view wellbeing as seeking a balance between an individual's inner world (Hu & Schaufeli, 2009) and social relationships (Lu, 2007). The environmental support indicator in the previous social cognitive wellbeing model is very general; therefore, the new model includes family relationships and school relationships (e.g., peer relations and teacher-student relations), which are based on Eastern cultural characteristics. Also, the previous trial model testing stage also included the participants' view of social relations in the cultural dimension: the self-construal factors (interdependence and independence). However, it does not have statistical significance and made the model more complicated, thus this study deleted self-construal factors.

The migrant workers' children in VET schools could be left-behind adolescents and migrant youngsters. Therefore, family relations, especially the caregiver-child relation, is one of the most important elements that impacts the wellbeing of migrant workers' children. The school relations aspect will be simplified into the environmental support scale in this research.

Figure 20. Family-Related Social Cognitive Model of Wellbeing Considering for Chinese Migrant Workers' Children



Note: Comm.= communication, Freq.= Frequency; Caregiver-child attachment includes two parts: Caregiver-child Trust & Communication and Caregiver-child Alienation. The variables with painted color were collectivism variables of family-related variables that were newly added in the previous SCWB model.

Family is the first place for adolescents' development and the family environment could be very different due to their parents' migration. Therefore, based on the characteristics of the target group, much importance is attached to family relations (especially, caregiver-child relations). Moreover, according to family relations, intimate relationships and attachment theory literature the following indicators have been added into the social cognitive wellbeing model for Chinese migrant workers children in VET schools: caregiver-child attachment, caregiver-child coactivities, caregiver-child communication, caregiver-child regulation as well as caregiver-child conflicts. The assumptions of interrelationship structure are shown in Figure 20.

Caregiver-child attachment

Attachment is usually defined as a lasting emotional bond with persisting strength. It includes three parts: trust, communication and alienation. The basic matter of attachment theory is the influence of optimal and non-optimal social attachment on psychological adaptation. For a long time, the relationship between a family's relationships and a person's character and wellbeing has been the interest of developmental psychologists. Parent-child attachments have been found to be significantly related to mental health (Armsden & Greenberg, 1987). The caregivers of the children of migrant workers could be parents or others, so the parent-child attachment is replaced by the caregiver-child attachment.

Caregiver-child coactivities

In comparison to others the children from migrant workers' families might suffer from the absence of parental care. In the case of the left-behind children, their parents left them with other caregivers (normally old grandparents); for migrant youngsters, their parents are busy with their work and struggling to survive in the migrant city with limited time to get together with their children (Central Government of the People's Republic of China, 2019). Therefore, both of these groups lack in caregiver-child coactivity. Here, the aim of the research is to compare the caregiver-child coactivity indicator between migrant workers' children with the non-migrant family.

Caregiver-child communication frequency

Communication frequency and quality between parent(s)/caregiver(s) and child is related in some way to adolescents' mental health, especially for migrant workers' children (Xu et al., 2019). In later childhood, children normally receive more support and communication, especially from their mothers, while in adolescents it seems parents tend to reduce mental control and increase tolerance. Family communication and support have also decreased. It may reflect parental response to children's requests for greater independence and impacts their wellbeing (Tur et al., 2015).

Caregiver-child regulation

It is identified that parental/caregiver(s) regulation rules can predict children's academic achievement. Moreover, parental/caregiver(s) regulation mediates the negative association between parental absence and children's school performance. It was also found that lower levels of parental regulation, parent-child communication, and parent-child coactivities were correlated with higher depression (Xu et al., 2019).

Caregiver-child conflicts

It is reported that conflicts between parents and adolescents are highly correlated with school misconduct, antisocial and at-risk behavior. Conflicts within migration families could be caused by the generation gap and changeable living environment (Lee et al., 2000). These family conflicts are identified as a form of adaptive pressure in a specific period (Sluzki, 1979) and other areas that adjust to different stress, for instance, physical, economic, and social.

Lent (2004) noted that the variables that influence an individual's wellbeing could mainly be divided into three categories. This new model is also based on these three characters.

a) The first category relates to biological variables, such as personality, affection, and emotion; these variables are commonly considered to be genetic factors based on biological mechanisms (Diener, 1996), which may be useful predictors that influence SWB (Lent, 2004). Some other psychologists argued that cognitive and motivational factors might mediate between biological variables and wellbeing (Lyubomirsky, 2001). Although personality traits and affective dispositions are somehow determined by genetic traits, they are less stable over longer time intervals (Veenhoven, 2005). Positive affection is reported as a component of SWB and shares the family environment's estimate with it, which suggests it is also a factor relating to experiential variables, such as family and social surroundings (Tellegen & Waller, 2008). Moreover, situation factors may also impact short-term emotions or enjoyment of life (Bandura, 1986). Thus, biological variables may be measured, intervened in, or even adjusted

through related mediate variables. In the new model, personal traits and affection dispositions have been removed and a modified social cognitive model is created to study migrant workers' children's wellbeing in VET schools in China.

b) The second category relates to social, cognitive, and behavior variables. When compared with innate traits and qualities, these variables are more likely to be modifiable constructs that are amenable to self-control. On the one hand, social, cognitive, and behavior variables are more flexible and may be intervened in for the promotion of wellbeing. On the other hand, they also have close interactions with biological variables; they potentially mediate and moderate the relations between the latter and wellbeing (Lent, 2004). Three types of cognition have been studied in a number of empirical studies: i) self-efficacy, which originated from personal control beliefs; ii) outcome expectations, about people's beliefs of future life (Lawrence et al., 2002); iii) goal progress, which refers to people's determination of attaining a certain level of performance or outcome (Bandura, 1986; Lent, 2004). Lent (2004) notes that personal beliefs may partly mediate the relations between goal progress and outcome expectations. According to Ryan and Deci (2001), people's goals or values are an essential factor that impacts SWB. Moreover, they also argue that compared to internal goals, people with external or material-oriented goals have lower satisfaction. Additionally, they feel the confidence of achieving valued goals is helpful to promote wellbeing (Ryan & Deci, 2001).

c) The third category of wellbeing-related variables is behavior and social variables, which emphasize the belief that people achieve some goals through involving themselves in some activities that contribute to personal wellbeing (Ryan & Deci, 2001). This behavioral involvement helps people make progress in their goals (e.g., self-set, culturally valued) and brings satisfaction by bringing people into mutual social contacts (Sanderson & Cantor, 1999). Environmental support (DeNeve, 1999) and relational resources (Heppner & Lee, 2002) have been mentioned as relating to wellbeing enhancement in many research studies (Lent, 2004). There is some evidence in previous studies that there are several benefits of social support, including material/economic support, companionship, and emotional help (Argyle, 2003). In the modified model, environmental and social support have been specified into three dimensions (based on the collectivism culture): i. Family relations, which mainly include the quality of parent-child relationships and support from family. ii. School relations such as teacher-student relations and support, peer relations. iii. Social support, which is a variable from a society perspective. It includes economic elements, social statue, financial support, and social identity. In this research, family relationships and social cognitive wellbeing will be studied in-depth first.

3.4.7 Measures of Wellbeing and Intimate Relationships

In this section measures and scales will be introduced, which are needed in future study by the researcher. Moreover, an example will be given for each scale. The result of the scale will be summed together and divided by the total number of items in each group. Generally, a high score implies positive cognition (Lent & Brown, 2006).

Life satisfaction

Diener et al. (1985) produced a subjective wellbeing scale (SWB), which is a 5-item satisfaction scale. It is also called satisfaction with life scale (SWLS). It was adopted to assess VET student's life satisfaction. One example of the questions used in this study was *"I'm satisfied with my life"* followed by a response from 1 (strongly disagree) to 5 (strongly agree). Higher marks

indicated participants received higher satisfaction. The SWB is generally proved to have suitable validity and reliability (Lent et al., 2005; Pavot & Diener, 2008; Sheu et al., 2014), e.g., in a Turkish study Cronbach's alpha = .805.

Academic satisfaction

Academic satisfaction will be assessed by a 7-item academic satisfaction scale (Lent et al., 2005); for example, *"Generally, I am satisfied with my academic life"*. The responses are rated from 1 (strongly disagree) to 5 (strongly agree), the higher the marks the higher the academic satisfaction of the VET students will be. The reliability estimates of .86 to .92 and the scores were correlated with other variables in the domain wellbeing model as well as lifelong satisfaction according to prior studies (Lent et al., 2005; Sheu et al., 2014; Işık et al., 2018).

Academic self-efficacy

Two sub-scales (Lent et al., 2005) will be used to measure the VET students' self-efficacy. The first scale is the 5-item learning milestone self-efficacy scale. It is used to assess the confidence of students' self-regulation abilities on whether she/he can insist on self-improvement even without supervision. One example of a question used is *"how confident will you be on enrolling yourself in your study in the next school year"* (Lent et al., 2005). It is rated from 1 (no confidence at all) to 5 (complete confidence). The other scale is a 7-item coping self-efficacy, which measures how confident VET students are with their competence when they are coping with difficulties or obstacles. One example of a question is as follows *"how confident you are to complete your study even under financial pressure"*. Responses are rated from 1 (no confidence at all) to 5 (complete confidence). The internal consistency values of the previous studies Cronbach's α are between .81 to .91 (Lent et al., 2005; Sheu et al., 2014; Işık et al., 2018), which shows the right consistency of this scale.

Academic goal progress

The academic goal progress is assessed by Lent et al.'s (2005) 7-item goal progress scale e.g., modified into four items according to the consequences of Chinese migrant workers' children in VET school (how much progress are you making on completing all tasks in every course). It is rated from 1 (no progress at all) to 5 (excellent progress). More 5-point answers reflect more considerable progress has been made in the VET student's academic life. The scale's coefficient alpha values were both .87 (Sheu et al., 2016) in samples with Chinese students and Turkish students (Işık et al., 2018).

Academic outcome expectations

A 10-item academic outcome expectation scale will be adopted in further study to assess the outcome expectations of the VET students. One of the samples from the above items is *"to graduate from a vocational school might help me find a good job"* on a 5-point scale rates from 1 (strongly disagree) to 5 (strongly agree). Higher scores show the students have favorable academic outcome expectations. Sheu et al. (2017) reported the Cronbach's alpha coefficient in a survey among college students in south-central China was .94. Moreover, it was .91 in a sample of college students in Italy (Lent et al., 2011a).

Environmental support

This refers to support or resources from teachers, school, and classmates. According to Lent & Brown (2006), favorable environmental support can promote progress towards one's goal

and improve one's satisfaction (Lent & Brown, 2006), for example, when students receive strong support from teachers/school/classmates/parents. It helps individuals achieve their target more efficiently and feel happier than without such support. Vice versa, environmental barriers may prevent one from obtaining goals and reduce satisfaction. When students confront significant obstacles from teachers or school, they may become unhappy. There are different explanations about environmental support. For example, Duffy & Lent (2009) use work conditions instead of environmental support in a modified SCCT wellbeing model. In this study, work conditions were measured by the two dimensions of personal environment and perceived organizational support. Moreover, the intimate environment dimension includes person/occupation fit and needs/supplies fit. In this research the researcher adopts a standard explanation. Several research studies have identified that environmental support/barriers affect students' wellbeing (Lent et al., 2017; Işık et al., 2018).

Positive and negative affect

This is a revised version of the Positive and Negative Affect scale (Watson et al., 1988). It contains two sections: five questions about positive affect (e.g., enthusiastic, proud and excited) and seven questions about negative affect (e.g., lonely, irritable and nervous). The answers are scored from 1 (never) to 5 (always), and records how often the participants have positive and negative feelings in general. The Chinese version of Positive and Negative Affect scale in this study expressed adequate internal consistency and yielded a Cronbach's alpha of 0.797.

Caregiver-child attachment

Before filling this scale, a question with options of caregivers must be given (A. both parents B. only father C. only mother D. Grandparents E. Others__). Based on the attachment theory Armsden & Greenberg (1987) designed the Inventory of Parental Attachment scale (IPAS) to study parent-child relations. Here, IPAS was used to scale the relations between migrant workers' children and their caregivers. The IPAS has three dimensions (Trust, Communication, and Alienation), including both positive and negative aspects. The Trust scale contains 10 items (e.g., my parents/caregivers trust my judgment.); the Communication scale also includes 10 items (e.g., my parents/caregivers encourage me to talk about my difficulties). There are eight items in the Alienation scale (e.g., I get upset a lot more than my parents know). In this research the scales are simplified and the trust and communication scale are placed together; therefore, there are two main parts to this scale: Trust & communication scale (nine items included) and Alienation scale (eight items included). The keys range from 1 (never) to 5 (always) points. In the research the alpha coefficient = .91 for Trust scale, Communication scale alpha = .91, and Alienation scale alpha = .86 (Armsden & Greenberg, 1987).

Caregiver-child communication frequency

This is a 5-item scale; the original scale with five questions related to the mother and five to the father, while here they are combined together as five questions for caregivers. It will be used to test the frequency of parent-child communications. It includes five conditions: school, friends, feelings, teachers, and worries and is answered by a three-point key (A. never; B. sometimes; C. Often). The alpha coefficient = .87 (Xu et al., 2018).

Caregiver-child coactivities

There are five items used to test the coactivities frequency of parent-child, including having dinner, travelling, shopping, watching TV/movie/shows, and doing sports. The options run from 1 for never to 5 for more than once a week. The higher marks given by the students indicate a higher frequency of parent-child coactivities. The alpha coefficient = .73 in the research of Xu et al. (2018) while in this study the item "how often do your parents watch TV with you?" has been combined with "how often do your parents watch film/show with you?" and "how often do parents go shopping with you?" has been added.

Caregiver-child regulation/house rules

An 8-item scale (Xu et al., 2018) will be included in this part, which contains factors from the following three perspectives of socialization (e.g., *"Do your caregiver(s) have strict rules on making friends"),* academic performance, and screen time are marked from "not at all" to "great deal". The result of this scale in one research study shows the alpha coefficient = .77 (Xu et al., 2018).

Caregiver-child conflicts

This is a modified scale with four items, which is used to assess four areas of conflict including decision-making, social life, academic expectations from parents, and caregivers making children-related comparisons (e.g., *"Your caregiver(s) always compares you to others, but you want them to accept you for being yourself").* These conflicts that happen between an individual and his or her caregiver(s) use a 5-point ranking system (1 = never to 5 = always). The alpha coefficient = .89 in one previous study (Lee et al., 2000).

Independence and interdependence(self-construal)

The self-construal scale will be adopted to assess independence and interdependence (SCS; Singelis, 1994; Hardin et al., 2004). The SCS scale includes 30 items in which there is a 15-item scale for measuring independence and the other 15-item scale measures interdependence. Higher scores in each dimension indicate that one is more separated and unique in comparison others or cooperative and collective among a group of people. For example, *"I feel comfortable even without other positive comments or rewards"* (independent); *"I need to ask my parents for advice when I make academic/educational decisions"* (interdependent, question numbers 2, 5, 6, 8, 9, 10 and 11). Each item in the SCS scale is rated from 1 (strongly disagree) to 5 (strongly agree). In the samples from Tai Wan (Cheng et al., 2011) and American Asian students (Miller et al., 2011), the related estimation of the reliability competed well within both independence and interdependence scores. Previous research reported the internal consistency estimates were .71 and .77 for independence and interdependence scale (Sheu et al., 2014).

In addition to SEC and self-construal, other factors that may affect the wellbeing of children of migrant workers in VET schools will be found through an unstructured interview. Only one question will be asked, *"What social factors do you think influence your wellbeing? /What makes you happy on a social level?"* Whatever related responses given are encouraged, and all will be recorded.

Demographic covariates

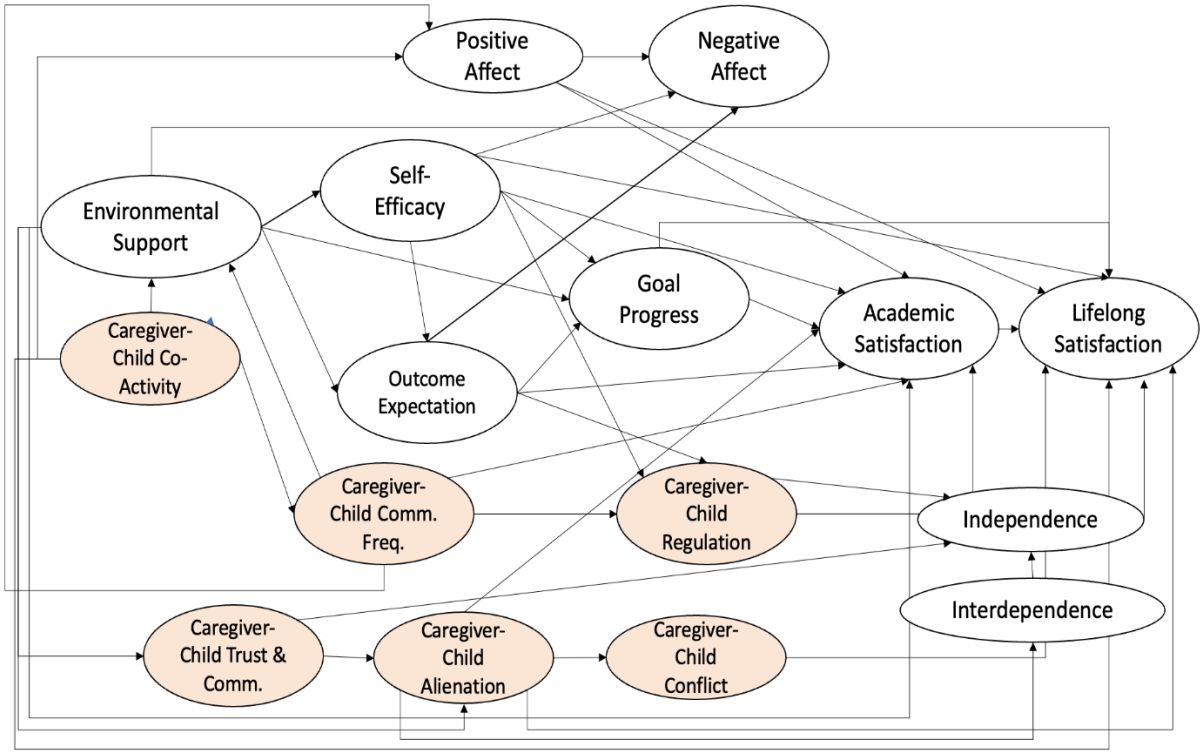
The identity of the participants will be indicated through four questions *"Who do you live with now / at 5/ at 10",* and students choose from following five answers A. Parents; B. Only Father; C. Only Mother; D. Grandparents and E. Other, and also household registration type will be coded as "0 (rural)" and "1 (urban)". In terms of family economic conditions, three questions based on the Family Affluence Scale (Currie et al., 2008) will be used to estimate the students' family economic statue (SEC), for example *"does your family own a car?"* The answer keys will be recoded as "No", "Yes, one", "Yes, two or more". In addition, the number of siblings as well as rank among the siblings are also included in the questionnaire: *"How many children in your family?"* answered by "one", "two", "three" and "more than three", and the rank of them is opened for a response. Moreover, information about each parent or their caregivers' age, education, and time of migration will be achieved through single questions, for example *"what is your parents' education"* with options from A. Primary school or below to D. college/university or above.

3.5 Research Questions

Based on the current situation and problems of the psychological status of migrant workers' children, mental health consultation is an urgent need for migrant workers' children. During the consulting process, the quality of the parent/caregiver-child relations that impact Chinese children's mental health need to be taken into consideration. Therefore, the modified family-related social cognitive wellbeing model was created (details shown in Figure 21).

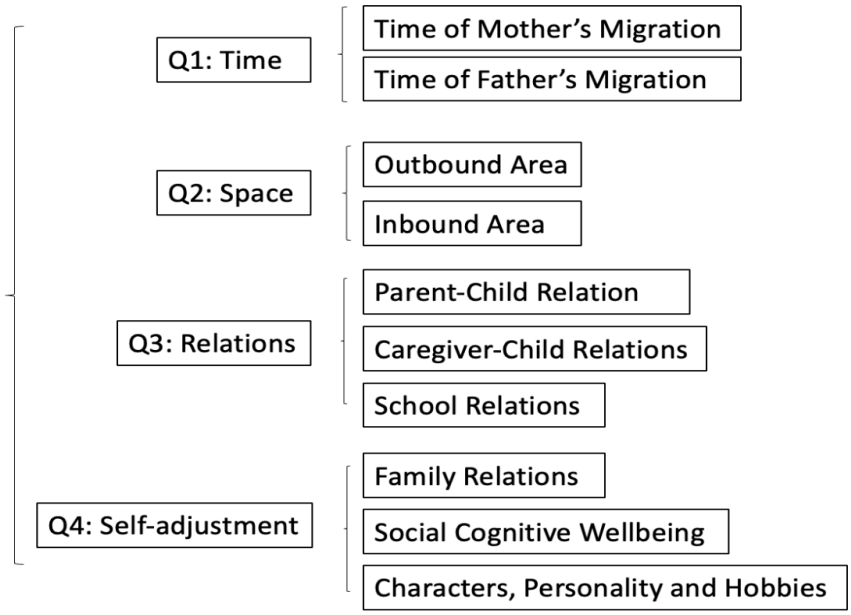
The first question is about the parents' migration time and the wellbeing of left-behind youngsters and the migration time of migrant youngsters as well as their mental health (time). The second research question explores the differences among the wellbeing of left-behind children, youngsters from non-migrant families in the outbound (mostly rural) areas and migrant youngsters, non-migrants in the inbound (mostly urban) areas (space). The third question is focused on the interrelations among family relationship indicators and social cognitive factors (relation). The fourth research question discusses how to improve SCWB through self-adjustment, the interrelationship of social cognitive variables and family relation variables were studied through structural equation modeling. Specifically, to figure out how family relations mediate social cognitive factors and whether people can improve wellbeing not only through adjusting their cognition factors but also through improving family relations (self-adjustment).

Figure 21. Family-related Social Cognitive Model of Wellbeing Considering Chinese Migrant Workers' Children



In terms of the structure for the research questions, this study is based on life course theory and the framework of the four research questions is shown in Figure 22:

Figure 22. Framework of Research Questions Based on Life Course Theory



Note: SCWB refers to social cognitive wellbeing

3.5.1 Time Dimension: Migration Duration of Parents and Wellbeing of Migrant Workers' Children

Huang et al. (2018) explored the influence of parents' migration period on the wellbeing of children from the parents' perspective. The length of time of the father's and mother's migration could be influential to the wellbeing of migrant workers' children.

How does the time span of parents' migration influence the wellbeing of migrant workers' children?

Sub-research question 1: How does the time span of parents' migration influence left-behind youngsters' satisfaction and other social cognitive factors?

Sub-research question 2: How does the time span of migration influence migrant youngsters' satisfaction and other social cognitive factors?

In this study the factors that influence both types of migrant workers' children: left-behind youngsters and migrant youngsters, were included in the following four dimensions based on life course theory (the framework of the three research questions). There are various views from the perspective of time management and migration. It is demonstrated that adolescents at the time of rebellion engage in high-risk behaviors, such as smoking, wine drinking, and conflict with teachers as well as peers (Wen & Lin, 2012). It is also found that parents' absence is particularly disruptive for children within their development ages (e.g., infants and preschool children) (Lu et al., 2016). Huang et al. (2018) outlined that there are different influences and outcomes caused by parents' migration in each distinct phase. But limited evidence shows whether the exact time (how long migrant parents left their children behind in rural areas or the time duration the migrating youngsters spend together with their parents in the host cities) impacts the wellbeing of migrant workers' children. Therefore, in this research, the influence of the time period of the migration or separation with parents will be investigated. In this research question, original logistic regression is used to solve these questions.

Hypothesis 1: The longer the fathers' migration the lower the adolescents' wellbeing and it has negative impacts on social cognitive factors. Caregiver-child communication frequency mediates parents' time of migration and left-behind children's wellbeing.

Hypothesis 2: The longer the mothers' migration the lower the adolescents' wellbeing and it impacts both academic satisfaction and life satisfaction, also other social cognitive factors (self-efficacy, outcome expectations, goal progress).

Hypothesis 3: The communication frequency mediates the relationship between the time of parents' migration and following social cognitive factors: self-efficacy, academic satisfaction and life satisfaction.

3.5.2 Space Dimension: Wellbeing of Students from Migrant and Non-migrant Families in Both Outbound and Inbound Areas.

What is difference between left-behind youngsters in outbound (mostly rural) areas and migrant youngsters in inbound (mostly urban) areas in social cognitive wellbeing?

Sub-research question 1: What is difference between teenagers in outbound (mostly rural) areas and youth in inbound (mostly urban) areas in their social cognitive wellbeing?

Sub-research question 2: What is difference between teenagers in rural areas and youth in urban areas in their social cognitive wellbeing?

Sub-research question 3: What is difference between teenagers with a rural household registration type and others with an urban household registration type in their social cognitive wellbeing?

In the previous literature, migrant youngsters are soon troubled with an "identification crisis" (Moskal, 2014) because they need to adopt a new school, dialect, and customs. However, for most rural migrant youngsters, a new life in urban areas is a big challenge and an excellent opportunity for social and other skills acquisition (Chen, 2014).

There are research studies which try to find out the family-related factors which influence the wellbeing of migrant workers' children, when comparing the mental health condition of migrant children with left-behind children. For instance, Hilderbrandt & McKenzie (2005) find out receiving remittances can possibly moderate the life satisfaction of left-behind children through releasing family financial stress. While, Lu et al. (2019) notice that instead of remittances, frequent contact between parents and children is more essential to improve the wellbeing of both migrant youngsters and left-behind children. Moreover, based on life course theory, Huang et al. (2018) stated the "four-principle" structure (a. family arrangements: who migrants, b. time of migration, c. house/living conditions, d. gender heterogeneity) was important. However, instead of perspectives from migrant workers' children they conduct the survey through their parents' perspectives, since wellbeing is a psychological condition of an individual's inner world, it can hardly be described and expressed by others even from his or her parents. In this research, a life course theory will be adopted to study wellbeing from the students' perspective, moreover, both migrant youngsters and left-behind youngsters in VET schools will be included.

Due to the inadequacy of parental care and concern (Jia & Tian, 2010), left-behind children may more likely suffer from adverse consequences such as anxiety (Dai & Chu, 2018), victimization (Chen et al., 2017), depression (Chen & Chan, 2016) and loneliness (Liu et al., 2010) and emotional trouble (Jia & Tian, 2010) than children from non-migrant families. Meanwhile, they are encouraged to study agricultural-related majors in VET schools. The government offers an allowance and no tuition fee for rural students enrolled in VET schools (Ministry of Education of the People's Republic of China, 2008). Therefore, many adolescents attend VET schools in China's rural areas. Parents migrating has been found to be of significant influence on adolescents' wellbeing in previous studies (Armsden & Greenberg, 1987; Amato, 1994 ; Brown, 2004). Moreover, many of the earlier studies, found left-behind adolescents' wellbeing relates to their attachment and sense of security in the relationships with their parents (Parkes & Stevenson-Hinde, 1982), caregivers (Kobak & Sceery, 1988), teachers and peers (Nahkur et al., 2017).

Some research studies about behavioral problems (Fan et al., 2010) found the adverse outcomes of their psychological health was due to lack of parental affection (Dai & Chu, 2018; Fan et al., 2010; Jia & Tian, 2010; Liu et al., 2010). Zhao et al. (2017) pointed out adolescents left behind by their parents are more likely to have mental difficulties in different aspects, such as emotions, social behavior, peer relationships, etc. (Zhao et al., 2017). Jorden & Graham (2012) found that those children left behind by their mother seem to be particularly unsatisfied in comparison with those with non-migrant parents. Moreover, in the research of Cortes (2015), children left behind by mothers are less happy and suffer more readily from detrimental effects than those left behind by fathers, while it was found that children left behind by their father are more likely to be unhappy in Thailand and Indonesia (Graham & Jordan, 2011). In research, children left behind by both of their parents seem worse in psychological health than those left behind by only one parent. Also, Chen & Chan (2016) find that left-behind children living in a divorced family or single-parent family have more risk of depression and negative emotions. In the current wellbeing literature, the left-behind children are more often compared to the non-left-behind children (Jorden & Graham, 2012; Zhao et al., 2007; Graham & Jordan, 2011; Mazzucato et al., 2015), while studies that compare left-behind children with migrant youngsters are still limited.

Most of the existing wellbeing literature of migrant workers' children focus on the preschool children or primary school students (Celeste & Puritz, 2002; Chen et al., 2017; Chai et al., 2019). Relevant studies for adolescents still need to be supplemented, which is in contrast to the reality that mental health disorders and psychological problems are pervasive in adolescence (Aneshensel & Sucoff, 1996). Moreover, there are limited wellbeing research studies concerned with the classification of migrant youngsters (migrant with both parents, migrant only with mother and migrant only with father) and comparison among them. So, this study will compare the differences among those adolescents: a. left behind by both parents, with grandparents, or other caregivers as primary caregivers; b. only father migration (left behind by father); c. only mother migration (left behind by mother); d. migrates with both parents; e. migrates with only one parent; f. non-migrant family in rural areas; and g. non-migrant family in urban areas. For instance, teenagers migrate with mother vs left-behind youth live with only mother in rural areas; migrate with both parents vs non-migrant family in rural areas.

Table 9. Family Migration Arrangement Types

	Live With		**Migrant With**		**Left Behind By**	
Live_with_parents	Parents	63.2%	Both parents	27.2%	No one	18.7%
			Non-migrants	17.3%		
Live_with_1_parent	Father	5.4%	Father	1.5%	Mother	3.9%
	Mother	12.8%	Mother	3.1%	Father	9.7%
Live_with_others	Grandparents	10.0%	Others	0.0%	Both parents	18.5%
	Others	8.5%				
Live_alone	Live alone	0.06%	Migrant alone	0.0%	Both parents	0.06%

Table 9 shows the sampling distribution of different arrangements caused by family migration. In the urban areas 27.2% of the children have migrated with both parents; 3.1% migrant with mother and 1.5% migrant with father. In terms of the rural areas 10.2% of the total sample size are left behind by both parents; 7.7% left behind by mother and 4.1% live only with mother. In this research question, the influence of family migrant arrangements to social cognitive factors will be checked.

Hypothesis 1: Teenagers living or who have migrated with both parents in urban/inbound areas possess higher social cognitive wellbeing than left-behind children or non-migrant families in rural/outbound areas.

Hypothesis 2: The wellbeing of teenagers living with both parents are higher than those who live with others. Communication with parents and parents' marital status mediates family arrangements and social cognitive factors.

3.5.3 Relations Dimension: Family Relationship and Social Cognitive Wellbeing

How does the quality of family relations influence the social cognitive wellbeing of migrant workers' children?

Sub-research question 1: How do the caregiver-child communication frequency, coactivity and trust & communication relate to the social cognitive wellbeing of migrant workers' children?

Sub-research question 2: How do caregiver-child regulation, conflicts and alienation impact participants' social cognitive factors?

A survey among Chinese young migrant workers notes that the migrant conception about adulthood reflected Chinese traditional social relations and family obligations (Zhong & Arnett, 2014). Family relations here mainly refer to parent-child relations and other caregiver-child relations. Some researchers pointed out that parental care for adolescents seems not as important as it is in early childhood. Still, the belief of commitment from their parents is crucial (Parkes & Stevenson-Hinde, 1982). A parent-child relationship may covertly impact adolescents' cognitive and social development throughout adolescence as well as adulthood (Kobak & Sceery, 1988). Also, adolescents' life satisfaction can considerably be predicted by their self-concept in family relations (Dew & Huebner, 1994).

Moreover, children's wellbeing is associated with the parents' corresponding or differential treatment between them and their siblings (Mchale et al., 1995). Additionally, female adolescents are found to have a stronger association with parenting characteristics than males (Shek, 1999). According to previous studies, an adolescent's experience with nonparent caregivers affects the quality of other social relations (Davis, 2006). According to Xiang et al. (2018), parental support can moderate the relationship between discrimination and conscientiousness. Additionally, among the previous consulting psychology literature, there are less wellbeing studies which include migrant youngsters and left-behind children together, while this study includes factors that influence both types of migrant workers' children.

In many cases where children do not live together with their migrant parents, they call and communicate regularly with their parents through phone or the internet. This is also a way to enhance their relationship and impacts on the mental health condition of the children. Moreover, the caregiver(s) of the children of migrant workers can be their parents or other people (normally grandparents, or some other relatives). This research will investigate how the following factors, such as caregiver-child regulation, communication frequency, conflicts and coactivity impact each participant's social cognitive factors separately. Also, in this research question, original logistic regression is used to answer these questions.

Hypothesis 1: Higher caregiver-child communication frequency, caregiver-child coactivity and communicate & trust improve the social cognitive wellbeing of adolescents.

Hypothesis 2: Caregiver-child alienation, caregiver-child regulation and caregiver-child conflicts are negatively related to participants' social cognitive wellbeing.

3.5.4 Self-adjustment: Family-Related Modified Social Cognitive Wellbeing Models

How do family relations factors adjust social cognitive wellbeing indicators as a whole? And how to offer therapy advice based on the family-related new wellbeing model to improve the wellbeing of migrant workers' children?

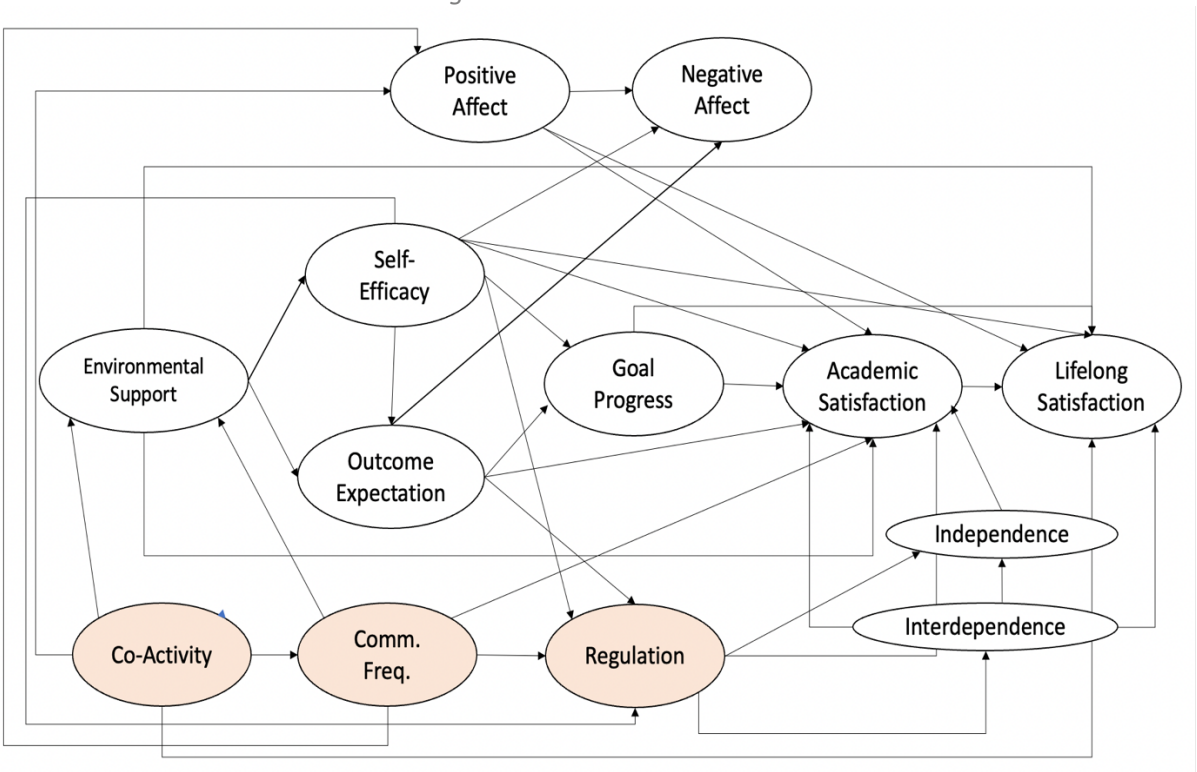
Sub-research question 1: How do caregiver-child communication frequency and coactivity correlate to participants' social cognitive wellbeing indicators?

Sub-research question 2: How do caregiver-child regulation, alienation and conflicts mediate participants' social cognitive factors, and does caregiver-child regulation correlate to caregiver-child communication frequency and coactivity?

Sub-research question 3: How can caregiver-child relations influence the social cognitive wellbeing of the migrant workers' children? How does the caregiver-child attachment adjust the relations among caregiver-child conflicts and social cognitive indicators?

The family relation-related social cognitive model of wellbeing included caregiver-child coactivity, caregiver-child communication, caregiver-child regulation, caregiver-child attachment and caregiver-child conflict. According to the previous studies caregiver-child communication, caregiver-child coactivity and caregiver-child regulation are in some way jointly connected with an adolescent's development and wellbeing. Moreover, the research hypothesis is that in this research caregiver-child attachment might mediate caregiver-child conflict and life satisfaction. Therefore, the five indicators are divided into two groups (Figure 23 shows the first group, Figure 24 shows the second group) and are separately arranged in two modified social cognitive models.

Figure 23. Family-Related Social Cognitive Wellbeing Model based on the Characteristics of Chinese Migrant Workers' Children I



In Figure 23, caregiver-child activity, caregiver-child communication and caregiver-child regulation are involved in the social cognitive model of wellbeing. The paths show the assumptions for the relations among social cognitive and family relation indicators. Here assume that the frequency of caregiver-child coactivity and communication can both impact environmental support and children's self-efficacy and outcome expectations could have influence on caregiver-child regulation. Moreover, caregiver-child regulation might impact academic satisfaction, interdependence self-construal and independence self-construal. In addition, caregiver-child coactivity and communication might relate to caregiver-child regulation. All the caregiver-child relation indicators in Figure 23 might be correlated with academic satisfaction and life satisfaction.

Figure 24. Family-Related Social Cognitive Model of Wellbeing Considering Chinese Migrant Workers' Children II

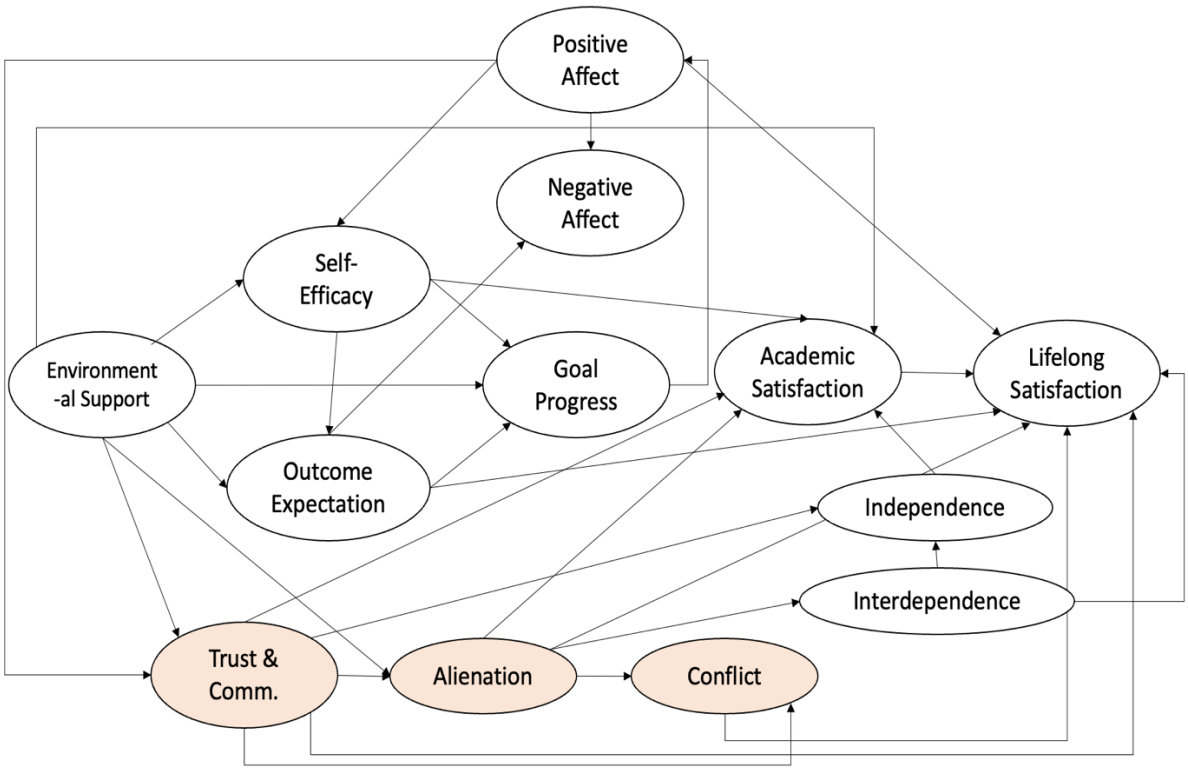


Figure 24 shows the structure of the relationship of the second part of the family-related social cognitive wellbeing model. Caregiver-child attachment (includes caregiver-child trust, communication and alienation) and conflict indicators are added into the social cognitive wellbeing model. Here it is assumed that caregiver-child trust and communication might impact children's academic satisfaction, independence self-construal and lifelong satisfaction. Meanwhile, positive affect and environmental support could have an impact on caregiver-child trust and communication. Caregiver-child alienation might influence children's interdependence self-construal, academic satisfaction and lifelong satisfaction. Moreover, caregiver-child conflicts could impact children's lifelong satisfaction. Also, the social cognitive factors correlate with each other. In terms of the method of this research question a structural equation model will be used to test the family-related social cognitive model. The research hypothesis is based on previous studies:

Hypothesis 1: Learning goal progress positively mediates caregiver-child communication frequency and academic satisfaction. Caregiver-child coactivity can positively mediate the relation between self-efficacy and learning goal progress, as well as mediate the relation between outcome expectations and learning goal progress.

Hypothesis 2: Caregiver-child regulation, alienation and conflicts are negatively correlated with social cognitive wellbeing indicators. Caregiver(s) regulation impacts academic and lifelong satisfaction through outcome expectations.

Chapter 4 Sampling and Descriptive Analysis

The sample design and the descriptive analysis of the research data is presented below. Chapter 4 will present the sample design, and will examine of the wellbeing of Chinese migrant workers' children from four different dimensions (time, space, relationship and self-adjustment).

4.1 Sample Design

The survey was conducted through stratified sampling according to the areas where migrant workers' children are located. It includes both migrant youngsters in inbound (mostly urban) areas and left-behind children in outbound (mostly rural) areas.

4.1.1 Participants

Stratified samples of migrant workers' children were chosen in 13 VET schools in both Hunan (mainly inbound area) and Guangdong (mainly outbound area) Provinces (shown in Figure 25). The survey included migrant workers' children in VET schools from both migrants' destination and origin areas, specifically, participants located in the Pearl River Delta (inbound area), and Yiyang together with Shantou (outbound area). The VET schools are located in five cities of the Guangdong Province (migrants' destination) and in Yiyang of Hunan Province (migrants' origin), which have very different economic conditions from each other.

As one of the most popular urbanized areas, the Pearl River Delta in Guangdong Province has been chosen. It is one of three areas where the largest numbers of migrant workers gather in China, with about 50.72 million migrant workers, about 64% of the total amount of migrants in Guangdong Province (National Bureau of Statistics of People's Republic of China 2018).

Figure 25. Map of Areas and Cities Involved in this Research

Source: Self-made map based on resource from Google Maps. Google.

Regarding the migrant workers' origin place, 1.7764 million migrants originated from Hunan Province in 2017, which is about 20% of the central part of China in the same year (National Bureau of Statistics of People's Republic of China, 2018a). Shantou is in the southeast of the Guangdong Province. It is a city with both inbound and outbound population movement

before 2017. The situation changed after 2017, with the outbound rate rising. The net outbound population reached 31.4 thousand (National Bureau of Statistics of People's Republic of China, 2018).

4.1.2 Information on the Chosen Cities

Guangzhou is the capital city of Guangdong Province, with a GDP of $341 billion USD in 2018. Five vocational high schools in different districts were included: Guangzhou Electronics and Information School, Guangzhou Trade and Information High School, Guangzhou City Construction High School, Guangzhou Trading and Foreign Language School and Guangzhou Medicine School.

Dongguan is a large city in the Pearl River Delta with a $120 billion USD GDP in 2018. Two different types of vocational high school in this city have been included: Dongguan Textile & Fashion School and Dongguan Tangxia Polytechnic School.

Zhongshan is a medium-sized city in the Pearl River Delta with a GDP of about $55 billion USD in 2018. Two schools were included in this field research: Zhongshan No. 1 Vocational High School and Zhongshan Tanzhou Polytechnic School.

Samples in Shantou are also included in this research. Shantou is a small city in Guangdong Province, with a GDP of $36.9 billion USD in 2018. One representative school has been chosen: Shantou Chaoyang Vocational High School.

Yiyang is a developing town in the north of Hunan Province with $25.8 billion USD as GDP in 2018. Not only the town area, but also the rural and mountainous areas in Yiyang are included in this field research. Three schools have been included: Nanxian Vocational High School, Anhua No. 2 Vocational High School and Anhua No. 1 Vocational High School.

Table 10. Social and Economic Conditions of the Stratified Sample Areas (2019)

Region	City	Population (millions)	GDP (billion USD)	Area (km^2)	Schools	n
Inbound	Guangzhou	15.3	$ 342.0	7,436	5	700
	Dongguan	8.4	$ 137.0	2,512	2	310
	Zhongshan	3.3	$ 44.9	1,770	2	400
Outbound	Shantou	5.6	$ 39.0	2,123	1	190
	Yiyang	4.4	$ 25.9	12,320	3	500

Source: National Bureau of Statistics of People's Republic of China (2019), n = Sample Size

Table 10 shows the data on population, GDP and area in 2019 of the cities included in the stratified sample. Guangzhou, as the capital city of Guangdong Province with area of 7,436 km^2, is the city with the most population and highest GDP ($342 billion USD) among these five cities in 2019; five vocational schools have been chosen in Guangzhou, entailing 700 interviewed students. Next, Dongguan has one-third of the area (2,512 km^2) and half the population (among which most are migrant workers) of Guangzhou, and its GDP was of $137 billion US dollars in 2019. Two vocational schools counting 310 students from Dongguan were included. Zhongshan is one of the second-tier cities in the Pearl River Delta megalopolis, with the smallest area (1,770 km^2) and population (3.3 million) among the five chosen cities, but with a moderate GDP ($44.9 billion USD). Two schools counting 400 students from Zhongshan have been included. Yiyang and Shantou have been chosen for the outbound areas in this research. Compared to Zhongshan, Shantou has a larger area (2,123 km^2) and more population (5.6 million), but lower GDP ($39 billion USD). One vocational school and 190

students have been included from Shantou. Yiyang is the city with the largest area (12,320 km^2) (constituted mostly of mountainous areas) among these five cities, while it has a smaller population (4.4 million) and the smallest GDP ($25.9 billion USD). Three VET schools counting 500 students from Yiyang were included.

4.1.3 The Pilot Studies

With the example of other similar studies, the researcher can have an idea of a proper sample size for the pre-test. A small-scale pilot study is advisable before a large-scale survey is conducted (Brace, 2008). In the trial test of Lent et al. (2005), 63 university students were included. The pre-test of this study included 100 students from inbound and outbound areas, among whom 50 were from a vocational school in a rural area in Hunan Province and the other half from a vocational school in Guangdong Province (urban area). According to the feedback of the pilot test, the questionnaire was revised.

The rural areas in Yiyang and the cities of the Pearl River Delta were included in the sample. For the pre-test sample, four cities in the inbound area have been taken as the migrant workers' destinations and three counties in the outbound area of Hunan Province have been chosen, all according to the economic conditions of the location.

4.1.4 Sample Size

To define a proper sample size, the research has taken previous studies on student wellbeing as a guide. The sample size of Lent et al. (2005) among American college students was of 177 students (72 male, 105 females, 119 first year and 32 second year) while in Lent et al. (2007), 153 American engineering students were sampled (124 male, 21 female, 8 no gender information, 113 first year and 40 second year). It appears that the distribution of gender relates to the type of degree (Lent et al., 2007). In Asian samples, for example, in Cheng et al. (2011) the Hong Kong sample included 140 college students (56 girls, 83 boys, 1 no information). Moreover, 578 VET students' wellbeing was tested, including 399 male and 179 female students in mainland China (Jiang & Zhang, 2012). The sample size for Chinese college students' wellbeing was of 757 students in Sheu et al. (2017); 227 girls and 530 boys. According to the previous wellbeing studies, a comfortable sample size should be over 150 in America, while in China, it should be more than 300; and the comparative-fit-index (CFI) should be above 0.90. The α Coefficient should be of 0.87 with an acceptable comparative-fit-index.

Table 11. Sample Size of Some Previous Wellbeing Studies

Male	Female	1st Year	2nd Year	CFI	Researcher	Total
72	105	119	58	.99	Lent et al. (2005)	177
124	21	113	40	.95	Lent et al. (2007)[3]	153
399	179	-	-	.90	Jiang & Zhang (2012)	578
227	530	-	-	.957	Sheu et al. (2017)	757
242	61	-	-	.90	Işık et al. (2018)	303

Previous social cognitive wellbeing (SCWB) research has been conducted on BSc (Bachler of Science) students (Lent, 2004; Lent et al., 2005; Sheu et al., 2017), but there has been limited research on BA (Bachler of Arts) students. In this research both BA and BSc students were included through random stratification.

[3] *In Lent et al. (2007), eight students from the second year did not report on gender.*

Based on α = 0.05, statistical power = 0.9, margin of error = 0.05, the minimal recommended sample size is 385. Hence, all sample sizes in subgrouping (n = 1,047 from inbound, n = 635 from outbound; n = 780 for males, and n = 902 for females) offered enough power to test the hypothesized models. The sample size of this study increased, as there are several variables to be investigated and correlated. For this reason, the sample size of this study should be significantly higher than that of previous studies of the subject.

4.1.5 Data Privacy Protection

The participation in this study is voluntary. All respondent data will be protected. The final result of this research will not include any personally identifiable information. Readers will not be able to trace any personal information of participants as a result this research.

4.1.6 Sampling Report

The total number of participants for this study is of 2,100 students, which include 1,410 students in urban areas and 690 in rural areas. Thirteen vocational schools are included, among them, four are science schools, one is a medical school, six are arts schools and two are comprehensive schools. Details are shown in Table 12.

Table 12. Schools included in Sample

	Location	School Name	Type	Sample
Inbound	Guangzhou	Guangzhou Electronic and Information School	Science	150
		Guangzhou Trade and Information High School	Arts	150
		Guangzhou City Construction High School	Science	100
		Guangzhou Trading and Foreign Language School	Arts	150
		Guangzhou Medicine School	Medical	150
	Dongguan	Dongguan Textile and Fashion School	Arts	200
		Dongguan Tangxia Polytechnic School	Science	110
	Zhongshan	Zhongshan No.1 Vocational High School	Arts	200
		Zhongshan Tanzhou Polytechnic School	Science	200
Outbound	Shantou	Shantou Chaoyang Vocational High School	Arts	190
	Yiyang	Nanxian Vocational High School	Arts	200
		Anhua No.1 Vocational High School	Comprehensive	200
		Anhua No.2 Vocational High School	Comprehensive	100
	Total			2,100
	No reply			183
	No reply of >15% of survey			235
	Effective sample size			**1,682**

The previous research studies have shown that incentive measures improve the effectiveness of the data of wellbeing surveys (Ezeofor & Lent, 2014; Sheu et al., 2017; Işık et al., 2018). In order to improve the effectiveness of the data, the headmasters of the 13 VET schools were contacted. The headmasters informed the teachers in each class about the research and its purpose; and asked the students to be sincere when answering the questionnaires in class (the average time to complete was 40 minutes).

There are three types of non-observation: non-coverage, complete non-response and item non-response (Kalton & Kasprzyk, 1982). In this research missing data occurred in two situations: complete non-response and item non-response. According to one of the previous studies (Mundfrom & Whitcomb, 1998), it is less troublesome to delete incomplete responses

if there is a large enough sample without missing structural data. It was found that when the 2,100 questionnaires were collected, there were 183 complete non-responses, and 235 with more than 15% items without an answer. Rates of more than 15% of missing data from a survey could have a significant impact in any study (Mundfrom & Whitcomb, 1998). Kalton (1981) explains that several methods have been proposed to treat missing data. The solution used more frequently is that of deleting instances containing at least one missing value of each variable. Since this study has a large enough sample size the complete non-response sample (183) and the responses with more than 15% of the items unanswered (235) have been deleted, making the effective sample size of 1,682. Among the remaining samples, there are still some with missing items, but not in a statistically significant amount.

Table 13. Migration Family Arrangement in Sampling

Parental Presence	**N**	**Migrated With:**	**n**	**Left Behind By:**	**n**
Live_with_parents	1,063	Both parents	457	/(Non-migrants)	606
Live_with_one_parent	307	Father	25	Mother	66
		Mother	52	Father	164
Live_with_others	311	Others	0	Both parents	311
Live_alone	1	Lone migrant	0	Both parents	1

Table 13 shows the information of participants' migration family arrangement. To identify the structure of the sampling. The family arrangement was identified through five questions:

1. *Which one applies best for you?*
   - *A. I am a local*
   - *B. I am not a local, but I come from the same province*
   - *C. I come from another province*
2. *With whom do you live now?*
   - *A. Parents*
   - *B. Only father*
   - *C. Only mother*
   - *D. Grandparents*
   - *E. Other*
3. *"How often do you see your mother?"*
   - *A. At most once a year or never B. At least twice a year C. At least once a month*
   - *D. At least once a week E. Almost every day*
4. *"How often do you see your father?"*
   - *A. At most once a year or never B. At least twice a year C. At least once a month*
   - *D. At least once a week E. Almost every day*
5. *What are your parents' marital status?*
   - *A. Non-divorce B. Divorce*

Questions 3 and 4 have been included to identify the participants who live in school dormitories and might have chosen *'other'* in Question 2. Question 5 has been added in case some participants live with only one parent because of divorce or death.

The percentage of migrant and left-behind youngsters has been more than 50% for both inbound (most are urban areas) and outbound (most are rural areas) areas. Regarding the family arrangement for migrant families, the migrant youngsters in inbound area can migrate with their mother, father or both parents; left-behind youngsters in outbound areas could be left behind by their mother, father or both. Most migrant youngsters migrate with both of

their parents (457); more migrate with their mother (52) than with their father (25). Similarly, among youngsters left behind, more are left by their father (164) than by their mother (66). Within this sample, it is more common for youngsters to live with their mother than with their father. Additionally, there are also migrants in the outbound area (18) and left-behind youngsters in the inbound area (39) in this sampling, but these are few cases compared to the opposite.

Summary of Missing Values in Variables

Table 14 presents a summary of the three variables with the most missing values. *Distance from the mother's working place* ranks first, with 364 missing values, 21.6% of the total, followed by *Birth order among siblings* with 363 (21.6%) and *Distance from the father's working place* missing 348 values (20.7%). The distance of father's and mother's working place were calculated through the question *"In which city does your father or your mother work?"* because migrant workers do not have a stable career, and they often change their jobs in different places. Lots of left-behind children do not know where their parents work, and this has resulted in a large amount of missing value for these two variables. The reason of why birth order among siblings' missing value is also high was due to the arrangement of this question. It is not separated and was placed right after the question *"How many siblings do you have?"* This had the result of causing the participants to ignore this question, and was not apparent in the pilot test. Other variables have less than 10% of values missing.

Table 14 Variables with Most Missing Values

Variable	Missing N	Percent	Valid N
Distance from mother's working place (km)	364	21.6%	1,318
Birth order among siblings	363	21.6%	1,319
Distance from father's working place (km)	348	20.7%	1,334

The reason for *Distance from parents working place* having the highest number of missing values was that most left-behind children are not sure where their parents work because of the constant movement of migrant workers. Since the distance from the parents is an essential data point for further research, these variables have been kept. The variable *Birth order among siblings* has been deleted.

Summary of Missing Values in Cases

Table 14 provides information of the missing value in variables, now Table 15 shows the missing value in cases (which are divided into three levels based on the valid sampling):

Table 15. Missing Value in Cases

Missing Values within Case	Cases	(%)
0% < x ≤ 5%	1,586	(94.3%)
5% < x ≤ 10%	191	(5.4%)
10% < x ≤ 15%	5	(0.3%)
Number of observations:	1,682	(100%)

It was found 1,586 cases in the sample have less than 5% of values missing; these are 94.3% of the complete sample size. There are 191 observations (5.4 % of the total amount) with between 5% and 10% missing values, and five cases (0.3% of the total sampling) with between 10% and 15% of the questionnaire items without an answer. The mean of missing values of the cases is 2%, with a standard deviation of 2%.

4.2 Who Has Higher Possibilities of Living Together with Both Parents

The descriptive analysis part of the research is targeted to clarify which kind of children have higher possibilities of living together with their parents. It also seeks to establish the characteristics of family arrangements of Chinese migrant workers. It includes two parts: first, the analysis of demographic variables, composed of the variables from the youngsters and from their parents, and second, the descriptive analysis of wellbeing scales, which are divided into two parts: social cognitive wellbeing (SCWB) variables and caregiver-child relationship (CCS) variables. All these were researched differently according to the participants' current area (inbound or outbound).

4.2.1 Factors Influencing Family Arrangement

The descriptive analysis of demographic variables has been divided into two parts: respondents' (VET students) information and information from respondents' parents.

4.2.1.1 Descriptive Analysis of Participants' Information

The descriptive analysis of students' information is made up of three parts: nominal variables, numeric variables and ordinal variables. Each part has been classified into three groups: living with both parents, living with one parent and living with others or alone.

a) Participants Living in Urban Areas Have Higher Possibility of Living with Both Parents

The descriptive analysis of nominal variables for participants' information is shown in Table 16. It shows participants percentual distribution divided into three groups: living with both parents, living with one parent and living with others or alone. The percentages, statistic results and accumulations are shown in Table 16.

Table 16. Participants' Demographic Nominal Variables

Variable	Selection	%	Both Parents (%)	One Parent (%)	Others / Alone (%)	%	x^2	df	P	C.V.
Gender	Female	46.7[4]	29.6	8.3	8.5	63.8[5]	0.12	2	n.s.	-
	Male	53.3	33.8	10.1	9.7	63.1				
Major	Art	64.2	40.7	10.3	10.0	66.7	12.7	2	*	0.087
	Science	35.8	22.7	8.0	8.3	58.2				
Household registration	Rural	60.4	38.3	13.1	15.5	57.3	68.4	2	*	0.202
	Urban	39.6	25.1	5.2	2.7	76.1				
Living place	Rural	21.0	13.3	8.0	9.4	43.3	133.9	2	***	0.282
	Urban	79.0	50.1	10.3	8.8	72.3				
Caregiver at age 5	Both Parents	75.7	47.6	9	7.6	74.1	242.5	8	***	0.269
	One Parent	3.0	2.1	4.2	1.5	26.9				
	Others	18.9	13.2	4.9	8.7	47.1				
Caregiver at age 10	Both Parents	85.5	54.2	7.6	7.2	78.6	595.8	8	***	0.422
	One Parent	3.7	2.4	7.1	1.4	22.0				
	Others	9.7	6.8	3.9	9.7	33.7				
Smokes	No	89.1	56.5	15.7	14.8	64.9	14.4	2	**	0.093
	Yes	10.9	6.9	2.7	3.5	53.1				
Drinks	No	80.0	50.7	14.3	12.7	65.2	14.0	2	**	0.091
	Yes	20.0	12.7	4.0	5.5	57.2				
Lives in dormitory	No	36.3	23.4	4.0	3.2	76.5	44.9	2	***	0.17
	Yes	63.7	41.0	14.1	14.3	59.1				
Hometown	Local	64.7	41.0	13.2	11.8	62.1	6.7	4	n.s.	-
	Same Province	21.3	13.5	2.9	3.8	66.5				
	Other Province	14.0	8.9	2.2	2.6	65.0				

*Note: P: *<0.05, **<0.01, *** <0.001*

The research uses the *Chi-square* (x^2) test to determine whether the percentage differential between the three groups is statistically significant or not. The differences are not statistically significant for *Gender* and *Hometown*. Meanwhile, all other variables have significance. Among the significant variables, *Caregiver at age 10* and *Living place* show the strongest relation to the different groups, since the Cramer's V (*C.V.*) of *Caregiver at age 10* is the largest (0.422), followed by *Living place* (0.282). According to the data collected, 76.1% of the participants with an urban household registration type (Hukou) live together with both parents, and it is 57.3% for participants with a rural household registration type (Hukou). A higher proportion of youngsters with an urban household registration type (Hukou) are living together with their parents than rural Hukou youngsters do. Most youngsters living in urban areas are living with both parents (72.3%), while in rural/outbound areas 43.3% live with both parents. There are more participants in urban/inbound areas who are living with both parents. The participants have a higher probability of living together with both of their parents now if they lived with them in an earlier stage, for example, 75.7% of participants lived with both parents when they were aged five and 85.5% at the age of 10.

As for the unhealthy habits of the participants, 89.1% of participants living with both parents do not smoke. Furthermore, 80.0% of participants living with both parents do not drink

[4] 46.7: That is the proportion of living with both parents in the column for the variable gender, e.g.,: 46.7% = 29.6% / (29.6% + 33.8%).

[5] 63.8: That is the proportion of living with both parents in the row for female, e.g.,: 63.8% = 29.6% / (29.6% + 8.3% + 8.5%).

alcoholic beverages; participants without parental presence tend to have *(less)* unhealthy habits.

b) Live With Both Parents with Better Parent-Child Communication and Higher Level of Physical Health

There are seven ordinal demographic variables shown in Table 17.

Table 17. Participants' Ordinal Demographic Variables

Variable	Selection	%	BP (%)	OP (%)	O (%)	%	x^2	df	P	C.V.
Bedroom	Small room shared with caregiver(s)	5.8[6]	3.7	1.6	1.2	56.9[7]	6.1	6	n.s.	-
	Small room shared with sibling	20.5	13.0	3.1	3.3	67.0				
	Small room not shared	47.7	30.3	8.7	8.4	63.9				
	Big room not shared	26.0	16.5	4.9	5.3	61.8				
Frequency of travel	None	29.9	19.0	7.2	7.7	56.0	25.7	6	***	0.124
	Once	33.4	21.2	5.9	5.6	64.8				
	Twice	16.5	10.5	2.7	2.2	68.2				
	More than two	20.2	12.8	2.4	2.8	71.1				
Academic performance	Behind	10.7	6.8	1.8	2.0	64.2	13.9	8	n.s.	-
	Lower Middle	26.6	16.9	4.0	4.0	67.9				
	Medium	35.7	22.7	6.2	5.8	65.4				
	Upper Middle	18.3	11.6	4.2	4.2	58.0				
	Among the best	8.7	5.5	2.0	2.4	55.6				
Physical health	Bad	2.1	1.3	0.8	1.1	40.6	32.9	4	***	0.099
	Not good & not bad	40.9	25.9	9.2	9.3	58.3				
	Very good	57.1	36.2	8.4	7.8	69.1				
Communication with parents	Not good with both	10.0	9.4	4.5	4.6	50.0	72.78	4	***	0.148
	Good with one	30.0	17.7	7.8	5.8	60.0				
	Good with both	60.0	36.5	6.0	7.6	70.0				

*Note: BP (%): Percentages of living with both parents; OP (%): Percentages of living with one parent; O (%): Percentages of living with others or living alone, P: *<0.05, **<0.01, ***<0.001.*

Among these variables, *Bedroom* and *Academic performance* are not statistically significant. It was found 33.4% of participants living with both parents travel recreationally with their parents at least once a year. That is, 16.5% for participants living with both parents travel twice a year and 20.2% travel more than twice a year. Among those who never travelled, 56.0%

[6] 5.8: That is the proportion of living with both parents in the column for the variable bedroom, e.g.,: 5.8% = 3.7% / (5.8% + 20.5% + 47.7% + 26.0%).

[7] 56.9: That is the proportion of living with both parents in the row for small room shared with caregiver(s), e.g.,: 56.9% = 3.7% / (3.7% + 1.6% + 1.2%).

of the participants are living with both parents. The above information shows that when youngsters live together with their parents, they have a relevantly higher frequency of travel than those who do not. But, around half of the participants have never travelled within a year, and this was probably due to poor family economic conditions, or they have busy parents. It was found that 40.9% of students living with both parents believe their physical health conditions are neither good nor bad, that is 57.1 % for participants think their health condition is very good. Only 2.1% believe they are in bad health. Moreover, among those participants who perceive themselves with bad health conditions 40.6% are living together with both parents. Most of the youngsters who are living together with both parents perceive themselves to have a health condition that is not bad. That is reasonable, as students living together with both parents can get a better life standard including food, care and mental support.

Among those participants who have good communication with parents 70.0% are living together with both parents. It is 60% for those participants have good relationship with one parent. More than 60% participants living together with both parents have good communication with both parents. It shows participants living together with both parents may have better communication with their parents or at least good communication with one parent.

c) Parents' Age and the Distance from Parents' Working Place to their Hometown Impact Family Arrangement

Numeric variables of participants will also be shown in the same three groups. There are two variables in Table 18: *Age* and *Distance from parents' working place*. An ANOVA test was made to compare the means from each group and to define whether the variables are significant.

Table 18. Participants' Numeric Demographic Variables

Variable[8]		Living With: Both Parents	Living With: One Parent	Living With: Others / Alone	Total	η	P-Value
Age	$\bar{x}$:	16.6	16.4	16.4	16.5	0.077	***
	σ:	1.0	0.96	0.8	0.97		
Distance from father's working place (km)[9]	$\bar{x}$:	82.4	322.4	408.4	181.6	0.324	***
	σ:	355.9	475.0	476.1	424.4		
Distance from mother's working place (km)	$\bar{x}$:	74.7	218.7	379.6	156.3	0.337	***
	σ:	238.7	436.3	458.3	**350.5**		

*Note: P: *<0.05, **<0.01, *** <0.001*

The ANOVA results show that there is statistical significance for the three variables (P-Value < 0.05), and that the effect of *Distance from mother's working place* is the largest among them (η = 0.337), while *Age* is the smallest (η = 0.077). The mean age for participants living with both parents (16.6) is a bit older than that of other groups (16.4). The mean *Distance from father's working place* (82.4 km) and *Distance from mother's working place* (74.7 km) for participants living with both parents is shorter than that of the other two groups.

[8] $\bar{x}$: Mean; σ: Standard Deviation; η: Eta.

[9] Distances from parent's working place exclude the parent living with the participant

4.2.1.2 Parents' Migration and Divorce Influence Family Arrangements

The previous results are related to the variables of the participants themselves. This section reviews the information and summary of variables of the parents of the participants. For the comparison of percentages of nominal variables, the Chi-square test is also used. Cramer's Value is offered to tell how strong the relationship is among the three groups and the variable.

Table 19. Nominal Demographic Variables of Participants' Parents

Variable	Selection	%[10]	Both Parents (%)	One Parent (%)	Others/ Alone (%)	%[11]	x^2	df	P	CV
Mother left	No	59.3	37.8	10.7	7.0	68.1	40.1	2	***	0.158
	Yes	40.7	25.9	7.6	11.0	58.2				
Father left	No	62.0	39.6	7.3	6.6	68.6	84.4	2	***	0.229
	Yes	38.0	24.3	10.9	11.4	52.3				
Marital status	Others	2.5	1.6	5.7	4.6	13.4	249.1	2	***	0.386
	Married	97.5	62.1	12.5	13.5	70.5				

*Note: Others/Alone (%): refers to live with others or live alone. P: *<0.05, **<0.01, ***<0.001*

Table 19 shows the results of three variables on the parents; all three variables have a significant difference across the groups. Among the three variables, *Marital status* has the strongest relationship to the different groups, since the Cramer's V (*C.V.*) is the largest (0.386), followed by *Father left* (0.229).

On one hand, the proportion among those participants whose mothers left their hometown, but live together with both parents is 58.2%, and it is 52.3% among those whose fathers left or migrated. On the other hand, among participants who are living with both parents, 40.7% of their mothers left their hometown, and it is 38.0% for those whose fathers left their hometown. This shows that participants have a higher possibility of migrating with their parents when their mothers migrated. It was found among those participants who are living together with both parents, 97.5% of them their parents' marital status is married. However, among those whose parents' marital status is married, 70.5% are living together with their parents. The rest of those participants could be left-behind children due to the migration of their parents.

[10] %: Take mother left as an example, 59.3 is the proportion of living with both parents in the column for the variable mother does not leave, e.g.,: 59.3% = 37.8% / (37.8% + 25.9%).

[11] %: Also, take mother left as an example, 68.1 is the proportion of living with both parents in the row for the variable mother does not leave, e.g.,: 68.1% = 37.8% / (37.8% + 10.7% + 7.0%).

4.2.1.3 Parents' Education Level, Age, Time of Migration and Family Economic Status Impact Family Arrangement

This section includes the descriptive analysis of ordinal variables for the participants' parents, which consist of their education, age and the duration of the parents' migration. All these variables have been shown to be statistically significant in determining the group of the student. Among those variables, the migration time duration of the father (*Time father left*) shows the strongest relationship to the student groups, since the Cramer's V is the largest (0.219), followed by migration time duration of mother (*Time mother left*) (0.176).

Regarding the education level of parents, 42.5% of participants live with both parents and their mothers have finished junior high school, this figure is of 44.7% for the fathers. It was found 27.0% of participants live with both parents and their mother had only primary school education; 17.6% for fathers. Less than 8% of participants living with both parents have at least one parent with college or university education (father: 7.4%; mother: 5.3%). But among those whose parents have college education, more than 67% of the participants live together with both parents (mother: 68%, father: 67.1%). This shows that participants have higher possibilities of living together with their parents if their parents have a higher level of education.

Table 20. Ordinal Demographic Variables of Parents

Variable	Selection	%[12]	Both Parents (%)	One Parent (%)	Others / Alone (%)	%[13]	x^2	df	P	*C.V.*
Mother's education	Primary	27.0	17.2	6.1	6.4	57.9	13.1	6	*	0.063
	Junior High	42.5	27.1	7.6	7.4	64.4				
	High / VET	25.1	16.0	3.7	3.5	69.0				
	University or Higher	5.3	3.4	0.8	0.8	68.0				
Father's education	Primary	17.6	11.2	4.0	4.1	57.7	17.1	6	*	0.072
	Junior High	44.7	28.5	8.0	9.3	62.2				
	High / VET	30.3	19.3	4.9	3.7	69.4				
	University or Higher	7.4	4.7	1.2	1.0	67.1				
Mother's age	Under 40	28.8	18.3	5.5	6.4	60.4	13.9	4	*	0.065
	40 to 50	66.8	42.4	11.3	11.1	65.4				
	Above 50	4.4	2.8	1.5	0.6	57.1				
Father's age	Under 40	11.7	7.5	2.1	3.2	58.6	12.9	4	*	0.062
	40 to 50	74.8	48.0	13.0	13.3	64.6				
	Above 50	13.5	8.7	2.7	1.6	66.9				
Time father left	NA	61.2	39.5	7.4	6.4	74.1	150.6	8	***	0.219
	< 1 year	8.1	5.2	4.8	5.5	33.5				
	1 to 5 years	6.8	4.4	1.7	2.2	53.0				
	6 to 10 years	3.1	2.0	0.8	0.8	55.6				
	> 10 years	20.8	13.4	2.7	3.3	69.1				
Time mother left	NA	58.6	37.6	10.5	6.7	68.6	96.5	8	***	0.176
	< 1 year	7.8	5.0	2.0	4.7	43.1				
	1 to 5 years	7.9	5.1	1.8	2.4	54.8				
	6 to 10 years	4.5	2.9	0.7	1.3	59.2				
	> 10 years	21.2	13.6	2.8	3.0	70.1				
Cars owned	No car	32.2	20.4	8.2	7.5	56.5	21.6	4	***	0.080
	1 car	48.1	30.5	7.6	7.9	66.3				
	> 1 car	19.7	12.5	2.6	2.8	69.8				

*Note: Other refers to other Situations: live with others or live alone. P: *<0.05, **<0.01, *** <0.001*

Moreover, where students and both parents live together, more than 60% of the parents are between the ages of 40 to 50 years (mother: 66.8%; father: 74.8%). Since the average age of the participants is around 16 years old, that means most of the parents had children in their early twenties. Also, among the participants living with both parents, there is a larger amount of them with their mothers under the age of 40 (28.8%) than with their fathers (11.7%). In cases where mothers are above 50 years old, 57.1% of the participants are living with both parents, and 66.9% for participants with fathers aged over 50 years.

There are 65.4% of students are living with both parents where their mothers of age 40 to 50, and 64.6% with fathers aged 40 to 50. Therefore, in cases where the mother is 40 to 50 years old and the father above 50 years old students have higher possibilities of living together with their parents.

[12] %: Take mother's education as an example, 27.0 is the proportion of living with both parents in the column for the variable mother's education in primary school level, e.g., 27.0% = 17.2% / (17.2% + 27.1% + 16.0% + 3.4%).

[13] %: Also, take mother's education as an example, 57.9 is the proportion of living with both parents in the row for the variable mother's education in primary school level, e.g., 57.9% = 17.2% / (17.2% + 6.1% + 6.4%).

For more than half of participants living together with their parents, the question about the time period of their mother's or father's migration did not apply (time father left NA: 61.2%; time mother left NA: 58.6%), because that parent did not leave their hometown (registered as NA). Moreover, among participants living with both parents, 21.2% of the participants' mothers migrated from their hometown for more than 10 years, and similarly for the father (20.8%).

It was found 48.1% of the participants' families have at least one car where students live together with both parents. In families with more than one car, 69.8% of the students are living with both parents, and 66.3% for those with one car. The number of cars is an indicator of the economic status of a family. From the above results, participants with a higher family economic status have a higher possibility of living together with both parents.

4.2.2 Social Cognitive Wellbeing, Family Relationships and Family Arrangement

The following tables show the means and standard deviations of Likert Scale items in the questionnaire from participants from both inbound (most are urban areas) and outbound (most are rural areas) areas. These items represent 13 variables that have been divided into two parts depending on their topic: Social Cognitive Wellbeing (SCWB) or Caregiver-Child Relationship (CCR). To simplify the model testing complexity and to compare the data across the three different groups (students living with both parents, living with one parent and living with others or alone), some of the variables have been separated into sub-variables.

The SCWB Positive & Negative Affect factor consists of the Negative Affect and Positive Affect sub-variables. Likewise, the Caregiver-Child Attachment variable was divided into Alienation and Trust & Communication. A total of 16 sub-variables were made to stand for the 13 potential concepts shown in two of the modified SCWB models.

4.2.2.1 Family Arrangement and Social Cognitive Wellbeing (SCWB)

For SCWB, there are eight different variables: Lifelong Satisfaction, Academic Satisfaction, Self-Efficacy, Outcome Expectations, Goal Progress, Positive & Negative Affect and Environmental Support. Each of these had three to six Likert Scale items for the students to answer in the questionnaire, shown in Appendix I. One thing to be noticed is that the Self-Construal Variables, which had been divided into independence and interdependence have been eliminated, given that their Cronbach's alpha noted that these were both not significant for this research. Therefore, this research deleted them.

Table 21. Analysis of Lifelong Satisfaction I

Life Satisfaction Items	**Factor Loading**
LS1. In most ways my life is close to my ideal.	*0.814*
LS2. The conditions of my life are excellent.	*0.812*
LS3. I am satisfied with my life.	*0.813*
LS4. So far, I have gotten the important things I want in life.	*0.729*
LS5. If I could live my life over, I would change almost nothing.	*0.598*
Cronbach's Alpha: 0.805	**Explained Variance: 57.4%**

Table 21 shows the five items in the life satisfaction scale, the Factor loading through principal components analysis (PCA) and the Cronbach's alpha coefficient. There are five questions for this scale, and responses from 1 (strongly disagree) to 5 (strongly agree).

The KMO (Kaiser-Meyer-Olkin) value obtained for the five items was of 0.799, indicating that the variable is suitable for Principal Components Analysis. According to the eigenvalue criteria (eigenvalue = 1), here one common factor was extracted from the five items that explains 57.4% of the total variance. The variables that correlate the most with the principal component (D1) have been LS1: *"In most ways, my life is close to my ideal*" (0.814), LS2: *"The conditions of my life are excellent"* (0.812) and LS3: *"I am satisfied with my life"* (0.813). The principal component is positively correlated to all five of these items. Therefore, increasing the values of LS1, LS2, LS3, LS4 and LS5 improves the value of the principal component (*Lifelong Satisfaction*). It increases the most when a participant strongly agrees with the item ""*In most ways, my life is close to my ideal*" (LS1). The Cronbach's alpha was of 0.805, indicating that the results have sufficient reliability.

Table 22 shows the statistical analyses of these life satisfaction variables, including means, standard deviations, Eta (η), Standard Deviation (σ), statistical significance (P-Value) through ANOVA tests.

Table 22. Analysis of Lifelong Satisfaction II

Living With		**LS1**	**LS2**	**LS3**	**LS4**	**LS5**
Both parents	$\bar{x}$:	2.88	3.19	3.17	2.43	2.32
n: 1,054–1,063	σ:	0.941	0.960	0.973	0.986	1.133
One parent	$\bar{x}$:	2.83	3.08	3.09	2.42	2.23
n: 304–307	σ:	0.913	0.985	1.035	0.995	1.087
Others/alone	$\bar{x}$:	2.78	3.08	3.01	2.40	2.08
n: 305–306	σ:	0.974	0.994	1.015	1.045	1.136
Total	$\bar{x}$:	2.85	3.15	3.12	2.42	2.26
n: 1,664–1,676	σ:	0.942	0.972	0.993	0.998	1.128
η:		n.s.	n.s.	0.063	n.s.	0.078
P-Value:		n.s.	n.s.	< 0.05	n.s.	< 0.05

To compare the means of *Lifelong Satisfaction* items from three groups that identify family arrangements and who participants live with, an ANOVA test has been used. There is statistical significance only for LS3 and LS5 (P < 0.05). The effect size of LS5 is the largest between the two variables ($\eta = 0.078$), followed by LS3, ($\eta = 0.063$).

For LS3 "*I am satisfied with my life"*, the mean was of 3.17 for participants living with both parents, of 3.09 living with one parent and of 3.01 for those living with others or alone; all slightly above 3 (neither agree nor disagree). For LS3, the standard deviation was 0.973 for participants living with both parents, 1.035 and 1.015 for those living with one parent and other conditions respectively. The fluctuation for participants living with both parents is

somewhat smaller than that of other conditions. As for the fifth question, LS5 "*If I could live my life again, I would change almost nothing",* the mean for participants living with both parents was of 2.32, with one parent, 2.23, and with others or alone, 2.08. All groups stand near 2 (disagree), and the standard deviations were 1.133 for participants living with both parents, 1.087 for participants living with one parent and 1.128 for participants living others or alone. In summary, participants living with both parents have slightly higher averages than the other two groups.

Table 23. Analysis of Academic Satisfaction I

Academic Satisfaction	**Factor Loading**
AS1. I am comfortable with the educational atmosphere in my major field.	0.802
AS2. For the most part, I am enjoying my coursework.	0.800
AS3. I am generally satisfied with my school life.	0.761
AS4. I enjoy the level of intellectual stimulation in my courses.	0.778
AS5. I feel enthusiastic about the subject matter in my intended major.	0.834
AS6. I like how much I have been learning in my classes.	0.798
Cronbach's Alpha: 0.884	**Explained Variance: 57.4%**

Table 23 shows the *Academic Satisfaction* items are also in Likert Scales from 1 (strongly disagree) to 5 (strongly agree). These reflect the participants' satisfaction in their academic life and in school. Also, here PCA is used to get the factor loading.

The KMO value for the six items was 0.767, implying the factor is suitable for PCA. According to the eigenvalue criteria, here one common factor was extracted from the six that explains 57.4% of the total variance. Items AS1: *"I am comfortable with the educational atmosphere in my major field"*, AS2: *"For the most part, I am enjoying my classes"* and AS5: *"I feel enthusiastic about the subject matters in my major"* correlate the most with the principal component (D1), with Factor Loadings of 0.802, 0.800 and 0.834 respectively. In addition, the principal component is positively correlated to all six of these items. Therefore, the increasing value of these six items improves the value of the principal component (*Academic Satisfaction*). Especially for AS5, it tells when the participants study in the major they interested in; it is most helpful to improve their academic satisfaction. Cronbach's alpha was 0.884, indicating that the symbols of the common factor have good reliability.

Table 24. Analysis of Academic Satisfaction II

Living With		**AS1**	**AS2**	**AS3**	**AS4**	**AS5**	**AS6**
Both parents	$\bar{x}$:	3.43	3.21	3.34	3.54	3.36	3.50
n: 1,055–1,061	σ:	0.886	0.931	0.942	0.908	0.911	0.903
One parent	$\bar{x}$:	3.35	3.06	3.18	3.37	3.18	3.47
n: 302–307	σ:	0.889	0.974	1.008	0.951	1.002	0.974
Others/alone	$\bar{x}$:	3.26	3.00	3.20	3.37	3.14	3.32
n: 304–306	σ:	0.967	0.970	0.984	1.004	0.983	0.918
Total	$\bar{x}$:	3.39	3.15	3.28	3.48	3.29	3.46
n: 1,661–1,674	σ:	0.904	0.950	0.964	0.938	0.947	0.921
η:		0.074	0.095	0.074	0.089	0.103	0.072
P-Value:		< 0.05	< 0.01	< 0.05	< 0.01	< 0.001	< 0.05

Table 24 shows information on Academic Satisfaction items. All six items have shown P < 0.05, there is statistical significance for all variables. The means of all the five questions have been between 3 (Neither agree nor disagree) and 4 (Agree) among the three groups. For Eta values, the effect size of AS5 is the largest among the six items $\eta = 0.103$, followed by AS2, $\eta = 0.095$.

The remaining Eta values are similar ($0.072 < \eta < 0.103$). The standard deviations of these scales range from 0.886 to 1.008. Also, for these academic satisfaction items, the averages for participants living with both parents are generally higher than those for the other two groups. It indicates participants living together with both parents possess higher levels of academic satisfaction.

Table 25. Analysis of Self-Efficacy I

Self-Efficacy	**Factor Loading**
SE1. Remain enrolled in your intended major over the next semester.	0.684
SE2. Excel in your intended major over the next semester.	0.397
SE3. Complete the upper level required courses in your intended major with an overall grade point average of 70 points or better (100 is the best score).	0.782
SE4. Find ways to avoid communication problems with teachers and teaching assistants in your courses.	0.798
SE5. Balance the pressures of studying with the desire to have leisure time for fun and other activities.	0.773
Cronbach's Alpha: 0.727	**Explained Variance: 74.7%**

The third SCWB factor tests the self-efficacy of the participants. The items were given a 5-item scale (shown in Table 25) responding from 1 (no confidence) to 5 (complete confidence).

Based on the results of PCA, the KMO value for the five items is 0.767, indicating the variable is suitable for PCA. According to the eigenvalue criteria, here one common factor is extracted from the four that explains 74.66% of the items' variance. All items positively reflect the principal component, and the items SE3: *"To complete the upper level required courses in my intended major with an overall grade point average of 70 or higher (100 being the best score)"* (0.782), SE4: *"To find ways to avoid communication problems with teachers and teaching assistants in my courses"* (0.798) and SE5: *"To balance the pressures of studying with the desires to have time for fun and other activities"* (0.773) correlate the most with the principal component (D1). That means to avoid communication problems with teachers contributes most to the principal component of self-efficacy. Furthermore, the Cronbach's alpha was of 0.727, indicating that the symbols of the common factor have sufficient reliability.

Table 26. Analysis of Self-Efficacy II

Living With		**SE1**	**SE2**	**SE3**	**SE4**	**SE5**
Both parents	$\bar{x}$:	3.01	2.07	2.69	2.60	3.02
n: 1,061–1,064	σ:	1.039	1.059	1.058	1.030	1.037
One parent	$\bar{x}$:	2.95	1.98	2.54	2.44	2.89
n: 302–307	σ:	1.047	1.064	1.113	1.002	1.142
Others/ alone	$\bar{x}$:	2.97	1.90	2.41	2.45	2.89
n: 304–306	σ:	1.101	1.025	0.942	1.014	1.081
Total	$\bar{x}$:	2.99	2.03	2.61	2.55	2.97
n: 1,667–1,676	σ:	1.052	1.055	1.054	1.024	1.066
η:		n.s.	0.064	0.107	0.075	n.s.
P-Value:		n.s.	< 0.05	< 0.01	< 0.05	n.s.

Table 26 shows the ANOVA test results *of* the *Self-Efficacy* scale. Three of the variables have a P-Value below 0.05, showing substantial significance. Regarding the result for the Eta values, the effect size of SE3 is the largest among the five variables (0.107) and SE2 is the smallest, $\eta = 0.064$. This factor shows similar results to *Lifelong Satisfaction*, and *Academic Satisfaction*,

the mean of answers from participants living with both parents is generally higher than that of the other two groups. Since *Self-Efficacy* refers to the personal belief of how competent one could be when solving or completing a particular task this shows students living with both parents have a higher confidence in themselves compared with those from the other two groups. The highest mean was of 3.02, and the lowest one was of 1.90.

Table 27. Analysis of Outcome Expectations I

Outcome Expectations	**Factor Loading**
Graduating in vocational school will likely allow me to:	
OE1. receive a good job (or graduate school) offer.	0.867
OE2. earn an attractive salary.	0.889
OE3. get respect from other people.	0.867
OE4. increase my sense of self-worth.	0.839
OE5. have a career that is valued by my family.	0.775
Cronbach's Alpha: 0.902	**Explained Variance: 71.9%**

Table 27 shows the PCA results and the Cronbach's alpha coefficient of the *Outcome Expectations* scale which is a 5-item scale with answers from 1 (strongly disagree) to 5 (strongly agree). The KMO value for the five items was 0.854, implying the variable is suitable for PCA. According to the eigenvalue criteria, here one common factor is extracted from the five that explains 71.9% of the item's variance. The most correlated variables with the principal component (D1) are OE2: *"earn an attractive salary"* (0.889), OE1: *"receive a good job offer (or graduate school) offer"* (0.867), OE3: *"be respected by other people"* (0.867), OE4: *"increase my sense of self-worth"* (0.839) and OE5: *"have a career that is valued by my family"* (0.775). It indicates that to earn a good salary after graduation contributes most to the principal component, followed by receive a good job and get respect from other people. In addition, the principal component is positively correlated with all five variables. Cronbach's alpha was of 0.902, indicating that the symbols of the common factor have excellent reliability.

The ANOVA tests results of outcome expectation scale. The mean, standard deviation, Eta, reliability coefficients and factor loading of this SCWB factor are shown in Table 28. All items are with $P > 0.05$, meaning there is no statistical significance for the outcome expectation variable in determining the group of the participants.

Table 28. Analysis of Goal Progress I

Goal Progress	**Factor Loading**
How much progress are you making toward each of these goals at this point in time (i.e. so far this semester):	
GP1. Completing all course assignments in time.	0.839
GP2. Have good marks in all of my exams.	0.869
GP3. Achieving / maintaining high marks/grades in all of my courses.	0.898
GP4. Learning and understanding the contents in each of my courses.	0.849
Cronbach's Alpha: 0.886	**Explained Variance: 74.7%**

Table 28 shows the *Goal Progress* scale. The base question for this Likert Scale has been: *"How much progress are you making toward each of these goals at this point in time i.e. so far this semester?"* followed by four items of students' goal progress with responses with answers from 1 (no progress) to 5 (excellent progress). The result of the KMO test was 0.817 for the factor, and the Chi-square value of the Bartlett sphere test was statistically significant, showing that the items are fit for CPA. According to the eigenvalue criteria, one common factor is extracted from the four that explains 74.66% of the total variance. The variables that

correlate the most with the principal component (D1) are GP2: *"I have good marks in all of my exams"* (0.869), and GP3: *"I am achieving/maintaining high marks/grades in all of my courses"* (0.898). The principal component is positively correlated with all four of these items. Additionally, the Cronbach's alpha is 0.886, indicating that the factor has excellent reliability.

Table 29. Analysis of Goal Progress II

Living with		**GP1**	**GP2**	**GP3**	**GP4**
Both Parents	$\bar{x}$:	3.11	3.26	2.91	3.11
n: 1,064–1,065	σ:	0.965	1.046	1.003	0.987
One Parent	$\bar{x}$:	2.82	2.90	2.65	2.88
n: 307	σ:	1.039	1.140	1.069	1.018
Others/ Alone	$\bar{x}$:	2.80	2.83	2.57	2.70
n: 306	σ:	1.013	1.088	1.029	1.002
Total	$\bar{x}$:	3.00	3.12	2.80	3.00
n: 1,677–1,678	σ:	1.001	1.091	1.043	1.023
η:		0.143	0.175	0.143	0.161
P-Value:		< 0.001	< 0.001	< 0.001	< 0.001

Table 29 shows the information for the *Goal Progress* SCWB factor. There are significant differences for all the *Goal Progress* items, which all have P < 0.001, which indicates substantial differences for participants who live together with parents, for all four items. The participants living together with both parents have higher averages in this factor. And the Eta values show the effect size of each item: GP2 "*I have good marks in all of my exams"* is the highest (η = 0.175). The means of the items in the three groups vary between 2.57 and 3.26. The averages of participants living with both parents are relatively higher in each item than those in the other two groups, since, goal progress refers to how much progress the students have made in achieving their goal of studying in the VET schools. The students living with both parents have better perceptions of the progress they have made in achieving their academic goals than those who live with others.

Table 30. Analysis of Positive Affect I

Positive Affect	**Factor Loading**
How often do you feel:	
NPA2: Excited	0.690
NPA5: Enthusiastic	0.769
NPA6: Proud	0.648
NPA9: Inspired	0.691
NPA11: Active	0.722
Cronbach's Alpha: 0.747	**Explained Variance: 49.7%**

Table 30 shows the content of the *Positive Affect* scale*,* it reveals the positive emotional disposition of the participants, with answers from 1 (never) to 5 (always). In addition, it also includes the results of PCA and Cronbach's alpha coefficient. The result of the KMO test for these items was of 0.768 and the Chi-square value of the Bartlett sphere test is statistically significant, which shows that the items are fit for a PCA. The principal component accounts for 49.7% of the total variance and is positively correlated with all five items. Therefore, increasing the values of these items slightly increases the value of the principal component of *Positive Affect*. In addition, the items that correlate the most with the principal component are NPA5: *"Enthusiastic"* (0.769) and NPA11*: "Active"* (0.722), while NPA6: *"Proud"* (0.648) has the lowest correlation. In addition, the Cronbach's alpha is of 0.747, showing that the scale has sufficient reliability.

The ANOVA test shows the positive affect scale. There is no significant difference for all five items of the positive affect subitems; they all have a P-Value higher than 0.05, indicating that there is no significant difference between participants from different groups on their *Positive Affect*.

Table 31. Analysis of Negative Affect I

Goal Progress	**Factor Loading**
How often do you feel:	
NPA1: Distressed	0.750
NPA3: Anxiety	0.784
NPA4: Lonely	0.727
NPA7: Irritable	0.759
NPA8: Ashamed	0.676
NPA10: Nervous	0.654
NPA12: Afraid	0.747
Cronbach's Alpha: 0.852	**Explained Variance: 53.2%**

Table 31 shows the items in the *Negative Affect* scale, it reveals the negative emotional disposition of the participants, with answers from 1 (never) to 5 (always). Also, it includes the results of PCA and Cronbach's alpha coefficient. The result of the KMO test of the *Negative Affect* subitems was of 0. 887, and the Chi-square value of the Bartlett sphere test is statistically significant, which shows that the variables are fit for PCA. The principal component accounts for 53.2% of the total variance. The items that correlate the most with the principal component are NA3: "*Anxiety*" (0.784) and NA7: *"Irritable"* (0.759). It indicates when participants feel more anxious and irritable helps improve the principal component of negative affect. Additionally, the Cronbach's coefficient was of 0.852, showing an excellent reliability for this SCWB factor.

Table 32. Statistical Analysis of Negative Affect

Living With		**NPA1**	**NPA3**	**NPA4**	**NPA7**	**NPA8**	**NPA10**	**NPA12**
Both parents	$\bar{x}$:	2.46	2.78	2.70	2.92	2.51	3.02	2.59
n: 1,061–1,064	σ:	0.884	0.954	1.047	0.950	0.874	0.913	0.985
One parent	$\bar{x}$:	2.47	2.84	2.86	3.04	2.56	2.97	2.68
n: 304–307	σ:	0.933	0.996	1.128	0.979	0.860	0.933	1.094
Others/ alone	$\bar{x}$:	2.58	2.92	3.03	3.08	2.60	3.14	2.83
n: 302– 06	σ:	0.935	0.939	1.138	0.948	0.872	0.928	1.094
Total	$\bar{x}$:	2.48	2.81	2.79	2.97	2.54	3.03	2.65
n: 1,670–1,676	σ:	0.903	0.960	1.086	0.958	0.871	0.921	1.030
η:		0.050	0.058	0.120	0.070	0.040	0.060	0.090
P-Value:		n.s.	n.s.	< 0.01	< 0.05	n.s.	< 0.05	< 0.01

Table 32 shows the *Negative Affect* subitems; most have a P-Value smaller than 0.05 (NPA4, NPA7, NPA10 and NPA12), indicating significant differences for participants across these three groups. In contrast, there is no significant difference from participants of different groups for NPA1, NPA3 and NPA8. NPA4 ("*Lonely"*), NPA7 (*"Irritable"*), NPA10 (*"Nervous"*) and NPA12 (*"Afraid"*) are negative emotions, and comparing the means, this study finds the participants living with others or alone have generally more *Negative Affect* and emotions.

For the reason why Positive affect is not significant, but Negative affect is significant among the three groups (live with both parents, live with one parent and live with others or alone), this may imply that positive emotions come from inner expectations, while negative ones come from outer influences.

Table 33. Analysis of Environmental Support I

Environmental Support	**Factor Loading**
At the present time, I …	
ESP1. Get encouragement from my teachers for pursuing my intended major.	0.812
ESP2. Feel that my family members support the decision to major in my intended field.	0.800
ESP3. Feel that close friends would be proud of me for majoring in my intended field.	0.834
Cronbach's Alpha: 0.747	**Explained Variance: 66.5%**

Table 33 shows the PCA results and the Cronbach's alpha coefficient of the *Environmental Support* scale, a five-item scale with answers from 1 (strongly disagree) to 5 (strongly agree). The result of the KMO test is 0.688 and the Chi-square value of the Bartlett sphere test is considerable, and it is statistically significant; this shows that the variables are fit for a CPA. According to the principle of eigenvalue, which has results greater than 1, here one common factor is extracted from the three items that explains 66.5% of the total variance. The variables that correlate the most with the principal component are ESP1 (0.834) and ESP3 (0.812). The principal component is positively correlated with all three of these variables. Especially, support from friends contributes most to the principal component. Additionally, the Cronbach's alpha was of 0.747, indicating that the scale has satisfactory reliability. The Factor Loading coefficients suggests that the *Environmental Support* items all have similar weight in this SCWB factor.

Table 34. Analysis of Environmental Support II

Living With		**ESP1**	**ESP2**	**ESP3**
Both parents	$\bar{x}$:	3.50	3.69	3.61
n: 1,062	σ:	0.878	0.889	0.840
One parent	$\bar{x}$:	3.42	3.57	3.55
n: 306–307	σ:	0.933	1.010	0.901
Others/ alone	$\bar{x}$:	3.34	3.64	3.46
n: 306	σ:	0.986	0.942	0.891
Total	$\bar{x}$:	3.46	3.66	3.57
n: 1,674–1,675	σ:	0.910	0.923	0.862
η:		0.071	0.053	0.067
P-Value:		< 0.05	n.s.	< 0.05

Table 34 shows the ANOVA test results of the *Environmental Support* scale. The means, standard deviations, and Eta for the *Environmental Support* items are shown in the table above. Since the participants are students, this includes support from parents or other caregivers, teachers and fellow classmates. Two of the three items (ESP1: *"I get encouraged by my teachers to pursue my major"*; ESP3: *"I feel that my close friends support my decision to major in my field"*) have statistical differences across groups, but ESP2 does not (*"I feel that my family members would be proud of me for majoring in my intended field"*). This shows encouragement from teachers and close friends has a significant difference between participants with different caregivers. There are generally higher means for participants living with both parents, which shows that participants living with both parents feel more support from teachers and close friends than other groups.

PCA was used to clarify the principal component of each SCWB variables, and ANOVA tests have been used to compare the averages of the SCWB variables across the three student

groups (living with both parents, living with one parent and living with others or alone). The P-Values of each test show that most SCWB variables are statistically significant to determine the caregiver(s) of the student, of which only *Outcome Expectations* and *Positive Affect* are not. Moreover, the averages of SCWB factors for participants living with both parents are generally higher than those of the other groups, and these invert for the items in the *Negative Affect* factor.

4.2.2.2 Family Arrangement and Family Relationships

There are five variables in the Caregiver-Child Relationships group: Regulations/House Rules, *Attachment, Bonding Activities, Frequency of Communication* and *Conflicts.* The following tables show the means, standard deviations, Eta, P-Values, Cronbach's alphas, and factor loading of these five variables.

Table 35. Analysis of Analysis of Caregiver-Child Regulations/House Rules I

Caregiver-Child Regulations	**Factor Loading**		
Do your caregiver(s) have strict rules on	D1	D2	D3
CHR1. Your homework completion?	0.215	0.876	0.002
CHR2. Your school performance?	0.165	0.857	0.216
CHR3. Your school attendance?	0.087	0.388	0.767
CHR4. Curfew (e.g., you must come back home before 0:00)?	0.192	-0.080	0.880
CHR5. Your friend selection?	0.504	0.301	0.357
CHR6. Your dress styles?	0.572	0.362	0.072
CHR7. Your time on computer games?	0.822	0.060	0.265
CHR8. Your time on mobile phone?	0.858	0.149	0.021
CHR9. Time on TV?	0.837	0.126	0.109
Cronbach's Alpha: 0.822	**Explained Variance:** 31.2%	52.6%	70.6%

Table 35 shows the Caregiver-Child Regulations/House Rules scale, a 9-item scale with answers from 1 (never) to 5 (always), Cronbach's alpha coefficient and results of CPA. The outcome of the KMO test on this scale is 0.80, and shows it is suitable to do CPA. And Cronbach's alpha is high (0.822), indicating that the common elements are reliable. Based on the eigenvalue criteria (the eigenvalue of group 1 is 3.893, of group 2 is 1.295 and of group 3 is 1.169), here three common factors are extracted from the nine items which explain 70.6% of the variance. According to the result of the CPA, the CHR items can be divided into three factors. The base question for this section was: "*Do your caregiver(s) have strict rules on …?"* for the nine items. The item CHR5 *("…your friend selection?")*, CHR6 *("…your clothing?"),* CHR7 *("…your time playing videogames?"),* CHR8 *("…your time on your mobile phone?")* and CHR9 *("…your time watching TV?")* belong to one dimension (D1); CHR1 *("…finishing your homework on time?")* and CHR2 *("…your school performance?")* belong to a second dimension (D2); and CHR3 *("…your school attendance?")* and CHR4 *("…the time you should arrive back home, i.e. 'you must come back home before 0:00'?")* belong to a third dimension (D3). The variables that correlate the most with the first principal component (D1) are CHR7 (0.822), CHR8 (0.858) and CHR9 (0.837). The first principal component is positively correlated with all five of these variables and explains 31.2% of the variation in the data. It indicates that caregivers setting some regulations on children's time playing video games contributes most to the first principal component (D1). And regulations or rules on completion of the homework help more with the second principal component (D2), regulations on curfew contribute most to the third principal component (D3).

Table 36. Analysis of Caregiver-Child Regulations/ House Rules II

Living With		**CHR1**	**CHR2**	**CHR3**	**CHR4**	**CHR5**	**CHR6**	**CHR7**	**CHR8**	**CHR9**
Both parents	$\bar{x}$:	3.38	3.39	3.05	3.04	2.89	2.72	3.00	3.37	2.98
n: 1,059–1,065	σ:	1.17	1.02	1.40	1.59	1.16	1.20	1.21	1.14	1.18
One parent	$\bar{x}$:	3.36	3.37	2.86	3.02	2.85	2.75	2.87	3.43	2.88
n: 306–307	σ:	1.19	1.07	1.37	1.61	1.12	1.19	1.20	1.13	1.19
Others/ alone	$\bar{x}$:	3.37	3.42	2.83	2.87	2.63	2.66	2.90	3.39	2.90
n: 304–306	σ:	1.29	1.09	1.39	1.66	1.10	1.16	1.18	1.14	1.19
Total	$\bar{x}$:	3.37	3.39	2.98	3.00	2.84	2.72	2.96	3.38	2.94
n: 1,672– 1,678	σ:	1.19	1.04	1.40	1.60	1.15	1.19	1.20	1.14	1.18
η:		n.s	n.s	0.072	n.s	0.087	n.s	n.s	n.s	n.s
P-Value:		n.s	n.s	< 0.05	n.s	< 0.01	n.s	n.s	n.s	n.s

The means of the *Caregiver-Child Regulation/House Rules* scale are shown in Table 36 through the ANOVA test, two of these nine items (CHR3 and CHR5) are statistically significant across the three groups. Eta values result in $\eta = 0.072$ for CHR3 and $\eta = 0.087$ for CHR5. The means of these two items are higher for participants living with both parents than for the other two groups, which indicates that students living together with both parents have more supervision from their caregivers.

The *Caregiver-Child Attachment* (CCA) factor has two subdivisions: *Alienation* and *Trust & Communication*. The CCA variable Likert Scales range from 1 (never) to 5 (always). Items 3, 5, 7, 8, 9, 12, 14 and 15 are negatively oriented (e.g., 3. *"I must rely on myself when I have a problem to solve."*), composing the *Alienation* side of CCA; and items 1, 2, 4, 6, 10, 11, 13, 16 and 17 are positively oriented (e.g., 1. *"My caregiver(s) respect my feelings."*), composing the *Trust & Communication* side of the variable.

Table 37. Analysis of Caregiver-Child Alienation I

Caregiver-Child Alienation	**Factor Loading**		
How do you think about the following statements?	D1	D2	D3
CCA3. I must rely on myself when I have a problem to solve.	0.439	0.080	0.551
CCA5. I feel it's no use letting my feelings show.	0.520	0.409	0.306
CCA7. Talking over my problems with my caregiver(s) makes me feel ashamed.	0.300	0.644	0.075
CCA8. My caregiver(s) expect too much from me.	0.015	0.833	-0.010
CCA9. My caregiver(s) seldom know something is bothering me and make me unhappy.	0.244	0.563	0.366
CCA12. My caregiver(s) have their own problems, so I don't bother them with mine.	-0.06	0.088	0.871
CCA14. I feel angry with my caregiver(s).	0.781	0.207	-0.016
CCA15. I don't get much attention from my caregiver(s).	0.815	0.107	0.101
Cronbach's Alpha: 0.745 **Explained Variance:**	23.6%	44.4%	60.7%

Table 37 shows the PCA results and the Cronbach's alpha coefficient of the caregiver-child alienation scale which is an eight-item scale with answers from 1 (never) to 5 (always). The KMO test effect is 0. 826, which shows that the variables are fit for factor analysis. According to the principle of eigenvalue, which has results greater than 0.9, here three common factors are extracted from the eight items that explain 60.7% of the total variance. The first principal component accounts for 23.6% of the total variance. The variables that correlate the most

with the first principal component (D1) are CCA5: “I feel it's of no use letting my feelings show” (0.520), CCA14: “I feel angry with my caregiver(s)” (0.781) and CCA15: “I don't get much attention from my caregiver(s)” (0.815). While CCA7: “Talking over my problems with my caregiver(s) makes me feel ashamed” (0.644), CCA8: “My caregiver(s) expect too much from me” (0.833) and CCA9: “My caregiver(s) seldom know when something is bothering me or making me unhappy.” (0.563) belong to a second principal component (D2). And CCA3: “I must rely on myself when I have a problem to solve” (0.551) and CCA12: “My caregiver(s) have their own problems, so I don't bother them with mine” (0.871) compose the third component (D3). All these items are positively correlated with the three components. Moreover, the Chi-square value of the Bartlett sphere test is of 2,266.026, and it is statistically significant. Furthermore, the Cronbach's Alpha is of 0.745, showing that the results have a high reliability.

The results of ANOVA tests among the above items in the *Alienation* sub-variable, show no item is statistically significant across the three groups. There is no significant difference for participants with different caregivers for the eight variables in this CCR factor.

Table 38. Analysis of Caregiver-Child Trust & Communication I

Caregiver-Child Regulations/ House Rules	**Factor Loading**	
How do you think about the following statements?	D1	D2
CCA1. My caregiver(s) respect my feelings.	0.822	0.131
CCA2. My caregiver(s) are successful as caregivers.	0.796	0.095
CCA4. I like to get my caregiver(s)’ point of view on things I'm concerned about.	0.370	0.352
CCA6. My caregiver(s)’ feel when I'm upset about something.	0.568	0.385
CCA10. My caregiver(s) trust my judgements.	0.582	0.421
CCA11. I tell my caregiver(s) about my problems and troubles.	0.638	0.342
CCA13. My caregiver(s) encourage me to talk about my difficulties.	0.067	0.883
CCA16. My caregiver(s) understand me.	0.638	0.476
CCA17. I can count on my caregiver(s) when I need to get something off my chest.	0.389	0.742
Cronbach’s Alpha: 0.862	**Explained Variance: 34.2%**	**58.1%**

Table 38 shows the PCA results and the Cronbach’s alpha coefficient of the caregiver-child trust and communication scale, a 9-item scale with answers 1 (never) to 5 (always). The outcome of the KMO test on this variable is 0. 893. The principle of eigenvalue, which resulted in greater than 0.9, here extracted two common factors from the nine items which explain 58.1% of the total variance. The first principal component accounts for 34.2 % of the total variance. The items that correlate the most with the first principal component (D1) are CCA1: *“My caregiver(s) respect my feelings” (*0.822) and CCA2: *“My caregiver(s) are successful as caregivers”* (0.796). The second dimension includes two items: CCA13: *“My caregiver(s) encourage me to talk about my difficulties”* (0.883) and CCA17: *“I can count on my caregiver(s) when I need to get something off my chest”* (0.742). The Cronbach's alpha is high (0.862), indicating that the common elements have good reliability.

Table 39. Analysis of Caregiver-Child Trust & Communication II

Living With		CCA1	CCA2	CCA4	CCA6	CCA10	CCA11	CCA13	CCA16	CCA17
Both parents	$\bar{x}$:	3.44	3.36	3.13	2.91	3.03	3.15	2.49	3.12	2.82
n: 1,058–1,065	σ:	0.955	0.991	0.942	1.064	1.127	1.051	1.126	1.048	1.203
One parent	$\bar{x}$:	3.33	3.21	3.09	2.91	3.04	2.98	2.31	2.91	2.57
n: 301–307	σ:	0.993	1.076	0.879	1.057	1.174	1.036	1.091	1.096	1.259
Others/ alone	$\bar{x}$:	3.37	3.27	3.09	2.93	3.05	3.07	2.31	3.04	2.53
n: 303–306	σ:	1.020	1.126	0.934	1.125	1.161	1.054	1.072	1.105	1.201
Total	$\bar{x}$:	3.41	3.31	3.12	2.92	3.04	3.11	2.42	3.07	2.72
n: 1,666–1,678	σ:	0.975	1.034	0.929	1.074	1.141	1.051	1.113	1.070	1.219
η:		0.048	0.061	0.020	0.006	0.007	0.065	0.078	0.074	0.106
P-Value:		n.s.	<0.05	n.s.	n.s.	n.s.	<0.05	<0.01	<0.05	<0.001

The means for *Trust & Communication* are shown in Table 39. There are five items in this variable that are statistically significant across the five groups: ($P < 0.05$; $0.020 < \eta < 0.106$). For all these five items: CCA2 *"My caregivers are successful as caregivers"*, CCA11 "I tell *my caregivers about problems and troubles*" CCA13 *"My caregivers encourage me to talk about my difficulties"*, CCA16 *"My caregivers understand me"* and CCA17 *"I can count on my caregivers when I need to get something off my chest"* the means are higher for participants living with both parents than that of the other two groups (living with only one parent and living with others/alone). It shows that the participants living with both parents get more company and better understanding of their emotions and feelings than those live with one parent or others.

Table 40. Analysis of Caregiver-Child Coactivities I

Caregiver-Child CoActivities	Factor Loading
CCCA1. How often your caregiver(s) have dinner with you?	0.502
CCCA2. How often your caregiver(s) do sport with you?	0.818
CCCA3. How often your caregiver(s) go shopping with you?	0.857
CCCA4. How often your caregiver(s) watch TV with you?	0.715
CCCA5. How often do your caregiver(s) travel with you?	0.762
Cronbach's Alpha: 0.790	**Explained Variance: 55.1%**

Table 40 shows the items in the caregiver-child coactivity scale; it reveals the frequency of five common caregiver-child coactivities, with answers from 1 (once a year or never) to 5 (more than twice a week). Also, it includes the results of PCA and Cronbach's alpha coefficient.

The result of the KMO test is 0.787, showing that the items are fit for a factor analysis. Additionally, the Chi-square value of the Bartlett sphere test is considerable, and it is statistically significant. The Cronbach's alpha is 0.790, indicating that the variable has excellent reliability. According to the principle of eigenvalue, which resulted in greater than 1, here one common factor is extracted from the five items that explains 55.1% of the total variance. The Factor Loading figures show that the items that correlate the most with the principal component (D1) are CCCA2: *"How often do your caregiver(s) play sports with you?"* (0.818) and CCCA3: *"How often do your caregiver(s) go shopping with you?"* (0.857). All five items are positively corelated with the principal component (D1) of CCCA. It indicates that going shopping and playing sports with caregiver(s) is the most common coactivities with their caregiver(s).

Table 41. Analysis of Caregiver-Child Coactivities

Living With		CCCA1	CCCA2	CCCA3	CCCA4	CCCA5
Both parents	$\bar{x}$:	4.58	2.55	3.04	3.69	2.26
n: 1,061–1,065	σ:	0.897	1.477	1.221	1.419	1.247
One parent	$\bar{x}$:	4.39	2.13	2.68	3.26	1.90
n: 304–05	σ:	0.975	1.343	1.252	1.488	1.096
Others/ alone	$\bar{x}$:	3.79	1.99	2.41	2.97	1.096
n: 304–05	σ:	1.323	1.285	1.172	1.498	1.91
Total	$\bar{x}$:	4.40	2.37	2.86	3.48	2.13
n: 1,669–1,673	σ:	1.044	1.440	1.243	1.474	1.212
η:		0.284	0.168	0.203	0.196	0.141
P-Value:		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Table 41 shows a scale that reflects the frequency of caregiver-child bonding activities. Items relating to this variable are contained in a scale ranging from (1) once a year or never to (5) more than twice a week. The means, standard deviations, Eta, reliability coefficients, and factor load for the *Caregiver-Child Coactivities* (CCCA) variable are shown in Table 42. All five items have a P-Value smaller than 0.001, indicating there are substantial differences for participants from different groups in this caregiver-child variable. Among these five items CCCA1 *"How often caregivers have dinner with you?"* has the biggest effect size with η = 0.284, which is followed by CCCA3 *"How often caregivers go shopping with you?"* $\eta = 0.203$).

Table 42. Analysis of Caregiver-Child Coactivities I

Caregiver-Child Communication Frequency	Factor Loading
How often do you talk to your caregiver(s) about your	
CCCF1. Friends?	0.825
CCCF2. School?	0.840
CCCF3. Teachers?	0.857
CCCF4. Feelings?	0.823
CCCF5. Worries?	0.777
Cronbach's Alpha: 0.881	**Explained Variance: 68.1%**

Table 42 shows the items in the caregiver-child communication frequency scale, it reveals the frequency of five common caregiver-child communication topics, with answers from 1 (once a year or never) to 5 (more than twice a week). Also, it includes the results of PCA and Cronbach's alpha coefficient.

The Cronbach's alpha equaled 0.881, indicating that the variable has excellent reliability. Additionally, the effect of the KMO test is 0.793, revealing that the items are fit for factor analysis. Moreover, the Chi-square value of the Bartlett sphere test is substantial, and it is statistically significant. According to the principle of eigenvalue, which resulted in greater than 1, one common factor was extracted from the items which explains 68.1% of the total variance. CCCF2: *"How often do you talk to your caregiver(s) about your school?"* and CCCF3: *"How often do you talk to your caregiver(s) about your teacher?"* correlated most with the principal component (D1). The components coefficients also indicate that CCCF5 has relatively lower weight among these five items (0.777). All five items in the variable are positively correlated with the principal component.

Table 43. Analysis of Caregiver-Child Frequency of Communication II

Living With		CCCF1	CCCF2	CCCF3	CCCF4	CCCF5
Both parents	$\bar{x}$:	3.46	3.37	3.13	2.92	2.76
n: 1,060–1,063	σ:	1.274	1.251	1.285	1.389	1.416
One parent	$\bar{x}$:	3.30	3.27	3.03	2.53	2.44
n: 306–07	σ:	1.287	1.253	1.259	1.358	1.357
Others/alone	$\bar{x}$:	3.13	3.16	2.95	2.51	2.44
n: 305–306	σ:	1.363	1.322	1.366	1.415	1.404
Total	$\bar{x}$:	3.37	3.31	3.08	2.77	2.64
n: 1,673–1,675	σ:	1.299	1.267	1.297	1.400	1.411
η:		0.099	0.064	0.057	0.137	0.110
P-Value:		< 0.001	< 0.05	n.s.	< 0.001	< 0.001

Table 43 shows the ANOVA results of caregiver-child frequency of communication scale. The means of all five items show participants living together with both parents get higher averages than the other two groups (living with only one parent and living with others or alone) in this variable. Participants who live together with their parents have a higher frequency of Caregiver-Child Coactivities.

As in CCCA, the items relating to this variable contained a scale ranging from (1) once a year or never to (5) more than twice a week. There are significant differences in four of the five items of Caregiver-Child Communication Frequency: CCCF1, CCCF2, CCCF4 and CCCF5 (P-Value < 0.05), indicating statistical differences for participants from different groups. The effect size of CCCF4 is the highest (0.137). Moreover, these four items show participants living with both parents get higher averages than the other two groups, which means that there is more caregiver-child communication for participants living with both parents than for those living with only one parent and living with others or alone.

Table 44. Analysis of Caregiver-Child Conflicts I

Caregiver-Child Conflicts	Factor Loading
1. Your caregiver(s) tell you what to do with your life, but you want to make your own decisions.	0.596
2. Your caregiver(s) tell you that a social life is not important at this age, but you think that it is.	0.692
3. You have done well in school, but your caregiver(s)' academic expectations always exceed your performance.	0.749
4. Your caregiver(s) always compare you to others, but you want them to accept you for being yourself.	0.732
Cronbach's Alpha: 0.641	**Explained Variance: 48.3%**

Table 44 shows the items in the caregiver-child conflicts scale, it reveals the frequency of four common caregiver-child conflicts, with answers from 1 (never) to 5 (always). Also, it includes the results of PCA and Cronbach's alpha coefficient. The Cronbach's alpha is of 0.641, indicating that the variable has sufficient reliability. Additionally, the result of the KMO test was 0.703, and Chi-square value of the Bartlett sphere test is sufficient and statistically significant, noting that the items are appropriate for factor analysis. According to the principle of eigenvalue, which resulted in greater than 1, here one common factor is extracted from the four items, which explains 48.3% of the total variance. The factor loading figures indicate that CFLT3 *"You have done well in school, but your caregiver(s) academic expectations always exceed your performance"* (0.749), and CFLT4 *"Your caregiver(s) always compare you to others, but you want them to accept you for being yourself"* (0.732) have relatively more weight

among these four items. The four items are positively related to the principal component, indicating higher scores in CFLT1, CFLT2, CFLT3 and CFLT4 increase the value of D1.

The ANOVA test results of caregiver-child conflicts shows there is no significant difference for participants across the three groups in the *Caregiver-Child Conflicts* factor, given all items resulted with a P-Value larger than 0.05.

This part shows the results of PCA results and ANOVA analysis outcomes within the three different groups: living with both parents, living with one parent and living with others or alone. There is a statistical difference across different groups for the means of CHR (*Regulations*/*House Rules*), *Trust & Communication* from CCA (*Attachment*), CCCA (*Coactivities*) and CCCF (*Communication Frequency*); but no statistical difference for CFLT (*Conflicts*) and *Alienation* from CCR (*Caregiver-Child Relationship*).

By comparing the means of each group in these four Caregiver-Child Relationship variables: CHR (*Regulations*/*House Rules*), *Trust & Communication* in CCA (*Attachment*), CCCA (*Coactivities*) and CCCF (*Communication Frequency*), the averages are generally higher for participants living with both parents than that of the other two groups. This indicates that students living together with both parents normally have more supervision from their caregiver(s), and more bonding activities and better communication with their caregivers than students living with only one parent or living with others or alone.

4.2.2.3 Conclusion

From the descriptive analysis of the demographic variables, it can be concluded that there is significant difference in family arrangements for participants according to the parents' education level, household registration type, and on who their caregiver is in the different stages of their lives. In contrast, there is no significant difference in gender and type of bedroom in family arrangements.

Regarding the PCA results, all the SCWB variables could be classified into one dimension, moreover, caregiver-child coactivity factors, caregiver-child communication frequency factors and caregiver-child conflict factors were also suitable within one dimension. The other *Caregiver-Child Relationship* (CCR) variables are with different classifications, the caregiver-child trust & communication factors are divided into two dimensions, and the caregiver-child regulations/house rules as well as caregiver-child alienation were suitable with three dimensions. Secondly, the means of students' SCWB variables living with both parents are generally higher (or preferable) than those living with only one parent and in other conditions. A similar circumstance occurs for the means of most CCR variables. For the CCR section, results are very similar in most variables, except for *Conflicts* and the sub-variable *Alienation* from *Attachment*.

The higher the mean score is, the more extreme the reaction in the direction of the construct being evaluated. For most variables, a higher mean indicates more satisfying or positive experiences or feelings (e.g., Lifelong Satisfaction, Academic Satisfaction, Self-Efficacy, Outcome Expectations, Goal Progress, Positive Affect, Environmental Support, Trust and Communication, Bonding Activities, Communication Frequency and House Rules). For the rest of the variables in the above tables, a higher score indicates more negative expectations or experiences. The Cronbach's alpha of all the variables are above 0.6 except for the Self-Construal factors of Independence and Interdependence, indicating low reliability in the items

of these two variables, and a high one for all others. Therefore, the Self-Construal items were deleted in this research.

The results relating to the wellbeing and family relationships of adolescents will be explored with more detail through the empirical study section.

4.2.3 Correlation Tests and Model Measurement

Correlation Coefficient of Demographic Variables

The correlation coefficient *(r)* can offer a basic insight about the correlations between the variables, building into the empirical study of this research.

Table 45. Correlation Coefficients for Demographic Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.time_fa_left	-																
2.time_mo_left	**.636** [a]	-															
3.freq_fa	**.180** [a]	.048 [c]	-														
4.freq_mo	**.116** [a]	**.139** [a]	**.675** [a]	-													
5.No._children	.031 [c]	-.012 [c]	**.119** [a]	**.077** [a]	-												
6.edu_mother	-.012 [c]	.021 [c]	**-.200** [a]	**-.157** [a]	**-.236** [a]	-											
7.edu_father	-.001 [c]	.027 [c]	**-.187** [a]	**-.161** [a]	**-.226** [a]	**.536** [a]	-										
8.freq_of_travel	-.049 [c]	.005 [c]	**-.162** [a]	**-.147** [a]	**-.077** [a]	**.254** [a]	**.234** [a]	-									
9.school_perfor	-.008 [c]	-.061 [b]	**.083** [a]	.028 [c]	.024 [c]	-.055 [b]	-.063 [b]	**-.089** [a]	-								
10.health_status	.008 [c]	-.031 [c]	**-.118** [a]	**-.120** [a]	.041 [c]	.044 [c]	.022 [c]	**.107** [a]	-.028 [c]	-							
11.distance_fa	**-.110** [a]	**-.111** [a]	**.155** [a]	**.140** [a]	.009 [c]	-.073 [b]	**-.080** [a]	-.040 [c]	.056 [c]	-.018 [c]	-						
12.distance_mo	**-.104** [a]	**-.105** [a]	**.140** [a]	**.157** [a]	.009 [c]	**-.087** [a]	-.075 [b]	-.031 [c]	.055 [c]	-.008 [c]	**.546** [a]	-					
13.age	**-.087** [a]	**-.104** [a]	.002 [c]	-.016 [c]	**.264** [a]	**-.145** [a]	**-.073** [a]	-.043 [c]	-.002 [c]	.045 [c]	.037 [c]	.025 [c]	-				
14.male	.018 [c]	.043 [c]	-.008 [c]	.003 [c]	**-.186** [a]	**.098** [a]	.061 [b]	.046 [c]	**.100** [a]	.061 [b]	-.035 [c]	-.022 [c]	-.102 [c]	-			
15.outbound	-.046 [c]	**-.136** [a]	**.230** [a]	**.162** [a]	**.109** [a]	**-.295** [a]	**-.271** [a]	**-.218** [a]	**.102** [a]	-.047 [c]	**.179** [a]	**.185** [a]	**.130** [a]	**-.208** [a]	-		
16.room	**-.074** [a]	-.062 [b]	.002 [c]	.047 [c]	**-.176** [a]	**.141** [a]	**.079** [a]	**.104** [a]	.020 [c]	**.109** [a]	.047 [c]	.054 [c]	**-.068** [a]	**.115** [a]	.005 [c]	-	
17.marital_status	-.019 [c]	-.024 [c]	**-.190** [a]	**-.180** [a]	**.121** [a]	-.029 [c]	-.032 [c]	.047 [c]	-.037 [c]	**.105** [a]	-.041 [c]	-.032 [c]	.019 [c]	-.039 [c]	.019 [c]	.040 [c]	-

Note: [a] P-Value < 0.01 (2-tailed); [b] P-Value < 0.05 (2-tailed); [c] No significant correlation.

From Table 45 of demographic variables, the *r* between the amount of time of father leaving and of mother leaving is 0.636 and these are significantly correlated with each other. The frequency of meetings with the father is significantly correlated with the parents' marital status, to the region of the student, as well as to the distance from their work. In addition, students' school performance has a significant correlation with frequency of meeting their father and their travelling frequency. Moreover, whether students come from an outbound (mostly a rural) area is significantly related to all variables, except for their health status and the amount of time their father was away during migration.

Table 46. Correlation Coefficients for SCWB and Caregiver-Child Relationship Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.LS*	-																		
2.AS	**.444** [a]	-																	
3.SE	**.312** [a]	**.517** [a]	-																
4.OE	**.302** [a]	**.420** [a]	**.310** [a]	-															
5.GP	**.282** [a]	**.473** [a]	**.566** [a]	**.271** [a]	-														
6.PA	**.197** [a]	**.243** [a]	**.292** [a]	**.213** [a]	**.258** [a]	-													
7.NA	**-.226** [a]	**-.167** [a]	**-.131** [a]	**-.096** [a]	**-.097** [a]	**.152** [a]	-												
8.ESP	**.263** [a]	**.396** [a]	**.327** [a]	**.318** [a]	**.334** [a]	**.246** [a]	**-.136** [a]	-											
9.CCATRD1	**-.257** [a]	**.260** [a]	**.261** [a]	**.197** [a]	**.288** [a]	**.244** [a]	**-.138** [a]	**.427** [a]	-										
10.CCATRD2	**.236** [a]	**.236** [a]	**.250** [a]	**.154** [a]	**.269** [a]	**.254** [a]	**-.145** [a]	**.306** [a]	**.613** [a]	-									
11.CCAAD1	*-.031* [c]	**-.071** [a]	*-.048* [c]	**-.067** [a]	**-.026** [a]	*-.008* [c]	**.232** [a]	**-.132** [a]	**-.234** [a]	**-.067** [a]	-								
12.CCAAD2	*-.031* [c]	*-.022* [c]	*.008* [c]	*-.031* [c]	*.024* [c]	*-.005* [c]	**.253** [a]	*-.031* [c]	*-.014* [c]	*-.030* [c]	**.510** [a]	-							
13.CCAAD3	-.049 [b]	*-.037* [c]	**.071** [a]	*-.001* [c]	**.064** [a]	*-.002* [c]	**.179** [a]	*.035* [c]	*.027* [c]	**-.063** [a]	**.357** [a]	**.335** [a]	-						
14.CCCA	**.187** [a]	**.168** [a]	**.151** [a]	**.128** [a]	**.243** [a]	**.166** [a]	**-.079** [a]	**.212** [a]	**.366** [a]	**.368** [a]	**-.089** [a]	*-.048* [c]	**-.082** [a]	-					
15.CCCF	**.201** [a]	**.217** [a]	**.193** [a]	**.162** [a]	**.209** [a]	**.219** [a]	**-.076** [a]	**.259** [a]	**.438** [a]	**.491** [a]	**-.105** [a]	*-.034* [c]	**-.085** [a]	**.521** [a]	-				
16.CHRD1	**.083** [a]	**.090** [a]	**.130** [a]	**.113** [a]	**.098** [a]	**.163** [a]	**.053** [a]	**.119** [a]	**.163** [a]	**.154** [a]	*.048* [c]	**.102** [a]	*.008* [c]	**.192** [a]	**.266** [a]	-			
17.CHRD2	**.136** [a]	**.179** [a]	**.172** [a]	**.183** [a]	**.238** [a]	**.192** [a]	*-.016* [c]	**.267** [a]	**.263** [a]	**.225** [a]	**-.066** [a]	**.053** [a]	*.009* [c]	**.226** [a]	**.302** [a]	**.435** [a]	-		
18.CHRD3	*-.003* [c]	*.035* [c]	**.074** [a]	*-.017* [c]	**.073** [a]	**.087** [a]	*-.034* [c]	**.072** [a]	**.143** [a]	*.035* [c]	**-.086** [a]	*.006* [c]	*.034* [c]	**.090** [a]	**.102** [a]	**.324** [a]	**.128** [a]	-	
19.CFLT	*.041* [c]	**.093** [a]	**.099** [a]	**.097** [a]	**.063** [a]	**.162** [a]	**.094** [a]	**.108** [a]	*.008* [c]	*-.002* [c]	**.190** [a]	**.248** [a]	**.202** [a]	*036* [c]	**.066** [a]	**.285** [a]	**.206** [a]	**089** [a]	-

Note: [a] P-Value < 0.01 (2-tailed); [b] P-Value < 0.05 (2-tailed); [c] No significant correlation

The statistic for each variable has been calculated by averaging the means of its items. The correlations between most SCWB and CCR variables are statistically significant. All the SCWB variables are correlated with each other in a highly statistically significant manner. Among them *Negative Affect (NA)* is negatively correlated with most SCWB variables except for *Positive Affect (PA)*, probably because of the instability of adolescents' affection. Also, most CCR variables are correlated with each other as expected, except for the second dimension *(CCAAD2) and* the third dimension (*CCAAD3*) of *Alienation* from the *Attachment* variable. All both two dimensions in the *Trust & Communication* subscale (CCATRD1 and CCATRD2) items, *Communication Frequency (CCCF)* items, most *Coactivities (CCCA)* items and most *Regulations/House Rules* items in the first dimension *(CHRD1)* are statistically correlated with SCWB variables and all the other variables, with a highly statistical significance (P-Value < 0.01), indicating the validity of the models and ground support for the hypotheses of this research.

* LS: life satisfaction, AS: academic satisfaction, SE: self-efficacy, OE: outcome expectations, GP: goal progress, PA: positive affect, NA: negative affect, ESP: environmental support, CCATRD1: caregiver-child-attachment: trust and communication subscale dimension 1, CCATRD2: caregiver-child-attachment: trust and communication subscale dimension 2, CCAAD1: caregiver-child-attachment: alienation subscale dimension 1, CCAAD2: caregiver-child-attachment: alienation subscale dimension 2, CCAAD3: caregiver-child-attachment: alienation subscale dimension 3, CCCA: caregiver-child-coactivity, CHRD1: caregiver-child-regulation dimension 1, CHRD2: caregiver-child-regulation dimension 2, CHRD3: caregiver-child-regulation dimension 3.

Chapter 5 Wellbeing of Chinese Migrant Workers' Children

In this section of the research, experimental analysis will be presented, which will combine quantitative and qualitative methods. The structure of both quantitative and qualitative research is based on the life course theory: time, space, relations and self-adjustment (Elder, 1998).

5.1 Factors Impacting the Wellbeing of Chinese Migrant Workers' Children from Four Dimensions

There are four dimensions included in the quantitative part of this study. The social cognitive wellbeing variables are the dependent variables for all the first three research questions, and they are ordinal category variables (marked from 1 to 5). All the dependent variables are mean centered. And the independent variables were categorized into the following dimensions: demographic, time, space, relation, and self-adjustment.

Since the dependent variables for the first three research questions are categorical variables, here linear regression is used to explore the relationships among the social cognitive variables and independent variables in different dimensions (time, space, and relations). In addition, demographic variables are also discussed in each section. The fourth research question is in the self-adjustment dimension and aims to explore the inner relationship of the social cognitive wellbeing variables and family relation indicators. Therefore, here path modeling and structural equation modeling are used to test the family-based social cognitive wellbeing model.

5.1.1 Time: Time With Parents Matters, Especially With Father

This part aims to explore the impacts of the parents' migration on the wellbeing of their children. The mental health of the children of migrant workers has been studied in different subgroups: residence type, gender, age, and family economic condition; however, there is a lack of evidence relating to parents' migration time and its influence on the mental health of migrants' children. There are some studies related to migration time and the mental health of migrants. For example, Wu et al (2020) found no differences in mental health among migrants who had arrived less than two years in their place of migration, but unemployed new migrants had worse mental health. Moreover, another researcher established a grief model to explain different negative feelings in migrants as time goes by (Stillman et al., 2005).

It is demonstrated that adolescents at the rebellion stage of their lives quickly take up unhealthy or improper behavior, such as smoking, drinking, and conflicts with teachers and peers (Wen & Lin, 2012). At the same time, it is also found that parental absence is particularly disruptive for children within their development ages (e.g., infants and preschool children) (Lu et al., 2016). In comparison, Huang et al. (2018) outlined different influences and outcomes caused by parents' migration in each distinct phase of a child's life. But limited evidence shows whether the exact time (the length of time migrant parents left behind their children in rural areas or the length of time migrant youngsters migrate together with their parents in the host cities) impacts the wellbeing of migrant workers' children.

According to the view of life course theory, "time of life" emphasizes both the history in a specific social context and personal experiences during the life span (Elder, 1998). Evidence shows that in children, their parents' migration could be essential because parental

participation in each phase of teenagers' development can support their cognitive growth in a different direction (Huang et al., 2018). In previous studies, Huang et al. (2018) explored the influence of parents' migration time on the wellbeing of children from their parents' perspective instead of their children. Moreover, many of these studies focus on left-behind children (Zhao et al., 2014), so what is the mental health condition for migrant youngsters? What are the differences among left-behind youngsters, migrant youngsters, and non-migrant youngsters in their wellbeing as their parents' migrant time goes by?

Moreover, parent-child communication has been proved to be essential to the wellbeing of both migrant youngsters and left-behind children, no matter how long they have been separated from their parents (Lu et al., 2019). Is parents' migration time period an essential element that influences migrant children's mental health? And does the company of parents and the quality of time they spend with them matter in children's wellbeing in the long term? In this part, answers will be found to the above questions and elements identified that can mediate the migrant time issues and improve students' wellbeing from the children's perspective.

Table 47 shows the dimensions, variables, and methods of this part of the research. More specifically, the dependent and independent variables and their types are classified based on their dimensions. The social cognitive wellbeing variables are the dependent variables, and they are ordinal category variables (marked from 1 to 5).

The independent variables were categorized into two dimensions: time and demographic. In the time dimension the length of time of the father's and mother's migration have been included. The variables come from the questions from this study: How long has your father left your hometown? And how long has your mother left your hometown? Both two questions are followed with four options (A. less than one year; B. one to five years; C. six to ten years; D. Above ten years). There are 15 variables included in the demographic dimension which can be classified into two groups: nominal variables and ordinal variables.

Table 47. Dimensions, Variables and Methods I[15]

Dimensions	Variables	Type
	Dependent Variables	
Social Cognitive Wellbeing	Life satisfaction	1 (strongly disagree) to 5 (strongly agree)
	Academic satisfaction	1 (strongly disagree) to 5 (strongly agree)
	Self-efficacy	1 (no confidence) to 5 (complete confidence)
	Outcome expectation	1 (strongly disagree) to 5 (strongly agree)
	Goal progress	1 (no progress) to 5 (excellent progress)
	Environmental support	1 (strongly disagree) to 5 (strongly agree)
	Negative affect	1 (never) to 5 (always)
	Positive affect	1 (never) to 5 (always)
	Independent Variables	
Time	Time of father's migration	1 (less than 1 year) to 4 (Above 10 years)
	Time of mother's migration	1 (less than 1 year) to 4 (Above 10 years)
Demographic	Frequency of meeting father	1 (Once a year/never) to 5 (everyday)
	Frequency of meeting mother	1 (Once a year/never) to 5 (everyday)
	Parent_child_communication	1 (not good with both) to 3 (good with both parents)
	Live_with_both_parents	0 (no) to 1 (yes)
	Male	0 (no) to 1 (yes)
	Health condition	1 (bad), 2 (not bad and nor good), 3 (good)
	School performance	1 (low) to 5 (among the best)
	Household registration type urban	0 (no) to 1 (yes)
	Living place urban	0 (no) to 1 (yes)
	Age_father	1 (below 40), 2 (40 to 50), 3 (above 50)
	Age_mother	1 (below 40), 2 (40 to 50), 3 (above 50)
	Edu._father	1 (Primary school /below) to 4 (college/above)
	Edu._mother	1 (Primary school /below) to 4 (college/above)
	Parents divorced	0 (no) to 1 (yes)
	Frequency travel per year	1 (never)to 4 (more than twice)

Table 48 shows the regression estimate of migration time and life satisfaction. Here the research involved two models in determining the direct impacts of parents' migration time on their children or how the demographic variables mediate or adjust this impact. Model 1 only estimated from parents' migration time. At the same time, model 2 added another 15 variables based on model 1: frequency of meeting with father, frequency of meeting with mother, living together with both parents, parent-child communication, gender, health condition, school performance, household registration type, living place, age of mother, age of the father, educational level of the mother, educational level of father, parents' marital

[15] Method in this part: Linear regression

status and frequency of travel. The adjusted R square value results: model 1 (0.007) is smaller than model 2 (0.106), indicating the degree of fit of model 2 is better than that of model 1.

Table 48. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Life Satisfaction (Dependent variable in this table is life satisfaction)

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	2.705***	1.543***
Time		
Time_father_migration	-0.002**	-0.001*
Time_mother_migration	0.000	0.001
Demographic		
Frequency_meet_with_father		-0.022
Frequency_meet_with_mother		-0.043
Live_with_both_parents		-0.137*
Communication_with_parents		0.186***
Male		0.141***
Health condition		0.215***
School performance		0.003
Household registration type urban		-0.018
Living place urban		0.040
Age_father		0.005
Age_mother		-0.021
Edu._father		0.021
Edu._mother		0.037
Parents divorced		-0.148
Frequency of travel		0.056***
Adjust $\boldsymbol{R}^2$	0.007	0.106

*Note: Sig.: * < .05, ** < .01, *** < .001.*

The regression constant corresponds to the level of life satisfaction for respondents whose parents' time of migration is at the average level (in model 1), have average communication with parents, average health conditions, and average frequencies of travel with parents in model 2. According to Table 49, the duration of the father's migration is statistically significant in both model 1 and model 2, while the duration of the mother's migration is not. The coefficient in model 1 for time period of father's migration is -0.002 and -0.001 in model 2. That means if the time period of the father's migration increased 1 unit, *ceteris paribus*, life satisfaction decreases by 0.002 units in model 1 and 0.001 units in model 2. It is similar to the results in some previous studies; Graham and Jordan (2011) found that in Thailand and Indonesia children left behind by the father are more likely to be unhappy. For the reason why the mothers' time of migration is not significant in the research samples, it probably because of the small number of youngsters left behind by their mothers. Among the 1,682 participants in the sample group there are only 66 left behind by their mothers (shown in Table 13). Less than 4% of the participants' mothers migrated without their children, and it is near 10% for the number of participants left behind by their fathers.

In model 2, in addition to the time of fathers' migration for participants, whether they live with both parents, the communication level with parents, gender of participants, health condition and frequency of travel with parents are also with statistical significance. Males get 0.141 units more life satisfaction than females when the duration of the fathers' migration is the same, same communication level with parents, same health conditions, and exact frequency of travel with parents. The other variables with significance in the regression model

all have a positive effect except whether the participant lives together with parents or not. It shows that the participants living together with their parents have 0.137 units lower lifelong satisfaction than those who do not. But if participants have 1 unit more parent-child communication; their lifelong satisfaction increases by 0.186 units. That shows the importance of parent-child communication for the subjective wellbeing of VET school students. Also, the health condition is essential to participants' lifelong satisfaction. When it is 1 unit higher, their lifelong satisfaction arises 0.215 units. Moreover, participants with non-divorced parents have 0.191 units higher lifelong satisfaction than those with divorced parents. Moreover, travel frequency impacts participants' lifelong satisfaction as the participants with a 1 unit higher frequency of travel have 0.056 units higher life satisfaction. In general, from the time dimension, the migration time period of the father influences the life satisfaction of the migrant workers' children in both above two models. In Chinese society, the gendered concept of the parent-child relationship and parenting practices are deeply influenced by traditional Chinese culture, especially Confucian ethics (Wu et al., 2002). Confucian ethics emphasize the importance of the family and the responsibility of parents to raise children. In the traditional sense, the father is the financial supporter, moral mentor, and strict disciplinarian of his children (Choi & Peng, 2016). This helps understanding of the results of this research in that the migration time of the father impacts the lifelong satisfaction of his child.

Table 49 shows the regression estimate of migration time and self-efficacy. There are two models included in the table. Also, here two models are involved in determining the direct impacts of parents' migration time on their children or how the demographic variables mediate or adjust this impact (all the following tables in the quantitative part will be the same). In model 1, the independent variables only contain the parents' migration time, while model 2 included time and several demographic variables, which are the same with the life satisfaction scale. From the adjusted R square value results, the fit degree of model 2 is much more significant than that of model 1.

Table 49. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Self-Efficacy

N = 1682	Model 1	Model 2
Variable	**B**	**B**
Constant	2.611***	2.153***
Time		
Time_father_migration	-0.002*	-0.001*
Time_mother_migration	0.001	0.001
Demographic		
Frequency_meet_with_father		0.008
Frequency_meet_with_mother		-0.006
Live_with_both_parents		-0.040
Communication_with_parents		0.063*
Male		0.240***
Health condition		0.178***
School performance		-0.169***
Household registration type_urban		0.141**
Living place_urban		0.108*
Age_father		-0.018
Age_mother		-0.029
Edu._father		0.01
Edu._mother		0.026
Parents divorced		-0.091
Frequency of travel		0.034
Adjust $\boldsymbol{R}^2$	0.003	0.141

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is self-efficacy.*

It is also statistically significant for time of the father's migration, but not significant for the time of the mother's migration in both of the above two models. According to the results from Table 49, if the time of father's migration increased 1 unit, while simultaneously keeping the other characteristics constant, self-efficacy decreases 0.002 units in model 1 and 0.001 in model 2. The regression constant corresponds to the level of self-efficacy for respondents whose father's time of migration is at the average level (in model 1), average communication with parents, average health conditions, average school performance, and living together with both parents in model 2.

Moreover, in model 2, males get 0.24 units more self-efficacy as female students when experiencing the same communication level with parents, same school performance, same health conditions, and same living place. The other variables with significance in the regression model show that better communication with parents, higher travel frequencies with parents, the healthier state of the participants, and living in the urban areas get higher self-efficacy. Specifically, when participants get 1 unit higher in health conditions, the self-efficacy increases by 0.178 units. But if the school performance increases 1 unit, the self-efficacy decreases by 0.169 units. That may be caused by the characteristics of Chinese vocational school students. Some research found that Chinese vocational school students suffered from failures in their learning experience; they had lower learning self-efficacy (Jiang & Zhang, 2012). Even though they obtained comparatively higher school performance after entering vocational school, they do not have enough confidence to keep at the top of the class again. Therefore, when the research participants have better school performance, their self-efficacy decreased. Moreover, the participants with an urban household registration type have 0.141 units higher self-

efficacy than rural ones. Also, the participants living in the urban areas have o.108 units higher self-efficacy than those living in rural/outbound areas.

Table 50 shows the regression estimate of migration time and academic satisfaction. Also, two models are included in the table. In model 1, the independent variables only contain parents' migration time, while model 2 has time and several demographic variables. The adjusted R square value result of model 2 (0.107) is much more significant than model 1 (0.004).

Regression estimates of migration time and social cognitive wellbeing: academic satisfaction.

Table 50. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Academic Satisfaction

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	3.383***	2.678***
Time		
Time_father_migration	-0.001**	-0.001
Time_mother_migration	0.001	0.001
Demographic		
Frequency_meet_with_father		0.003
Frequency_meet_with_mother		0.012
Live_with_both_parents		0.008
Parent-child communication		0.135***
Male		0.114**
Health condition		0.189***
School performance		-0.115***
Household registration type urban		0.034
Living place urban		0.261***
Age_father		-0.015
Age_mother		-0.016
Edu._father		0.016
Edu._mother		0.002
Parents divorced		-0.023
Frequency of travel		-0.006
Adjust R^2	0.004	0.107

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is academic satisfaction.*

The regression constants are both significant in model 1 (3.383) and model 2 (2.678). They show the level of academic satisfaction for respondents with fathers with an average migration time (in model 1), average communication with parents, average health conditions, average school performance, and living together with both parents in model 2. From the time dimension, only the migration time of the father is statistically significant in model 1. The time period of the mother's migration is not significant in both model 1 and model 2. Based on the results of model 1, if the time period of the father's migration increased 1 unit, academic satisfaction decreases 0.001 unit.

There is no significant influence for both fathers' and mothers' migration time in model 2. Males obtain 0.114 units more academic satisfaction than female students when they experience the same communication frequency with parents, same school performance, same health conditions, and same living place. Under similar conditions, if the parent-child communication increases 1 unit participants' academic satisfaction increases by 0.135 units higher in model 2. Also, when health conditions improve 1 unit the academic satisfaction

improves 0.189 units. Moreover, participants living in urban/inbound areas have 0.261 units higher academic satisfaction than others living in rural/outbound areas. On the contrary, when school performance improves 1 unit, the academic satisfaction decreases by 0.115 units. That may be because participants with better school performance probably are under higher academic pressure which decreases academic satisfaction.

Table 51 shows the regression estimate of migration time and outcome expectation. Two models are included in the table, model 1, in which the independent variables only contain the parents' migration time, and model 2 which has time and several demographic variables. The adjusted R square value results, the degree of fit of model 2 ($\text{Adjust } \boldsymbol{R}^2 = 0.050$) is much bigger than that of model 1 ($\text{Adjust } \boldsymbol{R}^2 = 0.001$).

Regression estimates of migration time and social cognitive wellbeing: Outcome Expectation.

Table 51. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Outcome Expectation

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	3.497***	2.715***
Time		
Time_father_migration	0.000	0.000
Time_mother_migration	0.000	-0.001
Demographic		
Frequency_meet_with_father		-0.012
Frequency_meet_with_mother		0.018
Live_with_both_parents		-0.086
Parent-child communication		0.105***
Male		0.052
Health condition		0.237
School performance		-0.021
Household registration type		0.008
Urban		
Living place urban		0.058
Age_father		-0.098
Age_mother		-0.001
Edu._father		0.007
Edu._mother		-0.001
Parents divorced		-0.112
Frequency travel		0.033
$\text{Adjust } \boldsymbol{R}^2$	0.001	0.050

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is outcome expectation.*

The regression constant corresponds to the outcome expectations for participants whose father's time of migration is at the average level (for model 1), and have average communication with parents in model 2. Based on the results of both model 1 and model 2, there is no significant influence for the migration time of participants' father and mother on participants' outcome expectations in both model 1 and model 2.

However, in model 2, when the parent-child communication increases 1 unit the participants' outcome expectations increase 0.105 units higher. This shows participants with good parent-child communication can help them get positive outcome expectations after graduating from vocational schools, since Outcome Expectation refers to the student's own expectation of the

outcomes of graduating from the VET school. Therefore, participants with better communication with their parents will have more confidence to find a good job or become enrolled in their ideal college than those who do not. Moreover, the reason why the migration time of participants' parents does not impact their outcome expectation, is probably because whether participants' parents migrate or not and how long they migrant influence little of their academic expectation, but the communication between them does.

Table 52 shows the regression estimate of migration time and goal progress. Also, two models are included in this table, model 1 in which the independent variables only contain the parents' migration time, while model 2 includes time and several demographic variables. Goal progress is the dependent variable. From the results of the adjusted R square value, the degree of fit of model 2 (0.254) is much bigger than that of model 1 (0.006).
Regression estimates of migration time and social cognitive wellbeing: goal progress.

Table 52. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Goal Progress

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	3.078***	2.843***
Time		
Time_father_migration	-0.002***	-0.001
Time_mother_migration	0.002**	0.001*
Demographic		
Frequency_meet_with_father		-0.001
Frequency_meet_with_mother		-0.051*
Live_with_both_parents		0.064
Parent-child communication		0.093**
Male		0.05
Health condition		0.184***
School performance		-0.298***
Household registration type urban		0.054
Living place urban		0.299***
Age_father		-0.012
Age_mother		0.028
Edu._father		0.071*
Edu._mother		0.003
Parents divorced		0.041
Frequency of travel		-0.037
Adjust $\boldsymbol{R}^2$	0.006	0.254

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is goal progress.*

The time period of both the father's and mother's migration are statistically significant in model 1. But there is no significant influence for the mother's migration time in model 2. Based on the results, if the time of the father's migration increased 1 unit, goal progress decreases 0.002 units in model 1 and 0.001 in model 2, simultaneously keeping the other characteristics constant. In contrast, the goal progress value increases 0.002 if the mother's migration time increases 1 unit in model 1. The regression constants are both significant in model 1 and model 2. They show the level of goal progress for respondents whose parents' migration time is at the average level in model 1, and mother's migration time is at the average level, average frequency of meeting with mother, average communication level with parents, the father with an average education level, average health conditions, average school performance and live in urban/inbound areas in model 2.

Moreover, in model 2, if the health condition improves 1 unit, participants' goal progress increases 0.184 units higher, while simultaneously keeping the other characteristics constant. Under similar conditions, the frequency of the participants meeting with their mother everyday has 0.051 units lower in goal progress than with the participants who meet with their mothers once a week. In addition, students living in urban/inbound areas have 0.299 units higher goal progress than those living in rural/outbound areas. Conversely, when school performance improves 1 unit the goal progress decreases 0.298 units. This is similar to the academic satisfaction and self-efficacy scale results, which is probably because participants with better school performance may be self-conscious that they have achieved some goals in academic works that decreases the expectation of academic work during the learning process. In addition, when the father's education level increases 1 unit, the participants' goal progress rises by 0.070 units. That may be because fathers with higher education levels comparatively have higher incomes, and the ability to make money is a crucial factor in defining fatherhood (Brandth & Kvande, 1998).

The environmental support is the dependent variable for both models in Table 53. This table shows the regression estimate of migration time and environmental support. Also, two models are included in this table. In model 1, the independent variables only contain the parents' migration time, while model 2 has time and several demographic variables. The adjusted R square value results, the fit degree of model 2 ($\text{Adjust } \boldsymbol{R}^2 = 0.072$) is much bigger than that of model 1 ($\text{Adjust } \boldsymbol{R}^2 = 0.004$).

Regression estimates of migration time and social cognitive wellbeing: environmental support.

Table 53. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Environmental Support

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	3.522***	2.857***
Time		
Time_father_migration	-0.001**	-0.001
Time_mother_migration	0.001	0.001
Demographic		
Frequency_meet_with_father		0.019
Frequency_meet_with_mother		-0.013
Live_with_both_parents		-0.015
Parent-child communication		0.185***
Male		0.002
Health condition		0.149***
School performance		-0.042
Household registration type urban		0.068
Living place urban		0.063
Age_father		0.014
Age_mother		-0.091*
Edu._father		-0.014
Edu._mother		0.02
Parents divorced		0.066
Frequency of travel		0.058**
$\text{Adjust } \boldsymbol{R}^2$	0.004	0.072

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is environmental support.*

Only the migration time of the father in model 1 is statistically significant. Moreover, the regression constants are both significant in model 1 and model 2. They show the level of environmental support for respondents whose father's time period of migration is at the average level (in model 1), or average health conditions, average school performance, average communication with parents, the average age of mother, and average frequency of travel in model 2. Based on the results of model 1, if the time period of the father's migration increased 1 unit, participants report they get 0.001 units fewer environmental support in model 1. But there is no significant influence for the mother's migration time in both model 1 and model 2.

In model 2, participants who perceive themselves with 1 unit more child-caregiver communication get 0.185 units of higher environmental support (support from teachers, parents, and friends), while simultaneously keeping the other characteristics constant. That is very easy to understand. When participants communicate more with their parents and tell them about their needs, they will get more support. Moreover, if the health conditions increases 1unit participants perceive their environmental support increases by 0.149 units in model 2. Furthermore, participants who travel at least once a year have 0.058 units higher environmental support than the participants who never travel with their parents. However, when the condition of the age of the mother increases 1 unit, they perceive there is 0.091 units less environmental support. This is probably because when the age gap between children and mothers is more significant, they get fewer common topics and there are higher possibilities of the generation gap. Therefore, children perceive they get less support from their mothers.

Table 54 shows the regression estimate of the parents' migration time and participants' negative affect. Two models are included in this table; in model 1 the independent variables only contain the parents' migration time, and model 2 has time and several demographic variables. Moreover, the negative affect is the dependent variable. The fit degree of model 2 (0.089) is more significant from the adjusted R square value results than that of model 1 (0.002).

The regression constants are both significant in model 1 and model 2. They show the negative affect for respondents whose father's time of migration is at the average level (in model 1) or average level of education, average health conditions and whose mother has an average education level in model 2. Based on model 1, if the time period of the father's migration increased 1 unit, the negative affect increases 0.001 units in model 1. But there is no significant influence for the time of the father's migration in model 2. Also, there is no significant influence for the mother's migration time in both model 1 and model 2.

Moreover, in model 2, participants with better communication get 0.169 units lower in negative affect, when they keep the same health conditions, and their mother has the same level of education. Under a similar situation, when the education level of participants' mothers gets 1 unit higher, their negative affect is 0.075 lower. That might be because the higher education mothers have more scientific ways to educate and communicate with their children, which helps them to reduce the negative affect.

Regression estimates of migration time and social cognitive wellbeing: Negative affect.

Table 54. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Negative Affect

N = 1682	Model 1	Model 2
Variable	**B**	**B**
Constant	2.763***	3.951***
Time		
Time_father_migration	0.001*	0.001
Time_mother_migration	-0.001	-0.001
Demographic		
Frequency_meet_with_father		0.006
Frequency_meet_with_mother		0.003
Live_with_both_parents		-0.005
Parent-child communication		-0.169***
Male		-0.087
Health condition		-0.239
School performance		-0.014
Household registration type urban		0.046
Living place urban		-0.08
Age_father		-0.028
Age_mother		0.039
Edu._father		-0.005
Edu._mother		-0.075**
Parents divorced		0.049
Frequency of travel		-0.001
Adjust $\boldsymbol{R}^2$	0.002	0.089

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table has negative affect.*

Table 55 shows the regression estimate of migration time and positive affect. Also, two models are included in this table; in model 1 the independent variables only contain parents' migration time, and model 2 has time and several demographic variables. The adjusted R square value results, the fit degree of model 2 ($\text{Adjust } \boldsymbol{R}^2 = 0.046$), is more significant than model 1 ($\text{Adjust } \boldsymbol{R}^2 = 0.007$).

Based on the results of both model 1 and model 2, there is no significant influence for the migration time of participants' father and mother on the participants' positive affect in both of the two models. The regression constants are 2.951 in model 1, and it is 2.726 in model 2. It corresponds to the positive affect for participants with average health conditions, average school performance, living with both parents and having average communication with their parents in model 2.

Moreover, in model 2, when the participants live with both parents, their positive affect decreases 0.057 units more than other conditions, while simultaneously keeping the other characteristics constant. In addition, when the health conditions improve 1 unit, the positive affect improves 0.164 units. Conversely, if the school performance is 1 unit higher, the participants' positive affect decreases 0.075 units. In general, participants' migration time does not have an impact on their positive affect. Moreover, good communication with parents helps participants improve the positive affect no matter whether they are living together with their parents or not. Furthermore, since the students get fewer negative affect as well as positive affect when they are living together with both parents, it shows that the youngsters who live together with both parents have more stable emotions and affection dispositions.

Regression estimates of migration time and social cognitive wellbeing: positive affect.

Table 55. Regression Estimates of Migration Time and Social Cognitive Wellbeing: Youngsters' Positive Affect

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	2.951***	2.726***
Time		
Time_father_migration	0.000	0.000
Time_mother_migration	0.000	0.001
Demographic		
Frequency_meet_with_father		-0.002
Frequency_meet_with_mother		-0.004
Live_with_both_parents		-0.057**
Parent-child communication		0.071***
Male		0.05
Health condition		0.164***
School performance		-0.075***
Household registration type		0.12
Urban		
Living place urban		-0.082
Age_father		-0.019
Age_mother		-0.052
Edu._father		-0.01
Edu._mother		0.013
Parents divorced		-0.024
Frequency of travel		0.031
Adjust $\boldsymbol{R}^2$	0.007	0.046

*Note: Sig.: * < .05, ** < .01, *** < .001,* the dependent variable in this table has positive affect.

Summary

In this section, the length of time of migration is one of the most important independent variables and influences participants' social cognitive wellbeing variables. The research has proved that the length of time the father migrated impacts participants' life satisfaction, self-efficacy, academic satisfaction, goal progress, environmental support, and negative affect through linear regression. However, the migration time of participants' mothers does not impact most of the social cognitive indicators and other dependent variables, except for goal progress. The mothers' time of migration is not significant in this research, and this is probably because of the small number of participants who were left behind by their mothers in the research sampling. In some of the previous migration studies, parents' absence can influence the emotional outcome of children, and those children who migrate with their mothers have more negative emotions and low academic performance than those who migrate with their father (Jordan & Graham 2012; Xu. et al., 2019). In comparison, few research studies are related to both the parents' migration time and the influences on the satisfaction and affections of the migrant children.

Moreover, this study also found that male participants have higher life satisfaction, self-efficacy, and academic satisfaction than female students. When the participant has better communication with their parents, they get relevantly higher marks in almost all SCWB variables (e.g., lifelong satisfaction, self-efficacy, goal progress, outcome expectations, environmental support and they convey more stable emotions and affection distribution). It is better when he or she is living together with both parents. Also, participants with better

health conditions get higher life satisfaction, self-efficacy, outcome expectations, goal progress, environmental support, and positive affect. Additionally, respondents living in urban/inbound areas or with urban household registration types have higher scores on goal progress, self-efficacy, and academic satisfaction. However, participants with better school performance have relevantly lower self-efficacy, goal progress, environmental support, and positive affect, while there is a higher negative affect.

The above regression analysis initially discussed teenagers' social cognitive wellbeing in relation to migration time and came out with good results based on participants' characteristics. All these results are based on a cross-section survey. In further study, long-term investigation should be involved to compare the differences through different periods. From the results of this part, this study found that fathers' migration time impacts the wellbeing of their children in a statistically significant manner. This shows fathers play an important role in the process of their children's development also. The absence of a father in developing children fundamentally influences the child's wellbeing and personality.

5.1.2 Space: Students in Inbound Area Achieve Higher Wellbeing than Outbound

As the Chinese sociologist Hsiao Tung Fei (1992) described in his book *From the Soil: Chinese immobility of the agricultural times, "enduring attachment to the soil, points to a relationship between people and space"* (Fei, 1992, P.11). Relatively, the mobility in industrial or post-industrial times also remarks on the connection between people and space.

Migrant workers' children could be migrant children (living in inbound areas, normally they are also urban areas) or left-behind children (living in outbound areas, most are rural areas). According to previous studies, Chinese migrant adolescents suffer from structural barriers in host cities, such as substantial difficulties in arranging adequate childcare and schooling (Chen et al., 2017), live in inadequate housing conditions and belong to a marginal group in society (Huang et al., 2018). Thus, even if migrant children enjoy a reunion with their parents and have better economic support than left-behind children, their migrant parents can hardly offer higher quality parenting than their fellows left behind. Additionally, according to Huang et al. (2018), they are confronted with social discrimination (Huang et al., 2018) (e.g., victim prejudice as incompetent and undisciplined) and have difficulties in fully integrating themselves into urban communities (Wong et al., 2009).

From the perspective of the left-behind children in rural areas, according to attachment theory, a separation from parents breaks the primary balance of affectional attachment (Zhou et al., 2015), which may potentially trigger emotional problems in left-behind children (e.g., depression, anxiety and loneliness). While some other studies noted that there is no significant difference between migrant children and left-behind children, likewise, there are studies that did not reach a conclusion (Huang et al., 2018). In terms of those children left behind by one parent, according to Lu (2012), the parent who is left in rural areas needs to take care of their children and handle agricultural production, but also has an emotional burden of long time separation from their beloved one. It potentially impacts their parenting skills and children's wellbeing (Lu, 2012).

Table 56 shows the dependent and independent variables and their types; they have been classified into three dimensions: social cognitive wellbeing, space, and demographic. The social cognitive wellbeing variables are the dependent variables, and they are ordinal category variables (marked from 1 to 5).

Table 56. Dimensions, Variables and Methods II[16]

Dimensions	Variables	Type
	Dependent Variables	
Social Cognitive Wellbeing	Life satisfaction	1 (strongly disagree) to 5 (strongly agree)
	Academic satisfaction	1 (strongly disagree) to 5 (strongly agree)
	Self-efficacy	1 (no confidence) to 5 (complete confidence)
	Outcome expectation	1 (strongly disagree) to 5 (strongly agree)
	Goal progress	1 (no progress) to 5 (excellent progress)
	Environmental support	1 (strongly disagree) to 5 (strongly agree)
	Negative affect	1 (never) to 5 (always)
	Positive affect	1 (never) to 5 (always)
	Independent Variables	
Space	Household registration type	0 (no) to 1 (yes)
	Living place	0 (no) to 1 (yes)
	Outbound	0 (no) to 1 (yes)
	Migrants' family	0 (no) to 1 (yes)
	Distance_father	Numeric
	Distance_mother	Numeric
Demographic	Parent-child communication	1 (not good with both) to 3 (good with both parents)
	Male	0 (no) to 1 (yes)
	Live_with_both_parents	0 (no) to 1 (yes)
	Health condition	1 (bad) to 3 (good)
	School performance	1 (low) to 5 (among the best)
	Age_mother	1 (below 40), 2 (40 to 50), 3 (above 50)
	Age_father	1 (below 40), 2 (40 to 50), 3 (above 50)
	Edu._mother	1 (Primary school /below) to 4 (college/above)
	Edu._father	1 (Primary school /below) to 4 (college/above)
	Parents divorced	0 (no) to 1 (yes)
	Frequency of travel	1 (never)to 4 (more than twice)

The independent variables have been also classified into two dimensions: space and demographic. There are seven variables in the space dimension of independent variable: they are household registration type (urban or rural areas), living place (rural or urban areas), outbound areas (yes or no: inbound areas), migrant family (yes or no), father's distance from home, and mother's distance from home. In the demographic dimension there are 11 variables included, which belong to two categories: nominal variables and ordinal variables. Moreover, linear regression has been used in this part also.

Table 57 shows the regression estimate for place of residence, family migration, and life satisfaction. There are two models in the table; model 1 estimates from the place of residence and whether from a migrant family or not, while model 2 added another 12 variables based on model 1: parent-child communication, gender, living together with both parents, health condition, school performance, age of mother, age of the father, education level of the mother, education level of father, parents' marital status, frequency of travel. The adjusted R square value results: model 1 (Adjust $\boldsymbol{R}^2$= 0.021) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.103), indicating the degree of fit of model 2 is better than that of model 1.

[16] Method in this part: Linear regression

Regression estimates of family arrangements in space and social cognitive wellbeing: life satisfaction.

Table 57. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Life Satisfaction

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	2.986***	1.822***
Space		
Household registration type urban	0.057	0.041
Living place urban	-0.085	-0.064
Outbound	-0.224***	-0.145*
Migrants' family	-0.119	-0.081
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		0.182***
Male		0.110**
Live_with_both_parents		-0.065
Health condition		0.195***
School performance		0.005
Age_mother		-0.045
Age_father		0.028
Edu._mother		0.029
Edu._father		-0.002
Parents' Divorced		-0.163
Frequency of travel		0.067**
Adjust $\boldsymbol{R}^2$	0.021	0.103

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is life satisfaction.*

Among all the variables in the space dimension, only outbound is statistically significant in both model 1 and model 2. The regression constant in model 1 (2.986) and model 2 (1.822) are also statistically significant. It corresponds to the level of life satisfaction for a respondent living in the inbound (mostly urban) areas (in model 1), average communication with parents, average health condition and average frequencies travel with parents in model 2. According to Table 57, the respondents from outbound areas have 0.224 units lower life satisfaction than inbound (mostly urban) areas in model 1, and it is 0.145 units lower in model 2.

In model 2, males get 0.110 units more life satisfaction than female participants when they keep the same communication level with parents, same health conditions, and exact frequency of travel with parents. The other variables with significance in the regression model have positive effects. If the parent-child communication increases 1 unit, the life satisfaction will improve by 0.182 units. In addition, if the health condition gets 1 unit better, the life satisfaction increases by 0.195 units. Moreover, if participants' travel frequency with their parents increases 1 unit, the lifelong satisfaction will improve by 0.067 units when other variables remain the same. All in all, male participants from inbound (mostly urban) areas with good health conditions have high lifelong satisfaction. Moreover, increased parent-child travel frequencies and communication can improve the life satisfaction of children.

Table 58 shows the regression estimate of place of residence, family migration and self-efficacy. Also, two models are in the table; model 1 estimates from the place of residence and whether from a migrant family or not, while model 2 added another 12 variables based on

model 1: parent-child communication, gender, living together with both parents, health condition, school performance, age of mother, age of father, education level of mother, education level of father, parents' marital status, frequency of travel. From the results of adjusted R square value: in model 1 (Adjust $\boldsymbol{R}^2$= 0.035) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.139), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family arrangement in space and social cognitive wellbeing: self-efficacy.

Table 58. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Self-Efficacy

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	2.624***	2.205***
Space		
Household registration type urban	0.056	0.072
Living place urban	0.145*	0.148*
Outbound	-0.115*	0.033
Migrants' family	-0.130	-0.86
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		0.073*
Male		0.228***
Live_with_both_parents		-0.033
Health condition		0.164***
School performance		-0.161***
Age_mother		-0.043
Age_father		0.003
Edu._mother		0.027
Edu._father		0.019
Parents divorced		-0.075
Frequency of travel		0.048*
Adjust $\boldsymbol{R}^2$	0.035	0.139

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is self-efficacy.*

According to Table 58, Living place urban and outbound in the space dimension are statistically significant in model 1, while only living place in an urban area is significant in model 2. The regression constant in model 1 (2.624) and model 2 (2.205) are statistically significant. The regression constant corresponds to the level of self-efficacy for the respondent living in urban areas and inbound areas, average school performance, average health condition and average frequencies of travel with parents. Also, students living in urban areas have 0.145 units higher self-efficacy than those living in the rural areas in model 1, and it is 0.148 higher in model 2. Moreover, the respondents living in outbound (mostly rural) areas have 0.115 units lower self-efficacy than those in inbound (mostly urban) areas in model 1, and it has no significance in model 2.

In model 2, males get 0.228 units more self-efficacy than female participants when they have the same household registration type, same living place, same school performance, same health conditions, and exact frequency of travel with parents. The other variables with significance in the regression model have positive effects except for school performance. If it is supposed the health condition gets 1 unit better for the participants, their self-efficacy

increases 0.164 units. Moreover, participants with good communication with both parents have0.073 units higher self-efficacy in their academic work than those have good communication only with one parent. Moreover, participants who travelled at least once every year with their parents have 0.048 higher self-efficacy than the participants who never travelled with their parents. While, if the school performance of participants improves 1 unit, their self-efficacy decreases by 0.161 units when other variables keep the same. That is probably because school performance is not essential for popularity in VET schools, while personality and specialty are, in Chinese VET schools. The qualitative section will offer more details and reasons related to this.

Table 59 shows the regression estimate of place of residence, family migration and academic satisfaction. There are two models in the table; model 1 estimates from place of residence and whether from a migrant family or not, while model 2 added another 12 variables based on model 1 (Adjust $\boldsymbol{R}^2$= 0.043): parent-child communication, gender, living together with both parents, health condition, school performance, age of mother, age of father, education level of mother, education level of father, parents' marital status, frequency of travel. From the results of adjusted R square value: in model 1 is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.108), showing the degree of fit of model 2 is better than that of model 1.

Regression estimates of family arrangement in space and social cognitive wellbeing: academic satisfaction.

Table 59. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Academic Satisfaction

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	3.392***	2.886***
Space		
Household registration type urban	0.011	-0.006
Living place urban	0.221***	0.230***
Outbound	-0.141**	-0.081
Migrants' family	-0.113	-0.076
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		0.120***
Male		0.096*
Live_with_both_parents		0.004
Health condition		0.206***
School performance		-0.120***
Age_mother		-0.030
Age_father		0.000
Edu._mother		-0.01
Edu._father		0.01
Parents divorced		0.026
Frequency of travel		0.001
Adjust $\boldsymbol{R}^2$	0.043	0.118

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is academic satisfaction.*

According to Table 59, the living place in urban areas and outbound in the space dimension are statistically significant in model 1. Only living place in urban areas is significant in model 2. The regression constant in model 1 (3.392) and model 2 (2.886) are statistically significant. It

corresponds to the level of academic satisfaction for the male respondent living in urban and inbound areas, has average communication with parents, average health conditions, and average school performance in model 2. Moreover, the respondents of outbound (mostly rural) areas have 0.141 units lower academic satisfaction than inbound (most are urban areas) in model 1. Additionally, participants living in urban areas have 0.221 units higher academic satisfaction than those living in rural areas in model 1 and it is 0.230 in model 2.

In model 2, males have 0.096 units more academic satisfaction than female participants when they have the same health conditions, and same school performance. The other variables with significance in the regression model have positive effects except for school performance. Moreover, the participants with good communication with both parents have 0.12 units higher academic satisfaction than those only having good communication with one parent. But, if the participants' school performance decreases 1- unit, the academic satisfaction will improve by 0.12 units. On the contrary, if the health condition becomes 1 unit better, the academic satisfaction increases by 0.206 units.

Table 60 shows the regression estimate of place of residence, family migration, and outcome expectations. Also, two models are in the table. Model 1 estimates from the place of residence and whether from migrant family or not, while model 2 added another 12 variables based on model 1. The adjusted R square value results: model 1 ($\text{Adjust } \boldsymbol{R}^2$= 0.002) is smaller than model 2 ($\text{Adjust } \boldsymbol{R}^2$= 0.050), indicating the degree of fit of model 2 is better than that of model 1.

According to Table 60, only the outbound variable in the space dimension in model 1 is statistically significant. All the variables in the space dimension in model 2 are not significant. Moreover, the regression constant in model 1 (3.659) and model 2 (2.903) are statistically significant. The regression constant corresponds to the outcome expectation level for a respondent living in the inbound areas, and with an average health condition. Furthermore, the respondents who live in the outbound (mostly rural) areas have 0.159 units lower outcome expectations than those in the inbound (mostly urban) areas in model 1. Other variables do not have statistical significance.

In model 2, participants who have better parent-child communication have 0.131 units higher outcome expectations, when they are with same health conditions. If the health conditions of the participants become 1 unit better, their outcome expectations increase by 0.22 units. The results indicate that the participants have more positive expectations about their future after graduation from VET school when they have better parent-child communication and better health conditions.

Regression estimates of family arrangement in space and social cognitive wellbeing: outcome expectation.

Table 60. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Outcome Expectations

N = 1682	Model 1	Model 2
Variable	**B**	**B**
Constant	3.659***	2.903***
Space		
Household registration type urban	-0.005	0.025
Living place urban	-0.093	-0.078
Outbound	-0.159*	-0.104
Migrants' family	-0.033	0.012
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		0.131***
Male		0.032
Live_with_both_parents		-0.047
Health condition		0.220***
School performance		-0.012
Age_mother		-0.041
Age_father		-0.065
Edu._mother		-0.005
Edu._father		0.012
Parents divorced		-0.037
Frequency of travel		0.039
Adjust $\boldsymbol{R}^2$	0.002	0.050

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is outcome expectation.*

Table 61 shows the regression estimate of place of residence, family migration, and goal progress. There are two models in the table. Model 1 estimates from place of residence and whether from a migrant family or not, while model 2 added another 12 variables based on model 1. The adjusted R square value results: model 1 (Adjust $\boldsymbol{R}^2$= 0.086) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.254), indicating the degree of fit of model 2 is better than that of model 1.

According to Table 61, half of the variables in model 1 are statistically significant which include a living place in urban areas, outbound and migrant family or not. Only one variable, a living place in urban areas is significant in the space dimension in model 2. The regression constant in model 1 (2.982) and model 2 (2.903) are statistically significant. It corresponds to the level of goal progress for respondents living in the urban and inbound areas, in a non-migrant family (in model 1), live in the urban areas, with average parent-child communication, average health conditions, have average school performance, and average frequencies of travel with parents (in model 2). Moreover, the respondents who live in the urban areas have 0.390 units goal progress higher than rural areas in model 1, and it is 0.303 higher in model 2. Also, participants in outbound areas have 0.221 units lower goal progress in model 1, and it is significant in model 2. Moreover, participants coming from migrant families have 0.130 more inadequate goal progress than those from non-migrant families in model 1.

Regression estimates of family arrangement in space and social cognitive wellbeing: goal progress.

Table 61. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Goal Progress

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	2.982***	2.903
Space		
Household registration type urban	0.021	0.048
Living place urban	0.390***	0.303***
Outbound	-0.221***	-0.068
Migrants' family	-0.130*	-0.033
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		0.084*
Male		0.045
Live_with_both_parents		0.09
Health condition		0.162***
School performance		-0.312***
Age_mother		0.003
Age_father		-0.009
Edu._mother		0.005
Edu._father		0.063
Parents divorced		-0.056
Frequency of travel		0.055*
Adjust $\boldsymbol{R}^2$	0.086	0.254

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is goal progress.*

In model 2, participants who are 1 unit better in school performance get 0.312 units less goal progress while simultaneous keeping the other characteristics constant. The other variables with significance in the regression model have positive effects. If the health conditions become 1 unit better, the goal progress increases by 0.162 units. Also, participants having good communication with both parents have 0.084 units higher academic satisfaction than those with only one parent. Moreover, when participants increase the 1 unit of travel frequency with their parents, the goal progress will improve by 0.055 units when other variables remain the same. The respondents who live in the inbound areas or urban areas, with better health conditions, good communication with both parents, higher frequencies of travel with parents and with average school performance have a relevantly positive attitude to goal progress in their school life.

Table 62 shows the regression estimate of place of residence, family migration, and environmental support. There are two models in the table. Model 1 estimates from place of residence and whether from migrant family or not, while model 2 added another 12 variables based on model 1. From the adjusted R square value results: model 1 (Adjust $\boldsymbol{R}^2$= 0.009) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.051), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family arrangement in space and social cognitive wellbeing: environmental support.

Table 62. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Environmental Support

N = 1682	Model 1	Model 2
Variable	**B**	**B**
Constant	3.568***	2.969***
Space		
Household registration type urban	0.066	0.061
Living place urban	0.042	0.038
Outbound	-0.079	-0.058
Migrants' family	-0.044	-0.049
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		0.173***
Male		-0.025
Live_with_both_parents		-0.06
Health condition		0.121**
School performance		-0.033
Age_mother		-0.074
Age_father		0.016
Edu._mother		0.04
Edu._father		-0.039
Parents divorced		0.06
Frequency of travel		0.061**
Adjust $\boldsymbol{R}^2$	0.009	0.066

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is environmental support.*

According to Table 62, all the variables in space dimension are not significant in both model 1 and model 2. The regression constant in model 1 (3.568) and model 2 (2.969) are statistically significant. It corresponds to the level of environmental support for respondents having average communication with parents, average health conditions, and average frequencies of travel with parents in model 2.

In model 2, if participants increase 1 unit of communication with their parents, the environmental support will improve by 0.173 units, when the health conditions, and frequency of travel with parents remain the same. Similarly, when other variables keep the same, if the health conditions become 1 unit better, the environmental support increases 0.121 units. Moreover, if the travel frequency grows one unit, the participants feel they get 0.061 units higher environmental support when other variables remain the same. The other variables with significance in the regression model also have positive effects. When school performance improves 1 unit respondents feel 0.121 units less environmental support.

Table 63 shows the regression estimate of place of residence, family migration and negative affect. Again, there are two models in the table; model 1 estimates from place of residence and whether from migrant family or not, while model 2 added another 12 variables based on model 1. From the results of adjusted R square value: in model 1 (Adjust $\boldsymbol{R}^2$= 0.008) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.100), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family arrangement in space and social cognitive wellbeing: negative affect.

Table 63. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Negative Affect

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	2.753***	3.963***
Space		
Household registration Type urban	-0.036	-0.018
Living place urban	-0.066	-0.101
Outbound	0.086	-0.006
Migrants' family	0.013	-0.071
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		-0.161***
Male		-0.105*
Live_with_both_parents		-0.015
Health condition		-0.257***
School performance		-0.007
Age_mother		0.035
Age_father		0.012
Edu._mother		-0.094**
Edu._father		0.049
Parents divorced		-0.044
Frequency of travel		0.005
Adjust $\boldsymbol{R}^2$	0.008	0.100

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is negative affect.*

The regression constant in model 1 (2.753) and model 2 (3.963) are statistically significant. The regression constant corresponds to a negative affect for a respondent who has average communication with parents, average health conditions, and his/her mother has an average education level. According to Table 63, all the variables are not significant in model 1. Also, the variables in space dimension are not significant in model 2.

In model 2, when the parent-child communication is 1 unit higher, the participant gets 0.161 units lower negative affect, while the health conditions and education level of his/her mother remain the same. Similarly, when other variables remain the same, and the health conditions becomes 1 unit better, the negative affect decreases 0.257 units. Moreover, male participants have 0.105 units lower negative affect than females. Moreover, when the education level of participant's mother increases 1 unit, the participants get 0.094 units lower negative effects. That may be because mothers with higher education levels usually have more scientific ways of communicating with their children. That helps to decrease the negative affect on her children.

Table 64 shows the regression estimate of place of residence, family migration, and positive affect. There are two models in the table. Model 1 estimates from place of residence and whether from migrant family or not, while model 2 added another 12 variables based on model 1. The adjusted R square value results: model 1 (Adjust $\boldsymbol{R}^2$= 0.002) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.044), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family arrangement in space and social cognitive wellbeing: positive affect.

Table 64. Regression Estimates of Residence Place, Family Migration and Social Cognitive Wellbeing: Positive Affect

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	3.028***	2.551***
Space		
Household registration type urban	0.037	0.04
Living place urban	-0.064	-0.077
Outbound	-0.056	0.005
Migrants' family	-0.086	-0.066
Distance_father	0.000	0.000
Distance_mother	0.000	0.000
Demographic		
Parent-child communication		0.058*
Male		0.031
Live_with_both_parents		-0.017
Health condition		0.160***
School performance		-0.075***
Age_mother		0.007
Age_father		0.000
Edu._mother		0.048
Edu._father		-0.029
Parents divorced		0.085
Frequency of travel		0.036
Adjust $\boldsymbol{R}^2$	0.002	0.044

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is positive affect.*

According to Table 64, all the variables in space dimension are not significant in both model 1 and model 2. The regression constant in model 1 (3.028) and model 2 (2.551) are statistically significant. It corresponds to the level of positive affect for a respondent with average health conditions, average school performance, and average travel frequency with parents in model 2.

While in model 2, if participants' health conditions become 1 unit better, the positive effects increase by 0.16 units, if the parent-child communication, and school performance keep the same. Moreover, the participants having good communication with both parents have 0.058 units higher positive affect than those have good communication with only one parent. While, if school performance increases 1 unit, the participants have 0.075 units lower positive affect when other variables keep the same.

This section estimates the relationships of participants' place of residence, bounding areas, parents' distance from home, and social cognitive wellbeing variables through linear regression. The distance of the working place of both fathers and mothers are not significant in each model and with different dependent variables. This might be because most of the migrant and non-migrant youngsters skipped these two questions and some of the left-behind children do not know the city where their parents live. Therefore, in the research sampling these are the two most missing variables in the sampling and that influences the results of the regression. However, the overall results supported the research hypothesis that the participants' living place, household registration type, migrants' inbound or outbound areas,

and whether he/she comes from a migrant family can influence some social cognitive wellbeing variables. Moreover, no matter whether migrant workers live together with their children or not, parent-child communication and coactivities, such as travelling together with their children, are essential to the social cognitive wellbeing of their children.

5.1.3 Relationship: A Better Relationship with Parents Improves Wellbeing

Dawson (1991) using personal interviews among 17,110 children in the US, found that the wellbeing of children who grow up in a family with their biological parents are much higher than those come from a single mother or non- biological family. In China, individual needs are intermeshed with the needs of society and the environment (Zha et al., 2006). Moreover, there is evidence to show that positive family relationships and supportive feelings from parents or other caregivers can improve adolescents' wellbeing (Chai et al., 2019). In addition, researchers also found that caregiver-changing decreases left-behind children's satisfaction (Mazzucato et al., 2015). Therefore, the wellbeing and cognitive development of migrant workers' children have been closely related to their nuclear family's bond and the competence of support (Zhao et al., 2017).

Table 65 shows the dependent and independent variables and their types for the exploration of the relations between family relationship and the wellbeing of migrant workers' children. The social cognitive wellbeing variables are the dependent variables and they are ordinal category variables (marked from 1 to 5). The independent variables include two dimensions: child-caregiver-relations and demographic variables.

Table 65. Dimensions, Variables and Methods III[17]

Dimensions	Variables	Type
Social Cognitive	**Dependent Variables**	
Wellbeing	Life satisfaction	1 (strongly disagree) to 5 (strongly agree)
	Academic satisfaction	1 (strongly disagree) to 5 (strongly agree)
	Self-efficacy	1 (no confidence) to 5 (complete confidence)
	Outcome expectation	1 (strongly disagree) to 5 (strongly agree)
	Goal Progress	1 (no progress) to 5 (excellent progress)
	Environmental support	1 (strongly disagree) to 5 (strongly agree)
	Negative affect	1 (never) to 5 (always)
	Positive affect	1 (never) to 5 (always)
	Independent Variables	
Caregiver_child_relation	Coactivity	1 (once a year/never) to 5 (more than twice a week)
	Communication frequency	1 (once a year/never) to 5 (more than twice a week)
	Conflicts	1 (never) to 5 (always)
	Allienation_D1	1 (never) to 5 (always)
	Allienation_D2	1 (never) to 5 (always)
	Allienation_D3	1 (never) to 5 (always)
	Regulation_D1	1 (never) to 5 (always)
	Regulation_D2	1 (never) to 5 (always)
	Regulation_D3	1 (never) to 5 (always)
	Trust&communicate_D1	1 (never) to 5 (always)
	Trust&communicate_D2	1 (never) to 5 (always)
Demographic	Household registration type urban	0 (no) to 1 (yes)
	Living place urban	0 (no) to 1 (yes)
	Outbound	0 (no) to 1 (yes)
	Parent-child communication	1 (not good with both) to 3 (good with both parents)
	Male	0 (no) to 1 (yes)
	Live_with_both_parents	0 (no) to 1 (yes)
	Health condition	1 (bad), 2 (not bad and nor good), 3 (good)
	School performance	1 (low) to 5 (among the best)
	Age_mother	1 (below 40), 2 (40 to 50), 3 (above 50)
	Age_father	1 (below 40), 2 (40 to 50), 3 (above 50)
	Edu._mother	1 (Primary school /below) to 4 (college/above)
	Edu._father	1 (Primary school /below) to 4 (college/above)
	Parents Divorced	0 (no) to 1 (yes)
	Frequency of travel	1 (never)to 4 (more than twice)

There are 11 variables in the caregiver-child relation dimension of independent variable, they are: caregiver-child coactivity, caregiver-child communication frequency, caregiver-child

[17] Method in this part: Linear regression

conflicts, caregiver-child alienation (dimension 1, dimension 2 and dimension 3), caregiver-child regulation (dimension 1, dimension 2 and dimension 3), caregiver-child trust & communicate (dimension 1 and dimension 2). In the demographic dimension, 14 variables are included, which are either nominal variables or ordinal variables. Also, linear regression has been used in this part.

Table 66 shows the regression estimate of child-caregiver relations, coactivities, and life satisfaction. There are two models in the table, model 1 estimates from child-caregiver relations and coactivity factors. In contrast, model 2 added another 14 variables based on model 1: parent-child communication, gender, living together with both parents, health conditions, school performance, age of mother, age of father, education level of mother, education level of father, parents' marital status (divorced or not) and frequency of travel. From the adjusted R square value results: model 1 (Adjust $\boldsymbol{R}^2$= 0.099) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.144), indicating the degree of fit of model 2 is better than model 1.

Table 66. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Life Satisfaction

N=1682	**Model1**	**Model2**
Variable	**B**	**B**
Constant	1.757***	1.313***
Caregiver_Child_ Relation		
Coactivity	0.069**	0.007
Communication frequency	0.030	0.038
Conflicts	0.042	0.021
Allienation_D1	0.058	0.067*
Allienation_D2	-0.062*	-0.052
Allienation_D3	-0.067*	-0.045
Regulation_D1	0.001	0.019
Regulation_D2	0.043	0.023
Regulation_D3	-0.028*	-0.017
Trust&communicate_D1	0.180***	0.115***
Trust&communicate_D2	0.068*	0.051
Demographic		
Household registration type urban		0.095
Living place urban		-0.070
Outbound		-0.144***
Parent-child communication		0.122***
Male		0.104*
Live_with_both_parents		-0.048
Health condition		0.195***
School performance		0.007
Age_mother		-0.041
Age_father		-0.004
Edu._mother		0.032
Edu._father		0.007
Parents divorced		-0.198***
Frequency of travel		0.031
Adjust $\boldsymbol{R}^2$	0.099	0.144

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is life satisfaction.*

In Table 66, this study found that the caregiver-child coactivity, the second and third dimension of caregiver-child alienation, the third dimension of caregiver-child regulation, the first and second dimension of caregiver-child trust & communication are statistically significant in model 1. Moreover, the first dimension of caregiver-child alienation and the first dimension of caregiver-child trust & communication, five other variables which include: rural or urban areas, parent-child communication, gender, health conditions and parents' marital status are statistically significant in model 2. Except for caregiver-child coactivity and caregiver-child trust & communication variables, other independent variables in child-caregiver relations and coactivities dimensions are with negative effects in model 1. For example, when the caregiver-child alienation increases 1 unit, the life satisfaction decreases 0.062 units at the second dimension and 0.028 units at the third dimension in model 1. Also, if the third dimension of parent-child regulation increases 1 unit, the life satisfaction decreases 0.028, in model 1.

Meanwhile, the regression constant in both model 1 (1.757) and model 2 (1.313) are statistically significant. The regression constant corresponds to the level of life satisfaction for respondents, who have average coactivities with caregivers, average caregiver-child alienation, average caregiver-child regulation, average caregiver-child trust & communication in model 1, but average caregiver-child alienation, average caregiver-child trust & communication, average parent-child communication, average health condition, and with parents not divorced in model 2. In addition, according to Table 66, for the respondents with 1 unit higher coactivities with their caregivers, life satisfaction improves 0.069 units. Moreover, when caregiver-child trust & communication increase 1 unit, the life satisfaction of participants improves 0.180 in the first dimension and 0.068 in the second dimension in model 1; lifelong satisfaction increases 0.115 in the first dimension of trust & communication in model 2.

In model 2, males get 0.104 units more life satisfaction than female participants, *ceteris paribus.* In a similar condition, the respondents from outbound areas have 0.144 units lower life satisfaction than those from inbound areas in model 2. In addition, when the health condition improves 1 unit, the lifelong satisfaction increases 0.195 units. Likewise, the participants with divorced parents have 0.198 units lower life satisfaction than those without.

All in all, male participants from inbound areas with good health conditions and their parents have not divorced have higher lifelong satisfaction. Moreover, increased caregiver-child coactivities and caregiver-child trust & communication while avoiding caregiver-child alienation and control in the caregiver-child regulation can improve the life satisfaction of Chinese VET school students.

Table 67 shows the regression estimate of child-caregiver relations, coactivities, and self-efficacy. Also, two models are included in the table; model 1 estimates from child-caregiver conflicts, coactivity, alienation, regulation, and trust & communication. In contrast, model 2 added another 14 variables based on model 1: household registration type, gender, living together with both parents, health conditions, school performance, age of mother, age of father, education level of mother, education level of father, parents' marital status and frequency of travel. The adjusted R square value results: model 1 ($\mathrm{Adjust}\ \boldsymbol{R}^2$= 0.108) is smaller than model 2 ($\mathrm{Adjust}\ \boldsymbol{R}^2$= 0.223), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family relationship and social cognitive wellbeing: self-efficacy.

Table 67. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Self-Efficacy

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	1.182***	1.250***
Caregiver_child_relation		
Coactivity	-0.060	-0.064***
Communication frequency	0.023	0.032
Conflicts	0.070**	0.050*
Allienation_D1	-0.033	-0.018
Allienation_D2	-0.029	-0.043
Allienation_D3	-0.090***	0.093***
Regulation_D1	0.025	0.036
Regulation_D2	0.057***	0.052*
Regulation_D3	0.012	0.011***
Trust&communicate_D1	0.127***	0.103***
Trust&communicate_D2	0.113***	0.093***
Demographic		
Household registration type urban		0.126***
Living place urban		0.175***
Outbound		0.054
Parent-child communication		0.003
Male		0.258***
Live_with_both_parents		-0.004
Health condition		0.145***
School performance		-0.163***
Age_mother		-0.001
Age_father		-0.012
Edu._mother		0.045
Edu._father		-0.007
Parents divorced		-0.083
Frequency of travel		0.022
Adjust $\boldsymbol{R}^2$	0.108	0.223

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is self-efficacy.*

From Table 67, this study found that the caregiver-child conflicts, the third dimension of caregiver-child alienation, the second dimension of caregiver-child regulation, the first and second dimension of caregiver-child trust & communication are statistically significant in model 1. In addition to the above variables, five other variables which include: household registration type, living place, gender, health conditions and school performance are statistically significant in model 2. Moreover, the regression constant in model 1 (1.182) and model 2 (1.250) are statistically significant. The regression constant corresponds to the level of self-efficacy for respondents who have average coactivities with caregivers, average caregiver-child alienation, average caregiver-child regulation, average caregiver-child trust & communication in model 1, and five more variables including: male, urban household registration type, living in urban areas, health conditions and average school performance in model 2. According to Table 67, if the respondents have 1 unit higher conflicts with caregivers the self-efficacy improves 0.07 units in model 1, and that increases 0.05 in model 2. Moreover, if the second dimension of caregiver-child regulation improves 1 unit, the self-efficacy

increases 0.057 units in model 1 and that increases 0.052 in model 2. When the first dimension of caregiver-child trust & communication increases 1 unit, participants' self-efficacy improves 0.127 in model 1 and increases 0.103 in model 2. They are 0.113 and 0.094 in the second dimension, for model 1 and model 2 respectively. However, if caregiver-child alienation dimension 3 increases 1 unit participants' self-efficacy decreases 0.09 in model 1, which reduces to 0.093 in model 2.

Furthermore, in model 2, *ceteris paribus*, males get 0.258 units more self-efficacy than female participants (when they have the same caregiver-child coactivities, same caregiver-child alienation, same caregiver-child regulation, same caregiver-child trust & communication, same parent-child conflict, same health conditions, and same school performance). In addition, the respondents with an urban household registration type have 0.126 units higher self-efficacy than rural respondents in model 2. In addition, if the health condition gets 1 unit better, the self-efficacy increases by 0.145 units. However, when the school performance increases 1 unit, the self-efficacy of participants decreases by 0.163 units.

Table 68 shows the regression estimate of child-caregiver relations, coactivities, and academic satisfaction. There are two models in the table; model 1 estimates from child-caregiver relations and coactivities, while model 2 added another 14 variables based on model 1. The adjusted R square value results: model 1 ($\text{Adjust } \boldsymbol{R}^2$ = 0.097) is smaller than model 2 ($\text{Adjust } \boldsymbol{R}^2$= 0.160), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family relationship and social cognitive wellbeing: academic satisfaction.

Table 68. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Academic Satisfaction

N = 1682	Model 1	Model 2
Variable	**B**	**B**
Constant	2.157***	2.213***
Caregiver_child_relation		
Coactivity	0.03	-0.010
Communication frequency	0.049*	0.045*
Conflicts	0.071**	0.061*
Allienation_D1	-0.03	-0.021
Allienation_D2	-0.033	-0.028
Allienation_D3	0.048	0.041
Regulation_D1	-0.028	-0.007
Regulation _D2	0.077***	0.063***
Regulation _D3	-0.008	0.000
Trust&communicate_D1	0.137***	0.116***
Trust&communicate_D2	0.078**	0.061*
Demographic		
Household registration type urban		0.063
Living place urban		0.215***
Outbound		-0.086
Parent-child communication		0.058
Male		0.107*
Live_with_both_parents		0.000
Health condition		0.142***
School performance		-0.108***
Age_mother		-0.010
Age_father		-0.020
Edu._mother		-0.011
Edu._father		-0.013
Parents divorced		-0.029
Frequency of travel		-0.037
Adjust $\boldsymbol{R}^2$	0.097	0.160

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is academic satisfaction.*

From Table 68, this study found that the caregiver-child communication, caregiver-child conflicts, the second dimension of caregiver-child regulation, the first and second dimension of caregiver-child trust & communication are statistically significant in both model 1 and model 2. In addition to the above variables, another four variables which include: living place, gender, health conditions and school performance are statistically significant in model 2. The regression constant in model 1 (2.157) and model 2 (2.213) are statistically significant. The regression constant corresponds to the level of academic satisfaction for respondents with average communication with caregivers, average caregiver-child conflicts, average caregiver-child regulation, average caregiver-child trust & communication, average school performance, average health conditions, and living in urban areas. According to Table 68, if the respondents have 1 unit higher communication with caregivers the academic satisfaction improves 0.049 units in model 1 and improve 0.045 in model 2. Moreover, if caregiver-child conflicts increase 1 unit, academic satisfaction improves by 0.071 in model 1 and is 0.061 in model 2. Also, if the

caregiver-child regulation increases 1 unit, academic satisfaction improves by 0.077 in model 1, which is 0.063 in model 2. Moreover, when caregiver-child trust & communication increases 1 unit, the academic satisfaction of participants improves 0.137 in the first dimension and 0.078 in the second dimension in model 1, academic satisfaction increases respectively 0.116 and 0.061 units in model 2.

In model 2, *ceteris paribus*, males get 0.107 units more academic satisfaction than female participants (which means when they have the same caregiver-child conflicts, same caregiver-child alienation, same caregiver-child regulation, same caregiver-child trust & communication, and the same parent-child communication, same health conditions, and same school performance). In addition, the respondents who live in urban/inbound areas have 0.215 units higher academic satisfaction than those living in rural/outbound areas. Also, if the health conditions are 1 unit better, academic satisfaction increases by 0.142 units. However, when the school performance of participants improves 1 unit, they get 0.108 units less academic satisfaction.

Table 69 shows the regression estimate of child-caregiver relations, coactivities, and outcome expectations. There are two models in the table. Model 1 estimates from child-caregiver relations and coactivities, while model 2 added another 14 variables based on model 1. The adjusted R square value results: model 1 ($\text{Adjust}\,\boldsymbol{R}^2$ =0.069) is smaller than model 2 ($\text{Adjust}\,\boldsymbol{R}^2$=0.093), indicating the fit degree of model 2 is better than that of model 1.

From Table 69, this study found that the caregiver-child conflicts, the second dimension of caregiver-child regulation, the first dimension of caregiver-child trust & communication are statistically significant in both model 1 and model 2. In addition to the above variables, another three variables which include: the first dimension of caregiver-child regulation, whether comes from the outbound areas, and health conditions are statistically significant in model 2. The regression constant in model 1 (2.418) and model 2 (2.198) are statistically significant. The regression constant corresponds to the level of outcome expectations for respondents who have average conflicts with caregivers, average health conditions and live in outbound areas. According to Table 69, for the respondents with 1 unit higher conflict with caregivers the outcome expectation improves 0.079 units in model 1, and that increases to 0.058 units in model 2. Also, if the first dimension of caregiver-child regulation increases 1 unit, the outcome expectation increases 0.061 in model 2; it is not significant in model 1, the outcome expectation increases 0.088 and 0.079 in the second dimension of caregiver-child regulation. Moreover, when the first dimension of caregiver-child trust & communication increases 1 unit, the participants' outcome expectation improves 0.143 in model 1 and 0.099 in model 2.

Regression estimates of family relationship and social cognitive wellbeing outcome expectations:

Table 69. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Outcome Expectation

N = 1682	Model 1	Model 2
Variable	**B**	**B**
Constant	2.418***	2.198***
Caregiver_child_relation		
Coactivity	0.023	-0.001
Communication frequency	0.034	0.04
Conflicts	0.079**	0.058*
Allienation_D1	-0.014	0.004
Allienation_D2	-0.042	-0.036
Allienation_D3	0.008	0.011
Regulation_D1	0.034	0.061*
Regulation_D2	0.088***	0.079***
Regulation_D3	-0.034	-0.026
Trust&communicate_D1	0.143***	0.099*
Trust&communicate_D2	0.012	0.009
Demographic		
Household registration type urban		0.09
Living place urban		0.001
Outbound		-0.13*
Parent-child communication		0.044
Male		0.005
Live_with_both_parents		-0.081
Health condition		0.232***
School performance		-0.003
Age_mother		0.022
Age_father		-0.096
Edu._mother		-0.012
Edu._father		-0.022
Parents divorced		-0.022
Frequency of travel		-0.005
Adjust $\boldsymbol{R}^2$	0.069	0.093

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is outcome expectation.*

In model 2, participants from outbound (mostly rural) areas have 0.13 units less outcome expectations than inbound participants with the same caregiver-child conflicts, same caregiver-child regulation, same caregiver-child trust & communication, and the same health conditions. In addition, if the health conditions become 1 unit better, the outcome expectations increase by 0.232 units.

Table 70 shows the regression estimate of child-caregiver relations, coactivities, and goal progress. There are two models in the table. Model 1 estimates from child-caregiver relations and coactivities, while model 2 added another 14 variables based on model 1. The adjusted R square value results: model 1 (Adjust $\boldsymbol{R}^2$= 0.140) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.328), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family relationship and social cognitive wellbeing: goal progress.

Table 70. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Goal Progress

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	1.172***	1.677***
Caregiver_child_relation		
Coactivity	0.130***	0.035
Communication frequency	-0.015	-0.006
Conflicts	0.035	0.022
Allienation_D1	-0.043	-0.024
Allienation_D2	0.018	0.025
Allienation_D3	0.104***	0.088***
Regulation_D1	-0.058	-0.049
Regulation_D2	0.144***	0.135***
Regulation_D3	0.018	0.012
Trust&communicate_D1	0.146***	0.124***
Trust&communicate_D2	0.132***	0.097***
Demographic		
Household registration type urban		0.076
Living place urban		0.342***
Outbound		-0.052
Parent-child communication		0.009
Male		0.063
Live_with_both_parents		0.102*
Health condition		0.153***
School Performance		-0.286***
Age_mother		0.047
Age_father		-0.023
Edu._mother		0.004
Edu._father		0.024
Parents divorced		-0.056
Frequency travel		-0.006
Adjust $\boldsymbol{R}^2$	0.140	0.328

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is goal progress.*

From Table 70, this study found that the caregiver-child coactivity, the third dimension of caregiver-child alienation, the second caregiver-child regulation, the first and second dimension of caregiver-child trust & communication are statistically significant in both model 1 and model 2. In addition to the above variables, another four variables which include: living place, parental presence, school performance and health conditions are statistically significant in model 2. The regression constant in model 1 (1.172) and model 2 (1.677) are statistically significant. The regression constant corresponds to the level of goal progress for respondents who have average coactivities with caregivers, average caregiver-child alienation, average caregiver-child regulation, average caregiver-child trust & communication, live in urban areas, live together with both parents, and with average health conditions. According to Table 70, where the respondents have 1 unit higher coactivities with caregivers the goal progress improves 0.130 units in model 1 and the result is not significant in model 2. Moreover, when the caregiver-child alienation increases 1 unit, the goal progress increases 0.104 at the third dimension in model 1 and 0.088 in model 2. And if parent-child regulation increases 1 unit in

the second dimension of model 1, the goal progress increases 0.144, and it is 0.135 in model 2. Moreover, when caregiver-child trust & communication increase 1 unit, the goal progress of participants improves 0.146 in the first dimension and 0.132 in the second dimension in model 1, the goal progress improves respectively 0.124 and 0.097 in model 2.

In model 2, participants living in urban areas have 0.342 units more goal progress than those living in rural areas, when they have the same caregiver-child coactivities, same caregiver-child alienation, same caregiver-child regulation, same caregiver-child trust & communication, live in urban areas with both parents and have the same school performance. In addition, participants who live together with both parents have 0.102 units higher goal progress than that of others. In addition, if the health conditions become 1 unit better, the life satisfaction increases by 0.153 units. However, if the school performance increases 1 unit, the goal progress of participants decreases by 0.286 units.

Table 71 shows the regression estimate of child-caregiver relations, coactivities, and environmental support. There are two models in the table. Model 1 estimates from child-caregiver relations and coactivities, while model 2 added another 14 variables based on model 1. From the adjusted R square value results: in model 1 ($\mathrm{Adjust}\ \boldsymbol{R}^2$= 0.217) is smaller than model 2 ($\mathrm{Adjust}\ \boldsymbol{R}^2$= 0.210), indicating the degree of fit of model 1 is better than that of model 2.

From Table 71, this study found that the caregiver-child conflicts, the first and second dimension of caregiver-child regulation, the first and second dimension of caregiver-child trust & communication are statistically significant in model 1. In addition to the above variables, one other variable which is health condition are statistically significant in model 2. The regression constant in model 1 (1.733) and model 2 (1.744) are statistically significant. The regression constant corresponds to the level of environmental support for respondents with average conflicts with caregivers, average caregiver-child regulation, average trust and communication, and average health conditions. According to Table 71, if the respondents have 1 unit higher conflict with caregivers the environmental support improves 0.092 units in model 1 and that increases to 0.084 units in model 2. Also, if the second dimension of caregiver-child regulation increases 1 unit, the environmental support increases 0.115 units in model 1, and it increases 0.128 in model 2. While, if the first dimension of caregiver-child regulation increases 1 unit, the environmental support decreases 0.05 units in model 1, and it is not significant in model 2. Moreover, when the first dimension of caregiver-child trust & communication increases 1 unit, the environmental support of participants improves 0.349 in model 1 and 0.325 in model 2.

Regression estimates of family relationship and social cognitive wellbeing: environmental support.

Table 71. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Environmental Support

N = 1682	Model 1	Model 2
Variable	**B**	**B**
Constant	1.733***	1.744***
Caregiver_child_relation		
Coactivity	0.017	-0.006
Communication frequency	0.026	0.025
Conflicts	0.092***	0.084***
Allienation_D1	-0.045	-0.038
Allienation_D2	-0.028	-0.024
Allienation_D3	0.032	0.024
Regulation_D1	-0.05*	-0.047
Regulation_D2	0.115***	0.128***
Regulation_D3	0.002	0.007
Trust&communicate_D1	0.349***	0.325***
Trust&communicate_D2	0.043	0.027
Demographic		
Household registration type urban		0.057
Living place urban		0.063
Outbound		-0.061
Parent-child communication		0.036
Male		-0.005
Live_with_both_parents		0.019
Health condition		0.074*
School performance		-0.017
Age_mother		-0.043
Age_father		0.016
Edu._mother		-0.002
Edu._father		-0.033
Parents divorced		0.064
Frequency of travel		-0.002
Adjust $\boldsymbol{R}^2$	0.217	0.210

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is environmental support.*

In model 2, if participants' health conditions improve 1 unit, the environmental support gets 0.074 units higher when they have the same caregiver-child conflicts, the same caregiver-child regulation, and same caregiver-child trust & communication.

Table 72 shows the regression estimate of child-caregiver relations, coactivities, and negative affect. There are two models in the table. Model 1 estimates from child-caregiver relations and coactivities, while model 2 added another 14 variables based on model 1. From the adjusted R square value results: in model 1 (Adjust $\boldsymbol{R}^2$ = 0.116) is smaller than model 2 (Adjust $\boldsymbol{R}^2$= 0.168), indicating the degree of fit of model 2 is better than that of model 1.

Regression estimates of family relationship and social cognitive wellbeing: negative affect.

Table 72. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Negative Affect

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	1.963***	2.776***
Caregiver_child_relation		
Coactivity	-0.014	0.029
Communication frequency	0.018	0.017
Conflicts	-0.005	0.011
Allienation_D1	0.077*	0.072*
Allienation_D2	0.191***	0.188***
Allienation_D3	0.091***	0.083***
Regulation_D1	0.031	0.002
Regulation_D2	0.000	-0.008
Regulation_D3	0.019	0.006
Trust&communicate_D1	-0.041	0.017
Trust&communicate_D2	-0.084***	-0.068**
Demographic		
Household registration type urban		0.023
Living place urban		-0.085
Outbound		-0.004
Parent-child communication		-0.095***
Male		-0.147***
Live_with_both_parents		-0.048
Health condition		-0.169***
School performance		-0.012
Age_mother		0.039
Age_father		-0.044
Edu._mother		-0.079**
Edu._father		0.010
Parents divorced		-0.057
Frequency of travel		-0.009
Adjust $\boldsymbol{R}^2$	0.116	0.168

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is negative affect.*

From Table 72, this study found that the first, second and third dimensions of caregiver-child alienation, and the second dimension of caregiver-child trust & communication are statistically significant in both model 1 and model 2. In addition to the above variables, four other variables which include: parent-child communication, gender, health condition and education of mother are statistically significant in model 2. The regression constant in model 1 (1.963) and model 2 (2.776) are statistically significant. The regression constant corresponds to the negative affect for male respondents who have average caregiver-child alienation, average caregiver-child trust & communication, average parent-child communication, average health conditions, and mother with average education. According to Table 72, if the respondents have 1 unit higher caregiver-child alienation in the first dimension, the negative affect improve 0.077 units in model 1, and it increases 0.072 in model 2. Similar results are also shown in the second and third dimensions. When the caregiver-child alienation in the second dimension increases 1 unit, the negative affect increase 0.191 in model 1 and 0.188 in model 2. That is 0.091 for the third dimension of caregiver-child alienation in model 1 and

0.083 in model 2. However, when caregiver-child trust & communication increases 1 unit, the negative affect of participants decreases 0.084 in the second dimension in model 1 and 0.068 in model 2.

Moreover, the other dependent variables in demographic dimensions are with negative results. In model 2, males get 0.15 units lower negative affects than female participants when they have the same caregiver-child alienation, same caregiver-child regulation, same caregiver-child trust & communication, same parent-child communication, same health condition, and mother with average education level. In addition, if the parent-child communication increases 1 unit, the negative effects will decrease by 0.095 units. Moreover, if the health condition becomes 1 unit better, the negative affect are 0.169 units lower. Furthermore, when the education level of participant's mother increases 1 unit, the negative effects are 0.079 lower.

Table 73 shows the regression estimate of child-caregiver relations, coactivities, and positive affect. There are two models in the table. Model 1 estimates from child-caregiver relations and coactivities, while model 2 added another 14 variables based on model 1. From the adjusted R square value results: model 1 ($\mathrm{Adjust}\ \boldsymbol{R}^2 = 0.119$) is smaller than model 2 ($\mathrm{Adjust}\ \boldsymbol{R}^2 = 0.137$), indicating the degree of fit of model 2 is better than that of model 1.

From Table 73, this study found that caregiver-child communication, caregiver-child conflicts, the second dimension of caregiver-child alienation, the first and second dimensions of caregiver-child trust & communication are statistically significant in both model 1 and model 2 (except for the second dimension of caregiver-child alienation). In addition to the above variables, three other variables which include: household registration type, health condition and school performance are statistically significant in model 2. The regression constant in model 1 (1.580) and model 2 (1.648) are statistically significant. The regression constant corresponds to the level of positive affect for respondents with average communication frequency, average conflicts with their caregiver(s), average caregiver-child alienation, average caregiver-child regulation, average caregiver-child trust & communication, average health conditions, average school performance, and with an urban household registration type. According to Table 73, the respondents with a 1 unit higher frequency of communication with caregivers improve the positive effects of 0.043 units in model 1 and increases to 0.051 units in model 2. Moreover, if caregiver-child conflicts increase 1 unit, the positive affect improve 0.111 in model 1 and 0.094 in model 2. Also, when caregiver-child trust & communication increase 1 unit, participants' positive affect improves 0.113 in the first dimension and 0.086 in the second dimension in model 1. They are 0.104 and 0.082 in model 2. If the second dimension of parent-child regulation increases 1 unit, the positive affect increases by 0.052 in model 1 and by 0.043 in model 2. However, when the second dimension of caregiver-child alienation increases 1 unit, the positive effects decrease by 0.043 in model 1 and are not significant.

Regression estimates of family relationship and social cognitive wellbeing: positive affect.

Table 73. Regression Estimates of Child-Caregiver Relations, Coactivities and Social Cognitive Wellbeing: Positive Affect

N = 1682	**Model 1**	**Model 2**
Variable	**B**	**B**
Constant	1.580***	1.648***
Caregiver_child_relation		
Coactivity	0.021	0.004
Communication frequency	0.043*	0.051*
Conflicts	0.111***	0.094***
Allienation_D1	0.041	0.050
Allienation_D2	-0.043***	-0.047
Allienation_D3	-0.011	-0.002
Regulation_D1	0.023	0.025
Regulation_D2	0.052***	0.043*
Regulation_D3	0.010	0.010
Trust&communicate_D1	0.113***	0.104**
Trust&communicate_D2	0.086***	0.082***
Demographic		
Household registration type urban		0.118**
Living place urban		-0.042
Outbound		0.045
Parent-child communication		-0.001
Male		0.058
Live_with_both_parents		-0.031
Health condition		0.120***
School performance		-0.070***
Age_mother		-0.021
Age_father		0.005
Edu._mother		0.034
Edu._father		-0.056
Parents divorced		0.019
Frequency of travel		-0.005
Adjust $\boldsymbol{R}^2$	0.119	0.137

*Note: Sig.: * < .05, ** < .01, *** < .001, the dependent variable in this table is positive affect.*

In model 2, the participants with a household registration type in urban areas have 0.118 units more positive affect than rural participants, when they have the same caregiver-child coactivities, same conflicts, same caregiver-child alienation, same caregiver-child regulation, same caregiver-child trust & communication, same parent-child communication, whose residence type with urban areas, same health conditions, and same school performance. In addition, if the health conditions become 1 unit better, the positive affect increases by 0.12 units. However, when the school performance increases 1 unit, the positive effects decrease 0.07 units.

Summary

This part studies the family coactivity, attachment (it includes two parts: caregiver-child trust & communication and caregiver-child alienation), communication, regulation, and conflicts with social cognitive factors. The results proved the research hypothesis that family relationship variables have positive impacts on the social cognitive wellbeing of migrant workers' children, such as family coactivity, attachment, communication, caregiver-child trust & communication and coactivities. Specifically, caregiver-child coactivities and caregiver-child trust & communication positively influences participants' life satisfaction, self-efficacy, academic satisfaction, goal progress and positive affect. Furthermore, caregiver-child alienation negatively affects life satisfaction, self-efficacy, goal progress and positive affect, but positively affects negative affect, that is also meet the expectation with research hypothesis 1

Contrary to the expectation that caregiver-child regulation and conflicts negatively impact the social cognitive wellbeing variables, they actually improve some of participants' social cognitive wellbeing. In detail: caregiver-child regulation is positively related to self-efficacy, academic satisfaction, outcome expectations, goal progress, and positive affect. However, caregiver-child regulation negatively influences life satisfaction and environmental support. And caregiver-child conflicts also improve self-efficacy, academic satisfaction, outcome expectation, environmental support and positive affect. Therefore, an increase of caregiver-child coactivities and caregiver-child trust & communication, while avoiding caregiver-child alienation and controlling the caregiver-child regulation, can improve participants' social cognitive wellbeing.

Moreover, male participants from inbound (mostly urban) areas , living together with both parents, with an urban household registration type, whose parents are not divorced get higher social cognitive wellbeing (e.g., life satisfaction, self-efficacy and academic satisfaction) and lower negative affect than female participants, living in rural areas or with a rural household registration type in outbound. Additionally, good health conditions in participants are very essential for their social cognitive wellbeing, while school performance is negatively related with social cognitive wellbeing variables, indicating higher academic pressure decreases social cognitive wellbeing.

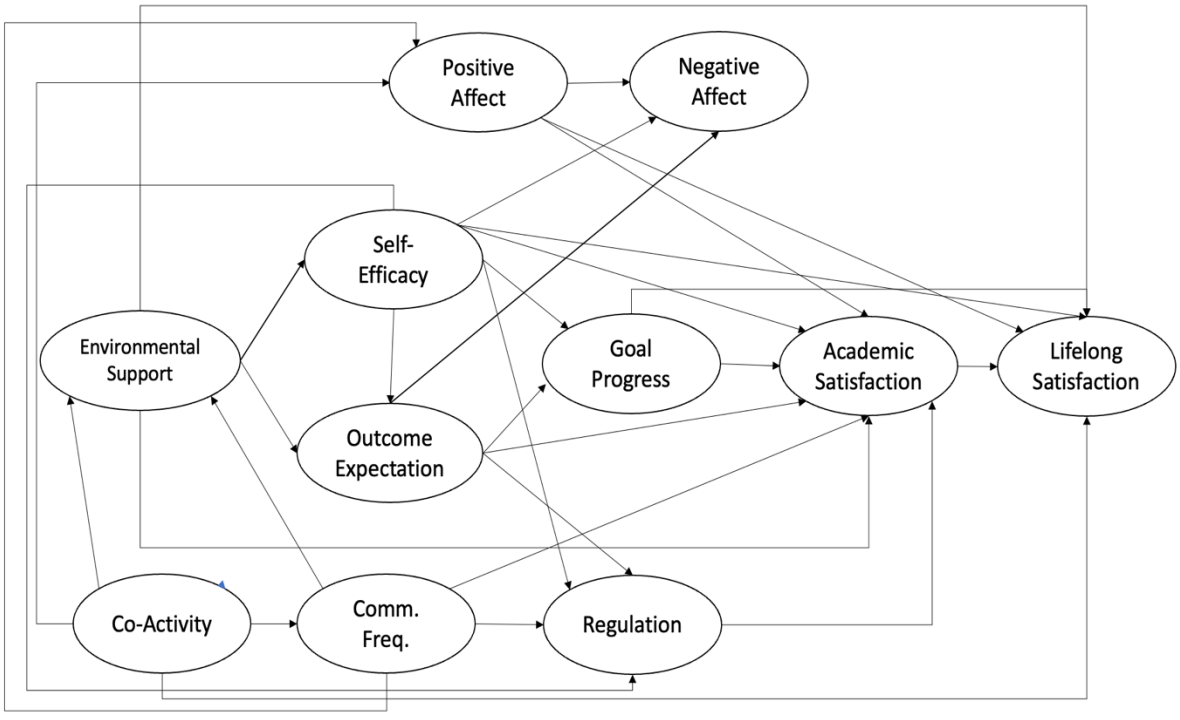
5.1.4 Self-adjustment: Self-Adjustment Factors Influence Wellbeing

The social cognitive model of wellbeing (Lent, 2004) is one of the few theoretical frameworks to illustrate human strengths and positive adjustment. This framework underlines the mediating functions of cognitive factors (self-efficacy, outcome expectation, and goal progress) in linking affective traits/personality (positive or negative affect) and environmental factors (environmental support and obstacles) to wellbeing outcomes (Işık et al., 2018). In this study, six family relationship factors (caregiver-child coactivity, caregiver-child communication frequency, caregiver-child regulation, caregiver-child conflicts, caregiver-child alienation, and caregiver-child trust communication) divided into two parts, have been involved in the environmental factors of the social cognitive model of wellbeing. Structural equation modeling was used in this part to test the paths of these two new models.

Preliminary Analyses:

There is a small percentage of missing values (1.973%) across 131 variables and 1,682 participants. Despite the results for the Little's missing completely at random (MCAR) test being significant (sig < 0.05), a visual inspection of the data set implied a generally missing at random pattern. Missing values were inputted using an expectation maximization algorithm in SPSS 22 (here used in the data for the following two models). The hypothesis of the revised model and its paths are shown in Figure 26, which is based on the previous studies and the characteristics of Chinese migrant workers' children.

Figure 26 Family-Related Modified Social Cognitive Model I

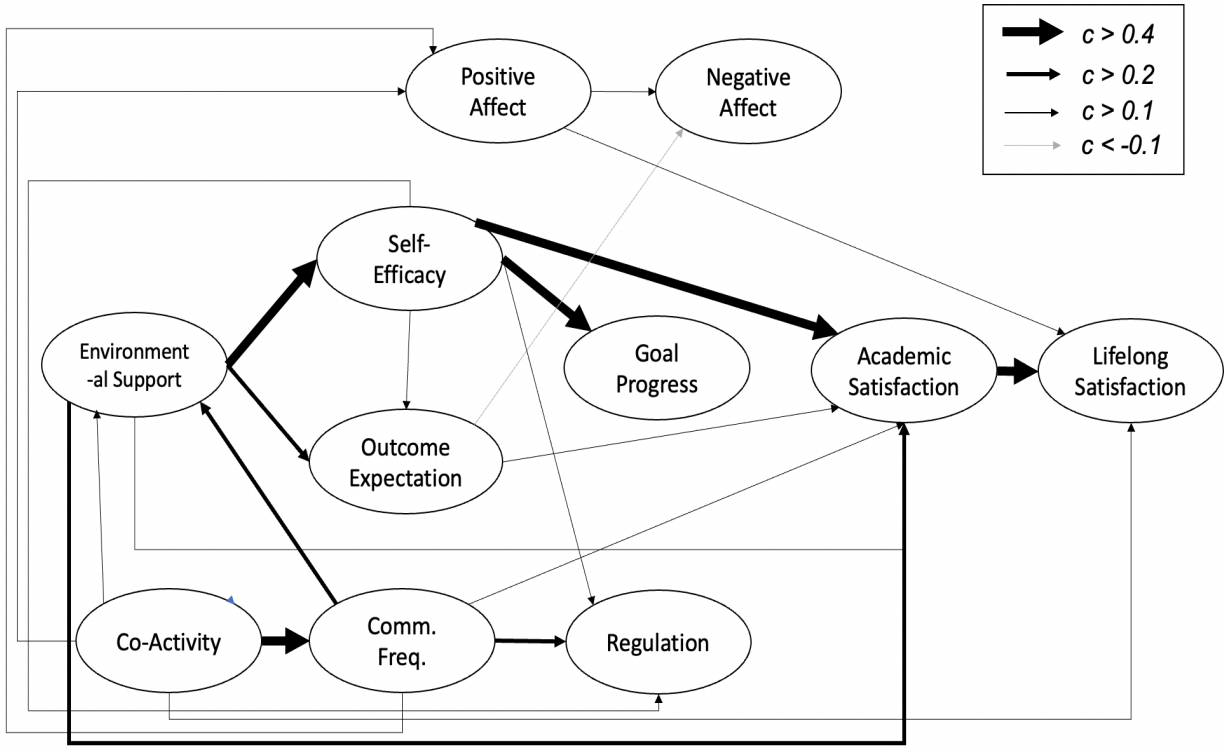


Note: Comm. Freq. is short for Caregiver-child communication frequency in the above figure.

Structural equation modeling in AMOS 22 was used to test the structural validity of these models within the target population. The bootstrap method has been used to test indirect effects related to environmental support, self-efficacy and caregiver-child coactivity; two thousand bootstrap samples were generated to estimate the indirect effects and bias-corrected 90% confidential intervals. Here three fit indices are used to assess the data fit: CIF (the comparative-fit-index), RMSEA (the root mean squared error of approximation), and root mean squared residual (SRMR). Values of RMSEA $\leq$ 0.08, CIF $\geq$ 0.90 and SRMR $\leq$ 0.08 are considered as an adequate fit. And RMSEA $\leq$ 0.06, CIF $\geq$ 0.95 and SRMR $\leq$ 0.05 are regarded as a good fit (L. Hu & Bentler, 1999). Also, researchers have determined that models meeting only one of the three values (CIF, RMSEA and SRMR) can be regarded as an acceptable fit (Sheu et al., 2017). The results of Confirmatory Factor Analysis (CFA)of above model with the current data set shows an acceptable fit, with x^2= 8829, df =1621, p < 0.0001, CFI = 0.846, RMSEA = 0.051 and SRMR = 0.076.

Positive affect and caregiver-child coactivity have indirect effects on lifelong satisfaction, the indirect (mediated) effect of caregiver-child coactivity on the positive affect is 0.114 and with statistically significant (P < 0.001). Moreover, environmental support and self-efficacy have significant indirect effects on outcome expectation, self-efficacy and outcome expectation have significant indirect effects on academic satisfaction. The significant standard indirect effects for lifelong satisfaction ranged from -0.287 to 0.283, whereas those for academic satisfaction ranged from 0.100 to 0.310.

Figure 27 Family-Related Modified Social Cognitive Model I-Path Coefficients



Note: Comm. Freq. is short for Caregiver-child communication frequency in the above figure.

Figure 27 shows the research hypothesis that most paths are with statistical significance. Moreover, most of the paths between SCWB variables are strongly correlated with each other, for example the paths' coefficient from environmental support to self-efficacy, self-efficacy to goal progress, goal progress to academic satisfaction and academic satisfaction to lifelong

satisfaction are both above 0.4. Also, the family relationship variables are closely correlated with each other; the paths' coefficient from caregiver-child coactivity to communication frequency is above 0.4, communication frequency to regulation is above 0.2 and caregiver-child coactivity to regulation/house rules are above 0.1. Most paths are statistically significant as it was predicted in Figure 29. This is also similar with the results of another researches (Sheu et. al,2017; Işik et al., 2018). Moreover, the path from communication frequency to environmental support is bigger than 0.2, which is easy to understand as students with better communication with caregiver(s) or parents receive more support from their caregiver(s)/parents. What is unexpected is that the path from goal progress to academic satisfaction is not significant.

Table 74. Significant Differences on Standardized Structure Path Coefficients Model I

Path			Coef.	P
Caregiver-child Coactivity	→	Caregiver-child Comm. Fre.	0.60	***
Caregiver-child Coactivity	→	Environmental support	0.19	***
Caregiver-child Comm. Fre.	→	Environmental support	0.24	***
Caregiver-child Comm. Fre.	→	Self-Efficacy	0.06	*
Environmental support	→	Self-Efficacy	0.54	***
Caregiver-child Comm. Fre.	→	Caregiver-child Regulation	0.29	***
Caregiver-child Coactivity	→	Caregiver-child Regulation	0.05	N.S.
Self-Efficacy	→	Caregiver-child Regulation	0.13	***
Self-Efficacy	→	Outcome Expectation	0.27	***
Caregiver-child Regulation	→	Outcome Expectation	0.04	N.S.
Environmental support	→	Outcome Expectation	0.26	***
Self-Efficacy	→	Goal Progress	0.76	***
Caregiver-child Comm. Fre.	→	Positive Affect	0.19	***
Caregiver-child Coactivity	→	Positive Affect	0.11	**
Outcome Expectation	→	Goal Progress	0.01	N.S.
Self-Efficacy	→	Academic Satisfaction	0.49	***
Caregiver-child Regulation	→	Academic Satisfaction	-0.07	**
Caregiver-child Comm. Fre.	→	Academic Satisfaction	0.05	N.S.
Outcome Expectation	→	Academic Satisfaction	0.19	***
Goal Progress	→	Academic Satisfaction	0.03	N.S.
Positive Affect	→	Academic Satisfaction	-0.03	N.S.
Environmental support	→	Academic Satisfaction	0.22	***
Academic Satisfaction	→	Life Satisfaction	0.47	***
Outcome Expectation	→	Negative Affect	-0.19	***
Self-Efficacy	→	Lifelong Satisfaction	0.02	N.S.
Positive Affect	→	Lifelong Satisfaction	0.08	*
Goal Progress	→	Lifelong Satisfaction	0.00	N.S.
Environmental Support	→	Lifelong Satisfaction	0.07	N.S
Positive Affect	→	Negative Affect	0.19	***
Caregiver-child Regulation	→	Life Satisfaction	0.02	N.S.
Caregiver-child Coactivity	→	Life Satisfaction	0.11	***

*Note: Comm. Fre.: communication frequency, C.R.: covariance, *< 0.05, **< 0.01, *** < 0.001*

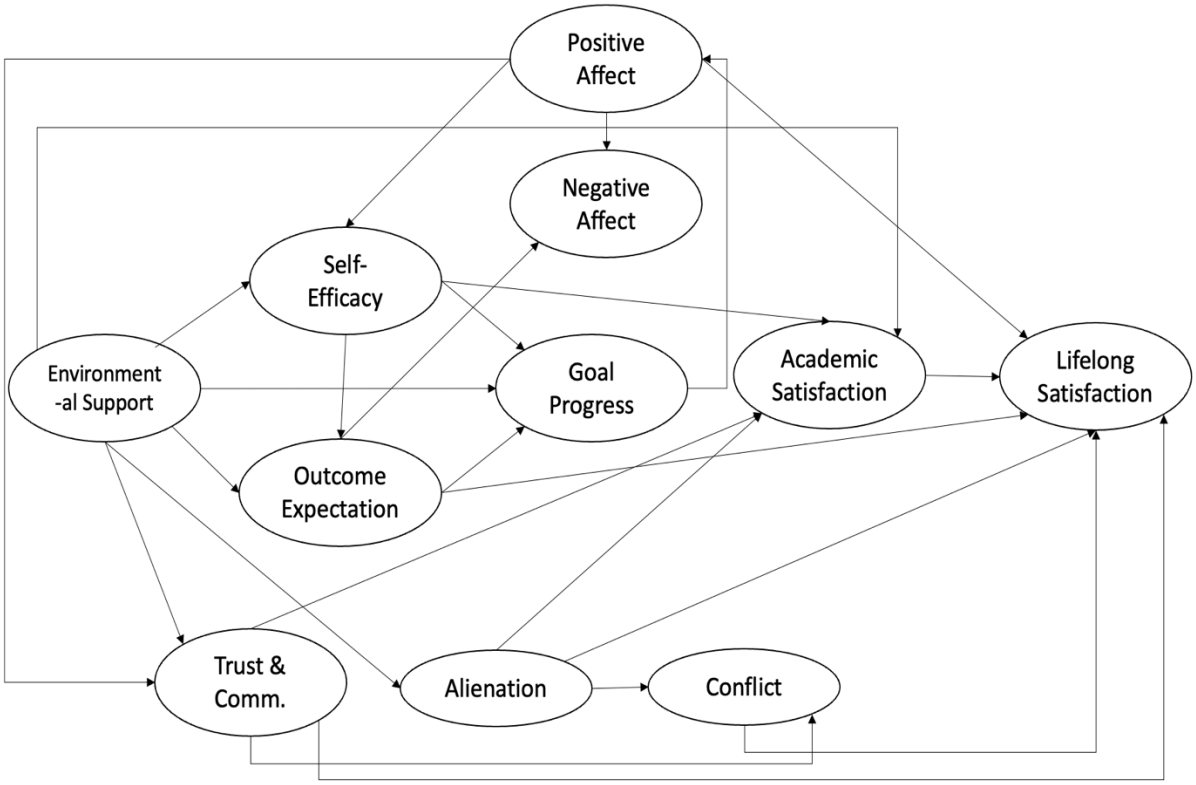
The results in Table 74 show the coefficients, covariance and p-value of all paths in the research hypothesis, which are with statistical significances, except for nine paths ($P > 0.05$). The path coefficients for many social cognitive variables (from environmental support to self-efficacy, from self-efficacy to goal progress, from environmental support to outcome expectation, from goal progress to academic satisfaction, from academic satisfaction to life satisfaction) show similar results with previous studies (Lent et al., 2009; Sheu et al., 2017) related to the social cognitive wellbeing model. Most of the path coefficients with statistical

significance are above zero, except one which is the path coefficient of the path from outcome expectation to negative affect ($path\ coeficient = -0.19, P < 0.001$). The path coefficient of the path from self-efficacy to goal progress is the largest ($path\ coeficient = 0.76, P < 0.001$), which means that when the self-efficacy improves 1 unit the goal progress increases 0.76 units and *ceteris paribus*.

This is followed by the path from caregiver-child coactivity to caregiver-child communication frequency ($path\ coeficient = 0.60, P < 0.001$), the path from environmental support to self-efficacy ($path\ coeficient = 0.54,\ P < 0.001$), the path from self-efficacy to academic satisfaction ($path\ coeficient = 0.49, P < 0.001$) and the path from academic satisfaction to lifelong satisfaction ($path\ coeficient = 0.47, P < 0.001$). Meanwhile, it is not significant for the path from caregiver-child coactivity to caregiver-child regulation, the path from caregiver-child regulation to outcome expectation and another nine paths. Furthermore, many paths with statistical significant are between caregiver-child relationship variables and SCWB variables, for example, the path from caregiver-child coactivity to positive affect ($path\ coeficient = 011, P < 0.001$), the path from self-efficacy to caregiver-child regulation ($path\ coeficient = 0.13, P < 0.001$), the path from caregiver-child communication frequency to positive affect ($path\ coeficient = 0.19, P < 0.001$), and the path from caregiver-child coactivity to lifelong satisfaction ($path\ coeficient = 0.11, P < 0.001$). It implies that more communication and coactivities between a child and caregiver(s) can improve the quality of the self-efficacy, positive affect and life satisfaction of Chinese VET school students. Regarding to caregiver-child regulation, it is negatively affected by academic satisfaction, but positively correlated with outcome expectation.

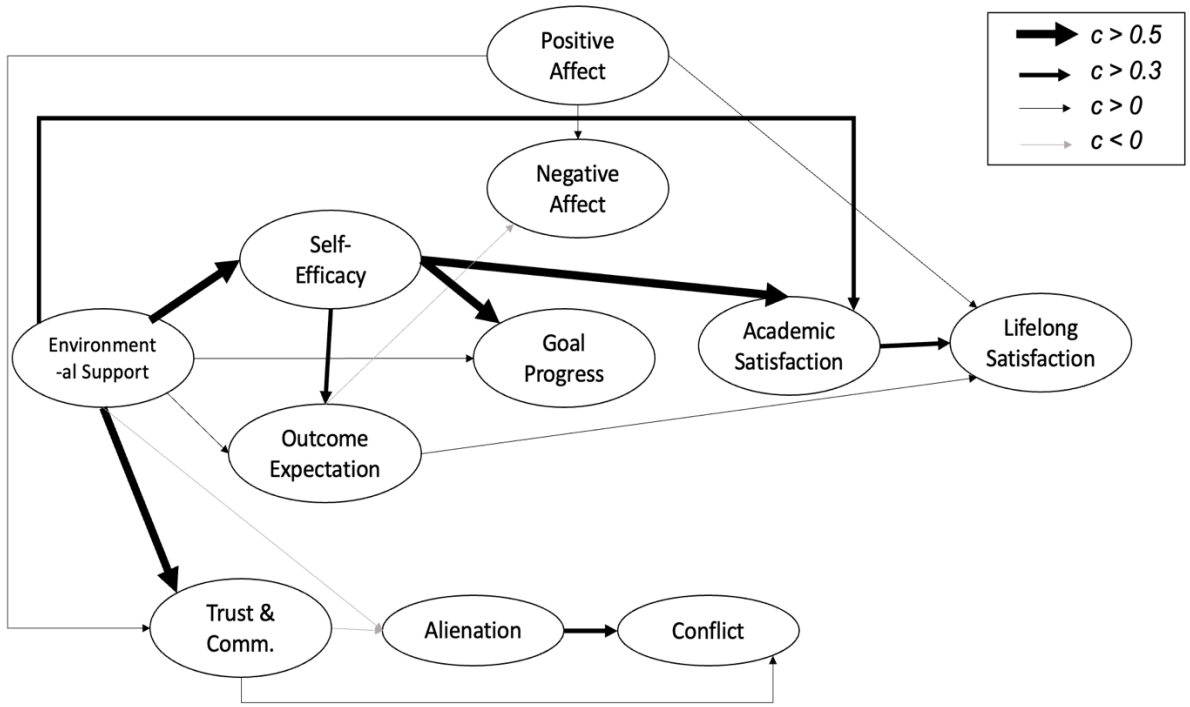
Figure 28 is the research hypothesis of the second family relationship social cognitive wellbeing model, which included two of the caregiver-child attachment variables (caregiver-child communication & trust and alienation) caregiver-child conflict. The paths between social cognitive wellbeing variables are based on the previous SCWB studies (Lent et al, 2005; Sheu et al., 2017). The paths between SCWB variables and family relationship variables are based on the characteristics of Chinese VET school students from migrants' families. In the hypothesis model: self-efficacy, outcome expectation, goal progress and academic satisfaction bridged the correlation paths between environmental support and lifelong satisfaction.

Figure 28 Family Relationship and Social Cognitive Model II



The structural equation modeling analysis results for the child-caregiver attachment and conflict social cognitive model with the current data shows an acceptable fit also, with x^2= 7576.2, df = 1740, p < 0.0001, CFI = 0.861, RMR = 0.068 and RMSEA = 0.045. The coefficient of four significant paths are above 0.5, which are the path from environmental support to caregiver-child trust & communication, the path from environmental support to self-efficacy, the path from self-efficacy to goal progress, and the path from self-efficacy to academic satisfaction. Moreover, coefficients of the other four paths are above 0.3, which includes the path from environmental support to academic satisfaction, the path from self-efficacy to outcome expectation, the path from academic satisfaction to lifelong satisfaction and the path from alienation to conflicts. Moreover, four of the significant paths are below 0; that means the correlation between these two variables is negative, for example the path from environmental support to alienation, the path from outcome expectation to negative affect, the path from trust & communication to alienation and the path from alienation to lifelong satisfaction. Furthermore, the coefficient of other paths in this model are above 0.

Figure 29 Family Relationship and Social Cognitive Model II-Path Coefficients



Note: Caregiver child trust & communication is short for Caregiver child communicate, Caregiver child alienations short for alienation in the above figure.

Here the bootstrap method was used to test indirect effects related to environmental support, positive affect, caregiver-child alienation and caregiver-child trust & communication; two thousand bootstrap samples were generated to estimate the indirect effects and bias-corrected 90% confidential intervals. Positive affect and environmental support have indirect effects on lifelong satisfaction, the indirect (mediated) effect of environmental support on the positive affect is 0.104 and is statistically significant ($P < 0.01$). Meanwhile, environmental support and caregiver-child trust & communication have indirect effects on alienation; the indirect effect of environmental support on caregiver-child alienation is -0.184 and is statistically significant ($P < 0.01$). Moreover, similarly with model 1, environmental support and self-efficacy have significant indirect effects on outcome expectation, self-efficacy and outcome expectation have significant indirect effects on academic satisfaction. The significant standard indirect effects for environmental support ranged from -0.184 to 0.369, whereas those for caregiver-child alienation ranged from -0.184 to 0.017.

Table 75 shows the coefficients of all the significant paths in the above model. Among all the path coefficients, nine paths are not significant, and the others are statistically significant.

Table 75. Significant Differences on Standardized Structure Path Coefficients Model II

Path			Coef.	P
Environmental support	→	Self-efficacy	0.52	***
Environmental support	→	Goal progress	0.13	***
Self-efficacy	→	Academic satisfaction	0.57	***
Positive affect	→	Trust & communication	0.17	***
Self-efficacy	→	Outcome expectation	0.32	***
Environmental support	→	Alienation	0.00	*N.S.*
Environmental support	→	Trust & communication	0.55	***
Environmental support	→	Outcome expectation	0.26	***
Goal progress	→	Academic satisfaction	-0.01	*N.S.*
Environmental support	→	Academic satisfaction	0.33	***
Academic satisfaction	→	Lifelong satisfaction	0.42	***
Outcome expectation	→	Negative affect	-0.19	***
Trust & communication	→	Parent-child conflicts	0.09	**
Alienation	→	Parent-child conflicts	0.40	***
Self-efficacy	→	Lifelong satisfaction	-0.01	*N.S.*
Outcome expectation	→	Lifelong satisfaction	0.17	***
Positive affect	→	Lifelong satisfaction	0.06	*.
Goal progress	→	Lifelong satisfaction	0.01	*N.S.*
Alienation	→	Lifelong satisfaction	-0.05	*N.S.*
Positive affect	→	Negative affect	0.18	***
Trust & communication	→	Lifelong satisfaction	0.14	***
Parent-child conflicts	→	Lifelong satisfaction	0.01	*N.S.*
Goal progress	→	Positive affect	0.33	***
Self-efficacy	→	Goal progress	0.70	***
Positive affect	→	Self-efficacy	0.05	*N.S.*
Outcome expectation	→	Goal progress	-0.04	*N.S.*
Alienation	→	Academic satisfaction	0.00	*N.S.*
Trust & communication	→	Academic satisfaction	-0.07	*
Trust & communication	→	Alienation	-0.16	***

*Note: C.R.: covariance, *<0.05, **<0.01, ***<0.001*

Similarly with the previous model, most of the path coefficients between SCWB variables are with significance. Among all the paths, the path from self-efficacy to goal progress is with the greatest coefficient ($path\ coeficient = 0.704,\ P < 0.001$). It is followed by the path coefficient from self-efficacy to academic satisfaction ($path\ coeficient = 0.57,\ P < 0.001$), the path coefficient from environmental support to caregiver-child trust & communication ($path\ coeficient = 0.55,\ P < 0.001$), the path coefficient from environmental support to self-efficacy ($path\ coeficient = 0.52,\ P < 0.001$) the path coefficient from academic satisfaction to lifelong satisfaction ($path\ coeficient = 0.42,\ P < 0.001$), the path coefficient from environment support to academic satisfaction ($path\ coeficient = 0.33,\ P < 0.001$), the path coefficient from goal progress to positive affect ($path\ coeficient = 0.33,\ P < 0.001$) and etc. Moreover, there are several variables negatively correlated with each other, and they are with path coefficients below 0. For example, the path coefficient from outcome expectation to negative affect ($path\ coeficient = -0.19,\ P < 0.001$), path coefficient from caregiver-child trust & communication to academic satisfaction ($path\ coeficient = -0.07,\ P < 0.05$), path coefficient from caregiver-child trust & communication to alienation ($path\ coeficient = -0.16,\ P < 0.001$).

In addition, most of the social cognitive variables can influence life satisfaction directly (positive affect, academic satisfaction and outcome expectation) or indirectly through other variables, such as, academic satisfaction/outcome expectation/goal progress/self-efficacy.

For the caregiver-child relation variables added in the SCWB model, caregiver-child trust and communication can positively impact environmental support and positive affect.

The measurement model tested two structural model relations that were hypothesized in the previous stage. Firstly, caregiver-child communication frequency, caregiver-child regulation, caregiver-child conflicts, caregiver-child trust & communication and coactivity positively correlated with participants' social cognitive wellbeing variables. Secondly, caregiver-child alienation negatively mediated the correlations with participants' social cognitive factors, through caregiver-child trust & communication. Moreover, this study found family-related variables (caregiver-child regulation, caregiver-child coactivities, caregiver-child communication frequency, caregiver-child alienation, caregiver-child conflicts and caregiver-child trust & communication) have interrelationships with social cognitive wellbeing variables (academic satisfaction, outcome expectation, goal progress, life satisfaction environmental support, positive affect, negative affect and self-efficacy) that can be adjusted.

5.1.5 Results and Implications

From the time dimension: As the time of the father's migration passes by male students get higher lifelong satisfaction, self-efficacy and academic satisfaction than female students. There is no statistical significance in most of the research models for the time period of the mother's migration. In randomly chosen samples in this study, 25.8% female participants and 18.2% male participants are left behind by their parent(s) in outbound (mostly rural) areas. It was found more female students are left behind than male children which is different from the results of other studies (UNICEF, 2015). This may be because their samples are nationwide (Chan & Crothall, 2009), but the samples for this study are regional. Female students in this study suffer more from the separation with their parents than male students do. Therefore, parents (especially fathers), caregivers and teachers should pay more attention to the mental health of the female children of migrant workers.

Moreover, parent-child communication helps the children of migrant workers to alleviate the pain of long-term separation between children and parents. As the period of time of the father's migration goes on, participants with better parent-child communication get higher life satisfaction and academic satisfaction, but with lower negative affect. Also, similar results appear in respect of travel frequency, as the time of father's migration elapses, participants with higher frequency of travelling together with their parents get higher lifelong satisfaction, self-efficacy, goal progress and environmental support. Moreover, with the time period of the father's migration at an average level, the students with better health conditions get higher self-efficacy, academic satisfaction, goal progress and environmental support, but with lower levels of negative affect. While, what was outside of the researcher's expectations, the participants have lower self-efficacy, academic satisfaction, goal progress and positive support, when they get better school performance, as the time of participant's father's migration goes by. These results may be caused by the characteristics of Chinese vocational school students. Some researchers have found that Chinese vocational school students suffered from failures in their learning experience as they had lower learning self-efficacy (Jiang & Zhang, 2012). Even though they obtained comparatively higher school performance after entering vocational school, they do not have enough confidence to keep up with their studies. Therefore, the guidance of parents and teachers is needed to help and encourage the students to build up their academic confidence and sense of accomplishment.

Why is the fathers' time of migration essential, instead of the mothers'? The previous psychologists pointed out that fathers play an essential role in children's development (Lamb, 2013). Forty years ago, researchers started to discuss the changing roles of fathers in the family, which used to be mainly focused on the economic support and the discipline of the children, and in the teenage years, on caring for them and rearing them (Lamb, 2013). In the research of Cortes (2015) children left behind by their mother are less happy and more easily suffer from detrimental effects than children left behind by their fathers. While Graham & Jordan (2011) found out children left behind by their father are more likely to be unhappy in Thailand and Indonesia (Graham & Jordan, 2011). For this question, the following qualitative research will offer more information.

From the space dimension: Participants from outbound (mostly rural) areas have relevantly lower scores of life satisfaction, outcome expectations, goal progress, self-efficacy, and academic satisfaction than participants from inbound (mostly urban) areas . Moreover, students who live in urban areas have a higher level of self-efficacy, goal progress, and academic satisfaction than those who live in rural areas. Also, participants with an urban household registration type possess higher self-efficacy than those with a rural household registration type. The distance the parents work from their hometown does not have impacts on participants' social cognitive wellbeing, but the communication quality and parent-child travel frequencies are essential to their social cognitive wellbeing (this will be discussed in detail in the relationship dimension).

The participants from non-migrant families have higher scores in goal progress than those from a migrant family. Furthermore, family communication, travel together with parents, and parents' company are essential to improve participants' life satisfaction, outcome expectations, goal progress, self-efficacy, and environmental support, no matter whether the students come from an inbound area and migrant family or not. This study will discuss these findings in more detail in the next part (the qualitative section).

Also, this study found that students with better school performance have relevantly lower scores in nearly all the social cognitive factors, which is similar to the results in the time dimension. Additionally, a good health condition is essential for almost all social cognitive factors in the space dimension. Some of the above factors that impact migrant workers' children could be adjusted by themselves or with the help of consultants, caregivers, parents, and teachers. However, the influences that come from the residential registration policy can only be adjusted by a policy revolution at the national level.

From family relationship dimension: Previous researchers have found that positive family relationships and supportive feelings from other caregivers except parents can also improve students' wellbeing (Chai et al., 2019). In the research sample, 19.3% of the children in rural areas live with their grandparents. In addition, 31.4% of the participants stated that they lived with their grandparents when they were five years old and 25.3% of the participants said they lived with their grandparents when they were ten. In this research, caregiver(s) for participants from non-migrant families or who migrated with their parent(s) is/are their parent(s). In the cases of the left-behind youngsters the caregiver(s) is/are nonparents.

This research found that caregiver(s) coactivities, communication frequency and caregiver-child trust are very essential for students in vocational schools, irrespective of whether they are from a migrant family or not. More communication and better trust between caregiver(s) and child improve the social cognitive wellbeing of youngsters. Moreover, even caregiver-child

regulation and conflicts help to improve the participants' social cognitive wellbeing. However, caregiver-child alienation significantly reduces youngsters' wellbeing. This shows the importance of the family relationships as well as the quality of caregiver-child communication in improving participants' wellbeing. However, there is still a need to find out the differences of the influences on children's wellbeing from different caregivers (parents vs nonparents) and this will be checked in the following qualitative study. Moreover, caregiver-child relationships, schoolmate relationships and teacher-student relationships may also have influence on the children's wellbeing; this will be examined in the next part.

From the self-adjustment dimension: The self-adjustment dimension aims to support the utility of two modified social cognitive wellbeing models (the research included caregiver-child coactivity, caregiver-child regulation as well as caregiver-child communication frequency in model 1 and caregiver-child alienation, caregiver-child trust & communication as well as caregiver-child conflicts in model 2). The family relationship indicators were included in the social cognitive model to predict how family relationships can adjust social cognitive wellbeing in collectivism social background (half of the participants are from migrant families). The data set was collected through the modified social cognitive wellbeing models which are based on the theoretical logic of previous research (Lent, 2004; Sheu et al., 2014) and was adjusted to accommodate of Chinese view of society. This study's results and findings offered initial evidence for modified family-related social cognitive wellbeing instruments, especially in a collectivist context. However, it is suggested that more aspects should be explored, for example, school or working relationships and social relationships. As few types of research studies have extended research on the environmental support and social relations elements, this is the first study that explores the validity of family-related social cognitive wellbeing instruments. It offers an example and lends further evidence for measurement, including environmental-related indicators, enabling future collectivism context exploration.

The overall outcomes from this study proved most of the research hypothesis that the structure model has a good fit for the data. Also, this study found most of the paths in two models are statistically significant.

Contrary to the researcher's expectations that caregiver-child regulation and caregiver-child conflicts negatively correlated with most social cognitive wellbeing indicators, they positively correlate with them. That may be because teenagers regard caregiver-child regulation and relevant conflicts between them and their parents as proof that adults care about them. This study noted the importance of parent-child relations and caregiver-child relations to the teenage students in China. It is appropriate to compare migrant children with their non-migrant fellows (left-behind children) in rural areas (Lu et al., 2019). Several studies have proved that children left behind by both parents are more prone to suffer from negative influences than any other kind (Fischer, 2009). Paralleling the conclusions of other studies (Tomşa & Jenaro, 2015), here it was also found that participants who have better communication with both parents have higher social cognitive wellbeing than those that only have better communication with one parent or no one of their parents.

5.2 Why Do These Factors Impact the Wellbeing of Chinese Migrant Workers' Children, and How?

In-depth interviews have been conducted in both rural and urban areas; the interviewees were students from the VET schools who had previously completed the questionnaires in this research, and their parents, caregivers and teachers. The interview questionnaire is a revised version of questionnaires used in a previous study (Lu et al., 2016). A total of 18 students with migrant parents have been randomly chosen from three vocational schools (two schools in rural areas and one in an urban area); nine of the students are from rural (outbound) areas and nine from urban (inbound) areas. For each student, a fictional code name has been assigned to protect their personal identification data. Students who migrated with their parents in earlier childhood have been given a coded name ending in "g" in the urban areas (Hui Xing, Jia Ling, Rui Qiang, Hui Ling and Xin Ming). The ages stated in the table are those at the time of the interview.

Table 76 shows the interviewees' basic information, which includes age, gender, location, caregivers, parents' working place and daily working hours. Most of the outbound left-behind youngsters are living together with their grandparents. The participants are aged from 15 to 17, and 11 of them are female students. Almost all the students who study in inbound areas are living with their parents, except for Rui Qiang, who lives with his father only. In contrast, all of those who study in outbound area are living with their grandparents, except Heng, who lives alone.

Table 76. General Information of Interviewees

Region	Name	Age	Student's Gender	Hometown	Lives With	School Performance	Health Condition	LS	AS	SE	Parents' Work… Location	Hours	Parents' Years of Migration
	Xiu Qing	16	Female	Henan	Both parents	Average	Good	M	M	M	Dongguan	11	11
	Hua Qie	16	Female	Chongqing	Both parents	Average	Good	M	H	M	Dongguan	10	25
	Hui Xing	17	Male	Qing An	Both parents	Average	Average	M	M	M	Dongguan	10	26
	Jia Ling	16	Female	Hunan	Both parents	Average	Good	L	M	L	Dongguan	8	23
Urban	Wen Jie	17	Male	Zhaoqing	Both parents	Above Average	Good	H	H	M	Dongguan	12	22
	Rui Qiang	16	Male	Hainan	Only father	Failing Grade	Good	L	M	L	Dongguan	Not fixed	22
	Hui Ling	17	Female	Meizhou	Both parents	Below Average	Average	L	M	L	Dongguan	10	18
	Xin Ming	16	Male	Chongqing	Both parents	Average	Average	L	H	M	Dongguan	16	16
	Jia Yi	16	Female	Guangxi	Both parents	Above Average	Good	L	L	L	Dongguan	10	22
	Ting	17	Female	AnHua	Grandparents	Excellent	Average	L	L	H	Zhejiang	10	20
	Meng	17	Female	AnHua	Grandparents	Above Average	Average	L	L	L	Zhao Qing	10	15
	Shan	16	Female	AnHua	Grandparents	Above Average	Good	M	M	M	Foshan	12	16
	Yang	16	Female	Nanxian	Grandparents	Average	Good	L	H	L	Yueyang	18	21
Rural	Jin	17	Female	Nanxian	Grandparents	Average	Good	M	M	M	Dongguan	11	20
	Zhou	16	Female	Nanxian	Grandparents	Excellent	Average	L	L	L	Guangzhou	12	15
	Qi	16	Male	Nanxian	Grandparents	Average	Good	L	M	L	Guangzhou	11	15
	Hao	15	Male	Nanxian	Grandparents	Average	Good	L	L	M	Zhejiang	9	15
	Heng	16	Male	Nanxian	Alone	Above Average	Good	L	L	L	Foshan	10	6

Note: LS is Lifelong Satisfaction, AS is Academic Satisfaction, SE refers to Self-Efficacy; L refers to low level; M refers to medium level; H refers to high level.

Moreover, Table 76 also shows the information of students' averages of their questionnaires in lifelong satisfaction (LS), academic satisfaction (AS) and self-efficacy (SE); key indicators of social cognitive wellbeing (Lent et al., 2005). In order to compare participants' wellbeing, three variables are divided into three levels: high, medium and low (shown in Table 76). The health condition and school performance of interviewees are also shown in Table 76. To obtain more information about the students, interviews were also conducted with their parents, caregiver(s) and teachers (the questionnaires are in Appendix II).

The structure of the qualitative research part of this study is also based on the life course theory framework, which is divided in four dimensions: time, space, relationships and self-adjustment. Moreover, it is based on the results of chapter 5, section 5.1. The chapter discusses the first dimension, time, to explore the relationship between the time duration of each parent's migration and the wellbeing of the participants. Study of the second, space, aims to discover more information about the students in inbound (most are urban areas) and outbound (most are rural areas) areas and compare their wellbeing. Relationships, the third dimensions, will be explored to discover further information about the wellbeing of migrant workers' children according to their family relationships. Then the fourth dimension, self-adjustment, will be considered to determine how other factors (e.g., personality, health conditions, etc.) could be adjusted by oneself to improve wellbeing in the participants. Here the researcher also checked the influence of the parents' migration on the students' personality. The research obtains information about their personality from the answers of their parents, caregivers and teachers to the question: *"What do you think of the personality and characteristics of X (student's name), strength and weakness?"*

5.2.1 Time: Paying the Price of Migration, Long-Term Parent-Child Separation

In 5.1.1 it has been found out that the father's migration time has impacts on most social cognitive wellbeing variables, meanwhile, the mother's migration time does not impact most of the social cognitive indicators. In addition, females suffer more from the absence of father-child separation than males. Also, parent-child communication can mediate the parent-child separation time and improve children's wellbeing. This section will investigate the reasons for this and look into unsolved factors in the previous stage of the research.

5.2.1.1 Why is Duration of Fathers' Migration Important to Wellbeing of Migrant Workers' Children?

Based on previous studies, in Eastern and Western societies the ability to make money is a key factor in defining fatherhood (Brandth & Kvande, 1998). Having the ability to support their children and family financially is the main basis on which male migrant workers build their fatherhood. This typical behavior of responsible fathers does not necessarily save their children from the pain and emotional torture caused by long-term separation. Moreover, father-only migration is the most common migration arrangement in China's rural households (Yue et al., 2017). Merely being a supporter is not enough to become a "good father" in the hearts of their children (Choi & Peng, 2016). The quality of the parent-child relationship is determined to an appropriate extent by "quality parent-child time", that is, the time that parents and children spend together and experience an intimate relationship (Dermott, 2014). Students with a better line of communication with their parents perceived a higher SCWB. The relationship between traditional Chinese fathers (Ho, 1989) and children is poor (Wu et al., 2002). In the process of raising children, emotional tasks are usually related to motherhood (Choi & Peng, 2016).

This research study found that most mothers spend more time communicating with their children than the fathers in both inbound and outbound areas. During interviews, Jia Ling, Xin Ming, Jia Yi and Zhou all commented that they talk much more with their mother than with their father. There are different reasons and situations for this phenomenon. Xin Ming said *"I communicate less with my dad [because] he is too busy with his work"* and Wen Jie, *"I talk everyday with my mother; my father either ignores me or sleeps in bed when I am at home."* These responses are very similar to those given in the previous studies.

Moreover, Zhou told us:

> *"I often chat with my mother. We chat about whatever happens in daily life. I communicate less with my father, and we call each other once a week. I have a lot of communication with my grandparents, but I don't talk about very deep topics with them because there is a generational gap between us. In some aspects, they cannot understand me."*

When the researcher asked the question: *"If you were to give some advice to your parents, what would you suggest?"* Jia Yi said, *"I hope the communication with my father would be better."* In addition, Xiu Qing mentioned, *"I hope to communicate more with my father, instead of us keeping everything to ourselves."* It should be noted that in these two cases both Jia Yi's and Xiu Qing's mother are not housewives, but have active careers. Xiu Qing's mother works more than ten hours per day.

From the participants' self-report about their relationship and communication frequency with their parents, this study has found that the teenagers are willing to exchange their ideas with the people they love and trust. Probably, due to the impact of Eastern family relationship traditions, fathers are more serious and hold an image of authority. As of today, mothers still spend more time and energy to take care of and to communicate with their children. Moreover, children (mainly females) expect their fathers to spend more time and communicate with them. They wish there could be a better understanding between them and their father. Some participants even feel that their father ignores their feelings and this does influence their wellbeing. This, in turn, makes children crave their father's attention even more. In other words, children have more expectations for the missing part in their lives.

5.2.1.2 Why Males Get Higher Wellbeing as Parents' Migration Time Elapses than Females

In the quantitative part, here it was also found that, as the time of the father's migration passes by, male students have higher social cognitive wellbeing than females. Traditionally, parents prefer sons over daughters because they are the heir of the family name, pedigree, and lineage – and have the responsibility of providing for their parents at the end of their life. In comparison with daughters, parents generally invest more in their sons' education, housing, and land acquisition because the son is a kind of old-age security, the daughter is only regarded as a temporary member of the family who cannot be counted on (Choi & Peng, 2016). This is one of the important reasons why females get lower life satisfaction, self-efficacy and academic satisfaction than males.

Among the 18 youngsters, half of them mentioned they have less communication with their father, six of them are female. They express their expectation to improve the communication with their father (Jia Yi said *"I hope the communication with my father would be better"* and Xiu Qing mentioned *"I hope to communicate more with my father, instead of us keeping everything for ourselves*"). In contrast, male youngsters show an understanding of their father's reasons for working overtime and lack of accompany (Xin Ming said *"I communicate less with my dad, because he is too busy with his work"*). Therefore, female teenagers have more expectations of their father than males do, and they are more sensitive to the missing fatherly love.

5.2.1.3 Different Influence of Parents' Migration Time on Parent-Child Relationship in Migrant Youth and Left-Behind Children

From the results of Table 76, this study found that the parents' migration time have some influence on the wellbeing of the VET school students, especially in outbound areas/rural areas, for example, Heng, whose parents left him behind for the shortest period, got three lows in social cognitive wellbeing, while Yang obtained the high academic satisfaction even though her parents' migration time is the longest among the outbound participants. This might be because the teenagers left behind at a very early age have less attachment to their parents than those who were left in recent years. In contrast, impacts from parents' migration time on students in inbound (mostly urban) areas are comparatively lower. Some students in inbound areas migrated together with their parents (Hui Ling). However, she gets a relatively lower SCWB mean than most of the students in inbound areas. Moreover, Jia Yi has the lowest SCWB mean value in an inbound area. Jia Yi's parents migrated 21 years ago, and she migrated to join her parents five years ago. Wen Jie (migrated to the city less than two years ago) and Rui Qiang (migrated to the city where his parents lived when he was four). The parents of Wen Jie and Rui Qiang have been migrant workers for the same period, but the students have very different mean scores in wellbeing (Wen Jie has high life satisfaction, high academic satisfaction and medium self-efficacy; but Rui Qiang has low life satisfaction, medium academic satisfaction and low self-efficacy). Therefore, the duration of the parents' migration does not have much impact on migrant youth's wellbeing in inbound (mostly urban) areas . Moreover, the duration of the migration also does not directly impact the personality of migrant children in VET schools.

5.2.1.4 Evidence of Other Time-Related Factors Influencing Parent-Child Communication and Wellbeing

In comparison, this study found some evidence in the interviews that parents' migration time influences the parent-child relationship. Hui Xing's parents have had the longest migration (26 years) among the 18 families studied. Hui Xing was left behind by his parents when he was one year old, and later moved in with his parents in the city at age of four. Hui Xing said *""There is a generational gap between us."* Other parents with short migrations have received comparatively positive descriptions from the student. For instance, Heng declared *"The relationship is excellent, one of [my parents] is strict, and the other is gentle."* His parents left their hometown to work outside six years ago. In addition, Hao has said the relationship with his parents is good. His parents left their hometown 15 years ago.

Additionally, from interviewee descriptions, it was found that the frequency of parent-child communication and company do impact the parent-child relationship, wellbeing and personality of the participants. This is similar with study findings in the previous part of the research. Like most migrant youngsters in urban areas, Wen Jie and Hua Qie both live together with their parents. They both communicate with their parents every day and perceive a good relationship with them. In comparison, other migrant youngsters who have less communication with their parents are perceived to be shy, antisocial, emetic and solitary, and less satisfied with their lives. The left-behind children usually communicate with their parents only once a week through phone calls and video calls. It is hard to tell whether the frequency and duration of communication with their parents can make a difference for left-behind children's personalities and wellbeing.

Furthermore, the working hours of the parents are incredibly long for all participants. The average working hours are of 11.2 hours per day, much higher than the legal eight hours per day of Chinese labor law. The self-employed parents generally work longer hours than those employed. Yang's father works the most: 18 hours per day, from 3 AM to 9 PM. Her parents are self-employed vegetable merchants. According to her father's description, they work at this pace all year round except on the Chinese New Year. Xin Ming's parents rank second, with working hours of 16 per day as owners of a small clothing workshop. This might show why migrant workers choose to leave their children in rural areas or have very little time to communicate with them even though they live in the same place. Most migrant parents live with the constant dilemma of choosing whether to make more money for the family or to spend more time taking care of their children.

In this part, this study found that most participants have more and better communication with their mother than with their father. But the lack of communication between fathers and their children, in turn, makes children crave their father's attention. Moreover, females have more expectations of the time spent with their fathers and do not know how to improve the father-child relation, meanwhile males show understanding of their fathers' working habits. Therefore, females are more sensitive to missing fatherly love. Parents' migration time does influence the wellbeing of left-behind children in rural areas but has no impact on the migrant youth. In addition, even though the quality of parent-child communication can ease the long-term pain of parent-child separation, the excessive working hours for most migrant parents prevent them from offering high-quality parental company and communication for their children.

There are around 280 million migrant workers in China in 2020, more than half of the migrant parents left behind their children in their hometown for years (National Bureau of statistics of the People's Republic of China, 2020b). Even those parents who migrated with their children, did suffer a certain time of separation at the early stage of their migration, which it is also found in this study. In order to search for a better life, they choose to leave their hometown but suffer from long-term separation with their children. Migrant workers pay the price of migration, long-term parent-child separation.

5.2.2 Space: Migration Trap of Regional Unbalanced Development – Difficult to Stay and Harder to Return

In 5.1.2, this study found that migrant workers' children in urban/inbound areas achieve higher wellbeing than those in rural/outbound areas; participants in migrant families have lower SCWB than those from non-migrant. In this part, this study explores why the wellbeing of migrant workers' children in inbound areas is generally higher than those from outbound areas, why do participants from non-migrant families have higher wellbeing than those from migrant families?

Among the 18 students interviewed, half live in rural areas, left behind by their parents, and half migrated with their parents to live in the city. When asked about their parents' job and where their parents work (Q1.2.1, in Appendix II), the answers from students who have migrated with their parents to inbound (mostly urban) areas were much more precise than the answers from left-behind youngsters in outbound (mostly rural) areas. All nine students residing in the inbound areas have a specific answer for their parents' occupations. The answer to the same question is not that clear from the left-behind youth. For example, Meng said her parents work in Guangdong Zhongshan, while her mother responded they actually work in Zhao Qing. This is comprehensible given that participants in outbound areas are far from their parents, so they do not know much about their lives.

5.2.2.1 Why the Wellbeing of Migrant Workers' Children in Inbound Areas is Generally Higher than those from Outbound Areas

Under the current household registration system, the children of migrant workers who do not have an urban household registration can only enjoy minimal urban childcare services (China Labor Bulletin, 2021), education services, and medical insurance. These structural imbalances prevent migrant workers from bringing their children into the cities (Choi & Peng, 2016). The children who migrated with their parents into the urban/inbound areas are easily troubled by an "identity crisis" (Moskal, 2014), because they need to adapt to a new school, new dialects and new customs. However, the left-behind children in outbound areas or rural areas may be more likely to suffer from negative affects (Jia & Tian, 2010), such as anxiety (Dai & Chu, 2018), depression (Chen & Chan, 2016), victimization (Chen et al., 2017) and loneliness (Liu et al., 2010) and emotional trouble (Lu et al., 2019) than non-left-behind children (even migrant youngsters).

In this study, with regard to this question, students were asked: *"Do you think there is any difference between children from urban areas and rural areas? What do you think is the difference?"* The migrant youngsters from urban areas typically believe that there is no significant difference. Two categories of students can be discerned in those who live in inbound areas. The first is students who were left behind in their childhood and moved in with their parents in urban areas later on (Hua Qie, Lin, Wen Jie, Rui Qiang and Jia Yi). The second is of students who migrated with their parents in their early childhood (Xiu Qing, Hui Xing, Hui Ling and Xin Ming). These two groups have different descriptions of their migration experience. Xiu Qing and Xin Ming, who migrated together with their parents to the urban areas at childhood, mentioned they studied in Peasants Workers' Children schools before they studied in a VET school. Jia Yi also studied in a Peasants Workers' Children school because she migrated to the urban area after primary school. Both Xiu Qing and Hua Qie think local students in their present VET school are very friendly and have a good personality. Hui Xing felt there are too many requirements for migrants who take a college entrance exam, in

comparison to local students. Hui Ling commented that the economic status of local students is higher than that of migrants, Jia Yi's teacher also mentioned this.

Some students' parents said taking children to urban areas or leaving them behind in rural areas exposes them to different environments (the question for the parents is *"What do you think is the difference between migrants with children and left-behind children in your hometown?";* Q2.4.1). Xiu Qing's mother said the education for children in cities is of higher quality in urban areas than in their hometown and there are better appliances and equipment in the school; therefore, she takes her children to the city to broaden their view of the world.

The unbalanced regional development of rural and urban areas in China caused a large amount of inner migration. The migrant workers migrated from rural/outbound areas to urban/inbound areas to search for an economically better life. Meanwhile, because of the household registration policy the migrant workers and their children cannot enjoy urban citizenship in the target cities, which includes childcare services, education services, and medical insurance. But if they choose to go back to their hometown after years of migration, long-term absence from the rural life makes it difficult for them to be a traditional farmer again. Also, the migrant children, even living and studying in an inferior position in cities, have access to a much better level of education and qualified teachers than that in rural areas.

5.2.2.2 Why Children from Non-Migrant Families Have Higher Wellbeing than Migrant Families in Both Rural and Urban Areas

There is a gap between the meager income of the vast majority of migrant workers and the high cost of living in cities that has made the life of many of the children who migrated to the cities with their parents very different from those of local children (Chan & Crothall, 2009). Furthermore, due to the long working hours of their parents, the children of migrant workers from rural areas rarely receive high-quality companionship from their parents (Choi & Peng, 2016).

One of the research questions asks: *"Do you think there is any difference between children from migrant and non-migrant families? What do you think the difference between migrant with children and left-behind children in your hometown?"* Jia Yi's mother told us: *"There is a big difference between migrants and non-migrant families, living in cities is much better."* Other parents, especially those who left behind their child and picked them up later, think differently about this issue, Hua Qie's father said, *"for the past few years, we have had less time to communicate with Hua Qie. Now we have more [communication]".* Also, Wen Jie's father said, *"Wen Jie was left behind in his early years. Even though his grandparents love him very much, they don't know how to communicate with him. That has an impact on his personality."*

Rui Qiang's mother told the researcher during an interview:

> *"There are differences between migrant and non-migrant families. Rui Qiang has no memories of his father before the age of four due to us being absent in his life, that is why he is also not very close to us. But we had no choice, our family is poor, and we had to leave our hometown to make money, while, later we often took him to the city. So, he has become more cheerful in character after that. At first, we asked him to study hard, but then we just wanted him to be happy. Rui Qiang lost two fingers during his years in our*

hometown with his grandparents. That made him not that confidence, and influenced the relationship between him and us."

At the same time, in response to this question, Xin Ming's mother said family migration has had an impact on Xin Ming. The relationship between her and her son is rather distant, and they feel like strangers to each other. She said Xin Ming is very rebellious and unwilling to express himself with them.

Also, Lin's mother said,

"The migration has had a large impact on Lin. When she was in junior high school, she wrote an essay about the possibility that we might send her back to our hometown. At that time, I had just given birth to her younger brother, and she hoped to stay with us, worried about us leaving her behind again."

The teacher of Xiu Qing and Hua Qie said there was no difference between students from migrant and non-migrant families. In comparison, Jia Ling's and Xin Ming's teacher said that the migrant students care more about their studies and study harder than local students.

For left-behind participants in rural areas, there are different answers to the question "*Do you think there is any difference between migrants and non-migrant families?"* and *"how did it influence you?"* The answers from Heng and Shan are very different from the responses from other students. Both of them think there was no difference between migrant and non-migrant families. Their parents' migration has made them feel that they are independent. At the same time, their parents have a different opinion. Heng's mother said, *"There are differences between migrants and non-migrants' families. Children need parents to accompany and communicate with them. Children from non-migrant families have more contact and company with their parents."* Also, Shan's mother said, *"There is not too much communication between the children and their grandparents. The grandparents keep them warm and well fed. Parents who are away from home pay less attention to their children's education."* This is very similar to Ting's answer to this question: *"Grandparents are getting older and can't keep up with the time. Fortunately, my grandparents respect and care about me, and we often talk about my school life. Of course, that I can communicate better with my parents. But I am used to it now."* Jin said, *"There is no significant difference [between children from migrant and non-migrant families]. But if my parents come back for some period and leave suddenly, I will be very anguished and sad."* Meng takes her younger sister as an example *"My mother came back and got together with us for a half year. During that period, my younger sister's school performance improved significantly, and at that time she was in second grade. After my mother left, my sister's academic performance worsened again."* The teacher of Yang, Jin and Zhou provided more evidence in support of this conclusion: *"The overall performance of students with parents working in their hometown is better [than those who have parents who migrated]. And their parents are also more concerned about them."* This was true for some of the left-behind children, such as Zhou. Zhou confided that she feels she was never loved (by her parents or caregivers), while her mother said that they know there is an absence of care and presence for Zhou, but they have no choice.

Moreover, Qi, a male student in the rural area whose parents left to go to work in the city, said *"There are some impacts. We seldom talk [because of their migration], but I feel that we are very close whenever they come back. I don't communicate as much with my grandparents*

as before, but I always chat with my mother through phone calls. We talk about my school life." This complements the words from Ting, Meng and Shan's teacher:

> *"Whether the parents are here or not, the degree of their attention to their children is essential. More than 60% of our students' parents work in other places. Even if the parents are not around, they can improve the condition of their children if they call them frequently and care about them."*

5.2.2.3 Difference Between Vocational High Schools and General High Schools

Regarding the answers to the question *"Do you think there is a difference between vocational school students and general high school students? What are the differences?"* there is not a big difference between the reflections and answers of interviewees from urban and rural areas. Most interviewees said there are some differences between VET school students and general high schools. Among those, there were mainly two categories of answers. Firstly, some of participants pointed out that the educational purpose for each type of school is different. VET schools aim to cultivate students' skills in specific areas, while the goal of a general high school is for the student to pass the college entrance exam (Hui Xing, Jia Ling, Hui Ling and Jia Yi, and teacher of Hui Ling and Meng). Secondly, other interviewees said that the general high school has higher requirements for school performance and the study promotes a higher level of stress in students than the VET schools (Xiu Qing, Meng and Qi). Yang, Zhou and Hua Qie said that students in general high schools have interpersonal relationships with their fellow students that are less complicated than those that VET students develop with each other.

Moreover, Qi, Yang and Rui Qiang said that they were forced to go to a VET school because of their poor school performance in the high school entrance exam. Some parents from both rural/outbound and urban/inbound areas believe that general high schools are better than vocational high schools in their teaching methods (Jia Yi) and have students with better academic performance (Zhou, Xin Ming and Hao). Other parents believe there are no significant differences (Meng, Wen Jie, Hua Qie and Rui Qiang).

Regarding the differences between students in outbound (mostly rural) areas and inbound (mostly urban) areas on SCWB: Jia Yi got three "low" scores in the three key elements of SCWB factors, the lowest from an inbound area, while Wen Jie got two "high" and one medium ranked in the medium level. Heng got three "low" as the lowest scoring student from the outbound (mostly rural) areas area, and Yang, with the only "high" labelled variable is the highest. With the resulting means and standard deviations of each group the outbound (mostly rural) areas have a lower range of standard variation, meaning it has a more 'stable' outcome. Children in urban/inbound areas vary more in their SCWB. When comparing the standard deviations of the groups, the rural/outbound areas also have a higher stability; 0.36 < 0.57. The mean is higher in the urban/inbound group though, meaning that even if more unstable, inbound children can achieve a higher degree of wellbeing.

In general, the higher economic statue, higher level of education quality and more face-to-face communication with their parents in inbound areas are reasons that migrant workers' children in inbound (urban) areas with higher wellbeing than those from outbound areas. Moreover, the limitations against taking the college entrance exam due to the household registration policy, lack of parental care and feelings of security, parent-child alienation, the generation gap with their caregivers (grandparents) as well as the poor quality of parent-child

communication are the reasons why participants from migrant families have feelings of less wellbeing than participants from non-migrant families.

5.2.3 Relationships: Family Attachment and Relationship-Based View of Wellbeing

Chinese culture attaches much attention to interpersonal relationships. A Chinese researcher pointed out that China is a relationship-based society (Hou, 2015). Familism is the most important feature in the social orientation of Chinese interpersonal relations. Emotionally speaking, Chinese familism includes a sense of unity, belonging, responsibility, and security (Ye, 1990) . Therefore, the Chinese view of wellbeing is also based on this concept, and the family relationship is the most important and basic relationship for Chinese people.

In the previous stage of the research at 5.1.3 it has already been found that some of the family relationship variables have impacts on the social cognitive wellbeing of migrant workers' children. This section aims to discuss more relationship related factors that impact the wellbeing of migrant workers' children.

5.2.3.1 What is the Difference in Wellbeing for Migrant Workers' Children with Different Caregiver(s)?

Researchers find positive family relationship and supportive feelings from other caregivers (besides parents) can also improve students' wellbeing (Chai et al., 2019), and changes in caregivers decrease the satisfaction of left-behind children (Mazzucato et al., 2015). Song et al. (2018) noted that grandparent-child relations are significant for the wellbeing of left-behind children, but not migrant youngsters (Song et al., 2018). In addition, school relationships, including teacher-student and peer relations, are also very important to migrant youngsters' satisfaction and mental health in school (Cousson et al., 2018). Also, researchers found that good relations in school have been proved positively related to adolescents' satisfaction (Lázaro et al., 2019).

The Perception of Interpersonal Relationship affects wellbeing: child-parent relationship

Interview results revealed that when teenagers attached importance to their relationship with their parents, and hold high expectations from them, but seldom try to talk with their parents, they get relatively lower averages on social cognitive wellbeing. For example, in inbound (most are urban) areas, Jia Yi said, *"The relationship with my mother is better [than with father]. My mother always takes the initiative to talk to me."* When the researcher asked her about the communication frequency with her parents, she told us: *"I talk every day with my mother; my father either ignores me or sleeps in bed when I am home."* Regarding suggestions to her parents, she said: "*I hope my family could be in more harmony and that my father would talk more with me."* Among the nine student interviewees in inbound (mostly urban) areas , Jia Yi got three "low" scores in three key factors (LS, AS and SE) of social cognitive wellbeing.

Like Jia Yi, Xin Ming also does not have good communication with his father and comes from an inbound area. In contrast, he does not attach much importance to his relationship with his father, he said, "*My view is different from my parents in different aspects. I prefer to talk with classmates."*

Moreover, the left-behind students usually do not have the same attachment with their fellows who migrated together in early childhood with their parents. Specially the students left behind in their early childhood have relatively lower attachments with their parents. This does not include students whose parents migrated within recent years. For example, Heng's

father left their hometown six years ago, and his mother left two years ago, he lives now alone and reported three "low" scores in SCWB in rural participants. Even though he reported that there is a good relationship between himself and his parents, he believes life alone is good and that it is good for him to be independent. But when the researcher asked him "*What are your expectations in school life?"* he said "*to study hard"* and "*my parents want me to study hard."* This shows that he perceived fulfilling his parents' expectations as a primary goal in his school life and a strong attachment with his parents. However, perceptions of parent-child relations are very different among other participants.

When the researcher asked the question, "*What do you think of your father and mother? And the relationship between you and your father and mother?"* There were two different groups of answers.

"It's regular" (Jia Ling);
"There is a generational gap between us" (Hui Xing);
"I have more communication with my mom than with my dad" (Xiu Qing, Meng, and Jia Yi);
"It's not bad!" (Jin and Zhou);
"I'd rather talk with my classmates" (Rui Qiang);
"The relationship between me and my parents is excellent!" (Hua Qie);
"We are friends" (Wen Jie).

The parents of both Hua Qie and Wen Jie have cared about their mental health and communicated with them more frequently during their childhood than the parents of the other participants.

In the answers to the question *"If you were to give some advice to your parents, what would it be?"* It was interesting to note that there was a very different tendency among students depending on their region. Through the responses from students in inbound (most are urban areas) regions, it can be seen that many children care about their parents. For example, Hui Xing, "*I hope they take care of themselves, slow down and relax"*; Jia Yi, "*I want them to sleep earlier, exercise more and be healthy. I hope my family could be in more harmony and that my father would talk more with me"*; and Wen Jie, *"I wish my parents placed health in the first place".* These migrant youngsters cared about the health conditions of their parents. Other migrant youngsters cared about a harmonious relationship within their family, such as Xin Ming, *"I hope they fight each other less and be more tolerant to each other"*; Jia Ling, "I hope the communication with father could be better"; Hui Ling, *"I don't like to communicate with my parents because my parents and my uncle and aunt live together with a family. I am not satisfied with the way they handle the big family relationship. I hope my parents can adjust"*; and Xiu Qing, *"I hope to communicate more with my father, instead of us keeping everything to ourselves"*. This shows some attachment between most children and their parents in inbound areas in this study. The other two students (Hua Qie and Rui Qiang) in outbound (mostly rural) areas answered with "No suggestions".

On the other hand, the left-behind children in outbound (mostly rural) areas returned few responses to the same question. Three replied with "*no suggestions"* (Hao, Ting and Meng); Hao needed further encouragement to elaborate on his feelings. One more question was provided to him to encourage a more complete answer "*If you were to give some advice to your grandparents, what would you suggest?"* (His caregivers are his grandparents). Hao answered without hesitation, "*I hope they pay attention to their health."* Other participants

asked for some consideration, for instance, Yang said "*I hope I get more encouragement from them instead of them pushing me, especially in my school performance. Don't compare me with others"* and Zhou, "*I hope my father would not be so aggressive, and my mother would not be too chatty."* Zhou is the girl who also confided, "*Since I was young, I have never felt loved."* Only Qi, "*I hope they come back several times a year, and hope my father drives safely"* and Heng, "*I hope they care about themselves and don't work too hard. My mother is obsessed with cleanliness, and I hope my mother will not be too strict with me [in terms of hygiene], after all, I am a boy"*, said something which showed their care of their parents. Heng's father left their hometown six years ago, and his mother left two years ago, much less time ago than the parents of others. Qi has a relatively good relationship with his parents, even though they left him 15 years ago. "*Whenever my parents come back, we are very close",* he told the researcher.

Students obtained higher wellbeing averages when they perceived their parents cared about them. Take Jin and Yang as an example; Jin was left behind when she was very young and then migrated with her parents for four years before returning. When Jin was asked about the communication between herself and her parents, she replied, "*We often make video calls. They always take the initiative to chat with me and fully understand me when they come back to my grandparents' house."* The answer for Yang to the same question was, "*Our communication is pretty good. We talk once a week. And we always talk about my school life."* Jin and Yang obtain relatively higher wellbeing averages (Yang: low in LS, high in AS, low in SE; Jin: medium in LS, medium in AS, medium in SE) than other left-behind participants. Zhou is an example of the opposite; she considers "*Since I was young, I have never felt loved."* Even though she said she has fine communication with her mother, and she has three scores of "low" in SCWB factors.

Child-caregiver relationship

A good relationship with the caregiver is especially important for left-behind children – for eight out of nine participants in outbound (mostly rural) areas, their caregivers are their grandparents. Among them, Jin and Yang also live with their aunts, and Heng lives alone. Regarding the nine migrant students in inbound (mostly urban) areas , six were left-behind children before and their caregivers were also their grandparents.

From the point of view of some left-behind youngsters, parent-child relationships were not as strong as caregiver-child relationships. For instance, when the researcher asked Yang the question "*Do you think that there is a difference between students from migrant and non-migrant families? What do you think is the difference?"* She answered "*It doesn't matter. I am very close to my aunt and grandma."* She implied that there is no significant difference between students from migrant and non-migrant families because she still has her grandparents and aunt. The researcher also interviewed her aunt and it was found that she communicates more with her aunt than with her parents. Yang told us that she calls her aunt *mom* instead of *aunty*. This shows a very close relationship between her and her caregiver.

Jin thinks similarly to Yang. When she answered the question "*How do you think the relationship and communication between you and your parents is?"* Jin said,

> "*We talk about things that happen in our daily life and about my school life. But I never share my thoughts with them. They will take the initiative to chat with me and fully understand me when they come back to my grandparents' house. I communicate more with my aunt and our talks are very deep."*

The researcher also interviewed her aunt; she described Jin as an outgoing and happy girl, which is a very different description of the student given by her mother, which was "*quiet and introverted"*. At the same time, both Jin and Yang obtained a high SCWB average.

Zhou was left behind in her early childhood and is living with her grandparents. Zhou calls her mother regularly and communicates a lot with her grandparents. She said something very different from Jin and Yang: "*I have a lot of communication with my grandparents, but I don't talk about important topics with them because there is a generation gap between us. In some aspects, they cannot understand me."*

In summary, caregivers who have good communication with the youngsters and understand them well, diminish their perception of parental absence and improve their wellbeing.

5.2.3.2 How Does the School Relationship Influence the Wellbeing of Migrant Workers' Children?

The participating students spend most of their time in school; therefore, school relationships are also essential – specially with their classmates or schoolmates.

Regarding school relationships almost all students provided positive answers to the question, "*How do you evaluate your school life? Do you get along with your classmates?"* Many students believe they have a good relationship with their classmates (Rui Qiang, Hui Ling, Xin Ming, Jia Yi, Ting, etc.) and use positive phrases to describe their school life, such as, *happy* (Hua Qie, Hui Xing, and Hao), *very rich* (Jia Ling), *fine* (Meng and Qi), *fulfilling* (Shan), and *very good* (Wen Jie and Qi). Some participants try to improve their interpersonal relationships in school. For example, Hui Ling said, "*My relationship with my classmates is okay. I compel myself to make friends because I am introverted. I hope I will change a little bit."* Most of the students' self-reported interpersonal relationships are similar to the descriptions from their teachers. For the question "*How do you evaluate your teachers in school?"* most of the answers from the students were positive, for example, *kind* (Hua Qie and Shan) and *like friends* (Jia Ling and Jin).

For the question "*Do you know [student name]'s friends?"* most parents who had left their children in outbound (mostly rural) areas did not know their child's friends, except for the parents of Jin and Heng. Contrariwise, many parents in inbound (mostly urban) areas or caregivers of children in outbound areas knew them (e.g., Jia Ling's parents and Ting's grandmother).

As for the question "*What are your expectations of your school life?"* most of the participants said something related to their school performance or academic goals (Xiu Qing, Lin, Hui Ling, Rui Qiang Jin, Zhou, Qi, and Jia Ling), only Wen Jie said, "*I want to meet more people. Secondly, I want to be a better person and wish I could complete a goal every day."* Regarding the other question "*What are your expectations after graduation?*" related to the expectations after graduating from the VET school, most of the students have the same goal: to further their studies in college. Xiu Qing, Yang, and Hao said they expect to find a satisfying job. This is very similar to the answers of their parents. When asked "*What do you expect from X in school life?"* and "*What do you expect from X after graduation?"* Most parents hope their child studies hard in school and passes the college entrance exam (parents of Xiu Qing, Hua Qie, Hui Xing, Wen Jie, and Jia Ling's). While Rui Qiang's mother said, "*I hope he is happy"* and Meng's mother, "*I respect her own decisions."*

Many students have expectations for their interpersonal relationships in school. For example:

"I hope to improve my school performance and make many friends, the more, the better" (Xiu Qing);
"I want to meet more people" (Jia Ling);
"I hope to have a better relationship with my teachers. I also want to make more friends and learn some skills. My parents want me to study hard" (Heng).

A perception of having interpersonal difficulties with fellow schoolmates brings negative impacts to the student's wellbeing. For instance, Jia Yi reported "*I look forward to improving the interpersonal relationships in school. I can't understand some of my classmates because we have different personalities."* Her mother also told the researcher "*I know some of her classmates, but I feel that she has no friend."* Zhou believes that even though she has made friends in the present school, the relationship with her previous classmates was better. Jia Yi and Zhou reported three "low" scores in SCWB.

Even though some students are perceived to have a good relationship with fellows and teachers by their teachers in school, it does not mean that these particular students think in the same way nor that they feel higher wellbeing than others. For example, Heng said "*I hope to have a better relationship with my teachers. I also want to make more friends…"* While his teacher commented "*He has perfect interpersonal relationships in school."* Moreover, Xin Ming reckons he has good understanding and communication with his classmates, while his teacher told us he only has good relationships with boys. *Ceteris paribus,* participants who perceive themselves to have a good interpersonal relationship in school have a higher level of SCWB.

Among all the participants, Wen Jie had the highest SCWB (high in LS, high in AS and medium in SE), followed by Hua Qie (medium in LS, high in AS, medium in SE) and Hui Xing (medium in LS, medium in AS, medium in SE). These three participants live in an inbound (mostly in a urban) area with their parents. They have a better relationship with their parents, regular family communication, and self-perceived better school relationships. Jia Yi, Zhou, and Hao have the lowest SCWB average. Hao's parents divorced six years ago and he lives alone. Jia Yi reported that she has not much communication with her father, and Zhou said, "*Since I was young, I have never felt loved."* In summary, participants who had a better relationship with their parents, more communication with their parents, and good relationships in school had a higher SCWB.

5.2.4 Self-Adjustment: Wellbeing Self-improvement – Identify Character Strength and Find the Flow

The three dimensions discussed above are related to the surroundings, the self-adjustment dimension mainly focuses on an individual's inner world and the self-adjustment of the environment. Self-adjustment examines characteristics, personality traits, and hobbies to clarify what is their character strength, what they love, and what they are good at and perceptions of family relations, to adjust themselves to gain a higher level of wellbeing.

5.2.4.1 What Other Elements Could Adjust Wellbeing of Migrant Workers' children in VET Schools?

In examination of previous research this study found that: although the definition of character includes contributions to satisfaction, those spiritual-related strengths, such as enthusiasm, gratitude, optimism, and love, compared with those related to the brain-related strengths (such as smartness), have more stable correlations with lifelong satisfaction. This model exists in adults, young people, and even the parents' evaluations of the children. The spiritual character strengths predict the satisfaction of life afterwards (Peterson, 2009). It has been argued that the best job for a person is doing what you love. Interests, ability and perseverance are the secrets of human success. Achievements in life are interesting and at the same time inspiring (Peterson, 2009).

Researchers call the experience of being completely immersed in what we are doing as the state of "flow", and it is described as a state of pleasure, delight, creativity, and process by which we are completely immersed in life (Nakamura & Csikszentmihalyi, 2014).

Parents and caregiver(s) were asked two interview questions related to the personality and characteristics of the children: "*What do you think is the personality and characteristics of X?"* and "*What do you think are the strengths and weaknesses of X?"*

5.2.4.2 The Influence of Personality and Personal Characteristics on Wellbeing

According to the interview answers, there is no significant difference between migrant and left-behind youngsters in personality and characteristics. Most migrant workers' children are described (by their parents, caregiver, or teachers) as having introverted personalities. But there were inconsistencies in the comments of participants' characters among parents, caregivers, and teachers, especially for participants left behind: the words from their parents were very different from their caregivers or teachers. For example, on Jin from Nanxian county, her mother uses "*introverted, shy, easily angered and hardworking"* to describe her. In contrast, her aunt (one of her caregivers) says that she is intelligent and lively. Also, Jin's teacher has very different comments from her parents on her personality and characteristics: "*She is outgoing, with strong organizational skills and a strong sense of responsibility."*

Hao's father says of his son that "*He is very polite, with a stubborn personality and addicted to playing on the cellphone."* The comment from his grandmother (his caregiver) is that "*He is diligent."* However, when the researcher asked his teacher about Hao's personality, she said: "*Hao is charming, cheerful and has a lot of potential. He is also very polite."* Both Jin and Hao lived in the outbound (mostly rural) areas and were left behind by their parents. Their parents left them at a very young age, and their parents lack communication with and understanding of their children. Even though they sometimes visit, their children are unwilling to talk to them because of their unfamiliarity. Jin and Hao are more expressive with their caregivers or in school than in front of their parents.

Among all the interviewees, Hua Qie was particularly different in this section. She migrated with her parents to an urban area, and her father's assessment of her personality is very different from that of her teacher. Hua Qie's father commented that his daughter is intelligent and shy and introverted, while her teacher said she behaves very cheerfully in school, and was good at observing others' words and opinions. According to Hua Qie and her father, Hua Qie migrated to an urban area with her parents after junior high school. Before that, she was left behind in their hometown. Therefore, there is a lack of familiarity between Hua Qie and her parents. The students who have been left behind in the past are more likely to be perceived as introverted by their parents according to research results.

Some students are also regarded as obedient (Yang and Qi) and sensitive to others' words and expressions (Hua Qie, Jia Yi, and Shan). As for the character of the students, the parents or caregiver(s) use the word *"obedient"* most frequently to describe the participants (Hui Xing, Meng, Yang, and Qi). "*Independent"* (Qi and Jia Ling), "*kind"* (Meng and Xin Ming), and "*hardworking and diligent"* (Yang and Qi) are the second most frequently used words. In comparison, teachers use "*responsible"* most (Jin and Ting). Parents and caregivers used "*lazy"*, "*smart"* and "*irritable"* to describe their child.

According to the results of self-reported wellbeing averages and the descriptions of students' personality from parents, caregiver as well as teachers, students who are perceived to have an outgoing, cheerful personality and positive characteristics (*responsible*, *kind*, and *confident*) in school have relatively higher levels of wellbeing. Wen Jie, who was described as being very *bright* and *active* in school, has the highest wellbeing average. Hua Qie and Yang are also perceived as *cheerful*, *confident* and *happy* in school according to their teachers' description. Meanwhile, participants described as *having low self-esteem* (Xin Ming), *irritable* and *introverted* (Jia Yi) get relatively lower averages on wellbeing among all the participants.

5.2.4.3 The Impacts of Hobbies, Capability, and Achievement on Wellbeing

Among the 18 participants, six study different majors and have different hobbies. Many students are fond of playing phone games (Xin Ming, Meng, Yang, and Qi). According to their parents, many of the participants are very enthusiastic about phone games. Hua Qie's father describes his daughter with "*she cannot control the time she plays on a mobile phone."* Meng's grandmother said the following comments on her granddaughter: "*she is lazy and addicted to playing mobile phones."* Jin's aunt told the researcher about her niece: "*she likes to play phone games."* Hao's father reckons that "*Hao loves to play with mobile phones."* This phenomenon is probably due to the popularity of smartphones among teenagers and adults. Therefore, most VET schools in China ask all students to hand in their phones during class.

Besides playing phone games, most students have other hobbies, for example, Xiu Qing, Hua Qie, Jia Ling, Hui Ling, Jia Yi, and Heng all like drawing. Ting, Zhou, and Qi are interested in reading. The researcher asked the students an additional question: "*What book do you like most?"* Qi said novels interest him the most. Ting mentioned a book that she was reading, titled *Moments We Shared* by Zhang Jia, which tells the story of a left-behind child who grown up with his grandmother. Ting herself is a left-behind child since she was very young. Other students, especially boys, are keen on sports (Wen Jie, Jia Yi, Shan, Zhou, Hao, and Heng). Wen Jie likes playing basketball; Hao prefers football; Zhou and Shan are interested in badminton; and Jia Yi is fond of Tae-kwon-do. Also, some students have an interest in music. Jian and Shan like singing and dancing; Jia Yi likes listening to music. Xin Ming plays the guitar. This study found that hobbies do not play critical roles in students' wellbeing. But when the other

conditions are similar, the more positive or active pursuits students have, the higher wellbeing they have. For example, Ting and Meng are female left-behind children of similar parent-child relationships, and economic status, while Ting likes reading and watching TV, Meng is fond of phone games, and Ting's SCWB average (3.2) is 0.5 points higher than that of Meng's (2.7).

Regarding capability, the parents and teachers have a different standard of ability. When asked *"What are the strengths and weaknesses of X?",* the parents attach more importance to the school performance and to how much their teenager helps with house chores. For example, Xiu Qing's mother thinks that her daughter has good capabilities of taking care of her younger sisters and brothers, and Hua Qie's father told the researcher that she performs well in school and learns handcraft skills very well. Therefore, she is also preparing herself to work at the family-owned cloth workshop.

In contrast, teachers emphasize the students' capabilities of communication and leadership. For instance, Wen Jie's teacher describes him as a teenager *very active in school activities* and with *good capabilities of activity organization*. Also, the teachers of Jin and Ting say they are capable of communicating well with teachers and classmates; they are both portrayed as having a strong sense of responsibility. Students who were described with positive comments on their capability have a relatively higher SCWB average.

To measure the achievements of the teenagers, here the research looks at their school performance. From the results of the 18 students, this study found that those with excellent school performance (Zhou and Ting) did not get the highest SCWB averages. Similarly, participants with low school performance also do not necessarily get the lowest averages in wellbeing (Rui Qiang and Hui Ling). Students with average or above average school performance got either high or low wellbeing for outbound (mostly rural) areas Yang while Heng, and inbound (mostly urban) areas Wenjie, Jia Yi. *Ceteris paribus,* variety in school performances cannot tell who will have higher wellbeing. These results are slightly different from the results from the quantitative research section earlier.

In summary, positive interpersonal relationships and better communication with parents and caregivers help improve the wellbeing of migrant workers' children. Moreover, positive characteristics and active personalities are also helpful to their lifelong satisfaction. Additionally, from the results of Table 76, if students have better health conditions, they have higher wellbeing. It might also be higher if they have some positive hobbies. Interpersonal communication, hobbies, and school performance can be adjusted by the students with some help along the way. Student can learn to know more about their weaknesses and strengths (personality traits), so that they can adjust their lives accordingly. Also, characteristics can be cultivated and guided for an extended period of time. All in all, the research concludes that inner strength provides more satisfaction in life.

5.2.5 Results and Implications

Regarding the dimension of time, in this part, this study found similar results to those of the previous studies. Mothers play a leading role (Montes, 2013) in the upbringing of children (Choi & Peng, 2016). Most participants have more and better communication with their mothers than with their fathers. Some participants even feel that their fathers are indifferent to them and this does influence their wellbeing. Parent-child communication was found very essential to the wellbeing of migrant workers' children; it decreases the parent-child alienation and mediates the pain of long-term separation of the children from their parents. The lack of communication between fathers and their children, in turn, makes children crave

their father's attention. In general, children have more expectation of receiving love and emotional support and missed it in their lives. Also, this study found in this part, female teenagers have more expectations of their father than males do, and they are more sensitive to the lack of fatherly love. Therefore, fathers should devote more of their time and efforts to be together with their children, especially their daughters. Additionally, it is normal for migrant workers to work overtime, which is one of the reasons why they do not have enough time and energy to communicate with their children.

Regarding the space dimension: under the current household registration system, children of migrant workers who do not have a local household registration type can only enjoy minimal social welfare, education services, and medical insurance in migrant cities. The higher economic statue, higher level of education quality and more face-to-face communication with their parents in inbound (most are urban) areas are the reason why migrant workers' children in urban areas have higher wellbeing than those from outbound (most are rural) areas.

Furthermore, there are several reasons why participants from migrant families have lower feelings of wellbeing than participants from non-migrant families in both outbound and inbound areas. Firstly, the students as well as some of their parents reported that the household registration policy set limitations for migrant teenagers to take the college entrance exam in a city outside of their hometown.

The researcher checked the requirements and policies in 2020 of Dongguan (where research participants study and work) for migrant workers' children who attend vocational high schools. The regulations are as follow: migrant workers in Dongguan who meet all the following conditions at the same time can register for the college entrance examination in Dongguan: (1) The father or mother has a legal and stable occupation in Guangdong Province; (2) The father or mother has a legal and stable residence in Guangdong Province (Dongguan belongs to Guangdong Province); (3) The father or mother has applied for a residence permit in Guangdong province before September 1, 2017, and the residence permit held by them is valid until August 31, 2020; (4) The father or mother should participate in social insurance (including medical and pension insurance) in Guangdong province in accordance with the law. As of August 31, 2020, the actual cumulative payment period of social insurance should be more than three years according to the regulations; (5) The accompanying children took the high school entrance examination in Guangdong province; (6) The children should have a complete three-year school enrollment status in VET schools of Guangdong province (Dongguan Education Bureau, 2019). The requirements are not that difficult to meet if the migrant workers and their children were informed four years before the college entrance examination. However, some of the research participants reported that it was already too late when they became aware of the requirements.

Secondly, participants from migrant families have an inferior position in social welfare compared to the local non-migrant families in inbound (mostly urban) areas . Thirdly, participants from migrant families receive less parental care and security, more parent-child alienation in both outbound (most are rural) and inbound (most are inbound) areas, for left-behind children in outbound areas they have a generation gap with their grandparents (caregivers) as well as a poor quality of parent-child communication.

Regarding the dimension of relationships, for the perceptions on the parent-child relationships of the participants, when teenagers attached importance to their relationship with their parents, and hold high expectations of them, but seldom try to talk with them, they

get relatively lower averages on social cognitive wellbeing. In addition, this study found participants in inbound areas care more about their parents and have more understanding of parents than students in outbound areas. Vice versa, the parents who migrated with their children into the inbound areas know their child better than the parents who left their children in outbound areas. In outbound (most are rural) areas, the caregiver-child relationship is very essential to the wellbeing of the left-behind children. The participants in outbound areas with better caregiver-child relationships perceive higher wellbeing. Meanwhile, most of the teenager participants are under the guidance of their grandparents, who they care about but were reported to have a lack of understanding about them due to the generation gap. Moreover, school relations which include fellow relationships and teacher-student relationships are also very essential to migrant workers' children in VET schools.

Regarding the dimension of self-adjustment, participants' personality and characteristics impact their wellbeing. Students with extrovert characteristics and with an optimistic personality generally possess feelings of greater wellbeing than those with introvert characteristics and pessimistic personalities. In addition, more hobbies and involvement in positive activities also help participants improve their wellbeing. In summary, students with the ability to identify their personality traits and character strength, and with a clear goal or a highly focused mental state may improve their SCWB.

Therefore, firstly, here the researcher encourages parents, especially fathers, to devote more time to communicate and accompany their children, since it is very helpful to increase SCWB of their children (time). Secondly, in order to improve the wellbeing of left-behind children in outbound areas, the caregiver(s) should communicate and care more about the children who are under their guidance. In inbound areas, the teachers and parents should pay more attention to the children who have left-behind experiences in their previous life stages (space). Thirdly, the SCWB factors of the students can be improved and adjusted by improving their interpersonal relationships (parents-child, caregiver-child, schoolmates and teacher-student). Also, improving fellow relationships and teacher-student relationships in school are particularly positive for the wellbeing of migrant workers' children (relation). Fourthly, students can be guided and encouraged to learn more about their personality traits, characteristics and cultivate more hobbies and help them to find their flow (self-adjustment).

Chapter 6 Conclusion and Implications

6.1 Conclusion

In most of its previous history China belongs to an agricultural society. *"It is normal for farmers to settle in one spot for generations, it would be abnormal for them to migrate"* (Fei, 1992)*; "industrial workers may choose where they live, and they may move without difficulty"* (Fei, 1968). China's revolution of social economy changed people's lifestyle and mode of production, which brings a large quantity of migrant rural workers into urban areas. In this particular phase and time, migration has changed the rural society from different aspects: the way of production, the family relationship, the way of using their land as well as the education of their children.

The current study aims to explore the wellbeing of migrant workers' children in Chinese vocational schools. Even while there are some wellbeing research studies about Chinese migrant workers' children (Song et al., 2018) or VET school students (Jiang & Zhang, 2012), this research targets the scope of study to extend the social cognitive wellbeing model not only under a collectivism context, but also established two more specific family-related wellbeing models, under the structure of life course theory. Social cognitive wellbeing theory (SCCT) combined the two most popular wellbeing research models: subjective wellbeing (SWB: feeling good, hedonic oriented) and psychological wellbeing (PWB: good life or purpose of life, Eudemonic oriented). It includes components of both "Hedonic" and "Eudemonic" wellbeing models (personality & trait positive affect, self-efficacy, domain satisfaction, environmental support & resource, outcome expectations, goal progress, and lifelong satisfaction) based on consulting psychology. This framework proposes people "feeling good" in life domains and "perusing a good life" to achieve life satisfaction. Moreover, it shows the relationships among domain satisfaction, life satisfaction, and other social cognitive wellbeing indicators. It offers possibilities of clinical consultants and the practice of applied psychology.

From the dimension of Time: Parents' migration length impacted the wellbeing of left-behind children in the outbound (mostly rural) areas and had no influence on migrant children in the inbound (mostly urban) areas. Time spent together with their parents, communication with them and their presence can positively impact the wellbeing of migrant workers' children. To be specific, the results of qualitative analysis show that, the time of the fathers' migration has negative impacts on most social cognitive wellbeing variables, such as participants' life satisfaction, self-efficacy, academic satisfaction, outcome expectations, goal progress, environmental support and positive affect. Moreover, it positively influences the negative affect of migrant workers' children in VET schools. In contrast, the time the mother left does not have an impact on most of the SCWB variables. In the time-related dimension, health conditions matter to most social wellbeing variables: they are life satisfaction, academic satisfaction, outcome expectations, goal progress, environmental support and positive affect. This is followed by school performance, which is positively related to self-efficacy, academic satisfaction, goal progress, environmental support and positive affect. In addition, parent-child communication and the frequency of travelling with parents are also very essential for half of the social cognitive wellbeing elements. Parent-child communication has impacts on

participants' life satisfaction, outcome expectations, environmental support and negative affect. The frequency of travelling together with their parents influences participants' life satisfaction, self-efficacy, goal progress and environmental support. Moreover, male participants generally have higher life satisfaction, self-efficacy, academic satisfaction and lower negative affect than females. There are several reasons for this, firstly due to the Chinese tradition, daughters normally get less attention and support from their parents. After the one-child policy finished many families changed their ideas, but in the rural areas it is also very normal and fundamental in parents' thoughts to value male children more than females. Also, this study found female teenagers have more expectations of their parents, especially their fathers, than males do, and they are more sensitive to the lack of parental love.

The lack of communication between fathers and their children, in turn, makes children crave their father's attention. In general, children have more expectations of receiving the missing part of love emotionally. The reason why many parents chose to migrant is because of the unbalanced development of different regions in China, and the limitations of China's industrialization and urbanization. Although the Chinese government has paid more attention to rural development in recent years, the rural-urban economic gap is still huge and large quantities of migrant workers left and continue to leave their hometown. Even in cases where migrant workers brought their children to cities, they do not have much time to communicate and keep company with their children, due to high frequencies of work overtime.

From the dimension of space, participants from outbound (mostly rural) areas have relatively lower life satisfaction, academic satisfaction, outcome expectations, goal progress, and environmental support, while a higher positive affect than participants from inbound (mostly urban) areas. Moreover, students living in urban areas have higher self-efficacy, academic satisfaction and goal progress than those in rural areas. In addition, participants with an urban household registration type have higher self-efficiency than those with a rural household registration type. Similar to the results in the time dimension, health condition relates to all of the social cognitive wellbeing variables. Furthermore, parent-child communication, travel frequency with parents and living with both parents or not influence most of the social cognitive factors. Specifically, parent-child communication impacts all social cognitive variables except goal progress of the participants from both inbound (most are urban areas) and outbound (most are rural areas) areas. Travel frequency with parents influences participants' life satisfaction, goal progress, environmental support and positive affect. Also, participants who live together with both parents have higher outcome expectations and greater environmental support, while they have relevantly lower negative affect. Also, school performance influences most social cognitive wellbeing variables, such as self-efficacy, academic satisfaction, goal progress, environmental support and positive affect. Moreover, male participants have higher life satisfaction, self-efficacy and academic satisfaction. The participants whose parents are divorced have lower life satisfaction and self-efficacy. In general, participants from non-migrant families have higher social cognitive wellbeing than those from migrant families.

In outbound (mostly rural) areas, wages, medical care and education quality are lower than in inbound (mostly urban) areas. Moreover, migrant workers' children living in outbound areas have difficulty in having face-to-face communication with their parents. These are the reasons

why children in inbound (most are urban) areas have higher wellbeing than those from outbound areas. Furthermore, there are several reasons why participants from migrant families have less feelings of wellbeing than participants from non-migrant families in both outbound and inbound areas. Firstly, there are limitations and strict rules for migrant teenagers who take the college entrance exam in a city outside of their hometown. Secondly, participants from migrant families have an inferior position in social welfare compared to the local non-migrant families in inbound areas. Thirdly, participants from migrant families receive less parental care and security; there is greater parent-child alienation in both outbound and inbound areas; left-behind children in outbound areas have a generation gap with their grandparents (caregivers) as well as a poor quality of parent-child communication.

In inbound (mostly urban) areas, the problem of school enrolment for the children of migrant workers in particular schools in cities is not only an educational issue. It involves many complex factors such as resource allocation, population reform, household registration management, social management, financial systems, and education system. In large cities such as Beijing and Shanghai, for example, it is necessary to fully consider issues such as urban strategic positioning, population control goals and educational carrying capacity. Many rural children now live in newly developed small and medium-sized cities, where social services are limited and suitable job opportunities are rare. Therefore, their parents still have to go to the big cities to find jobs, and the children still have difficulty in enjoying a good education and medical services. Regardless of where they live or their household registration type, the children of migrant workers in China face a series of broadly similar problems: they have unequal access to family support, education, medical care, and social support. These circumstances have the result that migrant workers' children have less feelings of wellbeing than non-migrants in inbound (mostly urban) areas.

From the dimension of relations: The family arrangements of migrant families influence family relationships as well as the wellbeing of migrant workers' children. The parents' migration, the distance from the parents' working place to their hometown, parents' education level, duration of parents' migration, parents' age, parents' marital status and family economic status impact family arrangements. Participants living in urban areas have a higher possibility of living together with both parents. Additionally, living with both parents promotes better parent-child communication and a higher level of physical health.

Also, this study found participants living with both parents have higher lifelong satisfaction, academic satisfaction, self-efficacy, goal progress and environmental support, and lower negative affect than those who live with one parent or live with others or live alone. By comparing the means of each group in these four caregiver-child relationship variables: the means of CHR (caregiver-child regulations/house rules), caregiver-child trust & communication in CCA (caregiver-child attachment), CCCA (caregiver-child coactivities) and CCCF (caregiver-child communication frequency) are generally higher for participants living with both parents than those of the other conditions. It shows participants living with both parents have better family relationships than those living with others.

The parent-child relationship is very critical to children's wellbeing, especially the father-child relations, and migrant workers' children attach much importance to it, but from the research

investigation, the role of the father is still not focused on cultivating relationships in many migrant worker families. In addition, from the result of the linear regression, trust and communication can impact all social cognitive factors except participants' negative affect. Moreover, caregiver-child regulation and caregiver-child trust & communication have positive impacts on most social cognitive factors, more specifically, the caregiver-child regulation affects all these variables except life satisfaction, and the caregiver-child trust & communication impacts all except outcome expectations and environmental support. Caregiver-child conflicts can also positively influence participants' self-efficacy, academic satisfaction, outcome expectations, environmental support and positive affect. Contrary to the other parent-child relation variables, parent-child alienation negatively impacts some of the social cognitive variables except negative affect, for example, parent-child alienation negatively relates to life satisfaction and positive affect, that is life satisfaction and self-efficacy and goal progress. Caregiver-child communication also positively relates to life satisfaction and negatively relates to negative affect. In addition, participants' health conditions are closely related to all social cognitive wellbeing variables in the relation dimension. Similar with the previous two dimensions, male participants have higher life satisfaction, self-efficacy and academic satisfaction, but lower negative affect. Also, participants living in urban areas have higher self-efficacy, academic satisfaction and goal progress.

A good relationship with the caregiver is especially important for left-behind children. From the point of view of some left-behind youngsters, parent-child relationships were not as strong as caregiver-child relationships.

From the results of self-adjustment dimension. The two adjusted models work very well. Most of the paths are available, family relation variables (caregiver-child coactivity, communication frequency, regulation, trust & communication, conflicts and alienation) can adjust social cognitive variables (life satisfaction, self-efficacy, academic satisfaction, outcome expectations, goal progress, environmental support and negative & positive affect). There are correlations among those 14 variables in the two models. For example, outcome expectations can adjust the impacts between trust & communication and alienation and goal progress in one model. Furthermore, caregiver-child conflicts mediate the relationship between caregiver-child alienation and participants' negative emotions in the same model. Moreover, caregiver-child regulation can adjust the influence between caregiver-child communication and academic satisfaction in the other model. Also, self-efficacy can affect the path between caregiver-child coactivity and participants' goal progress.

Additionally, personality and characteristics also impact the wellbeing of migrant workers' children. Teenagers with extrovert characteristics and with an optimistic personality generally have feelings of higher wellbeing than those with introvert characteristics and a pessimistic personality. Also, youngsters having more hobbies and involvement in positive activities can also help them improve their wellbeing. In summary, students who are able to identify their personality traits and character strength, and with a clear goal or a highly focused mental state may improve their SCWB.

6.2 Suggestions and Clinical Implications

This study hopes to offer some suggestions to national policies as well as consultant therapy for migrant workers' children in VET schools, in order to improve their wellbeing in school and offer suggestions to enhance their mental health conditions in a lifelong span.

6.2.1 Dimension of Time

The duration of parents' migration influences the wellbeing of migrant workers' children, especially, the time of the fathers' migration influences most of the children's social cognitive factors. Therefore, it is better if the parents do not leave their children in their early childhood or choose to work in their hometown. To achieve this, firstly, the government could support those industries and manufactories which are suitable and willing to settle down in rural areas through financial and tax methods. Secondly, the financial support for rural vocational training programs should increase to offer free training in skills and technical matters to the farmers, for example, agriculture-related technical, e-commerce and tourist-related training programs. These could help the farmers increase their income and become competitive if they choose to work locally.

Moreover, the migrant workers devote their time and energy for the development of the country. Government should pay more consideration to the life quality of migrant workers and their children. This study found that increasing the duration of parental coactivities and communication between parents and children can also improve the wellbeing of migrant workers' children. The parents either spending more time to accompany their children or talk to them as much as possible will help enhance the life satisfaction of migrant workers' children. However, the study also found that most of the migrant workers work overtime, with lower wages and cannot enjoy an equal education, medical care and social service in the cities. These are also one of the negative outcomes of the household registration policy, even though it has been changed several times in order to improve migrant workers' living conditions. The effect of such changes remain very limited. Therefore, further reforms of the household policy should be conducted according to the situations in each stage. Substantial improvement is needed in the education service, medical care and social service for migrant workers who worked certain years in urban areas and a minimal standard of income for working overtime, through policies or law regulations.

In addition, most migrant workers do not have as many holidays as the teachers, or officers in government and other stable occupations. The government could improve this circumstance by offering financial support or decrease tax or some other practical ways to encourage companies and manufactories to allow migrant workers to have their national holidays with payment as other occupations have. In this way they will have more time to get together or communicate with their children.

Furthermore, students spend most of their time in schools and a rich variety of activities can bring positive effects and improve the wellbeing of vocational school students. Therefore, the schools could offer students choices of activities after classes, such as different types of students' clubs and public facility rooms, which offer sports facilities, musical instruments and other activities. Students could join different kinds of activities according to their interests. Schools in an area with a large quantity of migrant workers should have information lists for migrant workers' children as well as their parents. Also, schools could organize regular training programs for students and their parents or caregivers, on parent-child communication and

knowledge of children's physical and mental development in order to improve the quality of child-caregivers and child-parent communication when they are together.

6.2.2 Dimension of Space

Outbound areas (normally rural areas)

Since the separation of families due to migration is not an individual case but a national phenomenon, the government can improve the conditions of migrant families and their children through policies and financial support. Currently, there are some policies and financial support that encourage migrant workers to work locally, but they have little effect. The local government in rural areas should identify the characteristics of the local area to publish some policies that can attract industries, companies and talent to help with the development of the rural areas, make more chances of employment, and encourage rural parents to work locally. Therefore, more support should be involved to help the economic development in outbound mainly rural areas. For instance, the green industries, tourists combined with e-commerce, modernize agriculture, nursing houses and etc.. Moreover, the government should improve the financial support to all levels of education and schools in rural areas, and improve the salary, social welfare and training system for teachers. This would attract more talented young people to teach in the rural areas and improve the education quality in these areas. Also, financial support should be provided to establish or improve mental health consultation centers in rural schools and involve those centers in a network to communicate and exchange ideas, offering better consultation services for children in rural areas.

Inbound areas (normally urban areas)

For migrant workers and their children to obtain more equal rights from the cities where they work, reforms in these areas are needed from migrant resource allocation, population reform, household registration management, social management, the financial system, and education system. Cities could offer better medical care, labor and social security to the qualified migrant workers and provide free training programs, such as skill training and children's developing psychology for migrant workers based on their population carrying capacity and education carrying capacity. At present, an example of balanced education and equitable development for all is Wuxi, a medium-sized city in eastern China, which focuses on light industry development. Migrant workers' children in Wuxi can apply to enter public schools, if they meet the following requirements: their parents must obtain a Wuxi residence permit or temporary residence permit for more than half a year, sign a labor contract of one year or more, or obtain a business license, and have social insurance (which are not difficult to achieve). Local public schools must accept applications from the children of migrant workers who meet with the above requirements, (Zhou & Wu, 2016). The policies of Wuxi could be introduced into the other cities with similar industries, other cities could also adjust their policies based on their conditions. In addition, financial support as well as policy support on medical care services and social welfare services for migrant workers and their children should also be offered accordingly. Moreover, for some cities that have sufficient education carrying capability and population capability the requirements for the children of migrant workers to join via the college entrance exam should be simplified. Information should be provided for the migrant workers' families about the requirements when their children are in junior high school through meetings and some other formal occasions and methods, so the migrant

workers' children would not lose the opportunity to further their study after graduation from VET schools.

VET Schools should have mental health consultation centers for students in areas with higher percentages of migrant workers, and teachers offering psychological consultation should know the characteristics of migrant workers' children very well and offer mental health tests, consultation, and therapy to the students.

6.2.3 Dimension of Relations

According to the results of both qualitative and quantitative research of this study it was found that fathers play a very essential role in the development of children. Here it was also found that the fathers' involvement in child rearing and communication are severely limited compared to the mothers'. It has a negative effect on the wellbeing of migrant workers' children. Therefore, the fathers in such families should care more and communicate more with their child/children. This is especially so for the fathers of left-behind children, since they are left behind by either one of their parents or both. Even in cases where fathers are far away from their child/children, they can communicate with their child through phone calls and video calls, care more about their hobbies, life in school, friends and emotions. During holidays when they return to their hometowns, both parents should spend more time to chat and get together with their child/children. For the migrant families, fathers have more chance to communicate face to face with their children; it is better to communicate based on a level of mutual respect and engage in family coactivities also, such as travelling, playing games and watching movies or television shows together, as these activities may also be helpful to improve the wellbeing of their children. Moreover, caregivers also play a very important role for migrant workers' children. When a child lives together with nonparent caregiver(s), good relationship and communication with their caregiver can also improve their wellbeing. Additionally, when the participants feel themselves understood very well by their caregiver(s) that makes a difference. Normally, for most of the left-behind children their caregiver(s) is/are their grandparent(s). Even though most grandparents love their grandson or granddaughter very much, they are perceived as the group of people to have a generation gap with research participants. Therefore, younger caregiver(s) (e.g., aunt or uncle) will encourage higher social cognitive wellbeing in the left-behind children. Also, good relationships with their young fellows and schoolmates as well as support from teachers are both found to be important to the wellbeing of migrant workers' children. Therefore, teachers should offer more help and support to students who come from migrant families and encourage them to make more friends.

Moreover, this study found that female students' wellbeing is more easily influenced by interpersonal relationships than in male students. Therefore, parents and teachers should pay more attention to female youngsters' wellbeing than to male students. Parents and teachers should communicate more with female children based on their emotions and personal characteristics.

6.2.4 Dimension of Self-adjustment

The life satisfaction and self-efficacy of children of migrant workers can be improved by children cultivating positive hobbies, such as doing sports, reading, drawing, singing, dancing or playing an instrument. Adopting a positive attitude towards school performance, and improvement in school performance can also be essential to better wellbeing conditions. In

addition, children should try to remember some activities that help improve positive affect and emotions when surrounded by negative emotions. Of course, it is also possible to make use of the correlations among social cognitive variables. It is possible to enhance self-efficacy, goal progress, outcome expectations and academic satisfaction to improve life satisfaction of migrant workers' children by asking caregivers to cooperate with consultation, on the one hand to improve caregiver-child communication, trust, propel regulation and coactivity. On the other hand, reducing caregiver-child alienation and conflicts can also improve the wellbeing of migrant children. Furthermore, this study found good health conditions are essential to all of the social cognitive factors. Therefore, improving the children's health conditions and helping them cultivate a healthy way of life is the primary way of enhancing the wellbeing of migrant workers' children. There are several ways to keep fit and achieve that goal: encourage students to eat in healthy ways, for example, improving the daily menu in the school canteen and at home. Suitable exercise, good time management as well as going to sleep early are also essential to be healthy. Moreover, youngsters are easily influenced by their young followers; therefore, the healthy plan would be more efficient if it executed among a learning group or students living in the same dormitory.

Moreover, here are some directions for school mental health centers for the consultants to improve their service and help students adjust their social cognitive factors and emotions in a proper way. From the results of this study, it has been recognized that the mental health consultation and therapy service in many Chinese vocational schools do not meet the students' needs, especially in the VET schools in rural areas. The research findings offer useful implications for increasing the wellbeing of Chinese migrant workers' children and VET school students. Consultants in school should help students gather academic support from parents or other caregivers, teachers and fellow students. Moreover, external services ought to avail of the connected advantages of combining interventions on self-efficacy, outcome expectations and goal progress with those on environmental support. This may be achieved through integrating interventions of students' efficacy beliefs, expectations and goal setting to raise students' academic satisfaction and lifelong wellbeing. In addition, more attention should be attached to the students with more negative affect and efforts made to improve their positive affect. For instance, practitioners should organize group activities and workshops to deal with negative emotions and affections and lead the students to find their best way to release their stress and sadness. In addition, consultants can make full use of social media such as WeChat, QQ and etc. to offer guidelines whenever and wherever the students need. Also, students should be guided and encouraged to learn more about their personality traits, characteristics and cultivate more hobbies and help them to find their flow (self-adjustment).

6.3 Innovation

This study offers meaningful perception into a social cognitive wellbeing model in the collectivism context. It provides initial proof for the adaptability of two family-related modified social cognitive wellbeing models which take the following conditions into consideration: a. Characteristics of Chinese culture. b. Limitations of the previous studies. c. Mental health problems of migrant workers' children. A multilevel family-related social cognitive wellbeing model has been established through time, space, relations, and self-adjustment (a modified social cognitive model according to Chinese VET students' characteristics). Most of the perceived paths have statistical significance. This study found that family relation variables can adjust the social cognitive variables in the sample Chinese VET school students.

Moreover, this study initially proved that the time period of the fathers' migration has impacts on the social cognitive wellbeing of migrant workers' children in China. It is even more influential than the migration time of the mother. This study included complete sample components from both outbound (rural) and inbound (urban) areas, which not only include students from migrant families, but also contain students from non-migrant families. It was found that students from migrant families generally have lower social cognitive wellbeing than non-migrant families. In addition, students living in inbound areas generally have higher wellbeing than those living in outbound areas.

Furthermore, unlike other social cognitive wellbeing studies, this study not only explored the paths and interrelations of two modified social cognitive wellbeing models using structural equation modeling, it also analyzed their correlations through lineal regression and the structure of the analysis is based on the life course theory. Additionally, both quantitative and qualitative methods were included in this research, while the previous social cognitive wellbeing studies normally used a quantitative method.

6.4 Limitations and Direction for Further Studies

Even though this study has promising results, there are still some limitations. Firstly, it is a cross sectional study that only recorded the current information of migrant workers' children in VET schools. Some of the students were actually left-behind children before and migrated in recent years or months, or some participants lived with parents before and were sent back to their hometown when they entered high schools. Therefore, the state of mental health is very different in different time spans. Therefore, based on this limitation, further studies could conduct a long-term study.

Secondly, participants are teenagers in China's vocational high schools; there are lots of studies which proved that family migration impacts young children in primary school or early childhood. However, there are still limited studies that included the social cognitive model of wellbeing. Therefore, further studies could extend the family-related social cognitive model of wellbeing to migrant workers' children in primary school and kindergarten.

Thirdly, it only explored the family-related social cognitive model of wellbeing. Other interpersonal relationships are also very essential to migrant workers' children, for example, fellow relations and teacher-student relations, are also very valuable variables to examine in the social cognitive wellbeing model in a collectivism context. Further research could extend the social cognitive model in other interpersonal relation variables, such as a school relations social cognitive model of wellbeing.

References

Amato, P. R. (1994). Father-child relations, mother-child relations, and offspring psychological well-being in early adulthood. *Journal of Marriage and the Family*, *56*(4), 1031–1042.

American School Counselor Association. (2003). The ASCA national model: A framework for school counseling programs. *Professional School Counseling*, 165–168.

Aneshensel, C. S., & Sucoff, C. A. (1996). The neighborhood context of adolescent mental health. *Journal of Health and Social Behavior*, *37*(4), 293–310.

Argyle, M. (2003). 18 causes and correlates of happiness. *Well-Being: The Foundations of Hedonic Psychology*, *353*, 169–190.

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, *16*(5), 427–454.

Arum, R., & Shavit, Y. (1995). Secondary vocational education and the transition from school to work. *Sociology of Education*, *68*(3), 187–204.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. *Englewood Cliffs*, *NJ: Prentice Hall.*

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Bandura, A. (1999). Social cognitive theory of personality. *Handbook of Personality*, *2*, 154–196.

Belle, B. C. (2013). *How to Measure Progress in Your Personal Goals: Daily, Weekly and Monthly*. https://blog.bufferapp.com/how-to-measure-progress-in-your-personal-goals-daily-weekly-and-monthly

Bengtson, V. L., & Allen, K. R. (2009). The life course perspective applied to families over time. In *Sourcebook of family theories and methods* (pp. 469–504). Springer.

Boelsma, F., Caubo-Damen, I., Schippers, A., Dane, M., & Abma, T. A. (2017). Rethinking FQoL: The dynamic interplay between individual and family quality of life. *Journal of Policy and Practice in Intellectual Disabilities*, *14*(1), 31–38.

Brace, L. (2008). *Questionnaire design: How to plan, structure and write survey material for effective market research* (2nd ed). Kogan Page.

Brandth, B., & Kvande, E. (1998). Masculinity and child care: The reconstruction of fathering. *The Sociological Review*, *46*(2), 293–313.

Brown, S. L. (2004). Family structure and child well-being: The significance of parental cohabitation. *Journal of Marriage and Family*, *66*(2), 351–367.

Celeste, G., & Puritz, P. (2002). Children Left behing: An Assessment of Access to Counsel and Quality of Representation in Delinquency Proceedings in Louisiana. *SUL Rev.*, *30*, 395.

Çelik, E. (2019). Stress regarding academic expectations, career exploration, and school attachment: The mediating role of adolescent–parent career congruence. *Australian Journal of Career Development*, *28*(1), 51–60.

Central Government of the People's Republic of China. (2019). *2019 National Education Statistical Bulletin*. http://www.gov.cn/xinwen/2020-05/20/content_5513250.htm

Chai, X., Li, X., Ye, Z., Li, Y., & Lin, D. (2019). Subjective well-being among left-behind children in rural C hina: The role of ecological assets and individual strength. *Child: Care, Health and Development*, *45*(1), 63–70.

Chan, A., & Crothall, E. G. (2009). Paying the Price for Economic Development: The Children of Migrant Workers in China. *China Labour Bulletin*, *Special Report*, 5–21. https://www.clb.org.hk/sites/default/files/archive/en/share/File/research_reports/Children_of_Migrant_Workers.pdf

Chen, B.-B. (2014). Rural-to-urban migrant children's behaviors and adaptation within migration social contexts in China. In *Global perspectives on well-being in immigrant families* (pp. 75–94). Springer.

Chen, M., & Chan, K. L. (2016). Parental absence, child victimization, and psychological well-being in rural China. *Child Abuse & Neglect*, *59*, 45–54.

Chen, X., Liang, N., & Ostertag, S. F. (2017). Victimization of children left behind in rural China. *Journal of Research in Crime and Delinquency*, *54*(4), 515–543.

Chen, X., Wang, L., & Wang, Z. (2009). Shyness-sensitivity and social, school, and psychological adjustment in rural migrant and urban children in China. *Child Development*, *80*(5), 1499–1513.

Cheng, C., Jose, P. E., Sheldon, K. M., Singelis, T. M., Cheung, M. W. L., Tiliouine, H., Alao, A. A., Chio, J. H. M., Lui, J. Y. M., Woo Young Chun, Golec de Zavala, A., Hakuzimana, A., Hertel, J., Liu, J.-T., Onyewadume, M., & Sims, C. (2011). Sociocultural Differences in Self-Construal and Subjective Well-Being: A Test of Four Cultural Models. *Journal of Cross-Cultural Psychology*, *42*(5), 832–855. https://doi.org/10.1177/0022022110381117

China Gate. (2007). *Juvenile delinquency increases by 13 percent annually, 20 million left-behind children at risk*.

China Labor Bulletin. (2021). *Migrant workers and their children*. https://clb.org.hk/zh-hans/content/%E5%86%9C%E6%B0%91%E5%B7%A5%E5%8F%8A%E5%85%B6%E5%AD%90%E5%A5%B3

China Youth Daily. (2008, June 3). Expert claims the problem of left-behind children is so serious it might endanger the future of rural China. *China Youth Daily*.

China Youth Research Centre. (2006). *China's Children and Juveniles Statistical Handbook*. Science Press.

Choi, S. Y.-P., & Peng, Y. (2016). *Masculine compromise: Migration, family, and gender in China*. Univ of California Press.

Christopher, J. C. (1999). Situating psychological well-being: Exploring the cultural roots of its theory and research. *Journal of Counseling & Development*, *77*(2), 141–152.

Cortes, P. (2015). The feminization of international migration and its effects on the children left behind: Evidence from the Philippines. *World Development*, *65*, 62–78.

Cousson, G., Florence, Lareyre, O., Margueritte, M., Paillart, J., Huteau, M.-E., Djoufelkit, K., Pereira, B., & Stoebner, A. (2018). Preventing tobacco in vocational high schools: Study protocol for a randomized controlled trial of P2P, a peer to peer and theory planned behavior-based program. *BMC Public Health*, *18*(1), 494.

Cripps, K., & Zyromski, B. (2009). Adolescents' psychological well-being and perceived parental involvement: Implications for parental involvement in middle schools. *RMLE Online*, *33*(4), 1–13.

Currie, C., Molcho, M., Boyce, W., Holstein, B., Torsheim, T., & Richter, M. (2008). Researching health inequalities in adolescents: The development of the Health Behaviour in School-Aged Children (HBSC) family affluence scale. *Social Science & Medicine*, *66*(6), 1429–1436.

Dai, Q., & Chu, R.-X. (2018). Anxiety, happiness and self-esteem of western Chinese left-behind children. *Child Abuse & Neglect*, *86*, 403–413.

Davis, H., A. (2006). Exploring the contexts of relationship quality between middle school students and teachers. *The Elementary School Journal*, *106*(3), 193–223.

Dawson, D. A. (1991). Family structure and children's health and well-being: Data from the 1988 National Health Interview Survey on Child Health. *Journal of Marriage and the Family*, 53(3), 573–584.

DeNeve, K. M. (1999). Happy as an extraverted clam? The role of personality for subjective well-being. *Current Directions in Psychological Science*, *8*(5), 141–144.

Dermott, E. (2014). *Intimate fatherhood: A sociological analysis*. Routledge.

Dew, T., & Huebner, E. S. (1994). Adolescents' perceived quality of life: An exploratory investigation. *Journal of School Psychology*, *32*(2), 185–199.

Diener, E. (1996). Traits can be powerful, but are not enough: Lessons from subjective well-being. *Journal of Research in Personality*, *30*(3), 389–399.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*(1), 71–75.

Diener, E., Lucas, R. E., & Oishi, S. (2002). *Subjective well-being: The science of happiness and life satisfaction, Handbook of positive psychology*. Oxford university press, *63-73*.

Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, *54*(1), 403–425.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*(2), 276.

Ding, L., Yuen, L.-W., Buhs, E. S., & Newman, I. M. (2019). Depression among Chinese left-behind children: A systematic review and meta-analysis. *John Wiley & Sons*.

Dongguan Education Bureau. (2019). *Migrant workers' children join the college entrance examination notice in Dongguan 2020*. http://dg.bendibao.com/dgzffw/2018116/dgzf144125.shtm

Dragon Tiger Net. (2005). Communique on the 2005 education development plan; understanding the key issues. *Long Hu Net*.

Duffy, R. D., & Lent, R. W. (2009). Test of a social cognitive model of work satisfaction in teachers. *Journal of Vocational Behavior*, *75*(2), 212–223. https://doi.org/10.1016/j.jvb.2009.06.001

Elder, G. H. Jr. (1998). The life course as developmental theory. *Child Development*, *69*(1), 1–12.

Elias, N., & Kemp, A. (2010). The new second generation: Non-Jewish Olim, Black Jews and children of migrant workers in Israel. *Israel Studies*, *15*(1), 73–94.

Emmons, R. A., & Diener, E. (1986). Influence of impulsivity and sociability on subjective well-being. *Journal of Personality and Social Psychology*, *50*(6), 1211.

Ezeofor, I., & Lent, R. W. (2014). Social cognitive and self-construal predictors of well-being among African college students in the US. *Journal of Vocational Behavior*, *85*(3), 413–421. https://doi.org/10.1016/j.jvb.2014.09.003

Fan, F., Su, L., Gill, M. K., & Birmaher, B. (2010). Emotional and behavioral problems of Chinese left-behind children: A preliminary study. *Social Psychiatry and Psychiatric Epidemiology*, *45*(6), 655–664.

Fan, H., & Li, C. N. (2020). Investigation and countermeasures of psychological health status of students in secondary vocational schools. *Psychological Monthly*, *1*.

Fei, H.-T. (1968). *China's Gentry*. Univ. of Chicago Press.

Fei, H.-T. (1992). *From the soil*. university of California Press.

Feuerbach, L. (1866). Über Spiritualismus und Materialismus, besonders in Beziehung auf die Willensfreiheit. *Id., Gesammelte Werke, Cit., Bd*, *11*, 172.

Fischer, J. A. (2009). Subjective Well-Being as Welfare Measure: Concepts and Methodology. *Munich Personal RePEc Archive*.

Fouad, N. A., & Guillen, A. (2006). Outcome Expectations: Looking to the Past and Potential Future. *Journal of Career Assessment*, *14*(1), 130–142. https://doi.org/10.1177/1069072705281370

Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, *13*(2), 172–175.

Gao, L., Zhen, X., & Yan, B. B. (2010). The Differences of Well-being Between the East and the West_ from the View of Self-construal. *Advances in Psychological Science*, *18*(7), 1041–1045.

Garvik, M., Idsoe, T., & Bru, E. (2014). Depression and school engagement among Norwegian upper secondary vocational school students. *Scandinavian Journal of Educational Research*, *58*(5), 592–608.

Gecas, V., & Schwalbe, M. L. (1986). Parental behavior and adolescent self-esteem. *Journal of Marriage and the Family*, *48*(1), 37–46.

Gerber, M., Lang, C., Feldmeth, A. K., Elliot, C., Brand, S., Holsboer-Trachsler, E., & Pühse, U. (2015). Burnout and mental health in Swiss vocational students: The moderating role of physical activity. *Journal of Research on Adolescence*, *25*(1), 63–74.

Goe, R., Ipsen, C., & Bliss, S. (2018). Pilot Testing a Digital Career Literacy Training for Vocational Rehabilitation Professionals. *Rehabilitation Counseling Bulletin*, *61*(4), 236–243.

Graham, E., & Jordan, L. P. (2011). Migrant parents and the psychological well-being of left-behind children in Southeast Asia. *Journal of Marriage and Family*, *73*(4), 763–787.

Green, P. E. (2003). The undocumented: Educating the children of migrant workers in America. *Bilingual Research Journal*, *27*(1), 51–71.

Gregoriadis, A., & Tsigilis, N. (2008). Applicability of the Student—Teacher Relationship Scale (STRS) in the Greek Educational Setting. *Journal of Psychoeducational Assessment*, *26*(2), 108–120.

Griffin, B., & Hesketh, B. (2005). Counseling for Work Adjustment. *American Psychological Association*, 483–505.

Guang'an municipal Party. (2006). *A survey of the leftbehind children in Guang'an city, Sichuan province*. Science Press.

Happell, B., Platania-Phung, C., Harris, S., & Bradshaw, J. (2014). It's the anxiety: Facilitators and inhibitors to nursing students' career interests in mental health nursing. *Issues in Mental Health Nursing*, *35*(1), 50–57.

Hardin, E. E., Leong, F. T. L., & Bhagwat, A. A. (2004). Factor Structure of the Self-Construal Scale Revisited: Implications for the Multidimensionality of Self-Construal. *Journal of Cross-Cultural Psychology*, *35*(3), 327–345. https://doi.org/10.1177/0022022104264125

Helliwell, J. F., Layard, R., & Sachs, J. (2015). *World Happiness Report 2013. New York: Sustainable Development Solutions Network, 2013*.

Heppner, P. P., & Lee, D. (2002). Problem-solving appraisal and psychological adjustment. *Handbook of Positive Psychology*, 288–298.

Hertzig, M. E., & Farber, E. A. (2013). Child–Parent Attachment and Children's Peer Relations: A Quantitative Review. In *Annual Progress in Child Psychiatry and Child Development 2002* (pp. 47–82). Routledge.

Hitokoto, H., & Uchida, Y. (2015). Interdependent happiness: Theoretical importance and measurement validity. *Journal of Happiness Studies*, *16*(1), 211–239.

Ho, D. Y. (1989). Continuity and variation in Chinese patterns of socialization. *Journal of Marriage and the Family*, 149–163.

Hou, Y. B. (2015). *Foundations of Social Psychology*. Peking University Press.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55.

Hu, Q., & Schaufeli, W. B. (2009). The factorial validity of the Maslach Burnout Inventory–student survey in China. *Psychological Reports*, *105*(2), 394–408.

Huang, Y., Song, Q., Tao, R., & Liang, Z. (2018). Migration, family arrangement, and Children's health in China. *Child Development*, *89*(2), e74–e90.

Işık, E., Ulubey, E., & Kozan, S. (2018). An examination of the social cognitive model of well-being in Turkish college students. *Journal of Vocational Behavior*, *106*, 11–21.

Jenkins, R. (2014). *Social identity*. Routledge.

Jia, Z., & Tian, W. (2010). Loneliness of left-behind children: A cross-sectional survey in a sample of rural China. *Child: Care, Health and Development*, *36*(6), 812–817.

Jiang, Da. Y. (2011). Thinking of modern vocational education system construction. *Educational Research*, *382*(11), 70–74.

Jiang, Z.-P., & Zhang, Z.-R. (2012). Using social cognitive career theory to predict the academic interests and goals of Chinese middle vocational-technical school students. *Public Personnel Management*, *41*(5), 59–68.

Jingzhong, Y., & Lu, P. (2011). Differentiated childhoods: Impacts of rural labor migration on left-behind children in China. *The Journal of Peasant Studies*, *38*(2), 355–377.

Jordan, L. P., & Graham, E. (2012). Resilience and well-being among children of migrant parents in South-East Asia. *Child Development*, *83*(5), 1672–1688.

Kalton, G., & Kasprzyk, D. (1982). Imputing for missing survey responses. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, *22*, 31.

Kitayama, S., & Markus, H. R. (2000). The pursuit of happiness and the realization of sympathy: Cultural patterns of self, social relations, and well-being. *Culture and Subjective Well-Being*, *1*, 113–161.

Kobak, R., & Madsen, S. (2008). Disruptions in attachment bonds: Implications for theory, research, and clinical intervention. *American Psychological Association*.

Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development*, 59(1), 135–146.

Koomen, H. M., Verschueren, K., van Schooten, E., Jak, S., & Pianta, R. C. (2012). Validating the Student-Teacher Relationship Scale: Testing factor structure and measurement invariance across child gender and age in a Dutch sample. *Journal of School Psychology*, *50*(2), 215–234.

Lamb, M. E. (2013). *The father's role: Cross cultural perspectives*. Routledge.

Langton, C. E., & Berger, L. M. (2011). Family structure and adolescent physical health, behavior, and emotional well-being. *Social Service Review*, *85*(3), 323–357.

Lawrence, J. W., Carver, C. S., & Scheier, M. F. (2002). Velocity toward goal attainment in immediate experience as a determinant of affect. *Journal of Applied Social Psychology*, *32*(4), 788–802.

Lázaro, S. V., Palomera, R., Briones, E., Fernández-Fuertes, A. A., & Fernández-Rouco, N. (2019). Bullied adolescent's life satisfaction: Personal competencies and school climate as protective factors. *Frontiers in Psychology*, *10*, 1691.

Lee, R. M., Choe, J., Kim, G., & Ngo, V. (2000). Construction of the Asian American Family Conflicts Scale. *Journal of Counseling Psychology*, *47*(2), 211.

Lent, R. W. (2004). Toward a Unifying Theoretical and Practical Perspective on Well-Being and Psychosocial Adjustment. *Journal of Counseling Psychology*, *51*(4), 482–509. https://doi.org/10.1037/0022-0167.51.4.482

Lent, R. W. (2005). *A Social Cognitive View of Career Development and Counseling.*

Lent, R. W., & Brown, S. D. (2006). Integrating person and situation perspectives on work satisfaction: A social-cognitive view. *Journal of Vocational Behavior*, *69*(2), 236–247. https://doi.org/10.1016/j.jvb.2006.02.006

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, *45*(1), 79–122.

Lent, R. W., Brown, S. D., Sheu, H.-B., Schmidt, J., Brenner, B. R., Gloster, C. S., Wilkins, G., Schmidt, L. C., Lyons, H., & Treistman, D. (2005). Social cognitive predictors of academic interests and goals in engineering: Utility for women and students at historically black universities. *Journal of Counseling Psychology*, *52*(1), 84.

Lent, R. W., do Céu Taveira, M., Sheu, H.-B., & Singley, D. (2009). Social cognitive predictors of academic adjustment and life satisfaction in Portuguese college students: A longitudinal analysis. *Journal of Vocational Behavior*, *74*(2), 190–198.

Lent, R. W., Lopez, F. G., Sheu, H.-B., & Lopez, A. M. (2011a). Social cognitive predictors of the interests and choices of computing majors: Applicability to underrepresented students. *Journal of Vocational Behavior*, *78*(2), 184–192. https://doi.org/10.1016/j.jvb.2010.10.006

Lent, R. W., Nota, L., Soresi, S., Ginevra, M. C., Duffy, R. D., & Brown, S. D. (2011b). Predicting the job and life satisfaction of Italian teachers: Test of a social cognitive model. *Journal of Vocational Behavior*, *79*(1), 91–97.

Lent, R. W., Singley, D., Sheu, H.-B., Schmidt, J. A., & Schmidt, L. C. (2007). Relation of Social-Cognitive Factors to Academic Satisfaction in Engineering Students. *Journal of Career Assessment*, *15*(1), 87–97. https://doi.org/10.1177/1069072706294518

Lent, R. W., Taveira, M. do C., Figuera, P., Dorio, I., Faria, S., & Gonçalves, A. M. (2017). Test of the Social Cognitive Model of Well-Being in Spanish College Students. *Journal of Career Assessment*, *25*(1), 135–143. https://doi.org/10.1177/1069072716657821

Lent, R. W., Taveira, M. do C., & Lobo, C. (2012). Two tests of the social cognitive model of well-being in Portuguese college students. *Journal of Vocational Behavior*, *80*(2), 362–371. https://doi.org/10.1016/j.jvb.2011.08.009

Lent, R. W., Taveira, M. do C., Pinto, J. C., Silva, A. D., Blanco, Á., Faria, S., & Gonçalves, A. M. (2014). Social cognitive predictors of well-being in African college students. *Journal of Vocational Behavior*, *84*(3), 266–272. https://doi.org/10.1016/j.jvb.2014.01.007

Lent, R. W., Taveira, M. do C., Sheu, H.-B., & Singley, D. (2009). Social cognitive predictors of academic adjustment and life satisfaction in Portuguese college students: A longitudinal analysis. *Journal of Vocational Behavior*, *74*(2), 190–198. https://doi.org/10.1016/j.jvb.2008.12.006

Li, B. F. (2011). The research on dillema of migrants shortage and difficulties of college employment. *Future and Development.*, 17–20.

Li, H., Rao, N., & Tse, S. K. (2012). Adapting Western pedagogies for Chinese literacy instruction: Case studies of Hong Kong, Shenzhen, and Singapore preschools. *Early Education & Development*, *23*(4), 603–621.

Lin, H. (2013). *The Research on China's Household Registration Change -From the Individual and Social Respective*. China Southwestern University of Finance and Ecnomics.

Ling, M. (2015). "Bad students go to vocational schools!": Education, social reproduction and migrant youth in urban China. *The China Journal*, *73*, 108–131.

Liu, J., Kun, He, X., Bin, He, G., Yan, & Zhang, Y., Liang. (2020). Parents' Participation, School Integration and Mental Health of Migrant Workers' Children. *Chinese Youth Studies*, *03*.

Liu, L. J., Sun, X., Zhang, C. L., Wang, Y., & Guo, Q. (2010). A survey in rural China of parent-absence through migrant working: The impact on their children's self-concept and loneliness. *BMC Public Health*, *10*(1), 32.

Liu, T. (2014). *A review of the household registration system in China*. http://www.sinoss.net

Lu, L. (2007). Well-being of Chinese People. *Discovery of Applied Phsychology*, 9(1), 19–31.

Lu, S., Lin, Y.-T., Vikse, J. H., & Huang, C.-C. (2016). Well-being of migrant and left-behind children in China: Education, health, parenting, and personal values: Left-behind children in China. *International Journal of Social Welfare*, *25*(1), 58–68. https://doi.org/10.1111/ijsw.12162

Lu, Y. (2012). Education of Children Left Behind in Rural China. *Journal of Marriage and Family*, *74*(2), 328–341. https://doi.org/10.1111/j.1741-3737.2011.00951.x

Lu, Y., Yeung, J. W.-J., Liu, J., & Treiman, D. J. (2019). Migration and children's psychosocial development in China: When and why migration matters. *Social Science Research*, *77*, 130–147.

Lyubomirsky, S. (2001). Why are some people happier than others? The role of cognitive and motivational processes in well-being. *American Psychologist*, *56*(3), 239.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224.

Mazzucato, V., Cebotari, V., Veale, A., White, A., Grassi, M., & Vivet, J. (2015). International parental migration and the psychological well-being of children in Ghana, Nigeria, and Angola. *Social Science & Medicine*, *132*, 215–224.

Mchale, S. M., Crouter, A. C., McGuire, S. A., & Updegraff, K. A. (1995). Congruence between mothers' and fathers' differential treatment of siblings: Links with family relations and children's well-being. *Child Development*, *66*(1), 116–128.

McLaughlin, J., Wells, D., Mendiburo, A., Lyn, A., & Vasilevska, B. (2017). 'Temporary Workers', Temporary Fathers: Transnational Family Impacts of Canada's Seasonal Agricultural Worker Program. *Relations Industrielles/Industrial Relations*, *72*(4), 682–709.

Meng, X., & Manning, C. (2010). The great migration in China and Indonesia: Trends and institutions. *Chapters, https://ideas.repec.org/h/elg/eechap/13619_1.html*.

Miller, M. J., Yang, M., Farrell, J. A., & Lin, L. (2011). Racial and cultural factors affecting the mental health of Asian Americans. *American Journal of Orthopsychiatry*, *81*(4), 489–497. https://doi.org/10.1111/j.1939-0025.2011.01118.x

Ministry of Civil Affairs of PRC. (2018). *Data of national left-behind children in 2018*. http://www.mca.gov.cn/article/gk/tjtb/201809/20180900010882.shtml

Ministry of Education of the People's Republic of China. (2008). *Some opinions of ministry of education on further deepening education reform of secondary vocational education*. http://www.gov.cn/gongbao/content/2009/content_1310689.htm

Ministry of Education in the People's Republic of China. (2015a). *Education innovation and development of higher vocational education Action plan (2015-2018)*. http://www.moe.gov.cn/srcsite/A07/moe_737/s3876_cxfz/201511/t20151102_216985.html

Ministry of Education of the People's Republic of China. (2015b). *2015 Statistical Bulletin of National Education Development*. http://www.moe.gov.cn/jyb_sjzl/s5990/201612/t20161219_292432.html

Ministry of Education of the People's Republic of China. (2017). *2017 Statistical Bulletin of National Education Development*. http://www.moe.gov.cn/jyb_sjzl/sjzl_fztjgb/201807/t20180719_343508.html

Ministry of Education of People's Republic of China. (2018a). *Composition of Students in Senior Secondary Schools*. http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2017/qg/201808/t20180808_344689.html

Ministry of Education in the People's Republic of China. (2018b). *The golden period of vocational education.* http://www.moe.gov.cn/jyb_xwfb/xw_zt/moe_357/jyzt_2018n/2018_zt05/zt1805_cjrh/201802/t20180227_327950.html

Ministry of Education of the People's Republic of China. (2018c). *13th state education conference of the national people's congress reply to recommendation 3317*. http://www.moe.gov.cn/jyb_xxgk/xxgk_jyta/jyta_jijiaosi/201812/t20181229_365435.html

Ministry of Education of the People's Republic of China. (2018d). *2018 Statistical Bulletin of National Education Development*. http://www.moe.gov.cn/jyb_sjzl/s5990/201909/t20190929_401639.html

Ministry of Education of People's Republic of China. (2019a). *2018 National Secondary Vocational Schools' Capability Evaluation Report*. http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/201911/t20191127_409905.html

Ministry of Education of the People's Republic of China. (2019b). *2018 National Vocational Education Evaluation Report*. http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/201911/t20191127_409905.html

Ministry of Education of the People's Republic of China. (2019c). *Number of Students of Formal Education by Type and Level*. http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2018/qg/201908/t20190812_394239.html

Montes, V. (2013). The role of emotions in the construction of masculinity: Guatemalan migrant men, transnational migration, and family relations. *Gender & Society*, *27*(4), 469–490.

Moore, G. F., Cox, R., Evans, R. E., Hallingberg, B., Hawkins, J., Littlecott, H. J., Long, S. J., & Murphy, S. (2018). School, peer and family relationships and adolescent substance use, subjective wellbeing and mental health symptoms in Wales: A cross sectional study. *Child Indicators Research*, *11*(6), 1951–1965.

Moskal, M. (2014). Polish migrant youth in Scottish schools: Conflicted identity and family capital. *Journal of Youth Studies*, *17*(2), 279–291.

Mundfrom, D. J., & Whitcomb, A. (1998). *Imputing Missing Values: The Effect on the Accuracy of Classification, https://eric.ed.gov/?id=ED419817.*

Murphy, R., Zhou, M., & Tao, R. (2016). Parents' migration and children's subjective well-being and health: Evidence from rural China. *Population, Space and Place*, *22*(8), 766–780.

Myers, D., G., & Diener, E. (1995). Who Is Happy? *Psychological Science*, *6*(1), 10–19.

Nahkur, O., & Kutsar, D. (2019). Social Ecological Measures of Interpersonal Destructiveness Impacting Child Subjective Mental Well-Being: Perceptions of 12-Year-Old Children in 14 Countries. *Child Indicators Research*, *12*(1), 353–378. https://doi.org/10.1007/s12187-018-9542-7

Nahkur, O., Kutsar, D., & Murakas, R. (2017). A Two-Dimensional Two-Layered Societal Index of Interpersonal Destructiveness: Internal Consistency Analysis. *Social Indicators Research*, *133*(2), 431–454. https://doi.org/10.1007/s11205-016-1378-2

Nakamura, J., & Csikszentmihalyi, M. (2014). The concept of flow. In *Flow and the foundations of positive psychology*, Springer Science, 239–263.

National Bureau of Statistics of the People's Republic of China. (2015). *China's Child Population Status in 2015-Facts and Statistics, http://www.stats.gov.cn/tjsj/zxfb/201604/t20160428_1349713.html*.

National Bureau of Statistics of the People's Republic of China. (2016). *2015 Migrant Workers Monitoring Survey Report*. http://www.stats.gov.cn/tjsj/zxfb/201704/t20170428_1489334.html.

National Bureau of Statistics of the People's Republic of China. (2017). *2016 Migrant Workers Monitoring Survey Report*. http://www.stats.gov.cn/tjsj/zxfb/201704/t20170428_1489334.html

National Bureau of Statistics of the People's Republic of China. (2018). *2017 migrant workers monitoring survey report*. http://www.stats.gov.cn/tjsj/zxfb/201804/t20180427_1596389.html

National Bureau of Statistics of the People's Republic of China. (2019). *2018 Migrant Workers Monitoring Survey Report*. http://www.stats.gov.cn/tJSj/zxfb/201904/t20190429_1662268.html

National Bureau of Statistics of the People's Republic of China. (2020a). *2019 Migrant Workers Monitoring Survey Report*. http://www.stats.gov.cn/tjsj/zxfb/202004/t20200430_1742724.html

National Bureau of Statistics of the People's Republic of China. (2020b). *2020 Migrant Workers Monitoring Survey Report*. http://www.stats.gov.cn/tjsj/zxfb/202104/t20210430_1816933.html

National Centre for Education Statistics. (2020). *Education Expenditures by Country*. https://nces.ed.gov/programs/coe/indicator_cmd.asp

Obrien, K. M., & Zamostny, K. P. (2003). Understanding adoptive families: An integrative review of empirical research and future directions for counseling psychology. *The Counseling Psychologist*, *31*(6), 679–710.

Pan, L., & Ye, J. (2009). A summary of studies on left-behind children in rural areas. *China Agricultural University Journal of Social Sciences Edition*, *26*(2), 5–12.

Parkes, C. M., & Stevenson-Hinde, J. (1982). *The place of attachment in human behavior*. Taylor & Francis.

Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., Arora, M., Azzopardi, P., Baldwin, W., & Bonell, C. (2016). Our future: A Lancet commission on adolescent health and wellbeing. *The Lancet*, *387*(10036), 2423–2478.

Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, *3*(2), 137–152.

Peterson, C. (2009). Positive psychology. *Reclaiming Children and Youth*, *18*(2), 3.

Phillips, J. M., & Gully, S. M. (1997). Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal—Setting process. *Journal of Applied Psychology*, *82*(5), 792.

Pianta, R. C. (2001). *Student-teacher relationship scale: Professional manual*. Psychological Assessment Resources.

Qin, D. B. (2008). Doing well vs. Feeling well: Understanding family dynamics and the psychological adjustment of Chinese immigrant adolescents. *Journal of Youth and Adolescence*, *37*(1), 22–35.

Roberts, R. E., & Bengtson, V. L. (1993). Relationships with parents, self-esteem, and psychological well-being in young adulthood. *Social Psychology Quarterly*, *56*(4), 263–277.

Ryan, L. (2011). Transnational Relations: Family Migration among Recent Polish Migrants in London. *International Migration*, *49*(2), 80–103. https://doi.org/10.1111/j.1468-2435.2010.00618.x

Ryan, R. M., & Deci, E. L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology*, *52*(1), 141–166. https://doi.org/10.1146/annurev.psych.52.1.141

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, *4*(4), 99–104.

Ryff, C. D., & Singer, B. (1998). The Contours of Positive Human Health. *Psychological Inquiry*, *9*(1), 1–28. https://doi.org/10.1207/s15327965pli0901_1

Sanderson, C., & Cantor, N. (1999). Life task participation and wellbeing. The importance of taking part in daily life. *The Foundations of Hedonic Psychology, Edited by D. Kahneman, E. Diener and N. Schwarz. New York: Russell Sage Foundation*.

Schaufeli, W. B. (1996). Maslach Burnout Inventory-General Survey (MBIGS). *Maslach Burnout Inventory Manual*.

Schneider, B. H., Atkinson, L., & Tardif, C. (2001). Child–parent attachment and children's peer relations: A quantitative review. *Developmental Psychology*, *37*(1), 86.

Senaratna, B. C. V., Perera, H., & Fonseka, P. (2011). Mental health status and risk factors for mental health problems in left-behind children of women migrant workers in Sri Lanka. *Ceylon Med J*, *56*(4), 153–158.

Sheeber, L., Hops, H., Alpert, A., Davis, B., & Andrews, J. (1997). Family support and conflict: Prospective relations to adolescent depression. *Journal of Abnormal Child Psychology*, *25*(4), 333–344.

Shek, D. T. (1999). Parenting characteristics and adolescent psychological well-being: A longitudinal study in a Chinese context. *Genetic, Social, and General Psychology Monographs*, *125*(1), 27.

Sheu, H.-B., Chong, S. S., Chen, H.-F., & Lin, W.-C. (2014). Well-being of Taiwanese and Singaporean college students: Cross-cultural validity of a modified social cognitive model. *Journal of Counseling Psychology*, *61*(3), 447–460. https://doi.org/10.1037/cou0000018

Sheu, H.-B., Liu, Y., & Li, Y. (2017). Well-Being of College Students in China: Testing a Modified Social Cognitive Model. *Journal of Career Assessment*, *25*(1), 144–158. https://doi.org/10.1177/1069072716658240

Sheu, H.-B., Mejia, A., Rigali-Oiler, M., Primé, D. R., & Chong, S. S. (2016). Social cognitive predictors of academic and life satisfaction: Measurement and structural equivalence across three racial/ethnic groups. *Journal of Counseling Psychology*, *63*(4), 460–474. https://doi.org/10.1037/cou0000158

Shin, D. C., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, *5*(1–4), 475–492.

Shin, H., Puig, A., Lee, J., Lee, J. H., & Lee, S. M. (2011). Cultural validation of the Maslach Burnout Inventory for Korean students. *Asia Pacific Education Review*, *12*(4), 633–639.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, *20*, 580–591.

Sleezer, C. M., & Denny, D. (2004). Strategies for developing a high-skilled workforce. *Performance Improvement Quarterly*, *17*(1), 41–55.

Sluzki, C. E. (1979). Migration and family conflict. *Family Process*, *18*(4), 379–390.

Song, J., Ma, C., Gu, C., & Zuo, B. (2018). What Matters Most to the Left-Behind Children's Life Satisfaction and School Engagement: Parent or Grandparent? *Journal of Child and Family Studies*, *27*(8), 2481–2490.

Spaulding, S. (1987). Policy and planning in adult education: The international dimension. *Planning Adult Learning: Issues, Practices and Directions*, 142–168.

Spengler, O. (1991). *The decline of the West*. Oxford University Press, USA.

Stillman, S., McKenzie, D., & Gibson, J. (2005). Migration and Mental Health: Evidence From a Natural Experiment. *World Development*, *65*, 37.

Tellegen, A., & Waller, N. G. (2008). Exploring personality through test construction: Development of the Multidimensional Personality Questionnaire. *The SAGE Handbook of Personality Theory and Assessment*, *2*, 261–292.

Tomşa, R., & Jenaro, C. (2015). Children left behind in Romania: Anxiety and predictor variables. *Psychological Reports*, *116*(2), 485–512.

Tur, P., Ana, Mestre, V., & Llorca, A. (2015). Parenting: Psychometric analysis of two studies in Spanish population. *Anuario De Psicologia*, *45*(3), 347–359.

UNICEF. (2015). *Population Status of Children in China in 2015*. https://www.unicef.cn/reports/population-status-children-china-2015

Valtolina, G. G., & Colombo, C. (2012). Psychological well-being, family relations, and developmental issues of children left behind. *Psychological Reports*, *111*(3), 905–928.

Veenhoven, R. (2005). Is happiness a trait? In *Citation Classics from Social Indicators Research* (pp. 477–536). Springer.

Wang, D. (2006). The causes of and preventive measures for juvenile delinquency in left-behind children in rural China. *Journal of Beijing Youth Politics College*, *15*(3), 27–33.

Wang, S. S. (2002). *A Historical Investigation of the Formation and Evolution of Household Registration System in People's Republic of China (1949-1978)*. Central Party School.

Wang, Y. (2011). *Research on Education of Rural Left-behind Children*. Northwest A&F University.

Wang, Y. Z. (2014). *An Analysis of Confucius' Thoughts on Well-being*. Northwest University.

Wang, Z., Kouvonen, A., Satka, M., & Julkunen, I. (2019). Parental Social Support and Adolescent Well-Being: A Cross-Sectional Study in China. *Child Indicators Research*, *12*(1), 299–317.

Watson, D. (2002). Positive affectivity. *Handbook of Positive Psychology*, 106–119.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063.

Wen, M., & Lin, D. (2012). Child development in rural China: Children left behind by their migrant parents and children of nonmigrant families. *Child Development*, *83*(1), 120–136.

Wilson, K. R., & Prior, M. R. (2011). Father involvement and child well-being. *Journal of Paediatrics and Child Health*, *47*(7), 405–407.

Wong, F. K. D., Chang, Y. L., & He, X. S. (2009). Correlates of psychological wellbeing of children of migrant workers in Shanghai, China. *Social Psychiatry and Psychiatric Epidemiology*, *44*(10), 815–824.

Wu, P., Robinson, C. C., Yang, C., Hart, C. H., Olsen, S. F., Porter, C. L., Jin, S., Wo, J., & Wu, X. (2002). Similarities and differences in mothers' parenting of preschoolers in China and the United States. *International Journal of Behavioral Development*, *26*(6), 481–491.

Wu, X. C. (2008). *Contemporary Vocational Education Management*. Beijing Poly-Technic University press.

Wu, Y. W. (2002). *Rural-urban migration under institutional barriers*. Chinese Academy of Social Sciences.

Wu, Z., H., & Li, J. M. (2016). The Realistic Dilemma and Policy Choice of Migrant Workers' Migrant Children Receiving Compulsory Education in Cities. *Educational Research*.

Xiang, X., Wong, D. F. K., & Hou, K. (2018). The impact of perceived discrimination on personality among Chinese migrant children: The moderating role of parental support. *International Journal of Social Psychiatry*, *64*(3), 248–257.

Xinhua News Agency. (2014). *National New Urbanization Plan 2014 to 2020*. http://www.gov.cn/zhengce/2014-03/16/content_2640075.htm

Xiong, M., & Ye, Y. D. (2011). A Review of the Research on the Mental Health of the Children of Rural Migrant Workers in China. *Advances in Psychological Science*, 1798–1813.

Xiong, Y. H. (2009). Urbanized Children: Urban and Rural Cognition and Identity Consciousness of Migrant Workers' Children. *Chinese Rural Observation*, *2*, 2–6.

Xu, J. Y. (2011). Retrospect and Prospect of my country's Household Registration System Reform. *Northern Economy*.

Xu, L., Cheung, M., Leung, P., & Xu, Y. (2018). Migrant child phenomenon in China: Subjective happiness factors for assessing service needs. *Children and Youth Services Review*, *90*, 66–73. https://doi.org/10.1016/j.childyouth.2018.05.003

Xu, Y., Xu, D., Simpkins, S., & Warschauer, M. (2019). Does It Matter Which Parent is Absent? Labor Migration, Parenting, and Adolescent Development in China. *Journal of Child and Family Studies*, 1–15.

Yang, G., S., & Lu, L. (2005). Psychological characteristics of social oriented self-realizers and individual orientated self-realizers: Conceptual analysis and real-world assessment. *Native psychology research*, *23*, 71–143.

Ye, M. H. (1990). *Chinese Familism and Its Changes*. National Taiwan University.

Yeung, W.-J. J., & Gu, X. (2016). Left behind by parents in China: Internal migration and adolescents' well-being. *Marriage & Family Review*, *52*(1–2), 127–161.

Yi, Y. H. (2019). Investigation and Analysis of the Mental Health of Secondary Vocational School Students. *Chinese Vocational and Technical Education*, *22*, 28.

Yu, M. V. B., Deutsch, N. L., Futch Ehrlich, V. A., Arbeit, M. R., Johnson, H. E., & Melton, T. N. (2019). "It's like all of his attention is on you": A mixed methods examination of attachment, supportive nonparental youth–adult relationships, and self-esteem during adolescence. *Journal of Community Psychology*, *47*(2), 414–434.

Yue, A., Shi, Y., Luo, R., Chen, J., Garth, J., Zhang, J., Medina, A., Kotb, S., & Rozelle, S. (2017). China's invisible crisis: Cognitive delays among rural toddlers and the absence of modern parenting. *The China Journal*, *78*(1), 50–80.

Zha, P., Walczyk, J. J., Griffith-Ross, D. A., Tobacyk, J. J., & Walczyk, D. F. (2006). The impact of culture and individualism–collectivism on the creative potential and achievement of American and Chinese adults. *Creativity Research Journal*, *18*(3), 355–366.

Zhang, F. Y. (2012). From 'Confucian well-being' to 'Gentleman well-being'-Mencius' Four Directions of Well-being. *Qilu Journal*.

Zhang, J. H., Yuen, M., & Chen, G. (2015). Career-related parental support for vocational school students in china. *International Journal for the Advancement of Counselling*, *37*(4), 346–354.

Zhao, C. Y., Wang, F., Li, L., Zhou, X., & Hesketh, T. (2017). Long-term impacts of parental migration on Chinese children's psychosocial well-being: Mitigating and exacerbating factors. *Social Psychiatry and Psychiatric Epidemiology*, *52*(6), 669–677.

Zhao, K., Fang, X., Su, H., He, L., Chen, J., Chen, M., & Ye, D. (2007). The epidemiological characteristics of unintentional injuries among children left-behind in Anhui province. *Journal of Disease Control and Prevention*, *11*(3), 277–279.

Zhao, X., Chen, J., Chen, M.-C., Lv, X.-L., Jiang, Y.-H., & Sun, Y.-H. (2014). Left-behind children in rural C hina experience higher levels of anxiety and poorer living conditions. *Acta Paediatrica*, *103*(6), 665–670.

Zhao, X. ,D. (2016). A brief analysis of the role of moral education in the career planning education of secondary vocational school students. *Occupation*, *2016*(02), 113–114.

Zhong, J., & Arnett, J. J. (2014). Conceptions of adulthood among migrant women workers in China. *International Journal of Behavioral Development*, *38*(3), 255–265.

Zhou, C., Sylvia, S., Zhang, L., Luo, R., Yi, H., Liu, C., Shi, Y., Loyalka, P., Chu, J., & Medina, A. (2015). China's left-behind children: Impact of parental migration on health, nutrition, and educational outcomes. *Health Affairs*, *34*(11), 1964–1971.

Zhou, G. H., & Wu, H. J. (2016). Several sollutions for migrant workers' children study in cities out of their hometown. *China Youth Daily*. http://www.cssn.cn/jyx/jyx_zdtj/201605/t20160531_3031850.shtml

Appendix

Appendix I Questionnaires

Hello, dear fellows! Following questionnaire are used to test your satisfaction about your school life in vocational school/college. First of all, it comes to the Demographic part just choose one exact answer or fill in the blank with○. Thank you very much for your cooperation!

Part 1 : General questions

1. Your age ( )
2. Your gender ( )

A. Male B. Female

3. What is your major ( )
4. Which one applies best for you? ( ) A. I'm a Local B. I'm not local, but come from the same Province C. I come from another Province

Part2: Please draw ○in the mark that suit very well with your condition to these following questions.

1. Using the scale below, please indicate the extent to which you agree or disagree with each of the following statements:

How do you think about your life?	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. In most ways my life is close to my ideal.	1	2	3	4	5
2. The conditions of my life are excellent.	1	2	3	4	5
3. I am satisfied with my life.	1	2	3	4	5
4. So far, I have gotten the important things I want in life.	1	2	3	4	5
5. If I could live my life over, I would change almost nothing.	1	2	3	4	5

2. Using the scale below, indicate your level of agreement with each of the following statements;

How much do you agree or disagree with the following statements?	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1.I am comfortable with the educational atmosphere in my major field	1	2	3	4	5
2.For the most part, I am enjoying my coursework	1	2	3	4	5
3.I am generally satisfied with my school life	1	2	3	4	5
4.I enjoy the level of intellectual stimulation in my courses	1	2	3	4	5
5.I feel enthusiastic about the subject matter in my intended major	1	2	3	4	5
6.I like how much I have been learning in my classes	1	2	3	4	5

3. Please indicate how much confidence you have in your ability to complete each of these steps in relation to the academic major that you are most likely to pursue. Use the scale below to indicate your degree of confidence.

How much confidence do you have in your ability to:	No Confidence	Little confidence	Some confidence	Very confidence	Complete confidence
1.Remain enrolled in your intended major over the next semester.	1	2	3	4	5
2.Excel in your intended major over the next semester.	1	2	3	4	5
3.Complete the upper level required courses in your intended major with an overall grade point average of 70 points or better (100 is the best score).	1	2	3	4	5
4.Find ways to avoid communication problems with teachers and teaching assistants in your courses.	1	2	3	4	5
5.Balance the pressures of studying with the desire to have leisure time for fun and other activities.	1	2	3	4	5

4.Using the scale below, please indicate the extent to which you agree or disagree with each of the following statements:

Graduating in vocational school will likely allow me to:	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1... receive a good job (or graduate school) offer	1	2	3	4	5
2... earn an attractive salary	1	2	3	4	5
3... get respect from other people	1	2	3	4	5
4... increase my sense of self-worth	1	2	3	4	5
5... have a career that is valued by my family	1	2	3	4	5

5. Now we would like for you to rate each of the goal statements in terms of how much progress you are making toward each one at this point in time. That is, indicate how effectively you feel you are meeting or working toward each goal at present, regardless of how important the goal is for you:

How much progress are you making toward each of these goals at this point in time (i.e., so far this semester):	No Progress	A Little Progress	Fair Progress	Good Progress	Excellent Progress
1.Completing all course assignments in time	1	2	3	4	5
2.Have good marks in all of my exams	1	2	3	4	5
3.Achieving / maintaining high marks/grades in all of my courses	1	2	3	4	5
4.Learning and understanding the contents in each of my courses	1	2	3	4	5

6. Using the scale below, please indicate the extent to which you agree or disagree with each of the following statements (independent VS. interdependent):

How much do you agree or disagree with the following statements?	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. I enjoy being unique and different from others in many respects.	1	2	3	4	5
2. I have respect for the authority figures with whom I interact$_1$.	1	2	3	4	5
3. I do my own thing, regardless of what others think.	1	2	3	4	5
4. I feel it is important for me to act as an independent person.	1	2	3	4	5
5. I am comfortable with being singled out for praise or rewards.	1	2	3	4	5
6. Relationships . . . are more important than . . . accomplishments$_1$.	1	2	3	4	5
7. I would offer my seat in a bus to my professor (or my boss)$_1$.	1	2	3	4	5
8. My happiness depends on the happiness of those around me$_1$.	1	2	3	4	5
9. I will stay in a group if they need me, even when I am not happy with the group$_1$.	1	2	3	4	5
10. I try to do what is best for me, regardless of how . . . affect others.	1	2	3	4	5
11. I act the same way at home that I do at school$_1$.	1	2	3	4	5
12. I'd rather say "no" directly than risk being misunderstood.	1	2	3	4	5

7. This scale consists of the following words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Use the following scale to record your answers:

How often do you feel:	Never	Seldom	Sometimes	Often	Always
Distressed	1	2	3	4	5
Excited	1	2	3	4	5
Anxiety	1	2	3	4	5
Lonely	1	2	3	4	5
Enthusiastic	1	2	3	4	5
Proud	1	2	3	4	5
Irritable	1	2	3	4	5
Ashamed	1	2	3	4	5
Inspired	1	2	3	4	5
Nervous	1	2	3	4	5
Active	1	2	3	4	5
Afraid	1	2	3	4	5

Part3: Caregiver-children relations scales.

1. Many factors can either support or hinder students' academic and social adjustment.

Here we are interested in the types of situations that may support your study. Please indicate how much you agree or disagree with each of the following statements:

At the present time, I …	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1.Get encouragement from my teachers for pursuing my intended major.	1	2	3	4	5
2.Feel that my family members support the decision to major in my intended field.	1	2	3	4	5
3.Feel that close friends would be proud of me for majoring in my intended field.	1	2	3	4	5

2. With whom do you live now?

A. Parents B. Only Father C. Only Mother D. Grandparents E. Other ( )

3. Inventory of Caregiver(s) Attachment: Using the scale, please indicate frequency with each of the following statements:

How do you think with the following statements?	Never	Seldom	Sometimes	Often	Always
1. My caregiver(s) respect my feelings.	1	2	3	4	5
2. My caregiver(s) are successful as caregivers.	1	2	3	4	5
3. I must rely on myself when I have a problem to solve.	1	2	3	4	5
4. I like to get my caregiver(s)' point of view on things I'm concerned about.	1	2	3	4	5
5. I feel it's no use letting my feelings show.	1	2	3	4	5
6.My caregiver(s)' feel when I'm upset about something.	1	2	3	4	5
7.Talking over my problems with my caregiver(s) makes me feel ashamed.	1	2	3	4	5
8. My caregiver(s) expect too much from me	1	2	3	4	5
9. My caregiver(s) seldom know something is bothering me and make me unhappy.	1	2	3	4	5
10. My caregiver(s) trust my judgments.	1	2	3	4	5
11. I tell my caregiver(s) about my problems and troubles.	1	2	3	4	5
12. My caregiver(s) have their own problems, so I don't bother them with mine.	1	2	3	4	5
13. My caregiver(s) encourage me to talk about my difficulties.	1	2	3	4	5
14. I feel angry with my caregiver(s).	1	2	3	4	5
15. I don't get much attention from my caregiver(s).	1	2	3	4	5
16. My caregiver(s) understand me.	1	2	3	4	5
17. I can count on my caregiver(s) when I need to get something off my chest.	1	2	3	4	5

4. Caregiver-child Co-activities

Using the 5 points scale, please indicate frequency with each of the following statements about caregiver-child co-activities:

	Once a year or never	At least twice a year	At least once a month	At least once a week	More than twice a week
1.How often your caregiver(s) have dinner with you?	1	2	3	4	5
2. How often your caregiver(s) do sport with you?	1	2	3	4	5
3. How often your caregiver(s) go shopping with you?	1	2	3	4	5
4.How often your caregiver(s) watch TV with you?	1	2	3	4	5
5. How often do your caregiver(s) travel with you?	1	2	3	4	5

5. Communication frequency with caregiver(s)

Using the scale below, please indicate the frequency for each of the following statements:

	Once a year or never	At least twice a year	At least once a month	At least once a week	More than twice a week
How often do you talk to your caregiver(s) about your					
1. Friends?	1	2	3	4	5
2. School?	1	2	3	4	5
3. Teachers?	1	2	3	4	5
4. Feelings?	1	2	3	4	5
5. Worries?	1	2	3	4	5

6. Regulations from Caregiver(s)

Using the scale below, please indicate the extent to how much you agree or disagree with each of the following statements:

Do your caregiver(s) have strict rules on	Never	Seldom	Sometimes	Often	Always
1.Your homework completion?	1	2	3	4	5
2.Your school performance?	1	2	3	4	5
3. Your school attendance?	1	2	3	4	5
4. Curfew (e.g., you must come back home before 0:00)?	1	2	3	4	5
5. Your friend's selection?	1	2	3	4	5
6. Your dress style?	1	2	3	4	5
7. Your time on computer games?	1	2	3	4	5
8. Your time on mobile phone?	1	2	3	4	5
9. Time on TV?	1	2	3	4	5

7. Caregiver-child Conflicts Scale

	Never	Seldom	Sometimes	Often	Always
1. Your caregiver(s) tell you what to do with your life, but you want to make your own decisions	1	2	3	4	5
2. Your caregiver(s) tell you that a social life is not important at this age, but you think that it is.	1	2	3	4	5
3. You have done well in school, but your caregiver(s) academic expectations always exceed your performance.	1	2	3	4	5
4. Your caregiver(s) always compare you to others, but you want them to accept you for being yourself.	1	2	3	4	5

Part 4. Specified Questions

1. Your household registration type

A. Urban B. Rural

2. Where do you live?

A. Urban B. Rural

3. Does your father take a job away from your hometown over six months and more?

A. Yes B. No(If your answer is “yes” please answer question 4 if not skip it.)

4. How long have your father left your hometown?

A. less than one year B. 1 to 5 year(s) C.6 to 10 years D. Above 10 years

5. Does your mother take a job away from your hometown over six months and more?

A. Yes B. No (If your answer is “yes” please answer question 6 if not skip it)

6. How long have your mother left your hometown?

A. less than one year B. 1 to 5 year(s) C.6 to 10 years D. Above 10 years

7. If your parent(s) do not live in your hometown, where do they live now [ ] please write down the name of the city/county(if they do not live together writer separately, if they live in your hometown skip this question).

8. How often do you see your mother?

A. At most once a year or never B. At least twice a year C. At least once a Month D. At least once a week E. Almost every day

9. How often do you see your father?

A. At most once a year or never B. At least twice a year C. At least once a Month D. At least once a week E. Almost every day

10. Who do you live together now ?

A. Parents B. Only Father C. Only Mother D. Grandparents E. Other ( )

11. Who do you live together when you were 5 years old ?

A. Parents B. Only Father C. Only Mother D. Grandparents E. Other ( )

12. Who do you live together when you were 10 years old ?

A. Parents B. Only Father C. Only Mother D. Grandparents E. Other ( )

14.Which of following statements is true for your family (multiple choices are allowed).

A. I have no contact with my father B. I have no contact with my mother C. I have no contact with both parents

D. I have good contact with my father E.I have good contact with my mother F. I have good contact with both of my parents

15. How many children in your family, you are ranked in (please directly write the number behind)_____.

A. One B. Two C. Three D. more than three

16. Your mother’s education.

A. Primary school or below B. junior high school C. senior high school D. college /university or above

17. Your father’s education.

A. Primary school or below B. junior high school C. senior high school D. college /university or above
18. Age of your mother.
A. below 40 B. 40 to 50 C. above 50
19. Age of your father.
A. below 40 B. 40 to 50 C. above 50
20. What are your parents' marital statuses?
A. Divorced B. Non-divorce
21. Do your parent(s) own a car?
A. No B. Yes, there is one car C. Yes, there are two or more cars
22. Do you have your own bedroom for yourself?
A. No, I share a room with my sibling(s) B. No, I share a room with my father or mother C. Yes, a small room D. Yes, a big room
23. During the past 12 months, how many times did you travel away on holiday with your family?
A. Never B. Once C. Twice D. More than twice
24. What is your academic performance level in your class?
A. low B. lower-middle C. middle D. upper-middle E. among the best
25.How is your health condition ?
A. bad B. not good and not bad C. good
26. Do you smoke?
A. Yes B. No
27. Do you drink alcohol?
A. Yes B. No
28. Do you live in the school dormitory?
A. Yes B. No
Part 5. Open questions
1. Please use two or three sentences to describe your family.
2. Please use two or three sentences to describe the relations between you and your parents in your family

Appendix II Interview Questions

1.Students:

1.1General questions of background information

1.1.1 Migrant youth: age, gender, hometown, time of migration, siblings, live with who, parents' marriage status, school performance, health condition, hobby.

1.1.2 Left-behind Children: Age, Gender, time of parent(s)' migration, siblings, caregiver, parents' marriage status, school performance, health condition, hobby.

1.2 Information at home and school

1.2.1. Where do your parents work? What kind of job do they do?

1.2.2. What do you think of your father and mother? And the relationship between you and your father and mother?

1.2.3. If you were to give some advice to your parents, what would it be?

1.2.4. How often do you talk to your father and mother? And what do you usually talk about?

1.2.5. How do you think the economic condition of your family?

1.2.6. Do you think there is any difference between children from migrant and non-migrant families? What do you think is the difference or how did it influence you?

1.2.7. How do you think of your school life? Do you get along very well with your classmates?

1.2.8. How do you evaluate your teachers?

1.2.9. Do you face some difficulties in your school life? What is that and what will you do to solve your problem?

1.2.10. What are your expectations in school life?

1.2.11. What are your expectations after graduation (from VET school)?

1.2.12. What is the difference do you think the students in VET schools and in general high schools?

1.2.13 The degree of your satisfaction of your life, is it high, medium or low?

1.2.14 The degree of your satisfaction of your school life, is it high, medium or low?

1.2.15 The degree of your confidence of finishing your study successfully, is it high, medium or low?

1.2.16 Do you think there is any difference between children from urban areas and rural areas? What do you think is the difference?

2.Parents

2.1 General questions of background information

Both parents: age, education, job, hometown, the time of migration, working hours per day

2.2 Family life, Communication and Co-activities

2.2.1 How X behave at home?

2.2.2 How often do you come back to your hometown(left-behind)?

2.2.3 How much time you spend with X? What do you usually do when you are together?

2.2.4 How often do you communicate with X? What do you usually talk about?

2.2.5 What do you think of the personality and characteristic of X, strength and weakness?

2.2.6 Do you know the friend(s) of X? How often do they meet?

2.3 School life

2.3.1. How often do you contact X's teacher? When is the last time you communicate with X?

2.3.2. Where did X got to know the VET school he is studying and why did he choose VET school?
2.3.3. Do you think there is a difference between vocational school students and general high school students? What are the differences?
2.3.4. What are your expectations from X in school life?
2.3.5. What are your expectations from X after graduation?
2.4 Other Questions:
2.4.1. Do you think there is any difference between children from migrant and non-migrant families? What do you think the difference between migrant with children and left-behind children in your hometown?
2.4.2. What impacts do you think for X caused by your migration?

3. Caregiver (left-behind children only)

3.1. How do you think of X behave at home?
3.2 How often do you accompany with X and what do you do when you are together?
3.3 How often do you talk or communicate with each other?
3.4. How often do you contact X's teacher?
3.5. What do you think of the personality and characteristic of X, strength and weakness?
3.6. What is your expectation for X in school and after graduation?

4.Teacher

4.1 How is X behave in school? How is X's school performance?
4.2 How often does X's parents contact you? What do you usually talk about?
4.3 What do you think of the personality and characteristic of X, strength and weakness?
4.4 How is the relationships of X and his fellows?
4.5 Did X talk about his family with you before or not? What exactly talk about?
4.6 What is your idea of differences between students from migrant and non-migrant families?
4.7 Do you think there is a difference between vocational school students and general high school students? What are the differences?