AN ANALYTICAL STUDY OF INTENTIONAL SELF-REGULATION AND POSITIVE YOUTH DEVELOPMENT OF ADOLESCENTS

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Abstract

The main aim of this study was to investigate the relationship between intentional self-regulation and positive youth development of adolescents in Myanmar. Then, this study was to examine the intentional self-regulation of adolescents by gender, specialized subject and parents' education level. In addition, this study was to analyze adolescents' positive youth development by gender and parents' education level. In this study, a total of 1110 participants, Grade 10 and Grade 11 students were selected from Basic Education Schools by using random sampling technique. Descriptive survey method was used. This study was conducted at 6 Regions and 4 States in Myanmar. Selection, Optimization and Compensation (SOC) Questionnaire developed by Geldhof et al., (2015) (Cronbach's alpha = 0.82) was used to measure the intentional self-regulation of adolescents. Then, Positive Youth Development Inventory developed by Arnold (2012) (Cronbach's alpha = 0.92) was used to examine the positive youth development of adolescents. According to the results of independent samples *t* - test, it was found that there were significant differences in intentional self-regulation by gender and specialized subject. Moreover, the ANOVA results revealed that there were also significant differences in intentional self-regulation by parents' education level. Concerning positive youth development of adolescents, the results of independent samples *t*-test showed that there were significant differences in positive youth development by gender. Then, ANOVA results showed significant differences in positive youth development by parents' education level. Moreover,Pearson's Product Moment Correlation revealed that the intentional self-regulation of adolescents was positively correlated with their positive youth development (r = 0.635, p<0.01). Therefore, it can be concluded that the high quality of intentional self-regulation can affect the well positive youth development of adolescents.

Keywords: Intentional Self-Regulation, Positive Youth Development, Adolescent

Introduction

Importance of the Study

Today's young people, adolescents, belong to the most promising generation in the history of the world. They stand at the summit of the ages. Most adolescents encounter identity confusion. They have trouble defining what they want to do, what they want to be and what thing is important for them. Thus, intentional self-regulation has become recognized for its foundational role in promoting wellbeing across the lifespan, including physical, emotional, social and economic health and educational achievement. During adolescence, young people often explore their identities and thinking about pathways into adulthood. Their increasing cognitive and behavioral capacities provide them with the tools for understanding and evaluating possible identities task. In addition, many have pointed to the importance of having the skills to self-regulate and maintain a positive sense of future. The current study investigated the role of intentional self-regulation or youth's goal-directed skills and youth's hopeful expectations about the future in predicting positive youth development.

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Aim of the Study

The main aim of this study is to investigate the relationship between intentional self-regulation and positive youth development of adolescents.

The specific objectives of this study are described as follows.

1. To explore the intentional self-regulation of adolescents
2. To find out the differences of intentional self-regulation during adolescence by gender, specialized subject and parents' education level
3. To examine the differences of positive youth development during adolescence by gender and parents' education level
4. To investigate the relationship between intentional self-regulation and positive youth development of adolescents

Definitions of Key Terms

Intentional Self-Regulation: Intentional self-regulation is defined as goal-directed behavior that is aimed at harmonizing an individual's personal goals with demands and resources in the environment. (Gestsdottir & Lerner, 2008)

Positive Youth Development: Development that promotes positive outcomes for young people by providing opportunities, relationships and supports to promote outcomes of competence, confidence, connection, character and caring. (Lerner et al.,2006)

Adolescent: An adolescent is a young person between ages 10 and 19 who is developing from childhood to adulthood. (World Health Organization, 2010)

Review of Related Literature

Intentional Self-Regulation Theory

Theories of intentional self-regulation typically focus on goal-directed behaviors, such as, goal selections, goal pursuit and goal management. The theoretical model of intentional self-regulation---the Selection(S), and Optimization(O) with Compensation(C), (SOC) model was developed by Baltes and colleagues (Baltes, 1997; Baltes & Baltes, 1990; Freund & Baltes, 2002). It is an action-theoretical approach to self-regulation. Action theories, such as, SOC are based on the assumption that human behavior is goal-directed. The SOC model is a comprehensive theoretical framework that discusses goal setting and goal pursuit within a life-span perspective about successful development within and across different domains of functioning (Baltes, 1997, Baltes & Baltes, 1990; Baltes & Dickson, 2001; Freund & Baltes, 2002; Wiese, Freund & Baltes, 2000). According to Baltes and Baltes (1990), across life people encounter both expected and normative events as well as unexpected and uncontrolled events. Each person must make selections from an array of individual or contextual resources available or potentially attainable in order to activate or to secure the means that will contribute to a good fit between the person and the context. Success in making these choices requires that individuals identify appropriate goals and find ways to maximize the use of their resources and minimize the effects of their deficits to reach the goals they have set (Baltes, 1997). The SOC approach emphasizes the self-regulatory processes: Elective Selection, Optimization, Compensation and Loss-based Selection.

Positive Youth Development

Positive youth development (PYD) refers to childhood and adolescents developmental experiences that provide optimal preparation for the attainment of adult potential and well-being. PYD views youth as having assets to be supported, nurtured and developed rather than as having problems to be solved and risks to be managed. Building the assets and skills of adolescents can result in both immediate and long-term positive effects on the mental and physical health, economic development and overall well-being of adolescents, their families and their communities (Patton et al., 2016). Successful negotiation of adolescence is marked not only by the avoidance of problems such as substance abuse, school failure, oppositional behavior and depression (Pittman, Irby & Ferber, 2001), but also by the successful transition into adulthood as a healthy, happy, fully functioning member of society (Furstenberg & Eccles, 2000). PYD concept is built from a framework known as the "5Cs" of positive youth development (Lerner, 2009). Developmental scientists have suggested that positive youth development encompasses psychological, behavioral and social characteristics that reflect "Five Cs". Those "Cs" are competence, confidence, connection, character and caring. A child or adolescent who develops with Five Cs is considered to be thriving. This model of PYD emphasizes the strengths of adolescents and as a consequence enables youth to be seen as resources to be developed. The model pointed out that positive development occurs if the strengths of youth enormous potential for systematic growth are aligned systematically with positive, growth promoting resources in the ecology of youth (Benson, 2006).

Method

Research Design

Descriptive Survey method was used in this study.

Participants of the Study

There were 1110 participants in the present study. The selected participants are Grade 10 and Grade 11 students from Nay Pyi Taw, Mandalay Region, Magway Region, Yangon Region, Bago Region, Ayeyarwaddy Region, Kachin State, Shan State, Mon State and Kayar State. Selected participants consist of 458 males and 652 females.

Instruments

The first instrument is the Selection, Optimization and Compensation (SOC) Questionnaire which is developed by Geldhof et al., (2015). This instrument consists of 24 items and which are examined by four-point Likert scale to measure intentional self-regulation of adolescents by four subscales: elective selection, optimization, compensation and loss-based selection. For positive youth development variable, Positive Youth Development Inventory (PYDI) (Arnold et al., 2012) is used by four-point Likert scale. It consists of five subscales: Competence, Confidence, Connection, Character and Caring.

Data Analysis and Findings

By using the statistical analysis, the collected data are analyzed and the results are described in the following session.

Table 1 Mean and Standard Deviation of Intentional Self-Regulation of Adolescents

Variables	*N*	Minimum	Maximum	Mean	*SD*
Elective Selection	1110	6	29	18.89	2.842
Optimization	1110	6	30	18.54	2.537
Compensation	1110	6	30	18.89	3.000
Loss Based Selection	1110	6	30	18.39	2.658
Intentional Self-Regulation	1110	24	119	74.66	8.654

Intentional self-regulation constitutes elective selection, optimization, compensation and loss-based selection. In order to investigate whether there were gender differences in intentional self-regulation of adolescents the mean scores of males and females in each subscale of intentional self-regulation were analyzed in Table 2.

Table 2 Mean, Standard Deviation and Independent Samples *t* -test Results of Intentional Self-Regulation by Gender

Subscale	Gender	*N*	Mean	*SD*	*t*	*P*
Elective Selection	Male	458	18.24	3.325	-6.020***	.000
	Female	652	19.27	2.358		
Optimization	Male	458	18.51	2.830	- 0.374***	.000
	Female	652	18.56	2.310		
Compensation	Male	458	18.57	3.659	-2.916**	.004
	Female	458	19.11	2.413		
Loss Based Selection	Male	458	18.45	2.832	- 0.711*	.024
	Female	652	18.34	2.530		
Intentional Self-Regulation	Male	458	73.78	10.068	-2.854***	.000
	Female	652	75.28	7.449		

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

According to the Table 2, the results of independent sample *t*-test confirmed that there were significant differences in all subscales of intentional self-regulation by gender. The mean scores of female adolescents were higher than the mean scores of male adolescents in elective selection subscale, optimization subscale and compensation subscale. But, in loss-based selection subscale, the mean scores of male adolescents were higher than the female mean scores. In the intentional self-regulation of adolescents, the female adolescents were significantly higher than the male adolescents.

Table 3 Mean, Standard Deviation and Independent Samples *t*-test Results of Intentional Self-Regulation by Specialized Subject

Subscale	Specialized Subject	*N*	Mean	*SD*	*t*	*p*
Elective Selection	STAMS-1	570	18.49	3.058	-4.252***	.000
	STEAMS-1	540	19.21	2.544		
Optimization	STAMS-1	570	18.33	2.431	- 2.900*	.024
	STEAMS-1	540	18.77	2.627		
Compensation	STAMS-1	570	18.49	3.063	-4.508***	.000
	STEAMS-1	540	19.30	2.878		
Loss Based Selection	STAMS-1	570	18.34	2.598	- 0.549	.118
	STEAMS-1	540	18.43	2.722		
Intentional Self-Regulation	STAMS-1	570	73.66	8.662	-3.977***	.000
	STEAMS-1	540	75.71	8.526		

Note: *p<0.05, **p<0.01

According to Table 3, there were significant differences in intentional self-regulation of adolescents by their specialized subjects. The mean scores of Science students were slightly higher than the mean scores of Art students in elective selection subscale, optimization subscale, compensation subscale and intentional self-regulation. But there was no significant difference in loss-based selection subscale. This result showed that intentional self-regulation of Science students would be better than Art students.

Table 4 ANOVA Results of Mean Comparison for Intentional Self-Regulation by Father's Education Level

Subscale	Education Level	*N*	Mean	*SD*	*F*	*p*
Elective Selection	Graduate	161	18.60	2.771	1.180	.318
	High School	319	18.97	3.022		
	Middle School	358	18.93	2.935		
	Primary School	222	18.85	2.586		
	No Schooling	50	18.20	2.167		
Optimization	Graduate	161	18.81	2.834	1.571	.180
	High School	319	18.65	2.579		
	Middle School	358	18.53	2.613		
	Primary School	222	18.34	2.220		

Subscale	Education Level	*N*	Mean	*SD*	*F*	*p*
	No Schooling	50	17.98	1.857		
Compensation	Graduate	161	20.34	3.298	12.272***	.000
	High School	319	18.87	2.826		
	Middle School	358	18.46	2.954		
	Primary School	222	18.65	2.878		
	No Schooling	50	18.48	2.613		
Loss Based Selection	Graduate	161	19.27	3.416	6.376***	.000
	High School	319	18.25	2.565		
	Middle School	358	18.39	2.530		
	Primary School	222	17.93	2.348		
	No Schooling	50	18.40	2.010		
Intentional Self-Regulation	Graduate	161	77.01	9.185	4.177**	.002
	High School	319	74.73	8.519		
	Middle School	358	74.30	9.062		
	Primary School	222	73.77	7.896		
	No Schooling	50	73.06	6.601		

Note: **p<0.01, ***p<0.001

According to the above Table 4, there was a significant difference in compensation subscale, loss-based selection subscale and intentional self-regulation of adolescents by their fathers' education level at 0.01 level and 0.001 level respectively. Then, Tukey HSD multiple comparisons were conducted to find out the significant differences of fathers' education level.

Table 5 Results of Tukey HSD Multiple Comparisons for Intentional Self-Regulation by Father's Education Level

Subscale	(I) Father's Education	(J) Father's Education	Mean Difference (I-J)	*p*
Compensation	Graduate	High School	1.470*	.000
Compensation	Graduate	Middle School	1.877*	.000
		Primary School	1.687*	.000
		No Schooling	1.855*	.001
	Graduate	High School	1.019*	.001

Subscale	**(I) Father's Education**	**(J) Father's Education**	**Mean Difference (I-J)**	***p***
Loss Based Selection		Middle School	0.873*	.004
		Primary School	1.335*	.000
Intentional Self-Regulation	Graduate	Middle School	2.702*	.050
		Primary School	3.236*	.009
		No Schooling	3.946	.003

According to Table 5, Tukey HSD results, the adolescent who possesses graduate father would be higher than the lower educated father's adolescent in compensation, loss- based selection and the whole subscale of intentional self-regulation.

Table 6 ANOVA Results of Mean Comparison for Intentional Self-Regulation by Mother's Education Level

Subscale	**Education Level**	***N***	**Mean**	***SD***	***F***	***p***
Elective Selection	Graduate	161	18.55	2.974	1.240	.292
	High School	319	18.94	3.059		
	Middle School	358	18.92	2.871		
	Primary School	222	18.98	2.522		
	No Schooling	50	18.38	2.757		
Optimization	Graduate	161	19.41	3.154	6.955***	.000
	High School	319	18.45	2.521		
	Middle School	358	18.40	2.532		
	Primary School	222	18.42	2.123		
	No Schooling	50	17.92	1.924		
Compensation	Graduate	161	20.01	3.271	8.921***	.000
	High School	319	18.96	3.186		
	Middle School	358	18.63	2.977		
	Primary School	222	18.65	2.529		
	No Schooling	50	18.05	2.809		
Loss Based Selection	Graduate	161	18.46	3.138	.945	.437
	High School	319	18.58	2.796		
	Middle School	358	18.43	2.662		

Subscale	Education Level	*N*	Mean	*SD*	*F*	*p*
	Primary School	222	18.21	2.329		
	No Schooling	50	18.05	2.039		
Intentional Self-Regulation	Graduate	161	76.44	9.496	3.458**	.008
	High School	319	74.92	9.031		
	Middle School	358	74.37	8.909		
	Primary School	222	74.27	7.605		
	No Schooling	50	72.41	7.088		

Note ***p*<0.01, ****p*<0.001

According to the above Table 6, there was a significant difference in compensation subscale, optimization subscale and the whole subscale of intentional self-regulation of adolescents by their mother' education level at 0.01 level and 0.001 level respectively. Then, Tukey HSD multiple comparisons were conducted to find out which education level of mother were significant differences.

Table 7 Results of Tukey HSD Multiple Comparisons for Intentional Self-Regulation by Mother's Education Level

	(I) Mother's Education	(J) Mother's Education	Mean Difference (I-J)	*p*
Optimization	Graduate	High School	.961*	.001
		Middle School	1.016*	.000
		Primary School	.993*	.000
		No Schooling	1.490*	.000
Compensation	Graduate	High School	1.053*	.003
		Middle School	1.378*	.000
		Primary School	1.357*	.000
		No Schooling	1.959*	.000
Intentional Self-Regulation	Graduate	No Schooling	4.032*	.006

The Table 7 showed that graduate level was significant with high school level, middle school level, primary school level and no schooling level in optimization and compensation subscales. Graduate level was also significant with no schooling level in the intentional self-regulation of adolescents.

Table 8 Mean and Standard Deviation of Positive Youth Development of Adolescents

Variables	N	Minimum	Maximum	Mean	Mean %	SD
Competence	1110	25	70	44.37	79.23	5.483
Confidence	1110	13	45	27.80	77.22	3.769
Connection	1110	11	40	25.63	80.09	3.439
Character	1110	13	45	27.80	77.22	3.769
Caring	1110	13	40	25.54	79.81	3.583
Positive Youth Development	1110	84	240	150.82	71.14	16.344

Table 9 Mean, Standard Deviation and Independent Samples *t* -test Results of Positive Youth Development by Gender

	Subscale	Gender	*N*	Mean	*SD*	*t*	*p*
Positive Youth Development	Competence	Male	458	44.83	5.891	2.374*	.018
		Female	652	44.04	5.158		
	Confidence	Male	458	28.13	4.000	2.454*	.014
		Female	652	27.57	3.582		
	Connection	Male	458	25.75	3.664	.968	.333
		Female	652	25.55	3.272		
	Character	Male	458	28.13	4.000	2.454*	.014
		Female	652	27.57	3.582		
	Caring	Male	458	25.54	3.784	.011	.991
		Female	652	25.54	3.438		

Note: *p<0.05

According to the results of independent sample *t*-test analysis, the significant difference was found in competence, confidence and character scales ($p < 0.05$). However, there was no significant difference in connection and caring subscales by gender. After that, independent sample *t*-test analysis was conducted to see the differences of positive youth development by Grade. The results were reported in the following table 10.

Table 10 ANOVA Results of Mean Comparison for Positive Youth Development by Father's Education Level

		Education Level	***N***	**Mean**	***SD***	***F***	***P***
Positive Youth Development	Competence	Graduate	161	45.18	5.842	3.755**	.005
		High School	319	44.90	5.375		
		Middle School	358	44.23	5.754		
		Primary School	222	43.36	4.920		
		No Schooling	50	43.74	4.707		
	Confidence	Graduate	161	28.38	4.097	5.191***	.000
		High School	319	28.35	3.663		
		Middle School	358	27.57	3.922		
		Primary School	222	27.12	3.411		
		No Schooling	50	27.18	3.015		
	Connection	Graduate	161	25.70	3.942	1.178	.319
		High School	319	25.94	3.351		
		Middle School	358	25.54	3.501		
		Primary School	222	25.37	3.156		
		No Schooling	50	25.26	2.933		
	Character	Graduate	161	28.38	4.097	5.191***	.000
		High School	319	28.35	3.663		
		Middle School	358	27.57	3.922		
		Primary School	222	27.12	3.411		
		No Schooling	50	27.18	3.015		
	Caring	Graduate	161	26.27	3.737	6.502***	.000

		Education Level	*N*	Mean	*SD*	*F*	*P*
		High School	319	26.01	3.588		
		Middle School	358	25.30	3.599		
		Primary School	222	25.01	3.398		
		No Schooling	50	24.22	2.881		

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

The results of ANOVA table explained that the positive youth development of adolescents was significantly different according to their fathers' education level. Moreover, the competence, confidence, character and caring scales were also significantly different. But the connection scale was not significant by their fathers' education level.

And then, Tukey HSD multiple comparisons was conducted and the results were shown in the following Table 11.

Table 11 Results of Tukey HSD Multiple Comparisons for Positive Youth Development by Father's Education Level

Subscale	(I) Father Education	(J) Father Education	Mean difference (I-J)	*p*
Competence	Graduate	Primary School	1.815*	.012
	High School	Primary School	1.538*	.011
Confidence	Graduate	Primary School	1.257*	.011
	High School	Primary School	1.226*	.002
Character	Graduate	Primary School	1.257*	.011
	High School	Primary School	1.226**	.002
Caring	Graduate	Middle School	.974*	.032
		Primary School	1.264**	.005
		No Schooling	2.053**	.003
	High School	Primary School	1.000*	.011
		No Schooling	1.789**	.008

According to the results of Table 11, adolescents who possess graduate father were higher than the adolescents who possess father with primary education in competence, confidence, character and caring subscales of positive youth development.

Table 12 ANOVA Results of Mean Comparison for Positive Youth Development by Mother's Education Level

	Subscale	**Education Level**	***N***	**Mean**	***SD***	***F***	***p***
Positive Youth Development	Competence	Graduate	175	44.57	5.842	3.755**	.005
		High School	240	45.16	5.375		
		Middle School	344	44.43	5.754		
		Primary School	275	43.87	4.920		
		NoSchooling	76	42.89	4.707		
	Confidence	Graduate	175	27.77	4.097	5.191***	.000
		High School	240	28.65	3.663		
		Middle School	344	27.85	3.922		
		Primary School	275	27.33	3.411		
		No Schooling	76	26.68	3.015		
	Connection	Graduate	175	25.39	3.942	1.178	.319
		High School	240	26.16	3.351		
		Middle School	344	25.73	3.501		
		Primary School	275	25.43	3.156		
		No Schooling	76	24.78	2.933		
	Character	Graduate	175	27.77	4.097	5.191***	.000
		High School	240	28.65	3.663		
		Middle School	344	27.85	3.922		
		Primary School	275	27.33	3.411		
		No Schooling	76	26.68	3.015		
	Caring	Graduate	175	25.67	3.737	6.502***	.000
		High School	240	26.25	3.588		
		Middle School	344	25.60	3.599		
		Primary School	275	25.12	3.398		
		No Schooling	76	24.17	2.881		

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

According to the ANOVA Table 12, positive youth development of adolescents were also significant different among their mothers' education level at 0.01 level and at 0.001level respectively. Tukey HSD multiple comparisons were also conducted.

Table 13 Results of Tukey HSD Multiple Comparisons for Positive Youth Development by Mother's Education Level

Subscale	(I) Mother Education	(J) Mother Education	Mean difference (I-J)	*p*
Competence	High School	No Schooling	2.268*	.014
Confidence	High School	Primary School	1.320**	.001
		No Schooling	1.970**	.001
Connection	High School	No Schooling	1.382*	.019
Character	High School	Primary School	1.320**	.001
		No Schooling	1.970**	.001
Caring	Graduate	No Schooling	1.503*	.018
	High School	Primary School	1.134**	.003
		No Schooling	2.083***	.000
	Middle School	No Schooling	1.434*	.013

According to the results of Table 13, adolescents who possess graduate and high school mothers were higher than the adolescents who possess primary education schooling mothers and no schooling mothers in competence, confidence, connection, character and caring subscales of positive youth development.

Relationship between Intentional Self-Regulation and Positive Youth Development of Adolescents

First of all, as one of the objectives of the study, the correlational analysis was used to find out whether there is a relationship between intentional self-regulation and positive youth development of adolescents. The result was shown in the following table 14.

Table 14 Correlation between Intentional Self-Regulation and Positive Youth Development of Adolescents

Variables	Intentional Self-Regulation	Positive Youth Development
Intentional Self-Regulation	1	.635**

**Correlation is significant at the 0.01 level.

According to the Table 14, the result revealed that there was a significant relationship between intentional self-regulation and positive youth development because the correlation coefficient was statistically significant ($r = .635$, $p < 0.01$). So, it can be said that intentional self-regulation is positively correlated with their positive youth development. In other words, this means that if the adolescents' intentional self-regulation is higher, their positive youth development will be higher.

Discussion and Suggestions

In this study, the significant differences in intentional self-regulation and positive youth development of adolescents through the socio-demographic variables were examined. The intentional self-regulation of adolescents was examined by gender, specialized subject and parents' education level. According to the results, there were significant differences by gender, specialized subject and parents' education level in intentional self-regulation. By independent sample *t* - test results, the female adolescents were significantly higher than the male adolescents in elective selection, optimization and compensation subscales of intentional self-regulation by gender. However, significant differences were not found in loss-based selection subscale by gender. And then, by independent sample *t* test results, the science specialized students were significantly higher than the art specialized students in all subscales of intentional self-regulation. Moreover, ANOVA results showed that the adolescents of higher education level parents were significantly higher than the adolescents of lower education level parents in intentional self-regulation.

In positive youth development of adolescents, there were significant differences by gender, father's education level and mother's education level. According to the results of independent sample *t*-test analysis, the significant difference was found in competence, confidence, character scales by gender. However, there was no significant difference in connection and caring subscales by gender. The results of ANOVA explained that the positive youth development of adolescents was significantly different according to their fathers' education level and their mothers' education level at 0.01level and at 0.001level respectively. Moreover, there was a positive correlation between intentional self-regulation and positive youth development of adolescents. The high quality of intentional self-regulation can cause the well positive youth development of adolescents. Thus, the findings of this study suggest that the adolescents should be cultivated to be well self-regulated students in enhancing the positive youth development of adolescents.

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References

Arnold, M. E., Nott, B. D., & Meinhold, J. L. (2012). *The Positive Youth Development Inventory*. Oregon State University.

Baltes, P.B., & Baltes, M.M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P.B. Baltes & M.M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). New York: Cambridge University

Baltes, P.B. (1997). On the incomplete architecture of human ontology: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist, 23*, 366–380.

Baltes, B.B., & Dickson, M.W. (2001). Using life-span models in industrial-organizational psychology: The theory of selective optimization with compensation. *Applied Developmental Science, 5*, 51–62.

Benson, P. L. (2006). Adolescent development in social and community context: A program of research. *New Directions for Youth Development,95,* 123–147.

Freund, A. M., & Baltes, P.B. (2002). Life management strategies of selection, Optimization and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology, 82, 642-662.*

Furstenberg, F., Cook, T. & Eccles, J. (2000). *Managing to make it: Urban families in adolescent success*. Chicago, IL: University of Chicago Press.

Geldhof, G. J., Little, T. D., & Colombo, J. (2015). Self-regulation across the lifespan. In M. E. Lamb, A. M.

Patton, G.C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., et al. (2016). *Our future: a lancet commission on adolescent health and well-being.*

Pittman, K. & Ferber, T. (2001). Unfinished Business: Further Reflections on a Decade of Promoting Youth Development. In P. L. Benson, K. J. Pittman (Eds.), *Trends in Youth Development: Visions, Realities and Challenges* (pp. 4-50). Norwell, MA: Kluwer Academic.

Wiese, B. S., Freund, A. F., & Baltes, P. B. (2000). Selection, optimization, and compensation: An action-related approach to work and partnership. *Journal of Vocational Behavior*, 57, 273-300.