

Institutional Support, Psychological Adjustment, and School Competence: The Mediating Role of Social Capital among Disadvantaged Adolescents

Simachew Ayalew^{12,*} & Tamirie Andualem¹

¹School of Psychology, College of Education and Behavioral Studies, Addis Ababa University

²Department of Psychology, Institute of Education and Behavioral Sciences, Dilla University

* Corresponding author: **Simachew Ayalew**

Abstract

Objective: Adolescence, a turbulent time marked by stress and rapid changes, making teenagers more susceptible to psychological issues. Socioeconomic factors, particularly poverty, further exacerbate these problems. Conversely, most African societies, including Ethiopia, have a potential untapped social capital resources rooted in socio-cultural values and norms that can be used to care and support vulnerable and disadvantaged groups of the society. Thus, this article aims to uncover the contributions of such resources and institutional support for the psychological adjustment and school competence of disadvantaged adolescents in Addis Ababa, Ethiopia. **Method:** SEM based structural path analysis was employed to test the possible direct and indirect effects. **Results:** The study found significant correlations between variables, explaining 37% and 61% of the variance in psychological adjustment and school competence respectively. Path analysis showed significant direct and indirect effects, revealing that institutional support indirectly affects psychological adjustment and school competence through family and peer social capital. Institutional support improves psychological adjustment by fostering family social capital resources, but it exacerbates problem behaviors and lowers adolescent psychological adjustment through peer influence. It also positively impacts adolescents' school competence by enhancing peer social capital resources. **Conclusion:** The results suggested that institutional support has an essential indirect influence on the psychological adjustment and school competence of disadvantaged adolescents through social capital variables. Thus, future studies are needed to fully understand the role different social contexts and social support in protecting and improving the wellbeing of vulnerable children and adolescents in Ethiopia.

Key words: Social capital, Institutional Support, Disadvantaged Adolescent, Psychological Adjustment, School Competence

1. Introduction

Adolescence is a period characterized by upheavals and difficulties that lead adolescents to experience emotional and behavioral challenges, and go through significant behavioral and psychological adjustments. Moreover, the period is also conceptualized as a unique vulnerability to stressful life events, which have been associated with adolescent internalizing and externalizing problems (Fresco, Alloy, & Reilly-Harrington, 2006; Grant et al., 2003). Research on Indian orphans showed adolescents facing emotional and behavioral issues such as hyperactivity disorder (8%), peer problems (38%), and prosocial behavior (23%) (Sujatha & Jacob, 2014). Australian findings echoed these results, with internalizing problems (18%) more common than externalizing ones (7%) among school adolescents (Philipp et al., 2018). These emotional and behavioral difficulties negatively impact emotional wellbeing and academic performances (Sánchez-García et al., 2018).

This problem-prone period has further exacerbated by the escalating and persistent socio-economic factors including poverty (Berry & Guthrie, 2003; Chernet, 2001; Skinner, et al., 2006) that made adolescents at a heightened risk and disadvantage. Besides, chronic poverty has frequently been mentioned as a major vulnerability factor that influences the wellbeing of low-income families and their children. For instance, family poverty was found to be a high predictor of adolescents' and young adults' anxiety and depression (Najman et al., 2010), and food insecurity indirectly influenced the psychological adjustment of adolescents in low-income families (Kotchick, Whitsett, & Sherman, 2020). These literatures in general pointed out that the poverty level of the family is among a major vulnerability factor that exposes children and adolescents to experience multiple psychosocial challenges than their orphan status, which underlies that child protection efforts need to address the economic disadvantage or poverty level of the family and the community in order to promote the wellbeing of disadvantaged adolescents.

On the other hand, social support and social capitals, which are rooted in the traditional care mechanisms of poor countries, can play a protective role for multiple psychosocial problems for marginalized and disadvantaged members of the society, especially teenagers (Abebe, 2008; Foster, 2000; Tottinham, 2012). Moreover, international organizations also allude that most poor developing countries in sub-Saharan Africa, have high stocks of social capital (UNICEF, 1989; Save the Children, 2003; ISS/UNICEF, 2004) that can be tapped to maximize the care and support of the growing number of orphan and vulnerable children. Moreover, social capital plays an important role in the growth of economically disadvantaged children and adolescents during their transition to adulthood (Coleman, 1988). It is also suggested that human development is shaped by multiple

social contexts, especially the most immediate environments (parents, peers and child care homes) have the strongest influence (Bronfenbrenner,1989).

Nonetheless, modern child care strategies predominantly concentrate on orphaned children, who only constitute a minor fraction of all vulnerable children. Consequently, the requirements of a substantial number of children and adolescents remain unfulfilled and overlooked.Guided by international communities and donor agencies, certain Non-Governmental Organizations (NGOs) are assisting vulnerable children within their families and communities. This includes bolstering traditional care methods with economic interventions, empowering families to support their own children (United Nations General Assembly, 2010).Ethiopia, as one of African countries that started child care reform towards deinstitutionalization, there are some efforts to provide outreach services for disadvantaged children and adolescents through family and community based approach by NGOs working on destitute children and families.

The contributions of such support for the wellbeing of disadvantaged adolescents did not yet studied so far.There are also little or no studies conducted on the protective role of social capital for the different social problems, including psychological adjustment and academic competence, especially in relation to disadvantaged adolescents.In addition, studies that combine institutional support and social capital variables in a study to understand their relationship with the psychosocial outcomes of disadvantage adolescents are scarce in Ethiopian contexts, while the situation of the problem is increasing alarmingly. Consequently, this study is designed to produce empirical data for the observed gap by exploring the relationships of institutional support and social capital variables with the psychological adjustment and school competence among disadvantaged adolescents in Addis Ababa, Ethiopia. Figure 1 below presents the conceptual framework of the study.

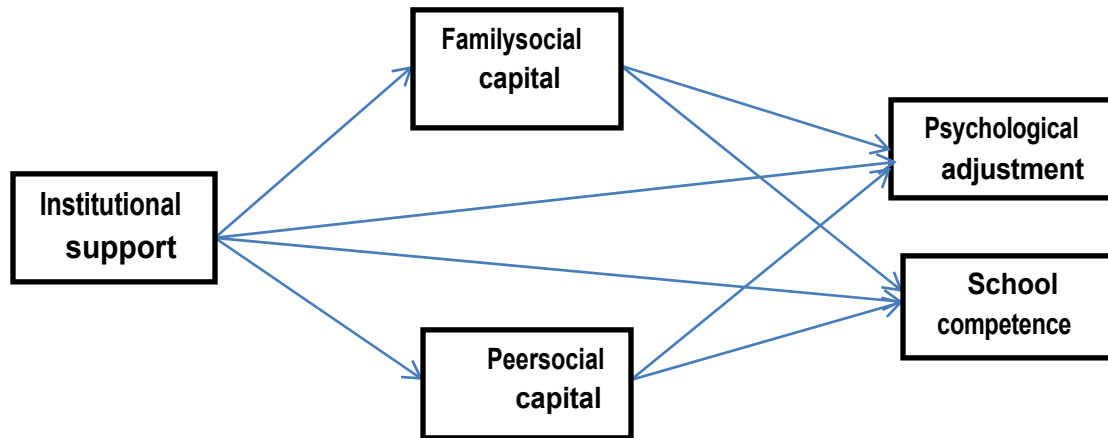


Fig.1 Conceptual Framework of the Study

2. Materials and Methods

2.1 Participants

The participants of this correlational study were adolescents of poor families living with their families and are currently supported by institution. The target institution of this study is a Charitable Non-Governmental Organization working on destitute children and families through family and community-based approach. That is, the institution is providing the support with the intention of strengthening the family and the community capacity in the long run while addressing their basic needs to some extent. A total of 250 participants aged 12 to 18 years were randomly selected and filled the questionnaires. However, 2 questionnaires were excluded because the participants were below the required age level, and questionnaires were partly filled. Thus, the final analysis was carried out based on the responses of 248 (male=116 and female=132) participants, with an average age of 15.2 years and standard deviation 1.79 years. The study was approved by the school of psychology and the institution supporting the participants through yielding verbal consent to collect data from its beneficiaries (adolescents). Moreover, as participants of the study are all below 18 years and disadvantage group, signed parental informed consent and ethical clearance from the school Research Ethic Committee were obtained.

2.2 Data collection instruments

Measures of social capital, institutional support, psychological adjustment, and school competences were used to collect the pertinent data.

Family social capital was assessed in terms of three indicators; parent-adolescent relationship quality, parental monitoring and parental support measured by parent-adolescent relationship scale (12 items) (Burke, Dittman, Haslam & Ralph, 2021), parental support scale (15 items) (Malecki, Demaray, & Elliott, 2000), and parental monitoring scale (9 items) (Stattin & Keer, 2000) respectively. The first two scales were a 6-point Likert scales and converted to a 5-point scale due to practicality reasons that the later suggested to be less confusing, easy to read and complete, and to increase response rate (Bouranta, Chitiris, & Paravantis, 2009). Moreover, scholars also suggested that the psychometric quality of a scale is independent to the number of responses of the sale (Brown, Wilding, & Coulter, 1991; Matell & Jacoby, 1971). All of these scales are answered in a 5-point Likert scale responses with reliability coefficient ranging from .72 (parent-adolescent relationship scale) to .85 (parental support scale).

Peer social capital was measured by friendship quality scale (Bukowski, Hoza, & Boivin, 1994), which consists of 23 items presented in five dimensions or subscales (companionship, conflict, help, security, and closeness) with reliability index ranging from 0.71 to 0.86. The scale used 5-point Likert scale responses ranging from, 5 (strongly agree) to 1 (strongly disagree). Finally, conflict subscale items are negatively worded and then these items were reverse scored so that higher scores are interpreted as high peer social capital.

Institutional support was measured using the adapted Orphan and Vulnerable Children's Wellbeing Tool developed by Catholic Relief Services (CRS; 2009). The tool is designed to assess ten domains (food and nutrition, shelter/environment, protection, family, health, spirituality, mental health, education, economic opportunities, and community cohesion) of services provided by humanitarian institutions from the children's perspective. However, only nine dimensions were used, excluding "spirituality." The tool has been pilot tested on children and has been used in many African countries to measure children's wellbeing. The well-being tool is a self-administered instrument that consists of a total of 33 items rated in three responses: 1 (none of the time), 2 (some of the time), and 3 (all of the time). The tool has high internal consistency and reliability (Cronbach's alpha = .85). Seven items were reverse-coded, and the total score was computed by taking the average of each domain's average. An average score of 23 or above is interpreted as an appropriate score, showing that the support given to children is reasonably good.

School competence was measured by adapted Academic Self-Concept Questionnaire (ASCQ) (Liu & Wang, 2005). The ASCQ has two scales; Academic confidence and academic effort. Academic confidence refers to students feeling and perceptions about their academic competence, while academic effort refers to students' commitment to and

involvement as well as interest in schoolwork. The scale has 20 items presented in two subscales with ten items each, and Cronbach's alphas of .70 for academic confidence and .65 for academic effort, indicating moderate to acceptable level of reliability coefficient. Moreover, the scale also studied and found to be valid, even for student with learning disabilities (Joyce & Yates, 2007). In the scale, negatively worded items (9 items) were reverse coded to facilitate score interpretation, so that higher scores are indicators of higher levels of academic self-concept, and hence high school competence.

Psychological Adjustment was assessed by Strength and Difficulty Questionnaire (SDQ) (Goodman, 1997), which consists of the negative adjustment (emotional and behavioral problem scales) and positive adjustment (prosocial behavior scale). The scale has 25 items presented in five subscales (emotional symptoms, conduct problems, hyperactivity, peer problems, and prosocial behavior) with five items each. It is a self-report instrument rated in a 3-point Likert scale responses (0=Not True, 1=Somewhat True, and 2= Certainly True). The total difficulties scale has a reliability coefficient ($\alpha = 0.78$) and the five subscales ranging from 0.47 (conduct problems) to 0.73 (emotional problem). Total difficulty score is interpreted using the recommended cutoff values of the scale, normal (0-15), borderline (16-19), and abnormal (20-40).

2.3 Procedures

First verbal consent was secured from the institution administrative body by providing letter of cooperation from the College of Education and Behavioral Studies, School of Psychology in Addis Ababa University. After selecting participants, they were informed about the purpose of data collection, their rights in the data collection process as well as the implication of the research for their service provision. Data were collected with the help of social workers, volunteers and assistant researchers. Importantly, ethical approval was secured from the Research Ethics Committee of the School of Psychology at Addis Ababa University, with the reference number SoP/Etho09/2023.

2.5 Methods of Data Analysis

Descriptive statistics, such as mean, standard deviation and percentage were performed for all the variables in the study. Pearson product moment correlation analysis was also carried out for continuous variable to see the existence of significant associations among each other. Finally, Structural Equation Modeling (SEM) using a path model was executed to assess the direct and indirect effect community-based institutional support on psychological adjustment and school competence through family and peers social capitals. Statistical Package for Social Science (SPSS) version 20 was used to manage the data screening and perform the descriptive and correlational analyses. Finally, Analysis of

Moment Structure (AMOS) version 23.0 was employed to evaluate the model fitness, reliability and validity of the measurement models, and to test the structural relationships among study variables.

The model was assessed using popular fit indices: Comparative Fit Index (CFI) and Tucker–Lewis Index (TLI) values of .95 or more for a close fit; Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR) values of .06 or less for a good fit; and less than .08 for an acceptable fit (Brown, 2006, Kline, 2011, and Hu & Bentler, 1999). The chi-square to degree of freedom ratio (CMIN/DF) should be 2 or less (Ullman, 2001). The results, with CMIN/DF= 1.389, CFI= .997, TLI= .989, RMSEA= .040, and SRMR = .030, suggest a good model fit.

3. Results

3.1 Demographic Characteristics

The study was carried out on 248 (female= 53%, N= 132; male= 47%, N= 116) randomly selected children from Ethiopian Orthodox Church (EOC) Child and Family Development Coordination Office. Most (86.2%) of the participants of the study were found in the age range between 12 to 17 years, with the average age of 15.17 years and standard deviation of 1.79. Regarding the educational status, 125 (50%) of the participants are from grade 6 to 8, 71 (28%) are from grade 9 and 10, and the rest 50 (20%) of them are 11 and 12 graders. The table also shows that few number of respondents were grade four and grade five students (See Table 1).

Table 1: *Demographic Characteristics of the Respondents (N=248)*

No	Demographic variables	Labels	Frequency	%
1	Sex	Female	132	53.2
		Male	116	46.8
2	Age <i>Average = 15.2 years with Standard deviations of 1.79 years</i>			
3	Grade	5 & 6	24	9.7
		7 & 8	103	41.5
		9 & 10	71	28.6
		11 & 12	50	20.2

3.2 Descriptive Statistics and Correlation Results

Table 2 also revealed the descriptive statistic and the correlation results among the study variables, including the demographic characteristics of the participants. The result shows that institutional support, peer social capital, and family social capital have negative statistically significant associations with psychological adjustment, indicating higher level of institutional support, family and peer social capitals tends to relate with lower psychological adjustment problems. Moreover, these variables have significant and positive association with adolescents' school competence, suggesting adolescent with higher level of institutional support and social capital resources tends to have higher level of school competence, with peer social capital having the strongest influence. Finally, psychological adjustment and school competence have also significant negative relationships with each other.

Table 2: *Summary of Bivariate Correlation, Mean, and Standard Deviation (N=248)*

Variables	Mean	Std	1	2	3	4	5
1. Psychological adjustment	16.53	5.39	-				
2. Peer social capital	19.32	2.84	-.415**	-			
3. Family social capital	12.87	2.22	-.349**	.311**	-		
4. Institutional support	22.36	2.53	-.496**	.381**	.569**	-	
5. School competence	46.50	6.65	-.288**	.455**	.244**	.343**	-

*p < .05 **p < .01 ***p < .001

3.4.2 Testing the Structural Path model

This section scrutinizes both direct and indirect effects of institutional support, mediator variables, and adolescents' demographic variables. To test the indirect effects, we used 200 boot strap sample with a 95% confidence interval. Table 3 illustrates the summary of direct and indirect path coefficients from the path analysis results.

Table 3: Summary of Direct and Indirect Path Coefficients of Path Analysis Results

Relationships between variables	Direct effects				Indirect effects			
	β	S.E.	C.R.	P	B	Lower	Upper	P
Inst_spt→PSC	.564	.430	1.312	***	-	-	-	-
Inst_spt→FSC	.266	.378	0.704	***	-	-	-	-
Grade→PsyA	-.159	.038	-4.184	.002	-	-	-	-
Inst_spt→PsyA	.037	.353	0.105	.564	-	-	-	-
FSC→PsyA	-.267	.056	-4.768	***	-	-	-	-
PSC→PsyA	.609	.042	14.500	***	-	-	-	-
PSC→Sch_c	.853	.014	60.929	***	-	-	-	-
Grade→Sch_c	-.105	.013	-8.077	.010	-	-	-	-
Inst_spt→FSC→PsyA	-	-	-	-	-.390	-.654	-.176	.007
Inst_spt→PSC→PsyA	-	-	-	-	1.887	1.176	2.483	.018
Inst_spt→PSC→Sch_c	-	-	-	-	1.140	.829	1.384	.014

*p < .05, **p < .01, ***p < .001

Note:Inst_spt = Institutional Support; FSC = Family Social Capital; PSC = Peer Social Capital;

PsyA= Psychological Adjustment; Sch_c = School Competence

As indicated in Table 3, the result disclosed that all the direct effects were significant except, the effects of institutional support on psychological adjustment and school competence. Family social capital, grade, and peer social capital have significant negative effect on psychological adjustment, except the later. Moreover, peer social capital and grade has a significant direct effect on school competence of adolescents, with the former having strong positive effect. Institutional support has also a significant positive effect on family social capital and peer social capital.

Table 3 also presents that institutional support has very strong significant indirect effects on adolescent psychological adjustment via peer social capital (B= 1.89, p < .05) and family social capital (B= -.39, p < .05), and on school competence thorough peer social capital (B= 1.14, p < .05) only. This indicates that institutional support has a protective role on psychological adjustments of adolescents through family social capital, while reinforcing psychological adjustment problems of adolescent through their peers influence. Moreover, peer social capital was also the only significant mediator between institutional support and adolescents' school competence, indicating that the later played

an important facilitative role on the school competence through its influence on the their peers' social capital resource.

4. Discussions

This study examines the direct and indirect effects of institutional support on psychological adjustment and school competence of adolescents as mediated by family and peer social capital. Moreover, the study attempts to explore the potential contributions of demographic characteristics in explaining their psychological adjustment and school competence.

Most of the correlation and the path analysis results of the current study were consistent with many results in the previous literature. For instance, high social capital was inversely related with psychological distress among adolescents (e.g., Li, Jiang, & Fang, 2020; Novak, & Kawachi, 2015) and tends to decrease the mental health problems of school adolescents and children (El-Dardiry et al., 2012; Hunduma et al., 2022; Rothon et al., 2012; Wit et al., 2011). Moreover, social capital improves the behavioral outcomes of children (Turley et al., 2017). More specifically, family social capital influences children's positive mental health (Li, Jiang, & Fang, 2020) suggesting that high family social capital associated with better self-esteem and self-efficacy in children. Similarly, parents investing in their children and create strong social bond can promote prosocial behaviors (Wright, Cullen, & Miller, 2001).

The protective role of institutional support to adolescents' psychological adjustment through its influence on family social capital was partly consistent with finding that underpins support from significant people has an essential influence on the psychological adjustment of unaccompanied children (Wang & Mao, 2015). It is also indicated that social support was inversely related to mental health problems of left behind children (Ye et al., 2017), suggesting that higher social support related with low mental health problems. Similarly, it has been proved that high level of social support leads to better psychological adjustment (Fan, & Fan, 2021; He, An, & Berry, 2019).

Conversely, institutional support intensifies the psychological adjustment difficulties experienced by underprivileged adolescents, a process that is propagated by peer social capital. This result is corroborated by evidence indicating significant detrimental impacts of relational bullying on the subjective wellbeing of adolescents through the mediated effect of social capital (Hu, Cheng, & Du, 2022). This may indicate the down side of social capital in peers. In the same vein, studies on adolescent internalizing symptoms

remarked that the more social capital does not give a guarantee for the better mental health status (Pan et al., 2023). Contrary to this, studies (Yugo & Davidson, 2007; Zambon et al., 2010) suggested higher social capital in peers promotes positive mental health of children and adolescents.

Regarding the positive influences of institutional support, peer and family social capital on adolescents' school competence, Mieziene et al. (2022) reported that social supports from parents, peers and teachers are the most important resources in promoting positive attitudes and outcomes in students' learning. Another supporting evidence also indicated that social support from teachers, peers, and parents can promote positive academic outcomes and prevent negative psychological outcomes during adolescence (Wang, Selman, Dishion, & Stormshak, 2010).

In this study, peer social capital was found to be a significant mediator between institutional support and adolescents' school competence, indicating that the former played an important facilitative role on the school competence through their peers' social capital resource. It has also a strong direct and indirect influence on both psychological adjustment and school competence. This result is somehow consistent with the finding that reported a slightly stronger influence of peer social support on behavioral outcomes than parents and teachers support (Wang & Eccles, 2012). Moreover, peer influences are also found to be an important source of influence on adolescents' positive and problematic behaviors (Wentzel, 1998). Similarly, a study among international students revealed that social support was related to greater academic and psychological adjustment (Lashari, Kaur, & Awang-Hashim, 2018), and also facilitates international students' academic and psychological adjustment by reducing stress (Ellison, Steinfield, & Lampe, 2007; Yeh & Inose, 2003; Zhang & Goodson, 2011). Moreover, social support has an instrumental role in influencing the academic and psychological adjustment of students (Smith & Khawaja, 2011). Besides, Mieziene et al. (2022) reported that social supports from parents, peers and teachers are the most important resources of support in promoting positive attitudes and outcomes in students' learning. Similarly, these social support mechanisms can also promote positive academic outcomes and prevent negative psychological outcomes during adolescence (Wang, Selman, Dishion, & Stormshak, 2010). It is also indicated that support from families and peers has a significant indirect effect on academic achievement (Saeed, Ahmed, Rahman, & Sleman, 2023). In sum, most of the results of this study are supported by previous literature, however, meditational study findings are lacking in the study area.

5. Conclusions

The study revealed significant findings about the variables' relationships. Institutional support, social capital variables, and grade level were found to negatively correlate with the psychological adjustment and positively with school competence of disadvantaged adolescents. The path analysis showed that most direct effects on the adolescents' psychological adjustment and school competence were significant. However, the direct effects of institutional support on psychological adjustment and school competence weren't significant. Moreover, institutional support indirectly affected school competence and psychological adjustment through peer and family social capital, indicating full mediation. Institutional support negatively affected psychological adjustment via family social capital, suggesting its protective role in improving psychological adjustment problems of adolescents. Notably, institutional support facilitates adolescents' school competence and reinforces their psychological adjustment problems. Grade level was the only demographic variable directly affecting both dependent variables. This highlights the need to explore and integrate social capital resources with institutional support to protect and enhance the psychological wellbeing and their educational competence.

Limitations of the Study

Some notable constraints were experienced during this study. First, due to the nature of the research methods used in the study, the findings did not show causation among the variables studied. Second, the study considered various variables but overlooked others like parental socio-demographic characteristics that could impact the adolescents' psychological adjustment. Third, the research also relied solely on children's viewpoints, omitting perspectives from parents or stakeholders that could enrich the study's comprehensiveness and validity. Fourth, the methodology was exclusively quantitative, and findings lacked qualitative data support. Lastly, the study's focus on a single institution limits the generalizability of the results to other vulnerable groups and institutions.

.Acknowledgement

The authors would like to thank children and the administrator of their institution for their earnest participation in the study. We also extend our heartfelt gratitude to Addis Ababa University and Dilla University for financing this study.

Funding : The authors received no financial support.

Conflicting Interests

There is no conflict of interest with respect to the research, authorship, and/or publication of this article.

References

1. Abebe, T. (2008). Ethiopian Childhoods. A Case Study of the Lives of Orphans and Working Children. (Thesis for the degree philosophiaeductor, Trondheim), Norwegian University of Science and Technology
2. Berry, L. & Guthrie, T. (2003). Rapid Assessment: The Situation of Children in South Africa. The University of Cape Town Children Institute—Save the Children, Cape Town.
3. Bouranta, N., Chitiris, L., & Paravantis, J. (2009). The relationship between internal and external service quality. *International Journal of Contemporary Hospitality Management*, 21(3), 275-293.
4. Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development: Revised formulations and current issues* (6). Greenwich, Connecticut: JAI Press.
5. Brown, G., Wilding, R. E., & Coulter, R. L. (1991). Customer evaluation of retail salespeople using the SOCO scale: A replication extension and application. *Journal of the Academy of Marketing Science*, 9, 374-351.
6. Bukowski, W.M., Hoza, B., & Boivin, M. (1994). Measuring friendship quality during pre and early adolescence: The development and psychometric properties of the Friendship Qualities Scale. *Journal of Social and Personal Relationships*, 11, 471-484.
7. Burke, K., Dittman, C. K., Haslam, D., & Ralph, A. (2021). Assessing critical dimensions of the parent-adolescent relationship from multiple perspectives: Development and validation of the Parent-Adolescent Relationship Scale (PARS). *Psychological Assessment*, 33(5), 395-410.
8. Catholic Relief Services (CRS; 2009). Orphans and Vulnerable Children Wellbeing Tool User's Guide .
9. Chernet T (2001). Overview of Services for Orphans and Vulnerable Children in Ethiopia, Addis Ababa.
10. Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, S95-S120.
11. El-Dardiry G, Dimitrakaki C, Tzavara C, et al. (2012) Child health-related quality of life and parental social capital in Greece: An exploratory study. *Social Indicators Research* 105(1), 75-92.
12. Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.

13. Fan, Z., & Fan, X. (2021). Effect of Social Support on the Psychological Adjustment of Chinese Left-Behind Rural Children: A Moderated Mediation Model. *Front. Psychol.* 11:604397.
14. Foster, G. (2000). The capacity of the extended family safety net for orphans in Africa. *Psychology, Health & Medicine*, 5(1), 55-62.
15. Fresco, D. M., Alloy, L. B., & Reilly-Harrington, N. (2006). Association of attributional style for negative and positive events and the occurrence of life events with depression and anxiety. *Journal of Social and Clinical Psychology*, 25, 1140-1159.
16. Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 38(5), 581-6.
17. Grant, K. E., Compas, B. E., Stuhlmacher, A., Thurm, A. E., McMahon, S., & Halpern, J. (2003). Stressors and child and adolescent psychopathology: moving from markers to mechanisms of risk. *Psychological Bulletin*, 129, 447-466.
18. He, B., An, R., & Berry, J. (2019). Psychological adjustment and social capital: a qualitative investigation of Chinese expatriates. *Cross Cultural & Strategic Management*, 26 (1), 67-92.
19. Hu, L., & Bentler, P.M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
20. Hu, W.; Cheng, Y.; Du, R. (2022). Effects of Overt and Relational Bullying on Adolescents' Subjective Well-Being: The Mediating Mechanisms of Social Capital and Psychological Capital. *Int. J. Environ. Res. Public Health*, 19, 11956.
21. Hunduma, G., Deyessa, N., Dessie, D., Geda, B., & Yadeta, T.A. (2022). High Social Capital is associated with Decreased Mental Health Problem among In-School Adolescents in Eastern Ethiopia: A Cross-Sectional Study. *Psychology Research and Behavior Management*, 15, 503-516.
22. Kline, R. (2011). Principles and practice of structural equation modeling, (2nd Ed.). New York: The Guilford Press.
23. Kotchick, B. A., Whitsett, D., & Sherman, M. F. (2021). Food insecurity and adolescent psychosocial adjustment: Indirect pathways through caregiver adjustment and caregiver-adolescent relationship quality. *Journal of Youth and Adolescence*, 50, 89-102.
24. International Social Service (ISS) & United Nations Children's Fund (/UNICEF) (2004) Improving protection for children without parental care: A call for international standards Retrieved from www.crin.org.au
25. Joyce, T. B. Y., & Yates, S. M. (2007). A Rasch analysis of the Academic Self-Concept Questionnaire. *International Education Journal*, 8(2), 470-484.
26. Lashari S. A., Kaur, A., & Awang-Hashim, R. (2018). Home Away From Home— the Role of Social Support For International Students' Adjustment. *Malaysian Journal of Learning and Instruction*, 15(2), 33-54.

27. Li, C., Jiang, S., & Fang, X. (2020). Effects of multi-dimensional social capital on mental health of children in poverty: An empirical study in Mainland China. *Journal of Health Psychology, 25*(6), 853–867.
28. Liu, W. C., & Wang, C. K. J. (2005). Academic Self-Concept: A Cross-Sectional Study of Grade and Gender Differences in a Singapore Secondary School. *Asia Pacific Education Review, 6*(1), 20–27.
29. Malecki, C.K., Demaray, M.K. & Elliott, S.N. (2000). The Child and Adolescent Social Support Scale. Northern Illinois University, DeKalb.
30. Matell, M. S., & Jacoby, J. (1971). Is there an optimal number of alternatives for Likert scale items? I. Reliability and validity. *Educational and Psychological Measurement, 31*(3), 657–674.
31. Mieziene, B.; Emeljanovas, A.; Jusiene, R.; Breidokiene, R.; Girdzijauskiene, S.; Sabaliauskas, S.; Buzaityte-Kasalyniene, J.; Budiene, V.; Eiliakaite, I.; Speicyte-Ruschhoff, E.; et al. (2022). Direct and Indirect Effects of Social Support and School Social Capital on the Academic Success of 11–19-Year-Old Students Using Distance Learning. *Sustainability, 14*, 2131.
32. Najman, J.M., Hayatbakhsh, M.R., Clavarino, A., WilBor, W., O'Callaghan, M.J., & Williams, G.M. (2010). Family Poverty Over the Early Life Course and Recurrent Adolescent and Young Adult Anxiety and Depression: A Longitudinal Study. *Am J Public Health, 100* (9): 1719–1723.
33. Novak, D., & Kawachi, I. (2015). Influence of different domains of social capital on psychological distress among Croatian high school students. *Int J Ment Health Syst* 9:18.
34. Pan, Y., Zhang, Y., Ma, Z., Wang, D., Ross, B., Huang, S., & Fan, F. (2023). The more, the better? Social capital profiles and adolescent internalizing symptoms: A latent profile analysis. *Child Psychiatry and Human Development*, (Preprint).
35. Philipp, J., Zeiler, M., Waldherr, K., Truttmann, S., Dür, W., Karwautz, A. F., & Wagner, G. (2018). Prevalence of emotional and behavioral problems and subthreshold psychiatric disorders in Austrian adolescents and the need for prevention. *Social psychiatry and psychiatric epidemiology, 53*, 1325–1337.
36. Rothon C., Goodwin L., & Stansfeld, S. (2012). Family social support, community “social capital” and adolescents’ mental health and educational outcomes: A longitudinal study in England. *Social Psychiatry and Psychiatric Epidemiology, 47*(5), 697–709.
37. Saeed, K.M., Ahmed, A.S., Rahman, Z.M., & Sleman, N.A. (2023). How social support predicts academic achievement among secondary students with special needs: the mediating role of self-esteem. *Middle East Current Psychiatry, 30*:46.
38. Sánchez-García, M. D. L. Á., Lucas-Molina, B., Fonseca-Pedrero, E., Pérez-Albéniz, A., & Paino, M. (2018). Emotional and behavioral difficulties in adolescence: Relationship with emotional well-being, affect, and academic performance.

39. Save the Children (SCF-2003). A Last Resort: The growing concern about children in residential care; Save the Children's position on residential care. Save the Children, UK
40. Skinner, D., Tsheko, N., Mtero-Munyati, S., Segwabe, M., Chibatamoto, P., Mfecane, S., Chandiwane, B., Nkomo, N., Tlou, S. & Chitiyo, G. (2006) Towards a definition of orphaned and vulnerable children. *AIDS and Behavior*, 10(6):619-626.
41. Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699-713.
42. Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71, 1072-1085.
43. Sujatha, R., & Jacob, S. M. (2014). Study on emotional and behavioural problems among adolescent children in selected orphanages at mangalore. *ZENITH International Journal of Multidisciplinary Research*, 4(7), 253-259.
44. Tottenham, N. (2012). Risk and Developmental Heterogeneity in Previously Institutionalized Children. *Journal of Adolescent Health*, 51(2), S29-S33.
45. Turley, R.N.L, Gamoran, A., McCarty, A.T, & Fish, T.(2017). Reducing children's behavior problems through social capital: A causal assessment, *Social Science Resear*, 61, 206-217.
46. Ullman, J. (2001). Structural equation modeling. In B. Tabachnick & L. Fidell, *Using multivariate statistics*, (4th ed.) (pp. 653-771). Boston: Allyn and Bacon.
47. UNICEF (1989). United Nation's Convention on the Rights of Children, UN; New York.
48. United Nations General Assembly. (2010). Guidelines for the alternative care of children (Resolution No. 64/142). Retrieved March 10, 2010 from www.unhcr.org.
49. Wang, M. T., Selman, R. L., Dishion, T. J., and Stormshak, E. A. (2010). A Tobit regression analysis of the covariation between middle school students' perceived school climate and behavioral problems. *Journal of Research on Adolescence*, 20, 274-286.
50. Wang, M-T and Eccles, J.S (2012). Social Support Matters: Longitudinal Effects of Social Support on Three Dimensions of School Engagement from Middle to High School. *Child Development*, 83(3), 877-89.
51. Wang, S. T., & Mao, S. Q. (2015). The impact of boarding on social-emotional competence of left-behind children: an empirical study in 11 provinces and autonomous region in western China. *J. Educ. Stud.* 11, 111-120.
52. Wentzel, K. R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*, 90, 202-209:
53. Wit, D.D., Karioja, K., & Rye, B.J, et al. (2011). Perception of declining classmate and teacher support following the transition to high school: Potential correlates of increasing student mental health difficulties. *Psychology in the Schools*, 48(6), 556-572:

54. Wright, J.P., Cullen, F.T., & Miller, J.T. (2001). Family social capital and delinquent involvement. *Journal of Criminal Justice*, 29(1), 1- 9.
55. Ye, M., Lv, M. M., Li, L. Z., Mao, T., and Zhang, J. P. (2017). The psychological problems and related influential factors of left-behind adolescents (LBA) in Hunan, China: a cross sectional study. *Int. J. Equity Health*, 16:163.
56. Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counseling Psychology Quarterly*, 16(1), 15-28.
57. Yugo, M., & Davidson, M. J. (2007). Connectedness within social contexts: The relation to adolescent health. *Healthcare Policy = Politiques De Sante* 2(3): 47-55.
58. Zambon A, Morgan A, & Vereecken C, et al. (2010). The contribution of club participation to adolescent health: Evidence from six countries. *Journal of Epidemiology and Community Health* 64(1), 89-95.
59. Zhang, J., & Goodson, P. (2011). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, 35(2), 139-162.