

Family Structure in the Academic Performance of Chinese Junior High School Students

Yanwenjun Liu*

University of Southampton, United Kingdom.

*Corresponding author. Email: 1037152120@qq.com

ABSTRACT

Education is particularly important, both individually and collectively. As an essential part of a student's education, family education is worthy of attention and study. This study aims to find effective ways to address home education issues and improve student achievement by examining the impact of family structure and parental involvement on student learning. This paper does so by using data from China Education Panel Survey 2013-2014 (CEPS). It first explores the relationship between family structure and parental involvement styles and then explores the relationship between parental involvement and student achievement. Analysis of the data shows that parental involvement varies by family structure, and families with stable family structures and a higher level of parental involvement tend to have better student achievements. The results suggest that parents should increase parental involvement in their children's learning through supervision and communication, and increase parental involvement while also trying to strengthen the family structure.

Keywords: Family structure, Parental involvement, Academic performance.

1. INTRODUCTION

Education is a means of promoting social development and progress. A country's education level determines its productivity and economic development [4]. A better-educated person tends to be productive and with a high income. Therefore, the education of teenagers has attracted attention from parents to improve teenagers' academic performance and to achieve a higher level of education [33].

Academic performance is a proper way to reflect a student's educational level and personal development [27], and it is important to study which factors influence student performance in order to improve academic performance and achieve higher educational attainment. An important factor in students' personal development and their progress in achievement is parental involvement [26]. The influence of parental work and socioeconomic status factors on parental involvement is often taken into account in research [31] [29]. But researchers overlook the impact of family structure on parental involvement [19].

A number of recent studies have concluded that family involvement is positively related to student achievement, with more participation resulting in better

student achievement [19] [42] [19] [33] [34] [35]. However, family engagement in students' homework activities is detrimental to academic progress [39] [12]. Jeynes also suggested that family communication across family structures is more important than homework supervision [19]. However, there is a paucity of research on family structure and academic achievement in China. Research on families in China may address variables of family structure, but few studies have been undertaken to investigate the relationship between specific classifications of family structure and student achievement [2] [42]. Therefore, in order to further address the issue of family education in China, it is important to explore the influence of family structure on student achievement. This study first explores the relationship between family structure and parental involvement styles and explores the relationship between parental involvement and student achievement, by analyzing the data from China Education Panel Survey 2013-2014 (CEPS). This article may provide parents with a guide to minimise the negative impact of changes in family structure on their children when they occur, as parents may pre-empt how changes in family structure will affect their children.

2. INTRODUCTION

2.1. Family Structure and Student Achievement

In recent years, divorce rates have been on the rise [32], at the same time women's participation in the economy is on the rise due to the development of society [17]. Due to the fact that women are more involved in economic activities, parental involvement tends to decrease [32]. In addition, contemporary family structures in China are becoming increasingly diverse [43], with non-traditional family units becoming the norm. Family structures are generally categorised into single-parent and two-parent families [22]. A more detailed breakdown of the transition of the parents' marriage, with divorced and remarried families [2]. Single-parent families include divorced families [41], unexpectedly widowed families [16] with only a mother or father. Remarried families are stepfamilies [2]. A two-parent family is generally considered to be one in which the biological parents are alive and the marriage has not changed [22].

Different family structures may have different effects on students' academic performance [1] [34] [16]. It is not only single-parent families that may contribute to lower academic performance [36] [38] [16]; remarried and reconstituted families also have a negative impact on students' psychological well-being [4] and may result in lower academic performance than students from single-parent families [11]. Hadfield et al. Pointed out that changes in family structure, such as widowhood or reorganisation, could cause work stress and emotional instability for all family members and affect family income [15]. Zhao argued that, at the non-compulsory stage, a reduction in family income can leave students behind in their education and parents may not be able to afford school fees in the short term, thus reducing teenagers' access to education [45]. In addition, Zhan and Pandey's study attributed the decline in teenagers' performance to changes in family members, since family members have to devote more energy to their work; adolescents receive less attention from their biological parents or step-parents [41].

A number of studies have investigated family factors on students' achievement. Zhao and Liu believed that family factors affect the family's educational input capital, and greater input capital has a beneficial influence on junior high school students' reading and writing skills [44]. Ding's research suggested that family environment affect student achievement that better family communication and family economics tend to improve student achievement [5]. However, in contrast, Lee discovered that parental participation and parental input capital have a role in the link between student academic accomplishment and family [23]. This means that the lack of parental involvement of the teenager has a detrimental influence on the teenager's

academic performance. This is similar to Hartati et al.'s view that parental absence reduces attention to engagement [16]. Therefore, further exploration of the relationship between family structure and parental involvement is necessary.

2.2. Parental Involvement and Student Achievement

The context of changing family structures may lead to less parental involvement and input than intact families of origin [2]. Some studies suggested that this may be due to the fact that restructured families need more time to adjust to the new family structure [2]. In addition, a substantial amount of evidence demonstrates that parental participation improves student success [8] [39] [33] [34] [20]. For example, active parental involvement has a positive impact on students' ability of self-regulating their learning and their psychological well-being [9] [14]. In particular, active parental involvement contributes more to student achievement [6] [21].

There are many definitions of parental involvement in the literature, with family involvement generally defined as school involvement, communication, monitoring and educational expectations [30] [39] [28]. Jeynes showed that parental communication was significantly correlated with higher achievement among secondary school students [20]. However, not all types of parental participation are connected with a student's academic progress [39] [21]. Some studies suggest that monitoring parental involvement is negative for students' academic achievement [12] [14]. The association between parental participation patterns and student accomplishment has to be investigated further due to contradictions in the research. In addition, the literature on family structure and student achievement in China has been sparse in recent years, with some literature investigating the relationship between family economics [26] [44], family parenting styles [24] and student achievement, however, there lacks research on family structure and academic achievement. Therefore, this study will focus on exploring the effects of family structure and parental involvement on student achievement.

3. METHOD

This study uses a quantitative approach and a secondary data, which were downloaded from the National Survey Data Archive (NSDA) in China. The data is from China Education Panel Survey 2013-2014 (CEPS), an extensive nationally representative tracking survey. Its goal is to uncover the influence of family, school, community, and macro-social systems on people's educational attainment. Two contemporaneous cohorts, junior high school year 1 and junior high school

year 3, were used as the beginning point for the investigation. The survey locations were chosen randomly from twenty-eight county-level units (counties, districts, and cities). In 2013-2014 (CEPS), 112 schools and 438 classes were surveyed; the number of all students in the sampling courses was approximately 20,000. Parent and student questionnaires were mainly used in this study. The information of teacher questionnaires and headmaster questionnaires will be excluded.

The purpose of this study is to explore the impact of family structure and parental involvement on student achievement, by assessing the ways how parents are involved, and their motivations for involvement. The following two main research questions were explored: 1. Does family structure affect parental involvement? 2. What is the impact of family structure and parental involvement on student achievement?

Hypothesis 1: There are differences in family structure and parental involvement.

Hypothesis 2: Parental involvement is positively correlated with student achievement.

Hypothesis 3: Family structure and student achievement are positively correlated, with better family structure leading to better achievement.

The classification of family structure was recreated from the student questionnaire and divided into four classes: two-parent, single-parent, reconstituted, and orphan. Children whose parents are alive and whose parents' marital relationship has not changed are classified as two-parent families; children whose one parent is widowed, and whose parents are divorced and have not remarried are classified as single-parent families; children whose one parent is widowed and the other remarried, whose parents are divorced and remarried are classified as reconstituted families; children whose parents have both died are classified as orphans. Parental involvement methods were selected according to the parent questionnaire and divided into four categories: school involvement, supervision, communication and parental expectations. Parental participation is measured by means of a questionnaire, and the different dimensions are summed to calculate a total score. The classification of student achievement was based on the score table attached to the student questionnaire and is classified according to the overall grade of three subjects (i.e. language, mathematics, English language). All quantitative data were analysed using SPSS, using both descriptive and explanatory analysis to present the findings. Student family structure and parental involvement were calculated using analysis of variance, and parental involvement and student achievement were analysed using correlation.

4. RESULT

4.1. Variance Analysis

The questionnaire questions corresponding to each dimension under parental involvement were integrated to calculate scores for the four dimensions of school involvement, monitoring, parental expectations and communication. The scores for each dimension were then combined to calculate the scores for parental vehicle involvement. According to the research hypothesis of this paper, family structure was set as a factor, and parental involvement and the dimensions were selected as dependent variables. SPSS 26.0 statistical software was used to verify the differences in parental involvement and each dimension between different family structures using one-way ANOVA. The analysis resulted in Table 1 below.

Table 1 shows there are statistically significant differences in parental involvement by family structure ($p = 0.002$). And a post-hoc test indicates that there is a significant difference in parental involvement scores between reconstituted and single ($p = 0.013$) and two parents ($p = 0$). Parental involvement scores for orphaned family structures were significantly lower than scores for children in single-parent and two-parent family structures.

Statistically significant differences existed between the supervision ($p < 0.001$) and communication dimensions ($p < 0.001$) of the different family structures. And post-hoc tests yielded that there were significant differences between two-parents and single-parent ($p=0.021$) and between two-parents and reconstituted ($p=0$) in terms of supervision. On parental expectations, there were significant differences between single-parent families and two-parent ($p=0.08$), single-parent and reconstituted ($p=0.012$), single-parent and orphaned ($p=0.015$) families. And between two parents, single parents and other family structures on the communication dimension ($p < 0.05$): two-parental and single-parental ($p=0.037$), two-parents and reconstituted ($p=0$), two-parents and orphan ($p=0.03$); single-parental and reconstituted ($p=0.018$), single-parental and orphan ($p=0.031$). This result proves hypothesis 1: there is variability in family structure and parental involvement.

4.2. Correlation Analysis

Based on research hypothesis 2 of this paper, parental involvement and Fall 2014 midterm grades in each subject were used as variables. SPSS 26.0 statistical software was used to verify the correlation between parental involvement and Fall 2014 midterm grades in each subject using Pearson product-moment correlation coefficients. The analysis resulted in Table 2 below.

Table 1. One-way ANOVA differences in the level of parental involvement by family

Title		Mean \pm S.D.	F	P
Parental involvement	Two-parent	2.88 \pm 0.36	4.930	0.002
	Single-parent	2.88 \pm 0.37		
	Reconstituted	2.81 \pm 0.36		
	Orphan	2.80 \pm 0.32		
School involvement	Two-parent	2.88 \pm 0.36	1.860	0.134
	Single-parent	1.93 \pm 0.64		
	Reconstituted	1.90 \pm 0.60		
	Orphan	1.90 \pm 0.62		
Supervision	Two-parent	2.13 \pm 0.74	7.607	< 0.001
	Single-parent	1.93 \pm 0.64		
	Reconstituted	2.20 \pm 0.39		
	Orphan	2.15 \pm 0.40		
Parental Expectations	Two-parent	2.12 \pm 0.38	3.513	0.015
	Single-parent	2.16 \pm 0.45		
	Reconstituted	2.19 \pm 0.39		
	Orphan	4.94 \pm 1.02		
Communication	Two-parent	5.08 \pm 1.08	14.217	< 0.001
	Single-parent	4.90 \pm 1.03		
	Reconstituted	4.69 \pm 0.69		
	Orphan	4.94 \pm 1.02		

Table 2. Pearson product-moment correlation test

Title	Parental involvement	School involvement	Supervision	Parental Expectations	Communication
Language Achievement	0.095**	-0.016	0.073**	0.036**	0.169**
Math Achievement	0.130**	-0.009	0.048**	0.065**	0.215**
English Achievement	0.144**	-0.050**	0.081**	0.084**	0.243**
Total score	0.120**	-0.053**	0.068**	0.067**	0.227**

Table 3. Kendall Grade Correlation Test

Title	Family structure	Language Achievement	Math Achievement	English Achievement	Total score
Language Achievement	0.026**	1			
Math Achievement	0.039**	0.492**	1		
English Achievement	0.027**	0.494**	0.541**	1	
Total score	0.038**	0.645**	0.752**	0.746**	1

Table 2 shows that parental involvement, supervision, parental expectations, communication and the fall 2014 midterm exams in language, mathematics, English, and overall scores show positive correlations. All of the above correlations were significant at the 0.01 level (two-tailed), meaning that parental involvement, supervision; parental expectations, communication and overall scores in language, mathematics, English, and the three subjects in the fall 2014 midterm were highly significant and positively correlated. School participation is negatively correlated with English language achievement and total score in all three subjects, and all of these correlations are significant at the 0.01 level (two-tailed). This means that school involvement is significantly negatively correlated with English language achievement and total score in all three subjects. The results of the data tests show that as parental involvement, supervision, parental expectations, and communication increased, students' scores in all subjects increased significantly. However, as school involvement increased, English scores and total scores in all three subjects decreased significantly. This result verified hypothesis 2: parental involvement is positively correlated with student achievement.

Based on research hypothesis 3 of this paper, family structure and grades in each subject on the Fall 2014 midterm were used as variables. And SPSS 26.0 statistical software was used to make Kendall's tau-b rank correlation coefficient to verify the correlation between family structure and grades in each subject on the Fall 2014 midterm. The analysis resulted in Table 3 below.

From Table 3, it can be seen that family structure and the total scores of language, mathematics, English, and the three courses in the fall 2014 midterm are positively correlated. These correlations are all significant at the 0.01 level (two-tailed), meaning that family structure and the scores in language, mathematics, English, and total scores are highly significant and positive. The results of the data tests show that as the family structure becomes more stable,

students' performance in each subject increases significantly. This result supports hypothesis 3.

5. DISCUSSION

Firstly, the findings show that parental involvement varies by family structure and is positively associated with student achievement. The more stable the family structure is, the higher the student achievement is in all subjects. In addition, parental involvement was significantly higher in two-parent families than in the rest of the families, which is in line with the findings of Park and Lee [34]. Among them, parental involvement in reconstituted and orphaned families differed significantly from that in two-parent and single-parent families. In addition, the findings suggest that communication and supervision in parental involvement are influenced by family structure, which is similar to the results of Fajolu et al. and Deslandes & Bertrand [7] [3]. School involvement and parental expectations did not differ significantly, which is inconsistent with Leung et al. [25]. This is possibly due to the lack of school involvement among Chinese parents in general and the rebelliousness of adolescents in their adolescent years. Due to the lack of available data, the generalisability of the results is somewhat limited. This is because school participation involves only attendance at parent meetings and active communication with the school. Future studies should explore into this aspect further to see how family structure affects school participation and parental expectations.

Another significant result is based on the fact that parental participation is often related with higher student accomplishment, which is consistent with previous findings in the literature [33] [20] [8]. In line with the findings of Otani, not all modes of involvement are positively associated with student achievement [33]. School involvement in parental involvement negatively affects students' overall scores in English and in all three subjects, which is in contrast to the findings of Jaiswal and Choudhuri that school engagement is beneficial in improving student achievement [18].

Consideration should be given to reducing the level of school involvement, or how the school is involved, as appropriate when parents consider ways to improve student achievement. Furthermore, the findings give fresh insight on the impact of parental participation on student achievement. Monitoring was not consistent with Xu's findings across the types of parental participation [40], but somewhat similar to the results of Gonida & Cortina [13], Moroni et al [31], Fernández Alonso et al [10]. The findings of this study indicate that supervision can have a positive impact on student achievement. The data helps to provide a clearer understanding of the importance of supervision and that parents should increase their supervision of students in relation to homework to improve their academic performance.

In addition, the family structure of this study did not take into account reconstituted, single parent, orphaned family member structures or whether parents were involved. This is because all reviews were based on data, it was not possible to investigate causal relationships. In addition, since no experimental studies were conducted, it was not possible to rule out whether student achievement might be influenced by student psychological and other factors. Therefore, future studies on the impact of family structure and parental participation on student success should include using experiments or observations.

6. CONCLUSION

The purpose of this research is to see how family structure and parental participation affect student performance. Based on quantitative analysis, it can be concluded that family structure is one of the critical factors that affect not only the manner in which parents are involved and the extent to which parents are involved but also student achievement. The results show that parental involvement styles are more likely to have an impact on student learning and that communication and supervision are the most effective ways to improve student achievement. Where an increase in school involvement may harm on student achievement in English and overall, therefore, it is recommended that parents communicate more with their children and increase their supervision of their students' school, such as homework, whenever possible.

In addition, while the measurement dimension of school engagement limits the generalisability of the results, it raises questions about how schools are engaged. More study is needed to determine the link between students' performance and the manner of school participation. Secondly, the differences between family structure and parental expectations in this study were small. To evaluate the influence of parental expectations on academic achievement, further study is needed to discover the link between the two.

REFERENCES

- [1] F. Bernardi, D. Boertien, Understanding heterogeneity in the effects of parental separation on educational attainment in Britain: Do children from lower educational backgrounds have less to lose? *European Sociological Review*, 32(6) (2016) 807–819. DOI: <https://doi.org/10.1093/esr/jcw036><https://doi.org/10.1093/esr/jcw036>
- [2] S. L. Brown, Family structure transitions and adolescent well-being. *Demography*, 43(3) (2006) 447–461. DOI: <https://doi.org/10.1353/dem.2006.0021>
- [3] R. Deslandes, R. Bertrand, Motivation of parent involvement in secondary-level schooling. *The Journal of Educational Research*, 98(3) (2005) 164–175. DOI: <https://doi.org/10.3200/JOER.98.3.164-175>
- [4] C. M. Ding and P. Y. Zhang, Does family restructuring reduce children's educational attainment? *Journal of Shanghai University of Finance and Economics*, 20(1) (2018) 102–113.
- [5] Y. D. Ding, Home education, student achievement and social reproduction. *Contemporary Education Forum*, 5, 2018.
- [6] M. Đurišić, & M. Bunijevac, Parental involvement as a important factor for successful education. *Center for Educational Policy Studies Journal*, 7(3) (2017) 137–153. DOI: <https://doi.org/10.26529/cepsj.291>
- [7] S. A. Fajoku, O. Aluede, A. I. Ojugo, Parental involvement as a correlate of academic achievement of primary school pupils in Edo State, Nigeria. *Research in Education*, 95(1) (2016) 33–43. DOI: <https://doi.org/10.7227/RIE.0023>
- [8] X. Fan, M. Chen, Parental involvement and students' academic achievement: A meta-analysis'. *Educational psychology review*, 13(1) (2001) 1–22. DOI: <https://doi.org/10.1023/A:1009048817385>
- [9] M. Farooq, I. Asim, Parental involvement as predictor for self-regulated learning and academic achievement of students at secondary school level. *Journal of Educational Sciences & Research*, 7(1) (2020) 14–32.
- [10] R. Fernández Alonso, M. Álvarez Dáz, P. Woitschach, J. Suárez Álvarez, and M. Cuesta Izquierdo, Parental involvement and academic performance: less control and more communication= Implicacion familiar y rendimiento academico: Menos control y mas

- comunicación. *Psicothema*, 2017. DOI: 10.7334/psicothema2017.181
- [11] P. Fomby, A. Cherlin, Family Instability and Child Well-Being. *American Sociological Review*, 72(2) (2007) 181-204.
- [12] L. Gilleece, Parental involvement and pupil reading achievement in Ireland: Findings from PIRLS 2011. *International Journal of Educational Research*, 73 (2015) 23-36. DOI: <https://doi.org/10.1016/j.ijer.2015.08.001>
- [13] E. N. Gonida, K. S. Cortina, Parental involvement in homework: Relations with parent and student achievement-related motivational beliefs and achievement. *British Journal of Educational Psychology*, 84(3) (2014) 376-396. DOI: <https://doi.org/10.1111/bjep.12039>
- [14] C. S. Grijalva-Quiñonez, A. AValdés-Cuervo, L.G.Parra-Pérez, F. I. G. Vazquez, Parental involvement in Mexican elementary students' homework: Its relation with academic self-efficacy, self-regulated learning, and academic achievement. *Psicología Educativa. Revista de los Psicólogos de la Educación*, 26(2) (2020) 129-136. DOI: <https://doi.org/10.5093/psed2020a5>
- [15] K. Hadfield, M. Amos, M. Ungar, J. Gosselin, L. Ganong, do changes to family structure affect child and family outcomes? A systematic review of the instability hypothesis. *Journal of Family Theory & Review*, 10(1) (2018) 87-110. DOI: <https://doi.org/10.1111/jftr.12243>
- [16] N. Hartati, M. G. Adiyanti, W. M. Mirza, K. W. Yuniarti, Psychological well-being and academic achievement of Minang students viewed from family structure and living arrangements. *Indigenous: Jurnal Ilmiah Psikologi*, 6(1) (2021) 55-66. DOI: <https://doi.org/10.23917/indigenous.v6i1.11156>
- [17] I. Ionescu, I. A. Chirianu, A multidisciplinary approach of the status of women in Europe in the 20th-21st century. *Cross-Cultural Management Journal*, 16(1), 2014.
- [18] S. K. Jaiswal, R. Choudhuri, A review of the relationship between parental involvement and students' academic performance. *The International Journal of Indian Psychology*, 4(3) (2017) 110-123. DOI: <https://doi.org/10.1016/j.childyouth.2020.105084>
- [19] W. H. Jeynes, Effects of parental involvement and family structure on the academic achievement of adolescents. *Marriage & Family Review*, 37(3) (2005) 99-116. DOI: https://doi.org/10.1300/J002v37n03_06
- [20] W. H. Jeynes, A meta-analysis: The relationship between parental involvement and Latino student outcomes. *Education and Urban Society*, 49(1) (2017) 4-28. DOI: <https://doi.org/10.1177/0013124516630596>
- [21] S. W. Kim, Meta-analysis of parental involvement and achievement in East Asian countries. *Education and Urban Society*, 52(2) (2020) 312-337.
- [22] A. Langøy, O. R. Smith, B. Wold, O. Samdal, E. M. Haug, Associations between family structure and young people's physical activity and screen time behaviors. *BMC public health*, 19(1) (2019) 1-10. DOI: <https://doi.org/10.1186/s12889-019-6740-2>
- [23] S. A. Lee, Family structure effects on student outcomes. In *Parents, their children, and schools*, 2018, pp.43-76. Routledge
- [24] X. M. Lei, N. Ning, L. Liu, L. Chen, Study on the influence of family environment and parenting style on primary school students' academic performance. *Chinese Journal of Child Health*, 27(9) (2019) 962
- [25] C. H. Y. Leung, S. X. Chen, B. C. P. Lam, where there's a will, there's a way: The mediating effect of academic aspiration between beliefs and academic outcomes. *Journal of Psychology in Chinese Societies*, 11 (2010) 53-72.
- [26] C. K. Li, Study on the influence of family socioeconomic status on junior high school students' academic performance (Master's thesis, Northwest Normal University), 2019.
- [27] J. Z. Li, Y. M. Hu, Study on the relationship between parental involvement in learning and academic achievement of primary and secondary school students: An analysis of a mediated moderation model based on parent-child relationship and learning self-confidence. *Journal of East China Normal University (Education Science Edition)*, 39(7) (2021) 72
- [28] Y. Li, T. Hu, T. Ge, E. Auden, The relationship between home-based parental involvement, parental educational expectation and academic performance of middle school students in mainland China: A mediation analysis of cognitive ability. *International Journal of Educational Research*, 97 (2019) 139-153. DOI: <https://doi.org/10.1016/j.ijer.2019.08.003>
- [29] C. K. May, Family Structure and Subjective Social Status: The Impact on a Young Adult's Academic Achievement and Self Esteem (Doctoral

- dissertation, Dublin, National College of Ireland), 2021.
- [30] R. B. McNeal Jr, Parental involvement as social capital: Differential effectiveness on science achievement, truancy, and dropping out. *Social forces*, 78(1) (1999) 117-144. DOI: <https://doi.org/10.1093/sf/78.1.117>
- [31] S. Moroni, H. Dumont, U. Trautwein, A. Niggli, F. Baeriswyl, The need to distinguish between quantity and quality in research on parental involvement: The example of parental help with homework. *The Journal of Educational Research*, 108(5) (2015) 417-431. DOI: <https://doi.org/10.1080/00220671.2014.901283>
- [32] Y. Ogiwara, The rise in individualism in Japan: Temporal changes in family structure, 1947-2015. *Journal of Cross-Cultural Psychology*, 49(8) (2018) 1219-1226. DOI: <https://doi.org/10.1177/0022022118781504>
- [33] M. Otani, Parental involvement and academic achievement among elementary and middle school students. *Asia Pacific Education Review*, 21(1) (2020) 1-25. DOI: <https://doi.org/10.1007/s12564-019-09614-z>
- [34] H. Park, K. S. Lee, The association of family structure with health behavior, mental health, and perceived academic achievement among adolescents: a 2018 Korean nationally representative survey. *BMC public health*, 20(1) (2020) 1-10. DOI: <https://doi.org/10.1186/s12889-020-08655-z>
- [35] M. Pinquart, M. Ebeling, Parental educational expectations and academic achievement in children and adolescents—A meta-analysis, 2020. DOI: <https://doi.org/10.1007/s10648-019-09506-z>
- [36] D. Ratnarajah, M. J. Schofield, Survivors' narratives of the impact of parental suicide. *Suicide and Life-Threatening Behaviour*, 38(5) (2008) 618-630.
- [37] A. Veas, J. L. Castejón, P. Miñano, R. Gilar-Corbí Relationship between parent involvement and academic achievement through metacognitive strategies: A multiple multilevel mediation analysis. *British journal of educational psychology*, 89(2) (2019) 393-411. DOI: <https://doi.org/10.1111/bjep.12245>
- [38] G. R. Weitoft, A. Hjern, M. Rosén, School's out! Why earlier among children of lone parents? *International Journal of Social Welfare*, 13(2) (2004) 134-144. DOI: <https://doi.org/10.1111/j.1369-6866.2004.00307.x>
- [39] S. Wilder, Effects of parental involvement on academic achievement: a meta-synthesis. *Educational Review*, 66(3) (2014) 377-397. DOI: <https://doi.org/10.1080/00131911.2013.780009>
- [40] J. Xu, Purposes for doing homework reported by middle and high school students. *The Journal of Educational Research*, 99(1) (2005) 46-55. DOI: <https://doi.org/10.3200/JOER.99.1.46-55>
- [41] M. Zhan, S. Pandey, Postsecondary education and economic well-being of single mothers and single fathers. *Journal of Marriage and Family*, 66(3) (2004) 661-673. DOI: <https://doi.org/10.1111/j.0022-2445.2004.00045.x>
- [42] X. Zhang, Y. G. Chen, B. H. Zhao, A study on the influence of family environment on academic achievement. *Journal of Ningbo University: Education Science Edition*, 34(4) (2012) 76-80.
- [43] X. M. Zhang, A study on the impact of changing family structure on adolescent socialization in contemporary China (Master's thesis, North China Electric Power University), 2018.
- [44] D. C. Zhao, S. M. Liu, The influence of family socioeconomic status on students' academic achievement--an analysis based on data from the PISA 2018 Chinese sample. *Journal of Beijing Normal University (Social Science Edition)*, (2) (2021) 17-26.
- [45] Y. Zhao, Employee layoffs, family resources and children's education. *Economic Research*, (5), 2016.