

Journal of Contemporary Social Science and Education Studies

E-ISSN: 2775-8774 Vol 5, Issue 2 (2025) Doi: 10.5281/zenodo.16756813

ACADEMIC BURNOUT AMONG ADOLESCENTS: RELATIONSHIPS WITH STUDENT DEMOGRAPHICS, PARENT-CHILD RELATIONSHIPS, AND PARENTING STYLES

*Lee Yee Ling, Lee Yee Ming² & Long Huamin³

^{1,3}School of Education, Taylor's University Lakeside Campus, Subang Jaya, Malaysia.
 ¹Education for All Impact Lab, Taylor's University, Subang Jaya, Malaysia.
 ²Horst Schulze School of Hospitality Management, Auburn University, U.S.A.

Article Info	ABSTRACT		
Article history: Received: 28 June 2025 Revised: 18 July 2025 Accepted: 7 Aug 2025 Published: 1 April 2025 Keywords: Academic Burnout Demographics Parent-child relationships Parenting Styles Adolescents OPEN ACCESS	Academic burnout is a state of stress, exhaustion and disengagement caused by prolonged academic pressure and study load. Academic burnout negatively impacts school students both academically and psychologically. Many factors contribute to academic burnout among students but research on parent-child relationships and parenting styles is scarce. This study aimed to investigate the relationships between student demographics, parent-child relationships and parenting styles on academic burnout among secondary school students. 92 Grade 7 to Grade 9 students from a school in Chongqing Province, China completed an online questionnaire about academic burnout. Data was analysed during descriptive and inferential statistics. The research findings showed that there was no difference in academic burnout based on the students' gender, single-child status, urban/rural living area, single parent household, father's education level, and mother's education level. Parent-child relationships were a predictor of academic burnout but not parenting style. This study suggests that a positive parent-child relationship can help students cope with academic burnout.		

Corresponding Author:

*Lee Yee Ling

School of Education, Taylor's University Lakeside Campus, Subang Jaya, Malaysia.

Email: yeeling.lee@taylors.edu.my



This is an open-access article under the CC BY-SA license.

DOI 10.5281/zenodo.16756813

INTRODUCTION

Burnout is a common phenomenon in the workplace, especially in high stress working environments such as healthcare, education, and hospitality (Acheloa Wellness, 2024). Burnout describes the negative, unfulfilling emotions and stress experienced by a person (Fredenbeger, 1974). In the context of education, academic burnout, which is characterized by emotional exhaustion, cynical, feeling of inefficacy, lack of sense of accomplishment and disengagement from school among the student groups, and it effects on students have been studied (Andriyani et al., 2017; Lin & Yang, 2021) both academically and psychologically. Academically, academic burnout results in negative perceptions of the learning environments, high level of perceived workload, frequent absenteeism, lack of participation in classroom activities, low academic performance and school detachment among the students (Oyoo et al., 2020; Rahmatpour et al., 2019; Yıldız & Kılıç, 2020). Psychologically, academic burnout is often linked to academic anxiety, poor well-being, depression, low efficacy and social distancing (Andriyani et al., 2017; Farina et al., 2020).

Academic burnout can affect any student group, including the younger students. Secondary school period is considered critical because the transitional period from elementary to secondary school could be stressful (Lee at al., 2013). Academic burnout usually happens in the adolescence period, which is considered a risky developmental stage (Vafa et al., 2021). For example, Gabola et al. (2021) reported close to 15% burnout among their participants of 14.8 years old in Switzerland. Cheung's (2019) study showed the prevalence of burnout among 1209 teenage students in China was more than 32%. The author pointed out that the high burnout rate was due to the high priority put on academic performance in Chinese culture. The One-Child Policy (OCP) introduced in 1979, has led to profound socio-cultural changes. Families restricted to having only one child often invest a significant number of resources and expectations in their only child. The child's academic performance becomes paramount, and, subsequently, academic pressure on the child increases (Krynen, 2011). In 2015, Chinese one-child policy was replaced by a two-child policy, allowing married couples, whose partner is a single child, to have two children (Zeng & Hesketh, 2018). Therefore, this study filled this research gap by surveying secondary school students in Chongqing province, China about their academic burnout.

LITERATURE REVIEW

The literature review discusses relationships between academic burnout with students' demographics, parents' demographics, parent-child relationships and parenting styles.

Students' Demographics and Academic Burnout

Due to these mixed research findings, it is worth studying how students' demographics such as gender and age in the family impact academic burnout. Gaps also remain in terms of students' grade level in relation to academic burnout. On the contrary, the study by Chu et al., (2015) indicated that non-only-children (NOCs) were more stressed than OCs with a stronger association in males. The findings reveal that male students score higher than female students in various aspects of academic burnout (Amelia, 2022; Liu et al., 2023). Although there are no significant differences between male and female students in the total score and various dimensions of academic burnout, except for the dimension of physical exhaustion where female students score higher (Amelia, 2022). In contrast, a few researchers (Ağır, 2018; Gabola et al., 2021; Walburg, 2014; Vinter et al., 2021) found that female students experienced higher levels of academic burnout than male students. In the study by Salgado & Au-Yong-Oliveira (2021) on Portuguese university students, there was no difference between male and female students in academic burnout. In different age groups, students face varying levels of academic stress and expectations. Studies by Fiorilli et al., (2020) and Salgado & Au-Yong-Oliveira (2021) indicated that age was positively linked to school burnout levels, indicating that students are more likely to experience burnout as they progress into the higher and more challenging levels of secondary education.

The absence of siblings for emotional support or shared responsibilities may amplify the stress experienced by the single child. Chu (2015) analyzed this phenomenon from both school and family perspectives, attributing it to schools' emphasis on students' performance in college entrance examination, monotonous school life and inflexible assessment. Parents' excessively high or low expectations, along with negligence in creating a supportive family environment, also bring stress to the only child at home (Chu, 2015). In an earlier study,

Krynen (2011) also reported that the only child experienced increased parental pressure and lacked emotional regulation.

Parents' Demographics and Academic Burnout

Single-parent families may be attributed to many factors, including divorce, death and long-term separation of parents. Study investigating the impacts of parents' marital status on students' academic burnout is limited but previous research showed that parents' marital status affected their children's academic performance. Specifically, children from single-parent families demonstrated lower academic performance compared to children from two-parent homes (Chavda & Nisarga, 2023; Watt, 2019). Single parents are often overburdened with the responsibilities of two parents; they face social stigma, lack social support and experience difficulty in spending quality time with their children (Chavda & Nisarga, 2023).

Research related to the influence of parents' education background on their children's academic burnout on their academic performance is limited. Studies conducted by Idris et al., (2020) and Wang et al., (2020), showed that parental education played a positive role in children's academic performance, with higher education attainment contributing to better children's academic performance. Wang et al. 's study (2020) further revealed that father's education has a more significant impact on child academic performance than the mother's.

Parent-Child Relationships and Academic Burnout

Parental-related factors are significant contributors to academic burnout. Absence of good family functions such as adequate support, active parental engagement and parental guidance leave students without a robust emotional and academic support system, leading to academic burnout (Andrade et al., 2023). Zhang (2013) identified family structure, family atmosphere, parenting styles, and parental educational beliefs as crucial factors influencing lower secondary students' aversion to learning. Nevertheless, there remain gaps in terms of whether family structure such as parents' marital status and their education background influence academic burnout among secondary school students. There is also limited research which systematically analyzes the impact of parenting styles and parent-child relations on secondary school students' academic burnout (Zhu et al., 2021). Numerous scholars have conducted research on the impact of parent-child relationships (i.e., father-child relationship) on middle school students.

Overall, middle school students tend to exhibit high attachment, relatively high levels of control, lower levels of intimacy, autonomy, and conflict, with moderate equality if they have a good relationship with their parents (Shi et al., 2004). Conversely, parents' emotional neglect and disregard for their children's emotional needs and expressions could lead to a sense of helplessness and a lack of recognition, making it challenging for children to establish a sense of security. Furthermore, in environments characterized by criticism and excessive expectations, children may develop a negative self-concept, feeling pressured and continually invalidated by parental expectations, thereby affecting their self-efficacy and cognitive development (Lanjekar et al., (2022). Parent-child relationships can affect children's academic self-concept and subsequently lead to academic burnout (Luo et al., 2016). Similarly, Wang et al., (2020) reported that middle school students with low self-control were more likely to experience academic burnout when exposed to family environments that lack intimacy.

Parenting Styles and Academic Burnout

Diana Baumrind (1978) proposed that parenting styles can be categorized into two dimensions: the first is the emotional attitude parents have toward their children, known as the acceptance-rejection dimension; the second is the degree of demands and control parents exert on their children, known as the control-permissiveness dimension. On the acceptance end of the emotional attitude, parents approach their children with a positive, affirming, and patient attitude, striving to meet their various needs. Conversely, on the rejection end, parents often adopt a dismissive attitude toward their children, showing little interest or concern. On the control end of the demand, parents set high standards for children, expecting them to exert effort to meet these requirements.

On the permissive end of the demand, parents display tolerance and indulgence, lacking discipline in their approach to children.

Arrindell et al., (1999) then categorized the parenting styles into three categories: emotional warmth, rejection and (over)protection. Emotional warmth refers to physical affection and emotional support such as praising (Arrindell et al., 1999; Ju et al., 2020). Rejection is characterized by hostility, punishment, abuse and derogation (Arrindell et al., 1999; Ju et al., 2020). The characteristics of (over)protection include fearful and anxious for children's safety, intrusive and overinvolved (Arrindell et al., 1999). Many studies have been conducted in the Chinese contexts to investigate the impacts of parenting styles on children's behaviours, social emotions and academic engagement (Jiang et al., 2004; Ju et al., 2020; Wang et al., 2024; Zhu et al., 2021) For instance, the study by Jiang (2024) indicates that parenting styles are related to children's problematic behavior, with children exhibiting fewer disruptive behaviours when parents provide more emotional warmth.

Children raised in negative parenting environments may develop insecure attachment relationships (Yang & Zhao, 2020), affecting individual interpersonal relationships (Fang, 2019; Zhou, 2019; Deng, 2019). A negative parenting style means children face family and social anxiety. Due to the high level of hostile parenting and low level of positive parenting, they experience stress, peer pressure, and social and family relationship problems (Lanjekar et al., 2022). Adolescents growing up under warm and accepting parenting styles show higher learning engagement and better academic adaptation (Yang & Zhao, 2020). Conversely, if parents are detached and neglectful, their children's learning engagement is lower (Liu et al., 2023; Yang & Zhao, 2020).

There is a difference between fathers and mothers in parenting styles (Yafee, 2020; Zhu et al., 2021). A systematic review by Yafee (2020) shows that while mothers are found to be more accepting, responsive and supportive, they are also more demanding, controlling and authoritative than fathers. Mothers' care and love are crucial for children to develop a sense of security and positive emotion (Ceka & Murati, 2016). However, fathers are more autocratic (Ceka & Murati, 2016l; Yafee, 2020), giving different expectations and challenges to children.

In the study conducted by Zhu et al., (2021) in China, it was found that authoritative parenting styles in both father and mothers resulted in less academic burnout in students. However, paternal authoritative parenting only directly and negatively predicted their sons'. On the contrary, maternal authoritarian parenting marginally predicted more academic burnout among sons. Students who reported both fathers and mothers equally involved in their learning, and perceived higher paternal and maternal support reported less high academic vigor and dedication and less issue with academic burnout compared to their peers whose parents were not involved (Zhu et al., 2021).

AIMS AND HYPOTHESIS

The overall arching goal of this study was to investigate the phenomena of school burnout among school children studied in a secondary school in China. The first objective of this study was to compare the students' school burnout differences based on their gender, grade, number of children in the family, parent marital status and parent's education level. Based on the review of literature as discussed above, it was hypothesized that male and female students showed different levels of academic burnout. There is a difference in secondary school students' academic burnout based on their grade, number of children in the family, parent marital status and parent's education level. The second objective was to examine the association of parental factors, including parent-child

relationships and school burnout. It was expected that there was a relationship between parent-child relationships and parenting styles and secondary school students' academic burnout.

METHODOLOGY

The methodology covers participants, data collection methods, instrument development and data analysis.

Participants

The participants were recruited from a secondary school in Chongqing Province, China. The school was selected based on convenience sampling due to geographical proximity to the third author. The school principal granted permission to the third author to conduct her research at the school. Since the research was conducted online, there was no interference with the lessons. The participants were required to complete an online questionnaire about academic burnout. The online survey was anonymous and confidential. Because the participants were under the age of 18 years old, the parents of the participants were informed about this study in advance and they were given the option to give consent to participate or withdraw from the study. Informed consent was granted as the participants completed the survey.

A total of 105 questionnaires were distributed to the participants. Ninety-two complete responses were collected, resulting in a response rate of 87.6%. The research participants consisted of 92 secondary school children from Grade 7 to Grade 9 from a school in Chongqing Province, China. The participant demographics are shown in Table 1.

Table 1. Participants' demographics

Demographic	Frequency (n)	Percentage (%)
Gender		
Male	49	53.3
Female	43	46.7
Grade		
Grade 7	31	33.7
Grade 8	31	33.7
Grade 9	30	32.6
Single Child in Family		
Yes	22	23.9
No	70	76.1
Area of Living		
Urban	66	71.7
Rural	26	28.3
Single Parent Household		
Yes	15	16.3
No	77	83.7
Father's Education Level		
Below college	50	54.3
College and above	42	45.7
Mother's Education Level		
Below college	56	60.9
College and above	36	39.1

Data Collection and Instrument Development

The participants were required to complete an online questionnaire. This questionnaire was developed based on the review of the existing literature (Li et al., 2013; Zhang (2011). The questionnaire was divided into three sections. Section one collected the participants' demographic information, such as gender, grade, number of children in the family, parents' marital status and parents' education level. Section Two measured academic burnout, using the Adolescent Academic Burnout Scale (Li et al., 2013). The scale contained 16 items, focusing on three dimensions of academic burnout namely physical and mental exhaustion (four items), academic alienation (four items) and negative attitudes towards learning (7 items). Two sample items for the physical and mental exhaustion dimension are "I feel so empty lately and don't know what to do." and "At the end of a day's study, I feel extremely tired.". Academic alienation covers items such as "I study so badly that I really want to give up." and "I don't think studying makes sense to me.". The students were asked to rate each item using a 5-point Likert scale, from 1 being "not at all" to 5 for being "completely,".

The parent-child relationship was measured using the Parent-Child Intimacy Scale developed by Zhang (2011). Zhang (2011) translated and revised Buchanan's Parent-Child Intimacy Scale according to the Chinese context. The scale measures parent-child relationships in two dimensions, father-child and mother-child, with eight items each. Two sample items were "I feel open and at ease when communicating with my father (or mother)" and "My father (or mother) expresses emotions or affection towards me." The participants indicated their response using a scale of 1 to 4, from 1 being "strongly disagree" to 4 being "strongly agree", with higher scores indicating a closer relationship between the adolescent and the father (or mother).

The parenting styles were assessed using Parenting Style Scale adopted from a few existing questionnaires (Arrindell et al., 1999l; Ju et al., 2020; Wang et al., 2024). This 21-item scale covers three dimensions (rejection, overprotection and emotional warmth), all of which have 4-point responses: "1 = never", "2 = occasionally", "3 = often", and "4-very often". A higher combined score indicates a parenting style that was adopted more frequently. The same items were used for father's and mother's parenting style. The two sample items for the rejection dimension are "My father/mother often loses his temper with me without me knowing the reason." and "I tend to be used as a "scapegoat" in my family.". The Overprotection dimension covers items such as "My father/mother requires me to explain to her what I did when I came home." and "My father/mother always controls what clothes I should wear or how I should dress.". The Emotional Warmth dimension contains items such as "My father/mother praises me." and "I can tell by my father/mother's words and expressions that he/she likes me very much."

The initial questionnaires underwent content validity review by two experts. The first expert, a university lecturer in China, possessed familiarity with research in the Chinese context. The second expert had experience conducting studies involving secondary school students. These experts provided feedback on item wording, questionnaire length, and question relevance. The online questionnaire was then revised based on their recommendations.

Data Analysis

IBM® SPSS, version 25.0 was used for data analyses. Cronbach's alpha was calculated to test the inter-item reliability for the psychometric scaled items, with the desirable value of $\alpha \ge 0.70$ (Cronbach, 1951). The results of the reliability test showed that the constructs were reliable. Father's Rejection = α = 0.826; Father's Overprotection = 0.713, Father's Emotional Warmth = 0.86. Mother's Rejection = α = 747, Mother's Overprotection = 0.780, Mother's Emotional Warmth = 0.838. Father-child relationship =0.91, mother-child relationship = 0.914. Academic burnout scales, which included negative attitudes toward learning (α = 0.862). academic alienation (α =0.826), physical and mental exhaustion (α =0.836) were also reliable.

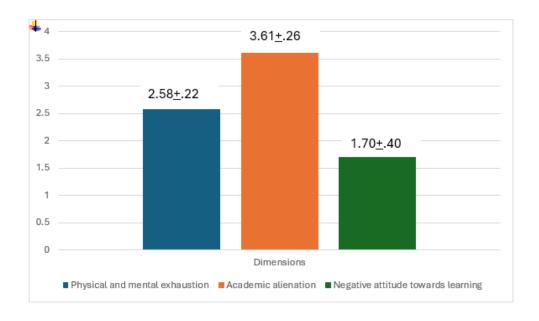
Descriptive statistics i.e., frequency was used to summarise the data of participants' demographics. Mean and standard deviation were used to present the data of three dimensions of academic burnout, namely physical and mental exhaustion, academic alienation and negative attitudes towards learning. Independent t-tests were used to test the differences in the students' school burnout based on their gender, grade, number of children in the

family, parent marital status and parent's education level. Additionally, multiple regression analysis was carried out to test the association between parenting styles (rejection, overprotection, and warmth) and parent-child relationships and school burnout. A required sample size for multiple analysis was calculated using statistics Kingdom Sample Size Calculator. A p value of <.05 was considered statistically significant.

RESEARCH FINDINGS AND DISCUSSIONS

Figure 1 shows the means and standard deviation for the three dimensions of academic burnout (i.e., physical and mental exhaustion, academic alienation and negative attitude towards learning) experienced by the participants. As shown in Figure 1, the mean for academic alienation (3.61 ± 0.26) is the highest, followed by physical and mental exhaustion (2.58 ± 0.22) . Negative attitude towards learning recorded the lowest mean (1.70 ± 0.40) . Academic burnout is detrimental to adolescents' cognitive and psychological functioning, leading to problems in school, peer relationship and academic performance (Oyoo et al., 2020; Vafa et al., 2021). In this study, academic burnout was manifested among the secondary school students in the academic alienation dimension. Alienated school students feel isolated from a group or activity which they should be engaged with (Vafa et al., 2021).

Figure 1: Dimensions of academic burnout among secondary school students



The t-test result showed there was no difference in burnout based on the participants' gender, single-child status, urban/rural living area, single parent household, father's education level, and mother's education level. ANOVA showed a difference in burnout based on grades (p <.01). Participants in Grade 8 reported the highest level of overall burnout. Grade 7 demonstrated the highest negative attitude towards learning (p <.002). Grade 9 reported the highest exhaustion (p <.000), while Grade 8 showed their academic burnout via academic alienation (p <.000).

In terms of gender roles, the research findings support previous studies by researchers such as Salgado & Au-Yong-Oliveira (2021) but in contrast with the studies by Amelia (2022), Gabola et al., (2021) and Liu et al., (2023). In line with other studies (i.e., Fiorilli et al., 2020; Liu et al., 2023; Salgado & Au-Yong-Oliveira, 2021), this study showed that students of different grades experienced different types of academic burnout. Older students experience a higher level of academic burnout due to increased difficulty in their subjects (Liu et al., 2023).

Several studies indicated that students from single-child and non-single-child family displayed different levels of academic burnout (Chu, 2015; Krynen, 2011). However, this study produced a different finding. Parents nowadays have the same expectations for all children and provide equal care and support for them. Students from urban areas often face heightened academic expectations and competitions among peers, leading to higher academic burnout (Liu et al., 2023). It is interesting to note that in this study, there was no difference in academic burnout between the students from urban and rural areas.

Opposite to the previous studies (Chavda & Nisarga, 2023; Idris et al., 2020; Wang et al., 2020; Watt, 2019), this study revealed that the students' academic burnout was not influenced by parents' marital status and their academic level. It is argued that single parents are often overburdened economically and socially that they neglect their child's academic needs (Chavda & Nisarga, 2023). Studies on single parents showed that single parents often cultivated strong bonds with their children by dedicating quality time and maintaining open communication with children (Daryanai et al., 2016). They also developed resilience to overcome their financial hardships to ensure their children's needs are fulfilled (Daryanai et al., 2016).

Multiple regression was performed using father's parenting styles, mother's parenting styles, father-child relationships and mother-child relationships as predictors of burnout. The results showed that the four variables predicted 15.4% of the model (R =3.93, R² = 0.154, p <.01). Among these four variables, only father-child relationship (B = -2.62, p <.05) and mother-child relationship (B = -2.648, p <.05) were significant predictors. In both cases, stronger father-child relationships and mother-child relationships were associated with the lower level of burnout. These research findings are in line with study by Shi et al., (2004) and Zhu et al., (2021). Mother-child interactions from the stage of kindergarten to middle school found that positive quality of mother-child interaction accounted for their children's academic success (Morrison et al., 2003). Low quality mother-child interactions bring unpleasant repercussions such as poor cognitive functioning to their children (Sharifian & Zahodne, 2019). Similarly, long term positive father-child relationships can develop their children's confidence and motivation, helping them to cope with challenges in academics (Zhang et al., 2024). The results suggest that it is crucial to develop positive parent-child relationships to help students cope with academic burnout.

Differences in parenting styles result in varying levels of academic performance and academic burnout (Checa et al., 2019; Zhu et al., 2021). Parental care and support are essential for positive academic outcomes among children (Checa at al., 2019; Yang & Zhao, 2020). However, this study showed that there was no relationship between the father and mother's parenting styles and their children's academic burnout. It is possible that as children grow older, especially during adolescence, they may make independent academic decisions with less reliance on parental input, reducing the impact of parenting styles on academic burnout. Besides, secondary school students may have developed their own coping mechanisms to manage the effects of parenting styles on their studies.

CONCLUSION AND RECOMMENDATION

This study investigated academic burnout among secondary school students and its relationship with various variables, consisting of students' demographic backgrounds, parents' demographic backgrounds, and parental factors. This study produced mixed results as compared to previous studies on the same phenomenon. This implies that academic burnout is influenced by many intertwined external and internal factors, making it difficult to establish a clear relationship between these variables with academic burnout.

The implications of this study are twofold, both on educators and parents. This study found that academic burnout is prevalent among lower secondary school students. Besides academic achievement, education should focus on the holistic development of individuals, nurturing children with sound personalities capable of adapting to future life. Educators and parents should also pay more attention to any signs of academic burnout among students and their socio-emotional well-being. They should

help students develop healthy learning habits such as balancing studying and leisure time to minimize academic pressure.

Our study recommends that parental education should focus on the holistic development of individuals, nurturing children with sound personalities capable of adapting to future life. Parents should break away from the sole emphasis on grades and unreasonable expectations on their children. Instead, they should prioritise the physical and physiological well-being of their children to avoid them from experiencing academic burnout. Parental education should help parents develop positive parenting styles characterised by emotional warmth, acceptance, and support, striving to become companions in their children's journey of growth. At home, parents should establish a positive parent-child relationship to create a harmonious family environment.

This study has a few limitations in terms of methodology. First, this study collected data solely through questionnaires. For future studies, it will be beneficial to incorporate a few more follow-up questions to gain deeper insights to the research questions. For instance, it would be meaningful to obtain real-life examples on how paternal and maternal parenting styles affect academic burnout as well as in what ways father-child relationship differs from mother-child's in mitigating academic burnout.

Second, while the study participants came from two different secondary schools, both schools were situated in the same region within a province in China, with minimal differences in geographical and socio-economic factors. The sample size is also considered small. The small sample size and regional homogeneity limit the generalizability of the research results. Future studies could overcome this limitation by including larger samples from different regions in the same province or other provinces.

While this study employed a questionnaire to investigate the current status of parental parenting styles, parent-child relationships and academic burnout among lower secondary students and provided insights into the impact of parental parenting styles and parent-child relationships on academic burnout, indepth exploration of the underlying mechanisms between these factors has not been undertaken. For example, how do parental parenting styles and parent-child relationships specifically influence academic burnout among lower secondary students, and whether other environmental factors play a moderating role. Moreover, teacher support, classroom environment, and student-teacher relationships may have a more direct impact on academic burnout than parental influence. Therefore, future research could focus on delving deeper into the underlying mechanisms of the relationships between these three factors.

REFERENCES

- Acheloa Wellness. (2025, March 17). *Highest burnout jobs: Examining professions with the most burnout*. https://www.acheloawellness.com/post/jobs-with-highest-burnout-rates
- Ağır, M. S. (2018). An analysis on the secondary school students burnout in terms of academic self-efficacy, parental monitoring, social support and leisure time activities. *International Journal of Eurasia Social Sciences*, 9(34), pp. (2313-2341).
- Amelia, R. N. (2022). Literature review of academic burnout. American Research Journal of Humanities & Social Science, *5*(2), 6-13.
- Andrade, D., Ribeiro, I. J. S., Prémusz, V, Maté, O. (2023). Academic burnout, family functionality, perceived social support and coping among graduate students during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 20(4832). https://doi.org/10.3390/ijerph20064832
- Andriyani, A., Himma, A. D., Alizar, S. A., Amin, Z. N., & Mulawarman (2017). The relationship of anxiety, school burnout and well-being in high school students. *Advances in Social Science, Education and Humanities Research*, *158*, 130-135. https://doi.org/10.2991/ictte-17.2017.5

- Arrindella, W. A., Sanavio, E., Guido Aguilar, G., Sica, C., Hatzichristou, C., Eisemann, M., Recinos, L. A., Gasznerf, P., Peter, M., Battagliese, G., Kallai, J., & van der Ende, J. (1999). The development of a short form of the EMBU: Its appraisal with students in Greece, Guatemala, Hungary and Italy. *Personality and Individual Differences*, 27, 613-638.
- Baumrind, D. (1978). Parental disciplinary patterns and social competence in child. *Youth & Society*, 9(3), 239-267. https://doi.org/10.1177/0044118X7800900302
- Ceka, A., & Murati, R. (2016). The role of parents in the education of children. Journal of Education and *Practice*, 7(5), 61-64.
- Checa, P., Abundis-Gutierrez, A., Pérez-Dueñas, C. & Fernández-Parra, A. (2019). Influence of maternal and paternal parenting style and behavior problems on academic outcomes in primary school. *Frontier in Psychology*, 10(378). https://doi.org/10.3389/fpsyg.2019.00378
- Chavda, K., & Nisarga, V. (2023). Single Parenting: Impact on child's development. *Journal of Indian Association for Child and Adolescent Mental Health*. *19*(1):14-20. https://doi.org/10.1177/09731342231179017
- Chu, J. J., Khan, M. H., Jahn, H. J., & Kraemer, A. (2105). Only-Child status in relation to perceived stress and studying-related life satisfaction among university students in China: A comparison with international students. PLoS One, *10*(12). e0144947. https://doi.org/10.1371/journal.pone.0144947
- Daryani, I., Hamilton, J. L., Abramson, L. Y., Alloy, L. B. (2016). Single mother parenting and adolescent psychopathology. *Journal of Abnormal Child Psychology*. 44, 1411-1423. https://doi.org/10.1007/s10802-016-0128-x
- Farina, E., Ornaghi, V., Pepe, E., Fiorilli, C., & Grazzani, I. (2020). High school student burnout: Is empathy a protective or risk factor? *Frontiers in Psychology*. 11, 897. https://doi.org/10.3389/fpsyg.2020.00897
- Fiorilli, C., Farina, E., Buonomo, I., Costa, S., Romano, L., Larcan, R. & Petrides, K. V. (2020). Trait emotional intelligence and school burnout: The mediating role of resilience and academic anxiety in high school, International Journal of Environmental Research and Public Health. *17*, https://doi.org/10.3390/ijerph17093058
- Freudenberger, H. J. (1974). Staff burnout. Journal of Social Issues. 30(1), 159–165.
- Gabola, P., Meylan, N., Hascoët, M., De Stasio, S. & Fiorilli, C. (2021). Adolescents' school burnout: A comparative study between Italy and Switzerland. *European Journal of Investigation in Health, Psychology and Education*, 11, 849–859. https://doi.org/10.3390/ejihpe11030062
- He, Q., Zhao, B., Wei, H., & Huang, F., (2022). The relationship between parental phubbing and learning burnout of elementary and secondary school students: The mediating roles of parent-child attachment and ego depletion. *Frontiers in Psychology*, 13(963492). https://doi.org/10.3389/fpsyg.2022.963492
- Hiko, M. A. A., Es, A. C., Baysen, E., (2023). Single parenting and students' academic performance. *South African Journal of Education*, 43(4), 1-9, https://doi.org/10.15700/saje.v43n4a2297
- Idris, M., Hussain, S., & Ahmad, N. (2020). Relationship between parent's education and their children's academic achievement. *Journal of Arts and Social Sciences*, 7(2), 82-92. https://doi.org/10.46662/jass-vol7-iss2-2020(82-92)
- Jiang, H., Zhang, X., Zhang, Y., Yan, H., Yu, H., Tan, H. Y., Zhang, D., Yu, W. (2024). Effects of parenting styles on adult personality traits, depressive trait, and brain structure. *Asian Journal of Psychiatry*, *93*, 103939. https://doi.org/10.1016/j.aip.2024.103939
- Ju, C., Wu, R., Zhang, B., You, X., & Luo, Y. (2020). Parenting style, coping efficacy, and risk-taking behavior in Chinese young adults. *Journal of Pacific Rim Psychology*, 14(e3), https://doi.org/10.1017/prp.2019.24
- Krynen, C. (2011). The Rise of single-child Families: Psychologically harming the Child? *Intuition*, 7, 10-14. Lanjekar, P. D., Joshi, S. H., Lanjekar, P. D., & Wagh, V. (2022). The effect of parenting and the parent-child relationship on a child's cognitive development: A literature review. *Cureus*. 14(10), e30574. https://doi.org/10.7759/cureus.30574
- Li, B., Wu, Y., Wen, Z., & Wang, M. (2013). Adolescent student burnout Inventory in Mainland China: Measurement invariance across gender and educational track. *Journal of Psychoeducational Assessment*. 32(3), 227-235. https://doi.org/10.1177/0734282913508246
- Li, Z., Qiu, Z. (2018). How does family background affect children's educational achievement? Evidence from contemporary China. *The Journal of Chinese Sociology*. *5*(13). https://doi.org/10.1186/s40711-018-0083-8

- Lin, F., & Yang, K. (2021). The external and internal factors of academic burnout. *Advances in Social Science, Education and Humanities Research*. 615, 1815-1821. https://doi.org/10.2991/assehr.k.211220.307
- Liu, Z., Xie, Y., Sun, Z., Liu, D., Yin, H., & Shi, L. (2023). Factors associated with academic burnout and its prevalence among university students: a cross-sectional study. BMC Medical Education, 23(1). 317. https://doi.org/10.1186/s12909-023-04316-y
- Meier, S. T., & Schmeck, R. R. (1985). The burned-out college student: A descriptive profile. *Journal of College Student Personnel*. 26(1), 63–69.
- Morrison, E. F., Rimm-Kaufman, S., & Planta, R. C. (2003). A longitudinal study of mother—child interactions at school entry and social and academic outcomes in middle school. *Journal of School Psychology*, 41(3), 185-200. https://doi.org/10.1016/S0022-4405(03)00044-X
- Oyoo, S., Mwaura, P., Kinai, T. & Mutua, J. (2020). Academic burnout and academic achievement among secondary school students in Kenya, Hindawi. *Education Research International*, Article ID 5347828. https://doi.org/10.1155/2020/5347828
- Rahmatpour, P., Chehrzad, M., Ghanbari, A., & Sadat-Ebrahimi, S. (2019). Academic burnout as an educational complication and promotion barrier among undergraduate students: A cross-sectional study. *Journal of Education and Health Promotion*, 8, 1-5. https://doi.org/10.4103/jehp.jehp 165 19
- Salgado, S., & Au-Yong-Oliveira, M. (2021). Student burnout: A case study about a Portuguese Public University. *Educational. Sciences*, 11(31). https://doi.org/10.3390/educsci11010031
- Sharifian, N. & Zahodne, L. B. (2019). The enduring effects of mother–child interactions on episodic memory in adulthood. *Journal of Marriage and Family*, 81, 936–952. https://doi.org/10.1111/jomf.12569
- Teuber, Z., Nussbeck, F. W., & Wild, E. (2021). School burnout among Chinese high school students: the role of teacher-student relationships and personal resources. *Educational Psychology*. https://doi.org/10.1080/01443410.2021.1917521
- Vafa, Z., Azizi, M., & Athar, M. E. (2021). Predicting academic alienation from emotion dysregulation, social competence, and peer relationships in school-attending girls: A multiple-regression approach. *Frontiers in Psychology*, 12, 755952. https://doi.org/10.3389/fpsyg.2021.755952
- Vinter, K., Anus, K., & Arro, G. (2021). Adolescent girls' and boys' academic burnout and its associations with cognitive emotion regulation strategies. *Educational Psychology*, 41(8), 1061–1077. https://doi.org/10.1080/01443410.2020.1855631
- Walburg, V. (2014). Burnout among high school students: A literature review. *Child and Youth Services Review*, 42, 28–33. https://doi.org/10.1016/j.childyouth.2014.03.020
- Wang, J., Huang, X., Li, Z., Chen, K., Jin, Z., He, Z., Han, B., Feng, L., Meng, N., Yang, C., & Liu, Z. (2024). Effect of parenting style on the emotional and behavioral problems among Chinese adolescents: The mediating effect of resilience. *BMC Public Health*, 24(787), 1-12. https://doi.org/10.1186/s12889-024-18167-9
- Wang, W., Dong, Y., Liu, X., Bai, Y., Zhang, L., (2020). The impact of family environment on academic burnout of middle school students: The moderating role of self-control. *Children and Youth Services Review*. 119, 105482. https://doi.org/10.1016/j.childyouth.2020.105482
- Watt, A. (2019). Single parent households and the effect on student learning [Master's Thesis, Eastern Illinois University]. The Keep. https://thekeep.eiu.edu/theses/4464
- Yafee, Y. (2023). Systematic review of the differences between mothers and fathers in parenting styles and practices. *Current Psychology*. 42, 16011-16024. https://doi.org/10.1007/s12144-020-01014-6
- Yıldız, V. A., & Kılıç, D. (2020). Investigation of school burnout and school attachment among secondary school students. *Educational Sciences: Theory into Practice*, 20(3), 44-55, https://doi.org/10.12738/jestp.2020.3.004
- Yang, J., & Zhao, X., (2020). Parenting styles and children's academic performance: Evidence from middle schools in China. *Children and Youth Services Review*, 113, 105017, https://doi.org/10.1016/j.childyouth.2020.105017
- Zeng, Y., & Hesketh, T. (2016). The effects of China's universal two-child policy. *Lancet.* 388(10054), 1930–1938. https://doi.org/10.1016/S0140-6736(16)31405-2
- Zhang, X., (2011). Parent–child and teacher–child relationships in Chinese preschoolers: The moderating role of preschool experiences and the mediating role of social competence. *Early Childhood Research Quarterly*, 26(2), 192-204. https://doi.org/10.1016/j.ecresq.2010.09.001

- Zhang, X., Klassen, R. M., & Wang, Y. (2013). Academic burnout and motivation of Chinese secondary students. *International Journal of Social Science and Humanity*, *3*(2), 135-138. https://doi.org/10.7763/IJSSH.2013.V3.212
- Zhang, Z., Wang, Y., Wu, H., Zhou, Y., & Peng, C., (2024) Direct and indirect effects of father-child attachment on academic burnout in college students. *Frontiers in Psychology*, 15(1345590), https://doi.org/10.3389/fpsyg.2024.1345590
- Zhu, Q., Cheong, Y., Wang, C., & Tong, J. (2021). The impact of maternal and paternal parenting styles and parental involvement on Chinese adolescents' academic engagement and burnout. *Current Psychology*. https://doi.org/10.1007/s12144-021-01611-z