

# PSYCHO-SOCIAL AND INSTITUTIONAL PREDICTORS OF STUDY HABITS

## **Abstract:**

The present study aims at finding predictors of study habits and the ways of influence. This review work is based on 100 research papers from digital resources. It is found that all predictors of study habits can be broadly categorized as psychological, social and institution. Psychological predictors are very much proximal to students' cognitive process including their motivation, intelligence; sociological predictors are, though distal influence the student study habits via parental expectation, encouragement and psycho-social support; institutional climate, teachers' personality and methods of teaching and peer group influence.

**Keywords:** Study habits, study approach, study skills

## **Introduction:**

Attaining good marks in examination, getting a good job and other form of cognitive development within students have direct connection with their study behaviour. This creates a larger interest among researcher to focus study related behaviour of students. Its manifestation or focus in research literature is found in multifarious ways, like study skills, technique, approaches, time management style etc. In a broader framework some researchers have included all these study related aspects within the variable known as study habits which means consistent ways of studying (techniques for study, time for study, approaches for study, management style for study (Chitkara et al.,2014; Adams & Blair, 2019). It is obvious that study habits as a variable have positive relation with students' academic success (Yip, 2009; Onwuegbuzie, 2011). But it is not rational to think all the students study habits is uniform. Why do study habits varies among students is another interesting area of research. Multiple variables having either psychological origin or sociological context or larger policy context affects the study related behaviour or study habits of students. But no such comprehensive explanation **was** available in literature by considering all these variables and the pathways of their influence **on** study habits.

It is found from literature that study habits as a variable **have** been operationalized by researchers broadly from two perspectives, one is composite perspective and another is

separative perspective. From the composite perspective, researchers have tried to define study habits, they include all the dimension and try to find a composite score and this is primarily trend of the researchers from Indian, African and Middle East countries (Iaisan & Kumar, 2011; Ossai, 2012; Naqvi et al., 2018). But in separative perspective, the researchers have analysed the study habits in different dimension wise such as spacing, rehearsal, deep and surface approach etc. Within the larger research framework of study habits, huge number variables have been used by the researchers which denotes the same thing “how the students consistently studying”.

Psycho-social predictor includes both psychological and sociological aspect of student which affect their study habits. And institutional variables include institutional residence, academic stream, nature of institution and medium of instruction, teachers’ personality and teaching style which also affect study habits. Regarding the antecedent or variables which affect the study habits, researcher all over the world have tried to give their own justification. Not only inconsistencies are there with respect to their findings but also these are context based. The researchers who are interested to know the synthetic perspective of influence and faced challenges by the previous researchers. This piece of review work will not only help the future researchers to have a detailed idea about why and how variations happen in study habits but also it can help for better understanding about study habits. And the future researchers will be able to identify the research gap and to conceptualize the mediating process of their influence or pathways.

By this literature review, the present review paper will give answers the following questions:

### **Research Question:**

- (1) How do the previous researchers have conceptualized and operationalized study habits as a variable?
- (2) How do the psychological variables affect the study habits?
- (3) How do the socio-ecological variables affect the study habits?
- (4) How do the institution related variables affect the study habits?

### **Method:**

For this study, primarily secondary data sources have been used and this is a purely review work which consist of 58 papers from databases like Scopus, ProQuest, Web of science, ResearchGate, google scholar etc. The researchers have used different key words like study habits of the students, predictors of study habits, factor influencing the study habits

and status of study habits of the university students, study skill, study technique, study approach, study strategy, learning skill, learning strategy etc. while searching in the internet. The research papers published from year 2000 to 2021 have been considered.

### **Selection criteria of research papers:**

The researchers have selected those articles which were studied on socio-cultural predictors, institutional predictor, psychological predictors of study habits and relationship between study habits and academic performance. Initially 100 number of articles from the internet downloaded and finally 58 research papers have been selected or included in the study and rest articles did not meet the above criteria after the examination of the papers.

### **Global Tools trends:**

It is found that Western researcher has used self-developed study skills questionnaire and standardized study strategy and approaches to study inventory whereas 70% Indian researcher has adopted study habits inventory by M. Mukhopadhyay & D.N. Sansanwal and 30 % researcher has used study habits inventory by C.P. Mathur & B.V. Patel and Palsane & Sharma.

### **Results:**

#### **(1) How do the previous researchers have conceptualized and operationalized study habits as a variable?**

Study habits refers to consistent pattern of study behaviour, skills and strategy of the students. In the research framework different aspect of study behaviour have been focused such as duration of study; time of study; individualized vs group study (Chitkara et al.,2014; Adams & Blair, 2019). On the other hand, while measuring study skill researchers have focused on several skills like; underline the main points; taking note from lectures or during study, use library to study, study from e-content, rehearsal and rote learning, summary method, visual imaginary, spacing and testing (Chitkara et al.,2014; Patidar, 2019). Study strategy is denoted as processing information, studies book deeply and studies in surface. (Bernadette et al., 1987). Approaches to studying refers to the students' general orientation toward learning in academic situations (Richardson, 2013). It can be categorized in to three aspect such as deep approach, strategic approach and surface approach. Deep approach is described as the intention to understand the learning material and to relate the concepts to

evidence and experiences (Brown et al., 2016); strategic approach to study is described as oriented toward competition and achievement and to get good grades (Carstensen et al., 2018); surface approach is associated with rote learning and studying with aim of passing exams while making little effort (Entwistle et al., 2000).

## **(2) How the psychological variables affect the study habits?**

From the literature, it is found that cognitive and emotional related variables like meta-cognitive, intelligence, personality, motivation, mental health, anxiety etc affects the study habits of the students. Plethora of research findings have documented regarding effects of students' psychological variables on their study habits. A positive relationship is found between meta-cognition and study habits (Ozsoy, 2009; Sekar & Rajendran, 2013; Zhou & Wang, 2020). It is found that students having high meta-cognitive ability use study technique likes self-testing, spacing and select study material according to their pre-plan than counterparts (Zhou & Wang, 2020). It is found from the literature that there is a significant relationship between intelligence and study habits (Kumar et al., 2017). Regarding association between intelligence and study habits, it is seen that intelligent students can grasp, retain, recall and understand academic content easily than average intelligent students (Chandra & Azimmudin, 2013). Personality also effects the students study habits (Ramya & Sethuramalgan, 2019; Ahangar, 2019; Brav & Trejo, 2021). And it is found that study approaches vary according to the personality of the students. The neurotised personality students use surface approach where the extroversion students use deep approaches (Entwistle & Tait, 1996). Neuroticism is linked to lack of concentration, fear of failure, and experiencing studying as stressful (Entwistle, 1986).

There is a positive relationship exists between mental health and study habits (Chandra & Reddy, 2014). If a student is mentally unhealthy then he/she will feel worry, fear to do work actively, procrastinate to avoid the circumstances and will not participate actively in learning and study situations (Grotan et al., 2019). From opposite perspective, negative correlation is found between anxiety and study habits (Bailey et al. 2000). High stress is associated with incomplete sleep; students can't concentrate on study and feel sluggish in class or during study (Bailey et al. 2000) and also it is found that anxiety disorder students exhibit a passive attitude towards their studies in the form of low interest in learning, poor performance in exams, and unable to complete assignment (Vitasaria,2010). The anxious students have low ability to manage their study skills (Kaya et al., 2012).

### **(3) Social variables as predictors of study habits:**

It is documented that social variable like gender, parental socio-economic status and residence locality affects the study habits.

#### **(3.1) Effect of Gender on study habits**

Regarding the effect of gender on study habits, three types of results have been reported. One types of result supports, girls have high study habits than boys (Ossai, 2012; Khan & Jan, 2010; Ogan, 2015; Unwalla, 2020; Chadha, 2015; Urh & Jareb, 2014; Sahni, 2012; Khurshid et al., 2012; Karakose, 2015). High study habits among girls have been explained from the sex based differential psychological attribute point of view, i.e., girls are more competitive, focused towards goal (Rana & Deepika, 2020; Chadha, 2015); high self-disciplined, more attentive and mature than boys (Unwalla, 2020). From separative perspectives, it has been reported that girl students have better time management skill related to study than their counterparts (Kaya et al., 2012). In a comparative study it has been reported that around 80% of girls prefer for textbook reading whereas only 29% boys have same and boys mostly prefer handouts provided by their teachers for their study (Jameel et al., 2019). Along with this, it is also documented that girls prefer more surface approach during study (Carstensen et al., 2018). Another perspective in support of girl's positive study habit is that due to more socio-structural restriction imposed by family to enjoy outdoor activity than boys, they have more time for study than the boys (Jameel et al., 2019).

In contrast to the above findings, it has been reported that boys have more study habit than girls (Rathee & Seema, 2017; Ogan,2015; Tahir et al., 2014; Devi 2016; Rogers & Hallam, 2006). These contradictory results have been explained again from socio-structural perspective of gender differential parental attitude, opportunity, encouragement and support. Due to patriarchal family system and son preference attitude within Indian parents, boy gets more opportunities, encouragement and support from parents for his development in comparison to his girl counterpart (Khan, 2016) which indirectly influence this differential finding.

Along with this contradiction, some findings also support for no difference (Jafari et al., 2019; Vyas & Chaudhary, 2016; Joseph,2017; Kumar, 2017; Radha & Muthukumar, 2015; Kumar & Jaswal, 2017; Naqvi et al., 2018). It may be due to fact that, due to social change process like urbanisation, modernisation and reformative policies, women also access the

same opportunities, amenities and condition in domestic and society including in educational institutions as per their male counterparts (Fanai and Lalrinngheti, 2016). Research findings from western countries support no gender-based difference in study habit (Hashemian & Hashemian, 2014, Hosseini et al., 2009).

### **(3.2) Effect of locality on study habits**

In the context of residence locality and study habits, it has found that locality is a predictor of the study habits of the students (Goud, 2018; Khan, 2016). Maximum studies conducted on school going students and study habits. Better study habits among urban students have been explained from locality resources point of view (Dahiya, 2013; Pachaiyappan & Prabu, 2014; Radha & Muthukumar, 2015). Urban students have more access to quality education, technology and opportunities than rural students (Ezeudu & Theresa, 2013). In urban areas, community library facilities are available for the students. On the other hand, rural students have lowest study habits which can be explained primarily from resource deficit and low value for education. Rural students face problem for access to good quality school, communication technology. Rural parents give less importance to their child education and rural students can't access more study resources. Also, it has been reported that no differences in the study habits due to their residential locality (Bai, Singh & Debnath, 2019) and no supportive explanation has been documented.

### **(3.3) Parental socio-economic status on study habits**

It is documented that parental socio-economic status is a predictor of student's study habits (Razia, 2015; Khan, 2016, Nayak & Panda, 2019). Parental socio-economic status has three indicators i.e., parental income, occupation and education. Parental education related with parental involvement and expectation. More educated parents have more expectation on their children and they are more involved with their children education which ultimately affects their children study habits. When the separate effect of parental socio-economic status on different aspect of study habits like comprehension, study sets, interaction, drilling recording & language dimensions, no effect has been found (Sheikh & Jahan, 2012), but regarding the effect of parental occupation on study habits, it has been found that the students of working mothers have better on concentration, task orientation & supports dimension of study habits than non-working mothers (Sheikh & Jahan, 2012; Ghosh, 2017). Along with this, it has been documented that habit of concentration of study students of non-working mothers have better than students of working mothers whereas Students of working mothers have better reading

& note taking, planning of subjects & preparation for examination dimensions of study habits than students of non-working mothers (Aditya & Ghosh, 2014).

Related with parental socio-economic status, it has been found that parental involvement is a predictor of study habits i.e., more the parents involve in the student's education matter better in their student study habits (Dahiya, 2013) the reason is that the students get more supports from their educated parents which leads to perform good in academic career (Nelson, 2009). But though family structure is a variable or predictors of study habits has been focused by the researcher, no effect has been found (Radha & Muthukumar, 2015); and tribal students have better study habits than schedule caste students (Bara, 2018); non-tribal students have better study habits, parenting and academic achievement than tribal adolescent students (Parhi, 2020). It is found that students from high and medium socio-economic status use deep and surface strategy than the students from low socio-economic status (Aharony, 2006). It is due to higher income parents can provide more learning opportunities and resources and quality tutoring facilities (Zhang & Xie,2015).

#### **(4) Institution related variables:**

Educational institutions also affect students study related behaviour or habits. In this context, literature has focused, the structural component of institution likes nature of school, medium of instruction, types of institutional residence; resources related variable and teachers and teaching learning related variable. It is found that teachers' teaching style and personality affect students study behaviour, the way teacher present the concept, discusses in the class and analyse critically, the students learn this learning technique from teachers' pedagogical behaviour.

It is documented that teachers' personality and teaching style influence the study behaviour or study habits (Maazouri, 2009; Jennings & Diprete, 2010). Along with it is found that science students have a better study habit than arts students. (Rana & Deepika ,2020; Sahni, 2012; Kumar, 2017). As, science stream students do have more practical, drill, project work (Rana & Deepika ,2020). And hosteler are better in their study habits than day scholar (Urh & Jareb, 2014; Morris, 2012). It is due to, hosteler students gets a certain degree of autonomy and responsibility, which is clearly reflected in their study (Urh & Jareb, 2014). From the previous literature it is also found that the nature of school has a significant effect on the study habits of the students (Chand, 2013; Goud, 2018; Rana & Deepika, 2020), Where private students possess better study habits than government school. Also, no significant

difference found between two universities with regard to students' study habits (Hashemian & Hashemian, 2014). The previous researchers have also stated that according medium of instruction study habits also varies (Kathawade, 2014; Grewal, 2018).

## **Discussion:**

In the first research question, it was found that study habits, study skills, study strategy and approaches to study etc have been used interchangeable manner by the researchers. Researchers from Australia, USA and Germany country have used mostly study approach and study strategy, whereas study habits and study skills have been used by Indian and turkey researchers. Thus, we can say study habits is a individualized approach to study.

Along with students' psychological variables, researchers have also considered some sociological predictors of study habits. **The reason for considering sociological variable is rooted in Bronfenbrenner's ecological system theory (Bronfenbrenner, 1979). This ecological system theory of Bronfenbrenner has contextual explanation for associating students' study related behaviour with larger micro and macro level of social ecology.** As per the theory, it is assumed that though development is influenced by proximal variables like students' own intelligence, personality, creativity and motivation etc but sometimes the distal variable which acts in social level affects the study habits via the psychological variables.

Within the present context of literature review, we observed that gender is a socio-cultural variable and a predictor of study habits has been primarily focused by the researchers from India, Midlist and Asian country including African country with respect to the findings.

In the context of institution related variables, it is seen that teachers' personality, teaching style affect the study habits mostly and it is also found that students who are staying in hostel, they more preferred study technique, deep approach and engage more time in study.

## **Policy Implication:**

- Hostel should be monitored time to time whether students are studying or not.
- Institutional resources should be improved.

## **Conclusion:**

As per the ecological system theory, the psychological variable is proximal variables which directly affects the cognitive development of the individual whereas social variable and

institutional variable play a distal role which affect the development of individual indirectly. Thus, social and institutional variables affect the study habits of the students indirectly through the intelligence, motivation, personality etc. Study habits seem to be an important predictor of academic achievement.

**Conflict of interest:**

The authors have no conflict of interest as this is a review based paper.

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References

- Adams, R. & Blair, B. (2019). Impact of time management behaviours on undergraduate engineering students' performance. *Sage Open*, 9(1), [DOI: 10.1177/2158244018824506](https://doi.org/10.1177/2158244018824506).
- Aditya & Ghosh (2014). Study habits of secondary school students of working and non-working Mothers. *Journal of Humanities and Social Science*,19(10),12-15.
- Ahmad, T., Koki, A. & Abudullahi, U. (2014). Gender differences in study habit skills of undergraduate students of Yobe state university. *Knowledge Review*, 31(2), 1-5.
- Ahmed, O., Hossain, M. A., & Rana, M. S. (2018). Role of self-esteem and study habit on academic achievement of university students. *Bangladesh Journal of Psychology*, 21,81-92.
- Alavi, H., Lesani, M., & Mahadavinia, J. (2017). Study habits and achievement: a comparison of medical and paramedical students. *The International Journal of Indian Psychology*, 4(2),70-75.
- Bailey, P., Onwuebuze, A.J., & Daley, C. E. (2000). Study habits and anxiety about learning foreign languages. *Perceptual and Motor skill*, 90,1151-1156.
- Boehler, M. L., Schwind, R. N., Folse, R. & Mrakwell, S. (2000). An evaluation of study habits of third year medical students in a surgical clerkship. *The American Journal of Surgery*,181,268-271.
- Bronfenbrenner, U. (1979). The ecology of human development. *Harvard University Press*.
- Chandra, T. S., & Reddy, S.V. (2014). Effect of mental health on study habits, teaching aptitude and academic stress among perspective teachers. *Indian Journal of Applied Research*, 4(12), 505-508.
- Chand, S. (2013). Study habits of secondary school students in relation to types of school and types of family. *International Journal of Social Science & Interdisciplinary Research*, 2(7), 90-96.

- Chitakara, N., Singhal, P., & Aggarwal, P. (2014). Study habits of Higher performing Engineering Students: A Survey. *International Journal of Computer Applications*, 97(2),33-37.
- Dayal, J. K. (2013). Impact of family environment on study habits. *Indian Journal of Applied Research*, 3(9), 172-173.
- Dey, C. (2014). Effect of study habit on academic achievement. *International Journal of Research in Humanities and Social Sciences*, 2(5),101-105.
- Diseth, A. (2002). The relationship between intelligence, approaches to learning and academic achievement. *Scandinavian Journal of Educational Research*, 46, 219–230.
- Entwistle, N.J., Waterson, S. (1988). Approaches to studying and levels of processing in university students. *British Journal of Educational Psychology*, 58, 258–265.
- Grewal, S. (2018). A comparative study of study habits of English medium and Hindi medium school students. Retrieved from, <http://www.ijarjie.com>.
- Iaisan, M., & Kumar, D. (2011) Study Habit of Post Graduate students in relation to Gender, Faculty and Academic Achievement. *International Journal of Educational & Social Development*, 2(1), 55-68.
- Jena, P. C. (2018). Study habit of university foreign students in relation to gender and streams of education. *World Scientific News*, 92(2), 351-359.
- Jafari, H., Aghaei, A., & Khatony, A. (2019). Relationship between study habits and academic achievement in students of medical sciences in Kermanshah-Iran. *Advances in Medical Education and Practice*, 637-643.
- Joseph, C. M. (2017). Study habits of high school students – A research. *Indian Journal of Applied Research*, 7(4), 547-550.
- Jahan, Q. & Sheikh, M. (2012). Study habits of higher secondary school students of working mothers and non-working mothers. *Journal of Education and Practice*, 3(12),119-126.
- Kaya, H., Kaya, N., & Pallo, A.K. (2012). Assessing time management skills in terms of age, gender and anxiety levels: A study on nursing and midwifery students in Turkey. *Nurse Education in Practice*, 12(5),284-288.

- Khan, Z. N. (2016). Factors effecting on study habits. *World Journal of Educational Research*, 3(1),145-150.
- Khan, M. A. & Jan, N. (2010). Study habits of senior secondary school students: a comparative study of boys and girls. *Human Behaviour: Journal of Applied Psychology*, 5(1), 16-21.
- Koki, A. T., & Abdullahi, U. (2014). Gender Differences in Study Habit Skills of undergraduate students of Yobe state university. *Knowledge Review*, 31(2)
- Kumar, S. (2015). Study habits of undergraduate students. *International journal of Education Information Studies*, 5(1), 17-24.
- Kumar, R. (2017). Study habits of science and arts students at senior secondary school level. *Scholarly Research Journal for Interdisciplinary Studies*,4(31),5720-5727.
- Mbah, T.B. (2010). The impact of ICT on students' study habits. Case study: university of Buea. *Journal of Science and Technology Education Research*, 1(5),107-110.
- Naaz, E. (2014). A study of undergraduate college student's study habits in relation to their academic achievement. *International Journal of Research in Commerce, IT & Management*, 4(02),60-64.
- Naqvi, M., Chikwa, G., Menon, U., & Kharusi, D. A. (2018). Study Skills Assessment among Undergraduate Students at a Private University College in Oman. *Mediterranean Journal of Social Sciences*, 9(2),139-147.
- Neelam, Krishna, D. & Sachan, H.K. (2015). Study habits of undergraduate students at Caff in Fiji national university. *International Journal of Agricultural Science and Research*,5(4),159-166.
- Nourian, A., Shah, M.F., Mousavi, S.N., & Nourian, A. (2011). Study skills and habits of the studentsi in Tehran Islamic Azad University of medical sciences in the academic year 2008-2009. *Strides in Development of Medical Education*, 7(2), 104-111.
- Olabanji, O.E. & Olufemi, O.S. (2018). Social media utilization, study habit and undergraduate students' academic performance in a university of education in Nigeria. *Library philosophy and Practice*.

- Omar, Z., Siddiqi, J., Shamshad, B. (2019). Impact of mobiles phones on study habits of university of Karachi students. *International Journal of Current Research*, 11(04),3263-3268.
- Onwuegbuzie, U. (2011). Correlation between study habit and students' academic success. *Jos J. Educ*, 2(1).
- Ossai, M. (2012). Age and Gender Differences in Study Habits: A Framework for Proactive Counselling Against Low Academic Achievement. *Journal of Educational and Social Research*, 2(3), 67-73.
- Ozsoy, G., Aysel, M., & Turan, T. (2009). Metacognition, Study Habits and Attitudes. *International Electronic Journal of Elementary Education*, 2(1),154-166.
- Pachaiyappan, P. & Prabu, T. (2014), Study habits of higher secondary Biology students – An analysis. *Indian Journal of Applied Research*,4(6),15-17.
- Pathak, R. (2016). Study habits of hosteller and day scholar students: a comparative study. *Indian Journal of Applied Research*, 6(1), 399-401.
- Patidar, J. (2019). Evaluation of Study Skills in Nursing Students. *International Journal of Nursing Education*, 11(3), 26-31.
- Paulson, R.N. & Starlet, S. (2018). Study habits and achievement motivation: a comparative study among arts & science students. *International Journal of Science and Research*,7(10).
- Praveen, D. (2014). A correlational study of intelligence, study habits and academic achievement at tenth grade students. *Indian Journal of Research*,3(4),236-238.
- Rajendran, R., Sangeetha A., & Sharon, S. T. (2019). An analysis on the study habits among undergraduate medical students. *International Journal of Medical Research and Review*, 7(05),404-410.

- Rana, N. & Deepika (2020). Study habits of higher secondary school students in relation to their gender, type of school and academic stream. *MIER Journal of Educational Studies, Trends & Practices*, 10(1), 113-123.
- Rathee, N. & Seema (2017) Effect of home environment on study habits of secondary school students. *Indian Journal of Applied Research*, 7(4),491-493.
- Razia, B. (2015). Study habits of secondary school students in relation to their socio-economic status and gender. *International Journal of Social Sciences and Management*, 2(1), 68-73.
- Sahni, M. (2012). Study habits of college students: differences with respect to gender and academic stream.
- Sayi, A.K. & Icen, M. (2019). Examining the relationship between parental attitudes and the study habits of gifted children. *International Journal of Progressive Education*,15(6),17-32.
- Sekar, J. A. & Rajendran, K.K. (2015). Study skills of Arts and Science students. *Indian E-Journal on Teacher Education*, 3(2), 46-55.
- Shet, C. & Thakre, N. (2020). Parenting styles, study habits and achievement motivation among adolescents. *Journal of Psychological Research*, 15(1), 281-293.
- Siahi, E. A. & Maiyo, J. K. (2015). Study of the relationship between study habits and academic achievement of students: a case of Spicer higher secondary school. *International Journal of Educational Administration and Policy Studies*,7(7),134-141.
- Singh, A.B. (2019). A study of study habits of senior secondary school students. *International Journal of Humanities & Social Science invention*, 8(06), 23-28.

- Thomas, O.A., Omotoke, O.O. & Ademola, R.O. (2016). Assessment of social media utilization and study habit of students of tertiary institution in Katsina state. *Journal of Educational and Practice*, 7(3),178-188.
- Uju, E. F. & Paul, O. A. (2017). Study habit and its impact on secondary school students' academic performance in biology. *Educational Research and Reviews*,12(10), 583-588.
- Urh, M. & Jareb, E. (2014). Learning habits in higher education. *Social & behavioural Sciences*,116, 350-355.
- Vitasari, P., Nubli, M., Wahab, A., Herawan, T., & Sinnadurai, S. N. (2010). The relationship between study anxiety and academic performance among engineering students. *Procedia Social and Behavioural Sciences*, (8),490-497.
- Yip, M.C. (2009). Difference between high and low academic achieving university students in learning and study strategies: A further investigation. *Educational Research and Evaluation*, 15(6), 561-570.
- Zhou, J. & Wang, X. (2020). The influence of Chinese college students' meta cognitive strategy and motivational beliefs on their study habits. *Asia- Pacific Edu Res.*