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THE NEXUS BETWEEN AGGRESSION & ACADEMIC ACHIEVEMENT AMONG STUDENTS: A GENDER-BASED CORRELATIONAL STUDY

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| KEYWORDS | ABSTRACT |
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| <p>Gender Differences, Academic Achievement, Aggression, Secondary Schools, Students</p> | <p>This research attempts to analyze the relationship between aggression and academic achievement among secondary school students, with a focus on gender differences. For this research, the purposive sample of 400 students (200 boys and 200 girls) was drawn from secondary schools across all five districts of Karachi, Pakistan. The aggression questionnaire short form was used to assess the participant's overall aggression. The sample's academic success was assessed by percentage of most recent school examination. Pearson product-moment correlation analysis revealed overall insignificant correlation between aggression and academic achievement for combined sample. The results provide significant information in reaching conclusion and making decision. However, significant negative correlation was found between the aggression and academic achievement in girls' sample. The t-test revealed a significant gender difference in academic achievement, with girls performing better than boys. No significant gender differences were observed in aggression levels. In this connection, this study highlights the diverse factors contributing to girls' achievements and its relationship with aggression. Similarly, some limitations and future research directions are also offered.</p> |
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INTRODUCTION

The complex interaction linking aggression and academic achievement through teenage years has gained substantial interest in the academia. This topic has been studied across the globe. For example a recent large scale study conducted in Kenya that found the negative association between aggression and academic achievement (Kibe, Owaa & Raburu, 2023). This notion has been endorsed by large scale study by Vuoksimaa et al. (2021) that further endorses the notion

that aggression is related to poorer academic performance. But there are other studies too that found no significant correlation between aggression and academic achievement (Kashif, 2022). So it can be said that there is no simple answer to this question and this topic requires further studies. The gender dynamics have additionally complexified the intricate link of aggressive behaviors with educational outcomes. For their academic achievement, the boys and girls have been found similar, however, aggressive behaviors have been less often reported in girls than boys (Rahman & Nahar, 2013; Ahmad, 2014). Several studies have found gender differences in aggressions in adolescents. For example, Card and Little (2008) found that males in the study had a slightly higher aggression. Similarly Toldos (2005) found that the adolescent males were higher in overall aggression than the adolescent females, specifically physical as well as verbal aggression.

When it comes to academic achievement, gender differences have also been observed in this domain also. For example, the academic achievement in mathematics was higher in adolescent males as compared to adolescent females (Ahrenfeldt, Petersen, Johnson & Christensen, 2015). Another study (Bécares & Priest, 2015) found that achievement of white males was superior to that of Latino, Black males and females. Eddy, Brownell and Wenderoth (2014) assessed class participation through the students' responses to teachers' questions, observed that in biology class, females showed lesser class engagement and lower performance than males. But in the arithmetic, females had higher achievement than males. Thus, sometimes individuals behave aggressively because they feel afraid or threatened. The traditional stereotypes keep reporting girls to be higher on achievement contexts (Hyder, 2014). Still, several factors challenge these discrepancies including intellectual capabilities (Mursaleen & Munaf, 2020), style of learning, and sensitivity of academic techniques to differential needs of adolescents (Munir, Mursaleen, Khalid, Tahir, Yaqoob & Mumtaz, 2023). It aims to add knowledge on these phenomena and determine the relationship of aggression with the academic achievement of secondary school students.

LITERATURE REVIEW

The aggression is defined as the feelings anger or antipathy that may result in hostile or violent behavior. The interdisciplinary viewpoint sees aggression as set of mechanisms created during the course of evolution in order to assert oneself, friends or relatives from others, or to achieve or to defend resources by damaging and harmful means (Wahl, 2019). As per Freud aggression stems mainly from a powerful death instinct possessed by all persons (Ewen, 2010). According to Bandura social learning theory (Ewen, 2010) five cognitive factors play their role to mediate the control of aggressive behavior. These factors include; attention: subject will pay attention to the aggressor in order to make their role model. Retention: any behavior to modelled should be retained in long term memory. Production: subject must be able to replicate the behavior, i.e. have physical capabilities. Motivation: there must be an expectation of reward for this behavior (that can be materialistic & symbolic). Self-efficacy: the subject must believe that their behavior will attain the goal According to Bandura aggression is reinforced by imitation of members of family as most important source of behavior modelling (Ewen, 2010). The studies underline the

standing of addressing aggression over targeted interventions to promote academic success & well-being.

According to the evolutionary perspective aggression is a behavior that controls social order and protects resources. It is considered a normal and necessary part of human societies, however, its certain types are considered pathological because those forms threaten lives, increase the likelihood of future psychological disturbance in victims and witnesses, and increase economic burdens on society (Flanigan & Russo, 2018). There are no accepted types of aggression. The scientists usually classify it in a simple dichotomy of physical and verbal aggression, but theorists can go further and define its subtypes in many different ways. For example, in a study by Yamasaki and Nishida (2009), aggression is divided into three types: 1. Reactive-expressive (i.e., verbal and physical aggression), 2. Reactive-inexpressive (i.e., hostility), and 3. Proactive-relational aggression (i.e., aggression that can break human relationships, for instance, by circulating malicious rumors). Theorists usually differentiate anger and aggression (NHS Inform, 2024). Anger is a feeling, while aggression is this feeling plus its expression in some form. Not all who feel anger are aggressive, and not all who act aggressively are angry. Sometimes individuals behave aggressively because they feel afraid or threatened (NHS Inform, 2024). It defines academic outcomes that specify the degree to which a student has attained their learning goals. It may refer to completing educational benchmarks like any degree/certificate (Top Hat, 2020).

It is mostly measured with grades (by course or assignment) and GPA (York, Gibson & Rankin, 2015). Tindle et al. (2022) found that academic performance was correlated with emotions, stress, satisfaction, study effort, anxiety & depression, study effort, prior academic achievement, adjustment, motivation, and social support. It is related to emotional intelligence (Shengyao et al., 2024). Refers to socially constructed characteristics of men and women. This includes roles, norms, and behaviors related to a girl or a boy, and relationships with each other (WHO, 2019). Gender studies is an interdisciplinary field devoted to analyzing gender identity and representation. In this linking, such studies cover a vast array of topics that can also include the differences in a particular variable in terms of gender in diverse circumstances (Wiesner, 2021). Differences between both genders can be noticed very early in life. These differences are present and also later and become wider and more pronounced. In this connection, to a much greater extent they affect the lives in adulthood in a wide spectrum of behavioral, cognitive, psychological, and physical characteristics (Szadvári et al., 2022). Insights from this would not only help adolescents in enhancing their achievement and social emotional learning but also provide insights into the changing dynamics of the critical period of adolescence in this modern era.

RESEARCH METHODOLOGY

This study employed quantitative methods involving Correlational and Comparative research design. A diverse sample of 400 secondary school students (Mean Age = 15.05 years, SD = 1.14) was utilized for this research. This sample was divided into two groups based on gender, with 200 boys (Mean = 15.44, SD = 0.091) and 200 girls (Mean = 14.68, SD = 0.814). The purpose

sampling technique was utilized to select students from the different private schools of five districts of Karachi including district East, district West, district South, district Central & district Malir.

Measures

The aggression was assessed through AQ -12. This scale is comprised of four subscales, namely verbal aggression, physical aggression, anger, and hostility. In this regard, the tool is a reliable and valid instrument for measuring adolescent aggression (Bryant & Smith, 2001). This scale was used due to its reliability and validity and also because it is suitable for the age of sample of study in order to ensure the consistency. The academic achievement of sample was assessed through the percentage scores obtained in their most recent school examinations. It was chosen as a measure of academic achievement because it is the end result of any student's academic endeavors.

Procedure

A list of private schools registered with Board of Secondary Education Karachi was compiled for sample collection. All the schools from district East, West, South, Central and Malir were enlisted to ensure representation of adolescents from all over Karachi. The formal consent and permission were obtained from head of institutions to conduct the study at selected secondary schools. Students from the selected schools voluntarily participated in the study. They filled in the AQ-12 and provided information about their most recent exam percentage in order to extract the desired information. The academic record of participants including their percentage scores in recent school examination were confirmed by school authorities with proper consent. Pearson product moment correlation and independent sample t-test was utilized for statistical analysis.

Ethical Considerations

The participants were asked for their active consent to participate in this study. This study was conducted over voluntary participation of sample. As an incentive the students were provided with a motivational lecture. All participants' responses were kept anonymous while analyzing data.

RESULTS OF STUDY

Table 1

Correlation between Aggression and Academic Achievement (N=400)

| | 1. | 2. | M | SD |
|-------------------------|-------|----|-------|-------|
| 1. Aggression | -- | | 41.43 | 10.98 |
| 2. Academic achievement | 0.087 | -- | 76.14 | 11.07 |

Table 1 indicates that for combined sample the correlation between aggression and academic achievement is thus insignificant. In this regard, it implies that the aggression generally does not correlate with academic achievement. Both variables are not predictor of each other in any direction.

Table 2

Correlation between Aggression and Academic Achievement of boys (N=200)

| | 1. | 2. | M | SD |
|-------------------------|-------|----|-------|-------|
| 1. Aggression | -- | | 40.46 | 10.83 |
| 2. Academic achievement | 0.427 | -- | 75.00 | 11.74 |

Table 2 indicates that for the for boys sample the correlation between aggression and academic success is insignificant. It implies that aggression generally does not correlate with academic achievement for this segment of sample. Both variables are not a predictor of each other in any direction.

Table 3

Correlation between Aggression and Academic Achievement of girls (N=200)

| | 1. | 2. | M | SD |
|-------------------------|--------|----|-------|-------|
| 1. Aggression | -- | | 42.41 | 11.07 |
| 2. Academic achievement | -.181* | -- | 77.29 | 10.25 |

* Correlation is significant at the 0.05 level (2-tailed).

The table 3 indicates the significant negative correlation between academic achievement and aggression for girls. In this connection, the correlation is significant but weak and in negative direction indicating that higher degree of aggression in girls is a predictor of lower academic achievement.

Table 4

Gender differences in Aggression and Academic Achievement (N=400)

| | Boys (N=200) | | Girls (N=200) | | T | P | Cohen's d |
|----------------------|--------------|-------|---------------|-------|-------|------|-----------|
| | M | SD | M | SD | | | |
| Aggression | 40.46 | 10.83 | 42.41 | 11.07 | 1.78 | .075 | 0.17 |
| Academic Achievement | 75.00 | 11.74 | 77.29 | 10.25 | 2.07* | .038 | 0.20 |

*Mean difference is significant at $p < 0.05$.

The table 4 indicates that a significant gender difference was found in academic achievement where girls scored higher than boys. It also indicates that there is no gender difference in terms of aggression.

DISCUSSION

This study aimed to determine relationship between aggression and academic achievement. It also examined the gender difference in these two variables. The results indicate for combined sample, aggression is not correlated with academic achievement implying that both variables do not positively or negatively predict each other (Table 1). Similarly for the boys' sample, the correlation between the above stated variables is insignificant (see Table 2). Interestingly for sample of girls there is a significant (although weak) negative correlation between aggression and academic achievement. Implying that girls with higher degrees of aggression tend to have

poor academic results (Table 3). The previous studies indicated negative relationship between aggression and academic achievement (Kibe et al., 2023; Vuoksimaa et al., 2021), but those findings were not specific to any gender while in the current study aggression is found to be correlated with only the girl's achievement. These results can be explained with the help of the following studies. Yu et al. (2014) found that males tend to externalize their aggression, while females tend to internalize their aggression resulting in the development of inward negative feelings.

It appears that girl's tendency of internalizing of aggression makes it more hazardous for their academic achievement which might be resulting in the lower academic achievement in case of higher aggression. Further, findings provide complex interplay of factors affecting academics and behavioral patterns of adolescents. Significance of inverse relationship, especially for girls provides a clue towards gender related patterns. For instance, findings of a study emphasizes probable negative outcomes of girls' aggression on their scholarly results could be related to multiple aspects specific to adolescent girls such as societal expectations, coping strategies, and their relationships with others as the girls' expression of anger might pose them to appear less pro-social which is not generally expected from them (Leadbeater et al, 2006). Hence, any kind of behavioral expression of relational anger in academic settings might effect their academic results. These findings are vital to suggest targeted intervention especially for girls' aggression. Policy makers, school psychologists, and educationists should carry specific implications in the light of current study's findings. For instance schools should be receptive to providing targeted interventions to address academic challenges faced by the girls who exhibit the higher level of aggression.

The students can be referred to counselling to develop better communication & social emotional skills. Moreover, this study revealed more interesting gender dynamics related to academics and behaviors of adolescents as contribute to valuable insights. Gender differences in academic achievement and aggression were calculated and although there was mean difference in both, the t value was only significant for academic achievement implying that in given sample girls' achievement was significantly higher than boys (Table 4). Previous studies showed that boys are aggressive than girls but have equal levels of the academic achievement (Rahman & Nahar, 2013; Ahmad et al. 2014; Roy & Jha, 2022). Contrarily, lack of significant gender differences in aggression challenge the conventional stereotypes that label boys to be more aggressive. The results contradict predetermined beliefs while emphasizing the individual differences among both genders. Since, current sample of adolescent boys and girls demonstrated similar levels of aggression. According to Padgett and Tremblay (2020) gender is strong predictor of aggression and violence but this relationship is complex and influenced by factors such as developmental stage, conflict types, aggression forms, the gender of opponent, motives, attitudes & perceived consequences.

This results need to be confirmed using different methodologies across the multiple behaviors other than used in this study to measure aggression. On other hand, in academic domain, the findings of this study again contradict previously found equal level of academic achievement of boys and girls (Ahmad et al. 2014; Rahman & Nahar, 2013). However, such disparities in

findings are explained by [Reilly \(2012\)](#) who observed females were better in the reading while males were superior in the mathematics. However, mixed trends were observed in science achievement. Similarly, [Arnett et al. \(2017\)](#) concluded that there was a difference of inhibitory control and processing speed in males and females, which resulted in the differences observed in their study. And, both genders utilize different learning strategies, which contribute toward the gender differences in academic achievement ([Ruffing et al., 2015](#)). A recent study ([Tsaousis & Alghamdi, 2022](#)) that examined general academic ability found that females scored higher than males. The above studies depict that there are a lot of incongruences in the findings about gender differences in achievement. This incongruence has been highlighted by [Stoet and Geary \(2013\)](#) who stated that along with cross nation variations, the variations are also present within nation.

They gathered data from 75 countries and had sample of 1.5 million adolescents. Their findings indicated that in the math achievement, females were better than males in some countries, and there was no gender difference in other countries. Hence, significant differences of academic achievement found in this sample favor girls which is again explained in terms of alterations in culture specific gender roles in Pakistani society. Since girls are now proportionally equal or high in number in almost all fields previously considered for boys such as science, engineering, math, IT etc. and they are out of proportionally high in fields like arts and social sciences, their over-representation in academic spheres may promote their academic success. Girls are found to possess certain benefits such as intellectual maturity, preferable learning patterns, and more engagement in the class ([Hyde, 2014](#)) which might place them higher in the academic contexts. Thus, findings of current study highlight reconsideration of educationists and policy makers in terms of training approaches. For instance, more practical assignments and engaging boys in class discussions will produce more conducive academic atmosphere inclusive of the different learning preferences. In this regard, addressing the individual needs of the boys who are at disadvantage in educational outcomes must be emphasized in promoting their just academic achievement.

CONCLUSION

This study investigated the complex dynamics of academic achievement and aggression in adolescent students. Although the overall relationship between academic achievement and aggression was found insignificant, the findings were significant for girls highlighting the need to emphasize gender-specific tactics in understanding and addressing the dynamic interplay between educational and behavioral outcomes specific to adolescents. Such findings imply that the educational institutions should be sensitive to identify adolescent girls who are high on aggression and refer them for counselling to enhance their social emotional skills which will ultimately contribute to their academic success. Moreover, the findings provide interesting gender sensitive dynamics which break previous stereotypes. Further, institutions' sensitivity for specific learning styles and abilities favor girls to be at advantage. Contrary to traditional stereotype labeling boys to be more aggressive, the girls in current sample were found equally aggressive to boys as explained in terms of change in gender roles & cultural expectations and need for researchers and clinicians to emphasize individual differences among adolescents.

Further, the significant gender differences in academic achievement favored girls to be high achievers which is explained in terms of their cognitive attainments, learning styles, as well as classroom engagement. Similar kinds of comprehensive learning strategies must be suggested for boys who are facing academic challenges such as fostering a classroom environment and relying upon more inclusive teaching methods tailored to the individual needs of adolescents. Clinical psychologists, stakeholders in educational settings, and researchers in Pakistan may consider the current study findings in promoting the supportive and more inclusive academic atmosphere.

Limitations & Future Directions

The overall percentage in the previous exam was taken as indicator of academic achievement. But the overall percentage is composite of marks taken in many subjects taught in any grade. A better approach could be analysis of aggression with any specific subject (mathematics or Urdu language). Further, use of tools that include more specific behavioral measures of aggression can confirm current study findings. Although sample size was sufficient for given population, the sample belonged to only one city, i.e. Karachi, so it limits the generalizability of findings. Considering more representative samples would highlight more generalizable findings in terms of the cultural stereotypes that are now changing in Eastern, Western and global cultural contexts.

REFERENCES

- Ahmad, S. (2014). Exploring the association amid gender, aggression & academic achievement in adolescents. *Journal of Youth and Adolescents*, 43(7), 1224-1235.
- Ahrenfeldt, L., Petersen, I., Johnson, W., & Christensen, K. (2015). Academic performance of opposite-sex & same-sex twins in adolescence: Danish national cohort study. *Hormones and Behavior*, 69, 123-131.
- Arnett, A. B., Pennington, B. F., Peterson, R. L., Willcutt, E. G., DeFries, J. C., & Olson, R. K. (2017). Explaining sex difference in dyslexia. *Journal of Child Psychology and Psychiatry*, 58(6), 719-727.
- Bécares, L., & Priest, N. (2015). Understanding the Influence of Race, Gender, and Class on Inequalities in Academic and Non-Academic Outcomes among Eighth-Grade Students: Findings from an Intersectionality Approach. *PLoS ONE*, 10(10), e0141363.
- Bryant, F. B., & Smith, B. D. (2001). Refining the Architecture of Aggression: A measurement model for the Buss-Perry Aggression Questionnaire. *Journal of Research in Personality*, 35(2), 138-167.
- Card, A., & Little, D. (2006). Proactive and reactive aggression in childhood and adolescence: A meta-analysis of differential relations with psychosocial adjustment. *International Journal of Behavioral Development*, 30(5), 466-480.
- Eddy, S. L., Brownell, S. E., & Wenderoth, M. P. (2014). The Gender gaps in achievement and participation in multiple introductory biology classrooms. *CBE – Life Sciences Education*, 13(3), 478-492.
- Ewen, R. (2010). *An introduction to theories of personality* (7th ed.). New York: Psychology Press Taylor and Francis group.

- Flanigan, M. E., & Russo, S. J. D. (2018). The Recent advances in the study of aggression. *Neuropsychopharmacology*, 44(2), 241–244.
- Hyde, J. S. (2014). Gender similarities and differences. *Annual Review of Psychology*, 65, 373–398.
- Kashif, N., Bashir, F., Ahmad, R., & Nasim, I. D. (2022). The Aggressive Students' Academic Performance: Teachers' Insight. *Review of Economics and Development Studies*, 8(2), 155–165.
- Kibe, H. M., Owaa, J., & A. Raburu, P. (2023). Relationship between aggression and academic achievement among students in secondary schools. *International Journal of Advance Research in Education & Literature (ISSN 2208-2441)*, 9(2), 13–29.
- Leadbeater, B. J., Boone, E. M., Sangster, N. A., & Mathieson, L. C. (2006). Sex differences in the personal costs and benefits of relational and physical aggression in high school. *Aggressive Behavior*, 32(4), 409–419.
- Munir, S. B., Mursaleen, S. M., Khalid, S., Tahir, K. S., Yaqoob, N., & Mumtaz, Z. (2023). Morphosyntactic Development: Contrasting Monolingual And Bilingual Children's Language Skills. *NeuroQuantology*, 21(6), 672–680.
- Mursaleen, M., & Munaf, S. (2020). Differences of Emotional Intelligence, Aggression, and Academic Achievement among students with different levels of Intellectual Ability. *Bahria Journal of Professional Psychology*; 19 (2), 48–60.
- NHS inform. (2024). *Why am I so angry?* | NHS inform. NHS Inform. <https://www.nhsinform.scot/healthy-living/mental-wellbeing/anger-management/why-am-i-so-angry/>.
- Padgett, J. K., & Tremblay, P. F. (2020). Gender differences in aggression. *The Wiley Encyclopedia of Personality and Individual Differences*, 173–177.
- Rahman, S., & Nahar, L. (2013). Aggression in Boys and Girls as Related to Their Academic Achievement and Residential Background. *Psychology*, 04(05), 459–462.
- Reilly, D. (2012). Gender, Culture, and Sex-Typed cognitive abilities. *PLoS ONE*, 7(7), e39904. <https://doi.org/10.1371/journal.pone.0039904>.
- Roy, B., & Jha, N. (2022). Gender Differences in Expression of Aggression. *International Journal of Indian Psychology*. 10(2) 756–761. <https://doi.org/10.25215/1002.075>.
- Ruffing, S., Wach, F., Spinath, F. M., Brünken, R., & Karbach, J. (2015). Learning strategies and general cognitive ability as predictors of gender- specific academic achievement. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.01238>.
- Shengyao, Y., Xuefen, L., Jenatabadi, H. S., Samsudin, N., Chunchun, K., & Ishak, Z. (2024). Emotional intelligence impact on academic achievement and psychological well-being among university students: the mediating role of positive psychological characteristics. *BMC Psychology*, 12(1). <https://doi.org/10.1186/s40359-024-01886-4>.
- Stoet, G., & Geary, D. C. (2013). Sex differences in mathematics and reading achievement are inversely related: within- and Across-Nation assessment of 10 years of PISA data. *PLoS ONE*, 8(3), e57988. <https://doi.org/10.1371/journal.pone.0057988>.
- Szadvári, I., Ostatníková, D., & Durdiaková, J. B. (2022). Sex differences matter: Males and females are equal but not the same. *Physiology & Behavior*, 259, 114038.
- Tindle, R., Hamza, E. G. A., Helal, A. A., Ayoub, A. E. A., & Moustafa, A. A. (2022). A scoping review of the psychosocial correlates of academic performance. *Review of Education*, 10(3). <https://doi.org/10.1002/rev3.3371>.

- Toldos, M. P. (2004). Sex and age differences in self-estimated physical, verbal and indirect aggression in Spanish adolescents. *Aggressive Behavior*, 31(1), 13–23.
- Top Hat. (2020, March 24). *Academic Achievement Definition and Meaning* | Top hat. <https://tophat.com/glossary/a/academic-achievement/>.
- Tsaousis, I., & Alghamdi, M. H. (2022). Examining academic performance across gender differently: Measurement invariance and latent mean differences using bias-corrected bootstrap confidence intervals. *Frontiers in Psychology*, 13.
- Vuoksimaa, E., Rose, R.J., Pulkkinen, L., Palviainen, T., Rimfeld, K., Lundström, S., Bartels, M., Beijsterveldt, C., Hendriks, A., Boomsma, D.I. and Kaprio, J. (2021), Higher aggression is related to poorer academic performance in compulsory education. *Journal of Child Psychol Psychiatr*, 62: 327-338.
- Wahl, K. (2019). *The Radical Right: biopsychosocial roots and international variations*. https://openlibrary.org/books/OL30800673M/The_Radical_Right.
- WHO. (2019, June 19). *The Gender*. https://www.who.int/health-topics/gender#tab=tab_1.
- Wiesner, E. (2021). *Gender in History: Global Perspectives*. <http://ci.nii.ac.jp/ncid/BB03098159>.
- Yamasaki, K., & Nishida, N. (2009). The relationship between three types of aggression and peer relations in elementary school children. *International journal of psychology : Journal international de psychologie*, 44(3), 179–186.
- York, T. T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. *Practical Assessment, Research & Evaluation*, 20(5), 1–20. <https://doi.org/10.7275/hz5x-tx03>.
- Yu, G., Hu, T., & Wang, W. (2014). A Follow-Up Study of high school students' aggression in Chongqing. *Advances in Psychology*, 04(02), 180–186. <https://doi.org/10.12677/ap.2014.42028>.