**PLACE EFFECT: MOTOR, COGNITIVE AND SELF CONFIDENCE BEHAVIORS**

By

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**Abstract**

Human beings live in various places. Place affects human being. A few experiments were conducted on 200 students, including 100 male and 100 female. Participants were the students of a selected school. Place effect on participants’ motor, cognitive behaviors and academic confidence studied. The subjects were divided into two groups. Group-A was consisted of students those were in the school for more than 5 years, whereas in group-B students with less than 5 years stay in the school were there. It was assumed that duration as stay in the school representing place effect may provide some relationship link? Following instruments were used; Taping Board (Electronic) 10 trails for both groups as motor performance, Star Mirror Drawing (Electronics) 10 trails with preferred hand both groups for transfer as cognition and Academic Self-efficacy Scale for all groups for academic confidence implied in similar controlled conditions. The results provided useful significant information about the place effect; some emic proposition regarding gender also emerged. More studies recommended.

**Keywords**: Place Effect, Motor, Cognition, Performance, Confidence

**Introduction**

The place is important in human presence because ‘situational forces’ present in the situation influence behaviors (Zimbardo, 2011). Place is a bond (Hernández, Hidalgo, Salazar-Laplace & Hess, 2007) that is related with identity and is important in attachment (Grey & O’Toole, 2018) because it is related with emotions (Manzo, 1995) therefore separation from a place is noticed (Chow & Healey, 2008).Place influences on human behaviors are like place attachment and the sense of belongingness (Inalhan& Finch, 2004).Experience of place influences the process of identification because situation adds into self-value (Richeson&Ambady, 2003) and is related to the development of emotional bond with the place (Broto, Burningham, Carter &Elghali, 2010) therefore place attachment has consequences (Carrus, Scopelliti, Fornara, Bonnes&Bonaiuto, 2014).It is because of such importance of place attachment that its role in various industries is valued for various reasons like tourism marketing (Tsai, 2012a: Hallak, Brown& Lindsay, 2013).Place attachment therefore is importance in social sciences and psychology and is rated as an important construct and concept (Low& Altman, 1992).

Place attachment influences school performance (Moss& St-Laurent, 2001) because “situational effects” are present in school situations (Schraw, Flowerday& Lehman, 2001). It was reported that situational influences and interests are related to knowledge acquisition in school (Rotgans& Schmidt, 2014a)and influence the process of learning in the classroom, academic achievements and interests (Rotgans& Schmidt, 2011).

Motor behavior is a lifelong process (Gabbard, 1992), a constituent of human physiology, it encompasses all activities of human presence (Cratty, 1967). Activity is related to cognitive function (Weuve, Kang, Manson, Breteler, Ware &Grodstein, 2004) and cognition is a well-defined construct (Varela, Thompson &Rosch, 2017).

Attachment (Bowlby, 1978) is a known behavior in a variety of human behaviors and remains side by side in the process of human development (Cassidy & Shaver (2002). The importance of attachment is known as a ‘motivational strength’ as motive (Bretherton, 1985).

In a study it was found that situations, “present” and “created” can influence the behaviors of the students studying in a school (Tsai, counter, Lüdtke, Trautwein& Ryan, 2008). It was also found that, ‘lateral’ relationship with an industry influences work outcomes as well as work attitudes and effectiveness of employees (Chiaburu& Harrison2008).Moreover ‘situational optimism’ was found related to performance (Nonis& Wright, 2003) its ‘effect on others’ and estimates about human acts (Gunther, 1991). Furthermore, success expectancy is related to performance (Durik, Shechter, Noh, Rozek&Harackiewicz, 2015) and the role of situational optimism is there in students’ performance outcomes (Nonis& Wright, 2003).

It was therefore assumed that the possibility does exist that students’ studying is a school for less than five years may behave differently on cognitive and motor devices, because of possible belongingness, may be due to their feel to effect on others, own estimates about to influence others, association difference with the place and the possibility of this whole situation as ‘place effect’ that could influence the participants’ scores on given instrument?

**Method and Procedure**

After obtaining approval from Riphah Research Ethics Committee and informed consent by the participants, 200 students studying in a selected school were studied in the present work; these students included 100 boys and 100 girls. The participants were divided into two groups having equal number of students 50 girls and 50 boys in each. In group A (that represented the long stay of the students in the school that was more than five years, or high place effect possibility).The group B (represented the less stay of the students less than five years in the school or less place effect possibility group).

All participants of both groups in a similar standardized control conditions, were tested and administered the following psychological instruments/ and a measure with a pre-supposed criterion for performance assessment for all respondents.

1. Tapping Board (Electronic) (Ten Trails each with preferred hand)
2. Mirror Drawing Apparatus (Electronic)(Ten Trails each with preferred hand)
3. Academic Self-efficacy Scale (Gafoor, Kunnathodi& Ashraf, 2007).

The responses of the subjects on the instruments and the measure, gained and measured in the same sequence, similar duration and performance mode for all considered as motor, cognitive and academic performance responses were compared and assessed for results and conclusions.

**Results and Conclusions**

A significant differences between group A and group B in academic self-confidence was noticed while the mean score of academic self-confidence was higher among group A as compared to group B, moreover, significant gender differences in situational effect were noticed(Table-1-1), situational effect was found higher among male respondents as compared to female respondents (Table 1-2) . The findings indicated significant differences between group A and group B in motor and cognitive performance and transfer, the mean score of motor and cognitive transfer were higher among group B as compared to group A (Table-1-3). Furthermore, a significant gender difference in cognition and motor transfer was found, whereas, the mean scores of cognition and motor transfer was significantly higher among female respondents as compared to male respondents (1-4).

**Discussion and Conclusion**

The study reflected an interesting finding that stay in an academic institution positively influences confidence, perhaps because of past success remembrance associated with the place or other associations related to the place or belonging to the place (Voelkl, 1997: Nichols, 2008: Van Ryzin, Gravely &Roseth, 2009).

Emic proposition emerged regarding the role of gender difference role in situational effect that was high among male as compared with female as reported by (Sánchez, Colón & Esparza, 2005). It came in light that belonging to an educational institution positively contributes towards the development of better motor and cognitive capacity necessary for the normal growth of a person; interestingly such was more visible among girls (Cornell, Callahan &Loyd, 1991). Moreover, an interesting finding regarding the motor and cognitive growth with reference to school situational effect was also emerged that was found higher among female. Since only focused associations were focused therefore the intervention possibilities of other variables was possible, however, overall results are informing and more context studies could bring in better awareness.

**References**

Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent psychiatry*.

Broto, V. C., Burningham, K., Carter, C., &Elghali, L. (2010). Stigma and attachment: performance of identity in an environmentally degraded place. *Society and Natural Resources*, *23*(10), 952-968.

Bretherton, I. (1985). Attachment theory: Retrospect and prospect. *Monographs of the society for research in child development*, *50*(1-2), 3-35.

Cassidy, J., & Shaver, P. R. (Eds.). (2002). *Handbook of attachment: Theory, research, and clinical applications*. Rough Guides.

Carrus, G., Scopelliti, M., Fornara, F., Bonnes, M., &Bonaiuto, M. (2014). Place attachment, community identification, and pro-environmental engagement. *Place attachment. Advances in theory, methods and applications*, 154-164.

Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, *93*(5), 1082.

Chow, K., & Healey, M. (2008). Place attachment and place identity: First-year undergraduates making the transition from home to university. *Journal of Environmental Psychology*,*28*(4), 362-372.

Clark, J. E., & Metcalfe, J. S. (2002). The mountain of motor development: A metaphor. *Motor development: Research and reviews*, *2*(163-190), 183-202.

Cratty, B. J. (1967). Movement behavior and motor learning.

Cornell, D. G., Callahan, C. M., &Loyd, B. H. (1991). Personality growth of female early college entrants: A controlled, prospective study. *Gifted Child Quarterly*, *35*(3), 135-143.

Durik, A. M., Shechter, O. G., Noh, M., Rozek, C. S., &Harackiewicz, J. M. (2015). What if I can’t? Success expectancies moderate the effects of utility value information on situational interest and performance. *Motivation and Emotion*, *39*(1), 104-118.

Gabbard, C. (1992). *Lifelong motor development* (pp. 259-275). Madison, WI: Brown & Benchmark.

Gafoor, Kunnathodi& Ashraf, Muhammed.(2007). Academic Self Efficacy Scale. 10.13140/RG.2.1.3930.2640.

Grey, C., & O’Toole, M. (2018). The Placing of Identity and the Identification of Place:“Place-Identity” in Community Lifeboating. *Journal of Management Inquiry*, 1056492618768696.

Gunther, A. (1991). What we think others think: Cause and consequence in the third-person effect. *Communication Research*, *18*(3), 355-372.

Hallak, R., Brown, G., & Lindsay, N. J. (2013). Examining tourism SME owners’ place attachment, support for community and business performance: the role of the enlightened self-interest model. *Journal of Sustainable Tourism*, *21*(5), 658-678.

Hernández, B., Hidalgo, M. C., Salazar-Laplace, M. E., & Hess, S. (2007). Place attachment and place identity in natives and non-natives. *Journal of environmental psychology*,*27*(4), 310-319.

Inalhan, G., & Finch, E. (2004). Place attachment and sense of belonging. *Facilities*, *22*(5/6), 120-128.

Low, S. M., & Altman, I. (1992). Place attachment. In *Place attachment* (pp. 1-12).Springer, Boston, MA.

Manzo, L. C. (1995). Relationships to non-residential places: Towards a reconceptualization of attachment to place.

Moss, E., & St-Laurent, D. (2001).Attachment at school age and academic performance. *Developmental psychology*, *37*(6), 863.

Nichols, S. L. (2008). An exploration of students' belongingness beliefs in one middle school. *The Journal of Experimental Education*, *76*(2), 145-169.

Nonis, S. A., & Wright, D. (2003).Moderating effects of achievement striving and situational optimism on the relationship between ability and performance outcomes of college students. *Research in Higher Education*, *44*(3), 327-346.

Richeson, J. A., &Ambady, N. (2003).Effects of situational power on automatic racial prejudice. *Journal of Experimental Social Psychology*, *39*(2), 177-183.

Rotgans, J. I., & Schmidt, H. G. (2011).Situational interest and academic achievement in the active-learning classroom. *Learning and Instruction*, *21*(1), 58-67.

Rotgans, J. I., & Schmidt, H. G. (2014a). Situational interest and learning: Thirst for knowledge. *Learning and Instruction*, *32*, 37-50.

Sánchez, B., Colón, Y., & Esparza, P. (2005). The role of sense of school belonging and gender in the academic adjustment of Latino adolescents. *Journal of youth and Adolescence*, *34*(6), 619-628.

Schraw, G., Flowerday, T., & Lehman, S. (2001). Increasing situational interest in the classroom. *Educational Psychology Review*, *13*(3), 211-224.

Tsai, S. P. (2012a). Place attachment and tourism marketing: Investigating international tourists in Singapore. *International Journal of Tourism Research*, *14*(2), 139-152.

Tsai, Y.-M., Kunter, M., Lüdtke, O., Trautwein, U., & Ryan, R. M. (2008). What makes lessons interesting? The role of situational and individual factors in three school subjects. *Journal of Educational Psychology, 100*(2), 460-472.

[http://dx.doi.org/10.1037/0022-0663.100.2.460](https://psycnet.apa.org/doi/10.1037/0022-0663.100.2.460)

Van Ryzin, M. J., Gravely, A. A., &Roseth, C. J. (2009).Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *Journal of youth and adolescence*, *38*(1), 1-12.

Varela, F. J., Thompson, E., &Rosch, E. (2017). *The embodied mind: Cognitive science and human experience*. MIT press.

Voelkl, K. E. (1997). Identification with school. *American Journal of Education*, *105*(3), 294-318.

Weuve, J., Kang, J. H., Manson, J. E., Breteler, M. M., Ware, J. H., &Grodstein, F. (2004). Physical activity, including walking, and cognitive function in older women. *Jama*, *292*(12), 1454-1461.

Zimbardo, P. G. (2011). Lucifer effect. *The Encyclopedia of Peace Psychology*.

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**Table 1.1**

Comparison Group (A&B) T-test Academic Self-Confidence (N=200)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Group A(*n* =100) | | Group B (*n* = 100) | |  | | *95%CI* | |
| *M* | *SD* | *M* | *SD* | *t* | *p* | *LL* | *UL* |
| Academic Self-Confidence | 121.61 | 3.56 | 119.48 | 4.00 | 3.98 | .00 | 1.07 | 3.19 |

The results of this table indicate the significant differences between group A and group B in academic self-confidence. While the mean score of academic self-confidence were higher among group A as compared to group B

**Table 1.2**

Comparison Gender Sample Place Effect (N=200)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Male(*n* =100) | | Female (*n* = 100) | |  | | *95%CI* | |
| *M* | *SD* | *M* | *SD* | *t* | *p* | *LL* | *UL* |
| Situational Effect | 29.76 | 5.06 | 27.85 | 4.69 | 2.77 | .01 | .55 | 3.27 |

The results of this table indicate the significant gender differences in situational effect. While the mean score of place effect were higher among male respondents as compared to female respondents

**Table 1.3**

Comparison Group (A&B) Motor and Cognition Transfer (N=200)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Group A(*n* =100) | | Group B (*n* = 100) | |  | | *95%CI* | |
| *M* | *SD* | *M* | *SD* | *t* | *p* | *LL* | *UL* |
| Motor and Cognition Transfer | 25.36 | 3.14 | 30.43 | 3.91 | -10.14 | .00 | -6.07 | -4.09 |

The results of this table indicate the significant differences between group A and group B in both motor and cognitive transfer. While the mean score of motor and cognitive transfer was higher among group B as compared to group A

**Table 1.4**

Comparison Gender Cognition and Motor Transfer (N=200)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Male(*n* =100) | | Female (*n* = 100) | |  | | *95%CI* | |
| *M* | *SD* | *M* | *SD* | *t* | *p* | *LL* | *UL* |
| Cognition and Motor Transfer | 26.44 | 3.17 | 29.34 | 4.89 | -4.98 | .00 | -4.05 | -1.75 |

The results of this table indicate the significant gender differences in cognition and motor transfer. While the mean score of cognition and motor transfers were significantly higher among female respondents as compared to male respondents.