Moral Disengagement and the Deviant Behaviors of Adolescent Physical Education Learning: The Moderating Effect of Learning Atmosphere

Huan Zhang* and Baolin Dong
Physical Education Department of Sanda University, Shanghai, China
* cathuan09@163.com

Keywords: Adolescent; Moral Disengagement (MD); Learning Atmosphere (LA); Physical Education Learning (PEL); Deviant Behaviors (DB)

Abstract: 
Objective: Explored the comprehensive influence of the sport moral disengagement (MD), learning atmosphere (LA) on adolescents' deviant behaviors of physical education learning (PEL-DB). 
Methods: Used the moral disengagement in sport scale, the sub-scale of adolescent perceptions of school climate scale, and the deviant behaviors scale of adolescent physical education learning, this paper made investigation on 2288 adolescents. 
Results: The positive influence of sport MD on adolescents' PEL-DB is significant. The negative influence of adolescents' LA on PEL-DB is significant. Furthermore, the moderator effect of LA is significant that in the influence chain of adolescents' MD and PEL-DB. 
Conclusion: In the context of physical education learning, for adolescent, the MD and LA are the internal and external factors that affect DB. Furthermore, the LA could alleviate the negative influence of MD on PEL-DB.

Introduction

Since nearly three decades, although continuous improvement of teaching methods and quality of school Physical education (PE), there are still some adolescents who due to their lack of moral consciousness, often experience deviations such as slackness, weariness, and truancy in PE learning. Deviant behavior is the inappropriate behavior that violates social norms and rules due to lack of authority or structured social [1], and it is related to individual age, gender and social status [2]. It follows that, rectifying adolescents' deviant behaviors of PE learning is of far-reaching significance for cultivating adolescents' healthy lifestyle.

In recent years, scholars had generally recognized "there is a correlation between moral disengagement and adolescents 'problematic behaviors' " when investigating improper or problematic behaviors in adolescents' physical activities from a moral perspective. Moral disengagement is the cognitive tendency of individuals to produce deviating behaviors such as deception and attack. It is also the moral tendency of individuals to rebuild moral cognition in order to alleviate guilt and self-blame caused by their non-ethical behaviors, and to realize the moral tendency to shirk responsibility for the consequences of their own behaviors[3]. For adolescent, moral disengagement could easily lead to the loss of its ability to regulate morality, distorting its tendency to recognize violations, dilute the guilt of negligence and faulty behaviors, promote deviating behaviors. Moreover, it had a higher explanatory power and predictive power for deviation behavior such as fault and bullying [4].

Social learning theory holds that the interaction of individuals, behaviors, and the environment forms the process of human social learning[5]. For adolescent, the deviation behavior might also be related to the surrounding atmosphere of PE learning. The learning atmosphere covers important interpersonal support such as teachers and peers, as well as opportunities and conditions for individual participation [6]. At the stage of social adaptation and development, adolescents were more inclined to imitate the behaviors of high-authority and high-status persons such as teachers, and form corresponding psychological characteristics and behaviors under the influence of authoritative interpersonal atmosphere. Moreover, influenced by the surrounding interpersonal behavior paradigms, the social behavior characteristics of adolescents tended to develop in a
direction consistent with most people [7]. So, could the learning atmosphere have an impact on adolescents' deviant behaviors of PE learning? Admittedly, this issue had not been empirically demonstrated so far.

In addition, studies had confirmed that a good learning atmosphere could provide normative guidelines and references for adolescents' learning and growth, and could effectively suppress the tendency to evade morality, develop social psychology, and alleviate the occurrence of these deviating behavior also [8]. In other words, the positive interpersonal relationships and a good learning atmosphere could help individuals develop social behavior based on enriching and regulating social cognition, as explained by Camps that different situations and atmospheres could lead to differences in moral cognition and behavior [9]. So, for adolescent, could the learning atmosphere regulate or reduce the negative influence of moral disengagement on deviant behaviors of PE learning? This issue still needs to be tested and justified.

Therefore, the aims of the present study were to examine the empirical investigation of the comprehensive influence of moral disengagement and learning atmosphere on deviant behaviors of PE learning of Chinese adolescent. Maybe, these would be helpful to cultivate adolescents' interest in sports learning and establishing awareness of moral standards.

Methods

Participants

The cross-sectional data presented here comes from 2,430 Chinese adolescents in Shanghai. From this survey, a total of 142 invalid questionnaires were excluded that following the criteria for some invalid scales such as missing data on frequency or time of any intensity of physical activities, testing of the item of reverse scoring, the response rate was less than 85 percent, the answer was obviously inconsistent with the facts. Eventually, 2,288 valid questionnaires were retained, and the age ranged of these survey participants from 12 to 18 years (3 adolescents did not specify their age) with a mean age of 14.84 years (SD = 1.629 years).

Measures

Moral Disengagement in Sport Scale (MDSS). These thirty two items asked participants to the levels of sports moral disengagement[10]. Responses were coded on a five-point Likert scale ranging from 1 (Extremely inconsistent) to 5 (Exactly consistent) with higher scores indicating greater severity of sports moral disengagement. Internal consistency for the scale ($\alpha = .936$) was acceptable.

Perceived School Climate Scale for Adolescents (PSCS). Revised the subscales of the teacher support, peer support, and autonomy opportunity of PSCS[6]. Added core words to the questions such as PE learning, PE teacher. These twenty five items asked participants to perceived the learning atmosphere of PE learning. Responses were coded on a five-point Likert scale ranging from 1 (Extremely inconsistent) to 5 (Exactly consistent) with higher scores indicating better of learning atmosphere of PE learning. Internal consistency for the scale ($\alpha = .929$) was acceptable.

Deviation Behavior Scale of PE Learning (PEL-DB). Compiled the PEL-DB scale from social norms, ethical norms, and management norms. Firstly, semi-structured interviews with 10 respondents. Respondents were asked to use the third person to describe in detail the improper and immoral behaviors of their classmates who violated the teaching requirements and norms in PE, and obtained a total of 97 codeable valid vocabularies. Combine subjective judgments to merge semantically similar words to form 34 core vocabulary, such as tired of learning, dishonesty. Invited two Ph.Ds in exercise psychology to analyze the coding content one by one to determine the coding reliability coefficient of .386 - .742. Secondly, the prediction was made on 60 adolescents, and subjects were asked to mark and correct items with unknown words. The eight items in the annotation set were revised, and the similarities, differences, and mergers were re-compared to form twenty six initial items. Finally, initial tests were conducted on 90 subjects. Through the analysis of
the items, seven items with no significant difference in the mean value and four items with total irrelevant items were eliminated, and the fifteen items of PEL-DB were finally determined. Responses were coded on a five-point Likert scale ranging from 1 (none) to 5 (always so) with higher scores indicating greater severity of deviation behaviors of PE learning. Internal consistency for the scale ($\alpha = .881$) was acceptable.

**Procedure**

Questionnaire survey was using the manner of collective testing, and took approximately 10 minutes to complete. Lastly, spot recycled questionnaire after finish filling out. Simultaneously, general demographic data (such as gender and age) of the subjects were obtained during the test.

**Statistical Analysis**

Firstly, valid data was imported into SPSS 24.0 statistical analysis software. Secondly, processed by reverse scoring, zero-centered, and latent variable score calculation. Next, the valid data was processed by standardized, and then, regular statistical mathematical methods such as descriptive statistics, correlation analysis, and regression analysis were used to achieve research needs.

**Results**

**The Direct Influence Of Moral Disengagement And Learning Atmosphere On Adolescents' Deviant Behaviors Of PE Learning**

The result of correlation analysis is showed in table 1. The moral disengagement was significantly positively correlated with deviant behaviors of PE learning ($r = .304$, $p < .01$), and the learning atmosphere ($r = -.488$) was significantly negatively correlated with deviant behaviors of PE learning ($p < .01$).

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$±$SD$</th>
<th>MD</th>
<th>LA</th>
<th>PEL-DB</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>52.80±18.003</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA</td>
<td>103.14±15.682</td>
<td>-0.414**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PEL-DB</td>
<td>24.05±7.254</td>
<td>0.304**</td>
<td>-0.488**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. MD=Moral disengagement, LA=Learning atmosphere, PEL-DB=Deviant behaviors of PE learning; * $p<0.05$, ** $p<0.01$ (Two-tailed).

The result of regression analysis is showed in table 2. Moral disengagement ($\beta= .304$) and learning atmosphere ($\beta= -.488$) had significant effects on deviant behaviors of PE learning, the interactive project of moral disengagement $\times$ learning atmosphere had significant effects on deviant behaviors of PE learning also.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>$T$</th>
<th>$F$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>0.123</td>
<td>0.016</td>
<td>0.304</td>
<td>7.621</td>
<td>58.077***</td>
<td>0.091</td>
</tr>
<tr>
<td>LA</td>
<td>-0.226</td>
<td>0.017</td>
<td>-0.488</td>
<td>-13.363</td>
<td>178.575***</td>
<td>0.237</td>
</tr>
<tr>
<td>MD×LA</td>
<td>0.042</td>
<td>0.010</td>
<td>0.093</td>
<td>2.239</td>
<td>5.015*</td>
<td>0.007</td>
</tr>
</tbody>
</table>

Note.***$p<0.001$, *$p<0.05$.

**The Moderating Effect Test Of PE Learning Atmosphere For Adolescent**

The result of regulating effect test used Bootstrap method is showed in table 3. When the moral disengagement affects deviant behaviors of PE learning, the learning atmosphere has a moderating
effect. Among them, the interactive project of moral disengagement × learning atmosphere had significant effects on deviant behaviors of PE learning ($\beta = -0.002$). According to the grouping conditions of Mean and $\pm$ SD from Mean, the moral disengagement had significantly effects on deviant behaviors of PE learning that in the low, middle and high level of sports learning atmosphere. Namely that, for adolescent, on the influence chain of moral disengagement and deviant behaviors of PE learning, the learning atmosphere had a regulating effect.

Table 3 Data results checked by bootstrap moderating effect

<table>
<thead>
<tr>
<th>Outcome: Deviant behaviors of PE learning</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$MSE$</th>
<th>$F$</th>
<th>$df_1$</th>
<th>$df_2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.508</td>
<td>.258</td>
<td>39.233</td>
<td>65.957***</td>
<td>3</td>
<td>2284</td>
<td>.000</td>
</tr>
<tr>
<td>Variable</td>
<td>Coefficient</td>
<td>$SE$</td>
<td>$T$</td>
<td>$p$</td>
<td>LLCI</td>
<td>ULCI</td>
<td></td>
</tr>
<tr>
<td>LA</td>
<td>-.307***</td>
<td>.048</td>
<td>-6.388</td>
<td>.000</td>
<td>-.401</td>
<td>-.213</td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>.142*</td>
<td>.083</td>
<td>2.012</td>
<td>.048</td>
<td>-.304</td>
<td>-.021</td>
<td></td>
</tr>
<tr>
<td>MD×LA</td>
<td>-.002*</td>
<td>.001</td>
<td>-2.355</td>
<td>.019</td>
<td>.003</td>
<td>.036</td>
<td></td>
</tr>
</tbody>
</table>

R-square increase due to interaction(s)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
<th>$df_1$</th>
<th>$df_2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD×LA</td>
<td>.007</td>
<td>5.546*</td>
<td>1</td>
<td>2284</td>
<td>.019</td>
</tr>
</tbody>
</table>

Conditional effect of X on Y at values of the moderator(s)

<table>
<thead>
<tr>
<th>LA</th>
<th>Effect</th>
<th>$SE$</th>
<th>$T$</th>
<th>$p$</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>87.462</td>
<td>.030</td>
<td>.018</td>
<td>2.665*</td>
<td>.036</td>
<td>.005</td>
<td>.065</td>
</tr>
<tr>
<td>103.143</td>
<td>.061</td>
<td>.017</td>
<td>3.645***</td>
<td>.000</td>
<td>.028</td>
<td>.097</td>
</tr>
<tr>
<td>118.825</td>
<td>.092</td>
<td>.024</td>
<td>3.824***</td>
<td>.000</td>
<td>.045</td>
<td>.139</td>
</tr>
</tbody>
</table>

Note. *** $p < 0.001$, *$p < 0.05$.

**Discuss**

Firstly, correlation analysis and regression analysis confirmed that the moral disengagement had a significant positive impact on adolescents' deviant behaviors of PE learning, this result was consistent with views by Osgood et al[1]. Moral cognition theory believes that for individuals, all of the moral essence should be obtained by learning to respect the rules[11]. For many years, school PE had focused on cultivating adolescents' sports ethics, so that adolescents could show better moral adjustment ability and moral consciousness in PE, and could follow the teacher's organizational norms when faced with challenging learning tasks. However, When adolescent with moral cognitive dysfunction are dealing with life events or challenging tasks, he might be still difficult to comply with rules or requirements to regulate their own words and deeds, and increase the probability of occurrence about deviation behavior, resulting in more deviation behavior. As explained by the clue filtering theory, the lower tendency of moral standards and the weakening of moral consciousness would make adolescents' internal moral mechanisms lose their ability to regulate, form moral evasion, and then showed more misconduct[12].

Secondly, the analysis confirmed that the learning atmosphere had a significant negative impact on adolescents' deviant behaviors of PE learning. Data analysis shows that a good learning atmosphere was helpful adolescent to actively participate in PE learning activities, enable adolescent to adhere to teaching norms and requirements. At the same time, a good learning atmosphere also helpful adolescent to develop independent learning abilities and social interaction ability to maintain active and proactive physical learning behaviors[13]. In short, the learning atmosphere was an important external resource for the social development of adolescent, and it was also an external help to effectively avoid deviant behaviors in PE.

Finally, Bootstrap analysis confirmed that the learning atmosphere had the moderator effect on the influence chain of adolescents' moral disengagement and deviant behaviors of PE learning. This result shows that a good learning atmosphere could help adolescent to establish a sense of ethics, enhance learning motivation and a sense of collective integration, and be able to consciously follow
the teacher's organizational arrangements when responding to PE learning activities, or make adolescent perform learning tasks with reference to the normative behaviors of most classmates, and then exhibit learning behavior characteristics such as initiative, compliance with rules, friendliness, and optimism. In other words, if individual was unable to obtain independent support from PE teachers or classmates, or self-awareness did not have the ability to make self-decisions, they tended to reduce internal motivations, and had a tendency to resist or be tired of physical learning activities. Especially when facing challenging tasks or exceeding anticipating goals, individual tended to mobilize moral shirk mechanisms to evade one's evasion, fault, fault, and misconduct, thereby inducing more frequent deviant behaviors[14].

Conclusion

1. In the context of PE learning, for adolescent, the moral disengagement and learning atmosphere are the internal and external factors that affect deviant behaviors.
2. The learning atmosphere could alleviate the negative influence of moral disengagement on deviant behaviors of PE learning.

References