Effects of an Advocacy Lesson on College Students' School Health Advocacy Intentions: A Quasi-Experimental Study

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ABSTRACT

Purpose: *This study aimed to assess the impact of a structured advocacy lesson on college students' attitudes and intentions to advocate for school health education. The aims of the study were to (1) measure changes in students' attitudes, subjective norms, perceived behavior control, and advocacy intentions from baseline, (2) assess students' perception of the lesson's efficacy, and (3) compare outcomes between the treatment and control groups.* ***Methods:*** *Using a quasi-experimental design, 201 college students from a mid-sized Hispanic Serving Institution were divided into treatment (114 students) and control (87 students) groups based on course enrollment status. The treatment group completed the advocacy lesson, while the control group did not. To evaluate the lesson's impact, both groups completed a 53-item Theory of Planned Behavior-based questionnaire at baseline and follow up. Statistical techniques including analysis of covariance and multiple linear regression were employed.* ***Results:*** *The advocacy lesson resulted in significant increases across all theory constructs in the treatment group compared to the control. Regression analysis revealed that Theory of Planned Behavior constructs, specifically perceived behavioral control, were strongly associated with advocacy intentions. An overwhelming majority of students perceived the lesson to be efficacious. The advocacy less also*

led to increases in students' intentions to engage in specific advocacy actions, with contact school officials and utilizing social media for advocacy exhibiting the greatest increase from baseline. ***Conclusion:*** *This study highlights the importance of embedding training in college courses to enhance students' understanding, confidence, and competency for health advocacy. Instilling advocacy capacity within college students has the potential to transform them from passive recipients of information to active champions for change, improving school health education and influencing the next generation's health landscape.*

KEYWORDS:
Advocacy, School Health Education, Theory of Planned Behavior, Quasi-Experimental Design

INTRODUCTION

Comprehensive school health education plays a pivotal role in fostering the overall well-being and academic success of students. It not only addresses the physiological aspects of health, but also encompasses emotional, mental, and social dimensions. Students who receive a holistic health education demonstrate enhanced academic performance, increased school attendance, and reduced risky behaviors (Kolbe, 2019). Moreover, Basch (2011) elucidates how health-related barriers can impede cognitive development and learning. Thus, it underscores the importance of comprehensive health curricula in addressing such barriers. Additionally, by integrating health topics such as nutrition, physical activity, mental and emotional well-being, substance abuse prevention, and sexual health, schools provide students with essential life skills and knowledge. As Allensworth and Kolbe (1987) suggest, this comprehensive approach not only supports immediate health outcomes during schooling years but also instills lifelong positive health behaviors, setting the foundation for a healthier adulthood.

School health education, once an integral component of holistic student development, has witnessed a significant decline in prominence with the introduction of the Common Core State Standards Initiative. Through the implementation of No Child Left Behind and the Common Core, which delineates specific standards for subjects such as mathematics and English language arts, has inadvertently marginalized non-core subjects, including health education, by not including them within its framework (Morse, 2013). This exclusion places an implicit emphasis on core subjects, often at the expense of health education, as schools and educators concentrate resources and instructional time to meet the stringent standards and assessment benchmarks associated with the Common Core (Arold & Shakeel, 2021). As a result of being a non-tested subject, health education's integral role in equipping students with knowledge and skills for lifelong health and wellness has been undermined, making it susceptible to reduced instructional hours, budgetary cuts, and decreased importance in the school curriculum (Slade & Griffith, 2013; Reback et al., 2014). This sidelining is particularly concerning given the rising health challenges faced by today's youth, which necessitate comprehensive health education more than ever.

Health education advocacy has not only been acknowledged as a significant force in recent times, but its influence has permeated various sectors of society. With the culmination of new research and emerging perspectives, advocacy is now recognized as playing a pivotal role in underpinning health education practices and in reinforcing the collective mission of health promotion (Galer-Unti, 2010; Galer-Unti et al., 2004; National Commission for Health Education Credentialing, Inc. [NCHEC], & Society for Public Health Education [SOPHE], 2020). Modern academic and professional disciplines now regard advocacy as a dual-

faceted obligation; one that caters to the responsibilities of health educators and also extends to the broader societal framework (Hall, 2022). Additionally, historical precedents reveal that communities have consistently depended on the advocacy initiatives of health professionals to shape policies and practices aimed at safeguarding and amplifying health (Birch et al., 2015). The outcomes of these advocacy endeavors can be considerably enhanced when communities are emboldened to champion their health causes, fostering a sense of proprietorship over their well-being. For advocacy to be truly efficacious, individuals need a nuanced comprehension of advocacy principles, the inherent advantages, strategic communication techniques, and requisite skills to effectively advocate in the current societal landscape. Moreover, the cultivation of digital advocacy skills among college students is paramount in today's digital era, enabling them to navigate, influence, and drive change effectively within increasingly online-centric sociopolitical landscapes (Hall, 2022).

Advocacy has been identified as a critical competency in health education preparation (NCHEC & SOPHE, 2020) and as a standard for school health education teacher preparation programs (SHAPE America, 2015; SOPHE, 2019). Additionally, advocacy skills are not only vital for college students pursuing careers in health education but also for those with diverse professional goals (Dodson et al., 2021; Kerr et al., 2017). Given that children spend a considerable portion of their lives in educational settings and many college students will eventually become parents, advocating for robust school health education can have profound effects on their families' health and educational trajectories (American Public Health Association, 2010; Hampton et al., 2017). For these students, the impetus to develop advocacy skills can stem both from professional ambitions and personal considerations, especially when recognizing the essential foundation that a quality health education provides.

To prepare the next generation for active roles in health promotion and policy-making, it's crucial to integrate advocacy skill development into college courses and rigorously evaluate these initiatives (Birch et al., 2011; Moreland-Russel et al., 2016). However, research highlights a concerning gap, suggesting insufficient instruction or limited teaching efficacy (Radius et al., 2009; Kerr et al., 2017). Wallen and colleagues (2012) found that a 50-minute advocacy lesson improved students' grasp of quality health education, increased their confidence in advocacy, and heightened their intention to support school health education. Yet, the researchers pointed out the lesson didn't focus on digital and technology-based advocacy strategies and the absence of a control group made it challenging to ascertain if the observed changes were exclusively due to the lesson.

In light of such challenges, this current study builds on prior limitations and recommendations through the implementation of an advocacy lesson, specific to k-12 school health, that emphasizes digital advocacy and a result design that incorporates a control group. The intervention was anchored in the Theory of Planned Behavior (TPB) which posits that individual intention, shaped by attitudes towards a behavior, subjective norms, and perceived behavioral control, is the primary determinant of behavior (Ajzen, 1991). In this endeavor, we aim to reshape students' perspectives on health education, empowering them to become advocates and create positive change in their communities. Results of this study will offer insights into student's advocacy intentions and the effectiveness of our lesson model.

PURPOSE

The main aims of this study were to: (a) evaluate changes in the TPB constructs of attitudes, subjective norms, perceived behavior control, and advocacy intentions for school health education following an advocacy lesson; (b) assess students'

perception on lesson effectiveness, and (c) evaluate the differences in outcomes between the treatment and control groups.

METHODS

Procedures

A total of 201 college students, at a midsized Hispanic Serving Institution on the West Coast, completed informed consent to participate in the study and completed all assessments. A total of 87 students, enrolled in a school health education methods course, composed the treatment group and were exposed to an advocacy lesson consisting of two 70-minute sessions. The comparative control group comprised 114 students enrolled in a general health course who did not receive the advocacy lesson. Both courses were upper-division and required junior or senior status for enrollment. To gauge the lesson's perceived effectiveness and outcome variables, a 53-item questionnaire was distributed to both groups at two time intervals. For the treatment group, this coincided with before and after the advocacy lesson, whereas the control group received it at the start and end of their regular class sessions. The instrument was designed to assess student perceptions on the lesson's effectiveness and to identify changes related to the TPB constructs of attitudes, subjective norms, perceived behavior control, and intentions. The study protocol was approved by the University's Institutional Review Board.

Lesson

In this learning module, college course students engaged in activities designed to promote understanding of school health advocacy principles. Over two 70-minute sessions, the instruction focused on the characteristics of quality school health education and its potential impact. It further aimed to equip course students with diverse advocacy strategies, guiding them on accessing and applying these tools, in order to increase their confidence and ability to champion school health education more effectively.

Students were introduced to the concept of quality school health education through a tactile exercise. Prior to class, the instructor prepared several "Mystery Boxes," each containing an item that symbolizes a characteristic of quality health education. Example items might include a magnifying glass for evidence-based methods or a globe for global perspectives. After a brief discussion about the general significance of school health education, students were divided into groups and given a box. Each group explored their item, deliberated on its potential symbolism in the context of health education, and then shared their interpretations with the class. The instructor then revealed the intended symbolism behind each item, aligning them with recognized characteristics of quality health education. The activity culminates in a paired reflection on the importance of these characteristics in contemporary education settings.

Course students then delved into the significance of quality school health to k-12 students, school stakeholders, and the community. They explored and discussed the tangible benefits of a successful school health education program through case studies which emphasized improved student health behaviors and associated benefits to the community. Students created a personal impact map to outline direct outcomes of quality school health education and connect them to personal implications, such as the wellbeing of their potential children or the broader societal effects. The activity ended by sharing their personally relevant outcomes, underscoring the interconnected impact of quality health education on an individual and interpersonal scale.

Students were then tasked to explore both traditional and digital advocacy strategies, categorizing them based on their perceived ease of implementation. Using a ladder-like visual aid, students categorized advocacy strategies on a continuum that ranged from "Quick & Easy", such as distributing flyers or posting infographics online, to "Long-Term Commitments", such

as lobbying for policy changes or creating dedicated advocacy websites. Students actively participated by assigning provided examples of advocacy strategies to the corresponding level on a visual ladder which sparked discussion on the potential impact and required effort for each strategy. In the "Toolkit Exploration" activity, students delved into the role of digital tools in contemporary advocacy by exploring and evaluating resources from organizations like the American School Health Association, Change.org, Resistbot, and Phone2Action to identify their functionality and potential benefits for school health advocacy. Insights and findings from both activities culminated in the creation of a course advocacy toolkit which was accessible to students.

Lastly, an empowerment activity was embedded to explore challenges and introduce empowerment techniques. This dual-faceted approach ensured that while students became cognizant of challenges, they simultaneously received suggestions for navigating them. Course students engaged in a group role-play activity to explore the perspectives of various school health stakeholders, including students, parents, teachers, administrators, and community members. Each group received a role representing a stakeholder and were provided contextual information regarding the stakeholder that included viewpoints, priority areas, or educational philosophy. Course students were asked to consider reasons and provide a rationale, given the specific information, as to why these stakeholders might endorse or oppose school health education. This roleplay activity allowed students to reflect on the complex dynamics that influence support for school health education and advocacy strategies, while also highlighting the importance of tailored communication to effectively engage diverse stakeholder groups. The module culminated with a commitment activity, designed to translate learning into actionable intentions. Students pledged specific advocacy actions, leveraging social commitment as a mechanism to solidify and heighten intentions to advocate for school health education.

Instrument

This study employed a previously developed and validated TPB survey (Chaney et al., 2011) to assess students' school health education advocacy-related perceptions. The original instrument was tested in a sample of college students for construct validity and reliability, exhibiting Cronbach's alpha scores of 0.80, 0.86, and 0.86, for the indirect measures of ATT, SN, and PBC respectively. The survey also evaluated students' advocacy intentions after the lesson (α=0.83) and their perception of the lesson's efficacy (α=0.88).

For the current study, nine items were used for inclusion and filtering to collect participant demographic information. 44-items were used to assess constructs related to the TPB and outcomes associated with the advocacy lesson. The TPB-related scales included nine items for ATT (e.g., "School health education advocacy makes a positive difference in the lives of students"; "Making a difference in the lives of students is important to me"), 16 items for SN (e.g., "Community members' likelihood of encouraging or discouraging your involvement in school health education advocacy"; "How likely are you to comply with the desires of community members?"), six items for PBC (e.g., "How much do available resources support or hinder your involvement in school health education advocacy?"), and six items related to intentions to engage in specific advocacy activities (INT; e.g., "Attend a local school board meeting/send electronic comments to advocate for school health education"). All scale items were rated on a 5-point Likert scale ranging from 1 to 5. Additionally, seven items evaluated students' perceptions of how effectively the course advocacy activities increased understanding, awareness, importance, interest, and advocacy skills.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS,

version 29). Frequency distributions were used to display participant characteristics and chi-square test of association were used to determine any differences in group characteristics. Perceived effectiveness of the advocacy lesson was quantified using percentages, with response categories of "effective" and "very effective" being collapsed to reflect students' perceptions of the lesson's efficacy across corresponding variables. Mean scores and unadjusted mean difference were used to identify construct scale items that showed the largest change from baseline to posttest.

Summed mean scores were used to calculate TPB construct scores at baseline and posttest. To determine whether there were statistically significant differences between the treatment and control groups, an Analysis of Covariance (ANCOVA) was utilized. The baseline scores for each construct served as the covariate, ensuring that the comparison between the posttest scores of the treatment and control groups was adjusted for any initial baseline differences. This statistical method is crucial for accurately discerning the genuine effects of the intervention since it controls for initial group variances (Levin, 1998). The primary outcome from the ANCOVA was the comparison of the adjusted group means, accounting for the influence of the baseline scores. A significant difference between the adjusted means would imply a statistically significant effect of the treatment on the measured constructs. A multiple linear regression analysis was conducted to evaluate how variations in the treatment group participants' attitudes, subjective norms, and perceived behavioral control predicted their intentions to advocate for school health education.

RESULTS

Participant characteristics are shown in Table 1. A chi-square test for association was conducted to determine the homogeneity between the treatment and control groups. There were no statistically significant associations between treatment arm and gender, $\chi2(1) = .322$, $p = .570$; academic classification, $\chi2(1) = 1.224$, $p = .268$; and race/ethnicity, $\chi2(1) = .669$, $p = .880$.

Unadjusted summed mean scores for each TPB construct at pre- and posttest are presented in Table 2. A one-way ANCOVA was performed to establish whether there were any statistically significant group differences on the dependent variables after adjusting for the covariate. Specifically, whether there were overall statistically significant differences in post-intervention TPB construct scores between the treatment and control groups once their means were adjusted for pre-intervention construct scores. After adjustment for baseline TPB construct scores, there was a statistically significant difference in post-intervention attitudes ($F[1, 198] = 102.40$, $p < .001$, partial $\eta2 = .341$), subjective norms ($F[1, 198] = 88.97$, $p < .001$, partial $\eta2 = .310$), perceived behavioral control ($F[1, 198] = 188.15$, $p < .001$, partial $\eta2 = .487$), and intentions ($F[1, 198] = 103.63$, $p < .001$, partial $\eta2 = .344$) between the groups. All TPB constructs demonstrated significantly greater increases in the treatment as compared to the control. Adjusted mean differences are presented in Table 2. Additionally, Table 3 provides summed mean scores for the TPB scale items that exhibited the greatest change in mean difference from baseline to post-intervention in the experimental group.

A multiple linear regression analysis using change scores from baseline to posttest for attitudes, subjective norms, and perceived behavioral control was employed to predict treatment participants' school health education advocacy intentions. The results revealed that the overall model significantly predicted intentions to advocate, $F(3, 83) = 40.24$, $p < .001$, accounting for 59.3% of the variance in advocacy intentions, with an adjusted R^2 of .578. Among the individual predictors, attitudes ($\beta = .26$, $p = .004$), subjective norms ($\beta = .20$, $p = .022$), and perceived behavioral control ($\beta = .47$, $p <$

.001) all emerged as significant contributors to the model.

The overwhelming majority of students found the lesson effective and beneficial. Most students indicated that the lesson was effective in enhancing their comprehension of high-quality school health education programs (94%), increasing awareness of how school health education directly impacts their lives (89%), improving their advocacy skills (87%), improving personal understand of the importance of quality school health education (79%), increasing interest in current advocacy issues (81%), and increasing intention to engage in school health education advocacy (71%).

DISCUSSION

The increasing significance of health education advocacy within society underscores the urgency to foster advocacy skills among future health professionals (Fisher & Hancher-Rauch, 2022). The present study aimed to assess the efficacy of a school health education advocacy lesson to increase student intentions to advocate for school health and to statistically attribute these changes to the intervention through the addition of a control group. The absence of significant differences in demographic variables between the control and experimental groups, as demonstrated by the chi-square test, indicates that both groups were comparably representative. This facilitates a more confident attribution of the post-intervention differences to the lesson's effect rather than other confounding factors (White & Sabarwal, 2014). Results from both pre- and posttests in the treatment group highlighted a significant increase in intentions to advocate for school health education post-lesson. Importantly, participants' perceptions of the importance of high-quality school health education and their self-assessment of advocacy skills experienced an increase following the lesson.

The findings of this study support the efficacy of the intervention lesson to improve college students' attitudes (ATT), subjective norms (SN), perceived behavior control (PBC), and intentions relating to school health advocacy. The statistically significant differences observed in all TPB constructs post-intervention attest to the lesson's robustness in facilitating positive changes in Theory of Planned Behavior (TPB) constructs. Consistent with the TPB (Ajzen, 1991), the employed regression analysis confirmed that the measured constructs of ATT, SN, and PCB were all positively associated with, and predictive of advocacy intentions.

The increased ATT scale scores likely reflect the lesson's emphasis on correcting any misconceptions about comprehensive school health education and illustrating its essential role in contributing to academic success and health or behavioral benefits that can permeate in the school and community. This was evidenced by a notable shift in course students' perceptions, particularly in recognizing the significant positive impact of school health on K-12 students, the broader community, and individuals they serve (or plan to serve) in their professional capacities. Additionally, the intervention had the greatest positive impact on students' SN perceptions as measure by increases in adjusted mean difference. This suggests the intervention informed students' understanding of how the benefits of quality school health education extend beyond individual students and positively impact the broader community and stakeholders. Consequently, students likely gained a deeper understanding of the broader impact their advocacy actions could have.

As an example from the implemented lesson, one course student correctly identified that comprehensive school health education encompasses more than just physical activity and nutrition, using Social and Emotional Learning (SEL) as an illustration. The aim of SEL is to equip students with skills to understand and manage emotions, set and achieve goals, show empathy, maintain positive relation-

ships, and make responsible decisions (Collaborative for Academic, Social, and Emotional Learning, n.d.). Building on this comment, students were prompted to share observed examples of behavior that may be mitigated or prevented if K-12 students received comprehensive school health education that included SEL. A notable reflection described an incident where a frustrated middle school student kicked their Chromebook, resulting in a two-week suspension. This observation was then used to underscore that effective learning requires students to be present in an environment that is safe and supportive of learning. The discussion then focused on how developing emotional intelligence and social skills benefit students, but also positively impacts teachers, parents, and the wider community through more empathetic and civic-minded young adults.

Notably, the finding that PBC had the largest beta coefficient in the regression analysis highlights its importance in predicting intentions to advocate for school health education. PBC reflects individuals' beliefs about their ability to perform a behavior, encompassing factors like confidence and perceived ease or difficulty of performing the behavior (Ajzen, 1991). This result underscores the idea that beyond recognizing the beneficial impact of school health education and the importance of advocacy, students must also feel confident about their ability to engage in advocacy, being aware of implementable strategies, and practicing advocacy strategies to enhance their skills (Birch et al., 2011; Hancher-Rauch et al., 2017; Thomas, 2019).

By integrating hands-on activities and digital tools, the lesson likely provided accessible entry points for advocacy, actively encouraging exploration that could help demystify the advocacy process. This approach may not only lower perceived barriers but also bolster students' confidence in their capability to effect change, thereby likely influencing their overall TPB scale scores by increasing their sense of efficacy and control in advocacy efforts. Notable PBC scale items that exhibited the largest increases were knowledge of the advocacy process, the level of advocacy training, and perception of available time. Exposure to a variety of advocacy strategies and tools likely served to enhance students' perceived understanding and awareness of the advocacy landscape. This, combined with the practical evaluation of strategies, might have inherently shifted advocacy knowledge and training from hindering factors to supportive factors. Additionally, by highlighting efficient advocacy strategies, the lesson could have effectively expanded students' perception of available time for engagement, illustrating how impactful actions can be integrated into their busy schedules.

Students reported the highest intentions to engage advocacy actions of contacting a school board member or administrator and using social networking platforms as an avenue for advocacy. In alignment with previous research, study observations underscored a preference among students for social media or digital methods over traditional print advocacy methods or strategies requiring physical presence (Wallen et al., 2012). The emphasis on digital literacy and social media strategies within the lesson responds to the highlighted need for the utilization of technology in advocacy preparation and practice. The emphasis on digital tools could resonate with students' existing competencies and preferences, making social media advocacy an appealing choice for its simplicity and wide reach (Galer-Unti, 2010; Hall, 2022; Hey et al., 2004). When exploring the potential impact of various advocacy strategies during the lesson, students highlighted that direct engagement with school board members or administrators could lead to more substantive changes and requires less time compared to other approaches. Combined with their perceived increase in advocacy knowledge and training, they may have better recognized their potential to make a meaningful difference and felt more

empowered and equipped to engage in this direct advocacy approach.

The overwhelmingly positive perceptions of lesson effectiveness, as evidenced by student feedback, further support the lesson's value. The students not only recognized the lesson's role in enhancing their advocacy skills but also appreciated its broader implications, including understand-Ing the importance of quality school health education and the impact of advocacy in their lives. Given the reported inadequacies among health education faculty members in imparting advocacy strategies (Radius et al., 2009; Kerr et al., 2017), the study's findings assume heightened importance. The lesson model offers potential strategies for academic institutions seeking to bolster advocacy instruction within their curricula.

Despite these promising findings, there are several limitations that warrant attention for future research. The study scope was confined to a single educational institution which may limit the generalizability to students from different geographical locations or demographic backgrounds, particularly those with different cultural, socioeconomic, or educational experiences. Additionally, the effectiveness of the advocacy lesson could have been influenced by the instructor's delivery method, engagement with students, and personal enthusiasm, which were not controlled for in this study. Given the self-reported nature of the survey, responses may be subject to social desirability bias. It is possible participants overreported positive outcomes to align with socially acceptable responses, such as intentions to engage in advocacy. Additionally, the study assessed immediate changes in outcomes which prevents determining if intentions translated into advocacy actions or if the observed effects were sustained over time. Finally, the study did not assess all potential confounding factors such as digital literacy, which could obscure the true effects of the intervention. Future research should explore diverse settings to understand variations in perceptions of school health education, investigate the impact of instructor teaching styles on advocacy lesson outcomes, utilize qualitative methods for deeper insights, include long-term follow-up to assess the persistence of reported changes and translation to action, and employ more comprehensive approaches to identify and control for confounding variables.

CONCLUSION

Quality school health education in K-12 settings contributes to the overall well-being of youth by enabling students to adopt and maintain health-enhancing behaviors that benefit physical, mental, emotional, and social health. This functional knowledge and skill development lays the foundation for a generation that understands the importance of health and wellness, actively engaging in health-enhancing behaviors to improve their quality of life and positively impact the lives of others. For all college students, understanding the importance of school health advocacy is essential. As future professionals, regardless of career path, these students have the potential to influence the health of the next generation. Advocacy can help ensure that school health education is prioritized, evolves, remains adequately funded, and aligns with the changing health landscape. Beyond professional responsibility, this advocacy holds personal significance, recognizing that all children deserve the best foundation for a healthy life.

Findings from this study support a continued emphasis on advocacy integration into college curriculum. This integration not only prioritizes individual and community health but also serves to transition future professionals from passive recipients of information to proactive champions for change. When students learn the value of advocating for quality school health education and understand its impact on peers and community, they gain a stronger sense of responsibility, confidence in their ability to advocate effectively, and the belief

that their advocacy can make a positive difference. Their advocacy efforts within local schools can directly contribute to the health of society at large. A society where its members actively champion health, work towards systemic change, and ultimately create an environment where all members can thrive.

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TABLES

Table 1.
Participant demographic information (n = 201)

Variables	Exp (n=87)	Cnt (n=114)
Gender; n (%)		
Male	30(34.5)	35(30.7)
Female	57(65.5)	79(69.3)
Race/ethnicity; n (%)		
Hispanic/Latinx/Spanish Origin	39(44.8)	57(50.0)
Non-Hispanic White	26(29.9)	31(27.2)
Asian	15(17.2)	19(16.7)
African American	7(8.0)	7(6.1)
Academic Classification; n (%)		
Junior	42(48.3)	64(56.1)
Senior	45(51.7)	50(43.9)

Note. *Cnt* = Control Group; *Exp* = Experimental Group

Table 2.
Summed mean scores (SD) and adjusted mean difference for Theory of Planned Behavior constructs

Variables	Range	Exp (n=87)		Cnt (n=114)		MD
		Pre M(SD)	Post M(SD)	Pre M(SD)	Post M(SD)	
Attitudes	9-45	24.32 (9.84)	34.47 (6.83)	24.17 (10.32)	25.09 (11.07)	9.28
Subjective Norms	16-80	47.61 (10.78)	58.20 (10.58)	42.56 (16.13)	43.54 (16.96)	10.17
Perceived Behavioral Control	6-30	12.57 (5.96)	21.16 (4.40)	14.08 (6.61)	14.23 (7.16)	8.02
Intentions	6-30	7.26 (4.29)	12.82 (4.01)	8.02 (3.92)	8.46 (4.51)	4.85

Note. Cnt = Control group; *Exp* = Experimental group; *M* = Mean, *MD* = Adjusted mean difference; *SD* = Standard Deviation

Table 3.
Summed mean scores (SD) and mean difference for select Theory of Planned Behavior scale items

TPB Construct and Scale Questions (Range 1-5)	Exp (n=87) Pre	Post	MD
Attitudes[a]			
Local community	2.75 (1.14)	4.00 (.96)	1.25
Students	2.83 (1.16)	4.03 (.93)	1.20
People I serve in my professional life	2.89 (1.15)	4.05 (.99)	1.16
Subjective Norms[b]			
Parents of school children	2.18 (1.37)	3.90 (.88)	1.72
Current or future students	2.58 (0.93)	3.89 (.86)	1.31
School teachers	3.05 (1.05)	3.95 (.88)	0.90
Perceived Behavioral Control[c]			
Knowledge of advocacy process	2.06 (1.14)	3.78 (.84)	1.72
Level of advocacy training	2.56 (1.32)	3.78 (1.22)	1.22
Available Time	1.79 (1.56)	3.42 (1.30)	1.63
Intentions[d]			
Contact a school board member or administrator	1.63 (0.86)	3.60 (1.32)	1.97
Use social networking platforms to advocate	2.03 (0.91)	3.40 (1.16)	1.37

Note. Cnt = Control group; *Exp* = Experimental group; *M* = Mean, *MD* =unadjusted mean; *SD* = Standard Deviation; *TPB* = Theory of Planned Behavior
[a] Scale Stem: School health advocacy makes a positive difference in the lives of…
[b] Scale Stem: Degree to which the entities encourage/discourage involvement in school health advocacy.
[c] Scale Stem: Indicate how much the following factor hinders or supports your involvement in school health advocacy.
[d] Scale Stem: Likelihood of participating in the following advocacy-related activity within the next 6 months.