ADDRESSING HEALTH DISPARITIES IN LGBTQ YOUTH THROUGH PROFESSIONAL

DEVELOPMENT OF MIDDLE SCHOOL EDUCATORS

A THESIS SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF
HAWAI'I AT MĀNOA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF

DOCTOR OF NURSING PRACTICE

MAY 2021

By

Melissa A. C. Owens

Committee:

Deborah Mattheus Chairperson
Richard Ramirez
Mavis Tasaka

Abstract

Significant health disparities exist for SMY including substance abuse, mental distress and suicidal ideation. Supportive adults in schools have been shown to improve mental wellbeing and academic outcomes for LGBTQ students. A Safe Space professional development training was implemented to increase teacher knowledge and comfort in supporting SMY. The training was conducted by a GLSEN-trained facilitator in two sessions for a cumulative time of 3 hours 15 minutes. Self-rated knowledge and comfort were assessed before and after completion of the training using survey responses. Follow up surveys were also completed at 2 weeks and 3 months after training to assess application of newly-learned material inside the classroom. There was a 34.9% increase in self-rated knowledge of LGBTQ issues and concerns in the school environment after the training (Likert score 2.84 to 3.83) and a 5.5% increase in self-rated comfort level in supporting LGBTQ students (Likert score 3.82 to 4.03). A 3-month follow-up survey indicated that 52.9% of the respondents were actively applying knowledge learned within their school setting. Results demonstrate the training was able to improve self-rated knowledge and comfort for participants. Survey response themes indicate increased awareness of desirable teacher attitudes and actions as well as an understanding of the underlying importance of the training with respect to bullying and other stigmatizing behaviors. Given the success of implementation, expansion to other schools could facilitate ally-building attitudes and behaviors as a protective factor for SMY throughout the state.

Contents

List of Tables

List of Figures

List of Abbreviations

CINAHL   Cumulative Index to Nursing and Allied Health Literature

COVID-19   Coronavirus Disease 2019

ERIC   Education Resources Information Center

GLSEN   Gay, Lesbian, Straight Education Network

GSA   Gender Sexuality Alliance (formerly Gay Straight Alliance)

HY   Heterosexual youth

LGBTQ   Lesbian, gay, bisexual, transgender, and queer

MeSH   Medical Subject Headings

PICO   Population, intervention, control, and outcomes

SMY   Sexual minority youth

Addressing Health Disparities in LGBTQ Youth Through Professional Development of Middle

School Educators

Health and educational outcome disparities exist for heterosexual youth (HY) and sexual

minority youth (SMY). The incidence of substance use, depression, anxiety, suicidality, dating

violence, bullying, sexual risk behavior, homelessness, and truancy are higher among SMY than

HY (Demissie, Rasberry, Steiner, Brener, & McManus, 2018; Dragowski, McCabe, & Rubinson,

2016; Kosciw, Greytak, Zongrone, Clark, & Truong, 2018). Many of these health disparity risk

factors such as anxiety and depression persist into adulthood (Birkett, Newcomb, & Mustanski,

2015).

Minority stress theory is widely accepted as the best explanation for why these health

disparities exist (Eisenberg et al., 2018). Stressors for SMY include stigma about one's sexuality,

concealment of one's sexuality, expectation of rejection, negative reactions to "coming out," and

the incidence of victimization and harassment prevalent in many schools (Baams, Grossman, &

Russell, 2015). Victimization is linked to dysregulation of the body's stress response system, the

hypothalamic-pituitary-adrenal axis (Vaillancourt, Hymel, & McDougall, 2013). This increase in

stress hormone release can place individuals at risk for physical and mental health conditions

across the lifespan (Gower et al., 2018; Vaillancourt et al., 2013).

Victimization and harassment of SMY is rampant in schools. In a national survey of

teachers, 90% reported observing LGBTQ harassment among students while 44% reported

overhearing school staff engaged in LGBTQ bias harassment. In fact, results from the teachers'

survey indicated that students in middle schools have a higher frequency of LGBTQ biased

harassment compared with high school students (Dragowski et al., 2016). Additionally, results

from a biennial national survey, most recently conducted in 2018, by the Gay, Lesbian, and

Straight Education Network reported that 98.5% of LGBTQ students heard "gay" used in a derogatory way at school, 94.0% heard negative remarks about gender expression, and 87.4% heard negative remarks specifically about transgender people (Kosciw, Greytak, Zongrone, Clark, & Truong, 2018). A startling 56.6% of students also reported hearing homophobic remarks from their teachers or other school staff.

Adolescence is a key period of development for youth as they become self-aware of sexuality and gender identity. Adolescents spend the majority of their waking hours at school, making it a critical site for adolescent development (Johns, Poteat, Horn, & Kosciw, 2019). As such, schools are a potential site for exposure to stigma-related risk factors or provision of protective factors. Leveraging school resources for the benefit of LGBTQ students may help curtail negative experiences.

Needs Assessment

The site of this project is Sanford B. Dole Middle School, a Title I school with approximately 560 students and 50 teachers located in Honolulu, Hawai'i. As with all middle schools, the adolescent students are becoming self-aware of sexual orientation and gender identity (Frankowski, 2004). The Hawai'i Youth Risk Behavior Survey data for 2017 demonstrate that 7.1% of middle school students identify as gay, lesbian, or bisexual, but transgender or questioning is not a response option (Saka, Gerard, & Afaga, 2018). Estimates of transgender and questioning populations of middle school students suggest an additional 1.3% identify as transgender, and 12.1% identify as "not sure" about their sexual orientation (Shields et al., 2013).

The principal of Sanford B. Dole Middle School has identified a need for improvement in the school climate, and especially a reduction in bias-based harassment and bullying of LGBTQ

students. The principal has also identified a knowledge deficit amongst teachers in supporting

LGBTQ students. A school-based health center staffed by an APRN exists on campus but no

interventions focused on addressing SMY health disparities had been instituted prior to this

project.

Background and Significance

The health disparities for sexual minority youth are substantial. The Hawai'i Sexual and

Gender Minority Health Report (Holmes et al., 2017) demonstrates that SMY were less likely to

have obtained primary care or dental care in the past year compared with heterosexual youth.

Sexual minority youth in Hawai'i are also more likely to use marijuana with 34% of SMY and

19% of HSY using in the past month. This trend is also seen with abuse of prescription drugs and

injection of illegal drugs. The use of cigarettes is three times higher among SMY than HSY

(24% versus 8% respectively) in Hawai'i (Holmes et al., 2017).

In addition to widespread substance abuse among SMY, there are also higher rates of

mental distress and suicidal ideation. Thirty-five percent of SMY in Hawai'i reported making a

plan for suicide compared to 13% of HSY (Holmes et al., 2017). Twenty-nine percent of SMY in

Hawai'i have attempted suicide in the past year compared to 7.8% of HSY.

The hardships LGBTQ youth face have been exacerbated during the COVID-19

pandemic. As classroom instruction moved online, SMY have experienced reduced access to

supportive adults and affirmative social interaction through involvement in Gender Sexuality

Alliances (GSAs), while at the same time experiencing an increased risk of cyberbullying and

abuse at home (Green, Price-Feeney, & Dorison, 2020). Other negative consequences of the

pandemic such as housing instability already disproportionately affect SMY. LGBTQ youth who

experience housing instability report considering suicide at double the rate and attempting

suicide at triple the rate of LGBTQ youth who had not (The Trevor Project, 2019).

Problem and Purpose Statement

The purpose of this project is to provide Safe Space professional development sessions to

improve teacher comfort in supporting sexual minority youth as a protective factor to reverse

negative health outcomes. The problem statement is: Does Safe Space professional development

(I) for middle school teachers (P) improve teacher comfort with ally development (O)?

Conceptual Framework

The Stetler model of evidence-based practice is useful to health care providers in guiding

program planning and implementation (Stetler, 2001). The model encourages the practical

application of research findings while reducing the risk of human errors made in decision

making. There are five phases: preparation, evidence validation, decision making,

translation/application, and evaluation. The preparation phase includes consideration of

contextual factors, which requires an understanding of educators' preconceived notions about

SMY. The second phase of evidence validation includes examining each relevant study for its

quality prior to utilization in research synthesis. The decision-making phase encourages logical

organization of summarized findings from all validated sources, such as research studies in

nursing, psychology, and education, to determine applicability or feasibility of utilizing findings

in practice. The translation phase was accomplished by taking summary statements from phase

III and forming action terms to apply synthesized findings into practice change strategies. The

Stetler model encourages use of research utilization in the final evaluation phase including both

formative and outcome evaluation data.

Literature Search

A literature search was conducted in PubMed, CINAHL, ERIC, and Google Scholar. Search terms included all aspects of the PICO statement and related topics such as "professional development", "LGBTQ: (MeSH term), "Safe Space," "teacher ally," "school climate," "protective factors," "connectedness factors," and "health outcomes." Boolean operators were used to ensure the results were related to the keyword *school* for concepts such as protective factors and professional development. No date limitations were placed to obtain historical context for the issue. References of the most pertinent articles were also examined to ensure a complete search of original material. A total of 933 articles were resulted and these were narrowed down to 121 after eliminating duplicates.

The 121 resulting articles were then scrutinized to determine Mosby's level of evidence which determines the usefulness for cause and effect decision making (Melnyk & Fineout-Overholt, 2004). Twenty-three articles were determined to have sufficient quality for inclusion in this synthesis of the literature (Table 1). Articles were excluded for lack of relevance to the school setting, professional development for educators, or sexual minority youth.

Table 1

Grading of evidence

Mosby's Quality of Evidence	Number of articles obtained (total of 23)
Level I: Meta-analysis	1
Level II: Experimental design (RCT)	0
Level III: Quasi-experimental design	0
Level IV: Case-controlled, cohort, longitudinal studies	11
Level V: Correlation studies	1
Level VI: Descriptive studies	4
Level VII: Authority opinion or expert committee reports	4
Other: Performance Improvement; Review of Literature	2

Literature Synthesis

Protective factors for LGBTQ students

Protective factors are conditions, behaviors, or characteristics that can improve health directly or reduce the negative effects of a risk factor on health (Johns, Poteat, Horn, & Kosciw, 2019). A systematic review of the literature by Espelage et al. (2019) examined protective factors for all students and determined that school level protective factors include a positive school climate that is conducive to learning, building relationships, and offering opportunities. Evidence indicates that school climate can be either protective or detrimental. Inclusive school policies and curriculum have been demonstrated to reduce homophobic aggression. Examples of inclusive measures are anti-bullying policies that cover sexuality or gender identity, establishment of Gay Straight Alliances (GSA), classroom curriculum or workshops, and supportive adults in school.

Saewyc and Homma (2017, p. 29-57) indicate that when all protective factors for LGBTQ students are considered (GSAs, comprehensive anti-bullying policies, inclusive curriculum, and supportive educators), supportive educators have the strongest effect on student wellbeing and academic success.

Supportive educators. Youth who can identify at least one supportive adult at school report better outcomes than youth who cannot identify a safe adult (Graybill & Proctor, 2016). Supportive adults in schools have been shown to improve mental wellbeing and academic outcomes for LGBTQ students (Johns, Poteat, Horn, & Kosciw, 2019). Although educators cannot eliminate all disparities experienced by SMY, educators have the power to improve the school climate for LGBTQ youth, which in turn reduces some of the negative short- and long-term outcomes for this group. The number of supportive educators at a school is positively associated with a less hostile school climate (Johns, Poteat, Horn, & Kosciw, 2019). The protective factors included encouraging staff to attend trainings on creating supportive environments for LGBTQ students (Hatzenbuehler et al., 2014). Supportive staff may improve outcomes for students through providing personal connections that buffer against severe victimization, creating a safer and more affirming environment, directly intervening when victimization is occurring, and advocating for protective school policies and practices.

Sexual minority youth who report greater school connectedness and safety also report lower suicidal ideation and fewer suicide attempts (Eisenberg & Resnick, 2006). Hatzenbuehler et al. (2014) found that SMY at schools with greater protective factors had fewer suicidal thoughts.

Professional development for teachers. Many educators report feeling uncomfortable or unprepared to support LGBT youth (Graybill & Proctor, 2016). One reason for educators'

discomfort may be that LGBT content is sometimes missing or covered minimally in university training programs. Professional development seminars build an educator's capacity to intervene when anti-LGBQ bias occurs in schools and are a growing area of research on supportive adults in schools (Johns, Poteat, Horn, & Kosciw, 2019).

While teachers often receive professional development on bullying and diversity issues, they are much less likely to receive training specific to LGBT student issues (Greytak, Kosciw, Villenas, & Giga, 2016). More than 75% of secondary schools in Hawai'i report encouraging staff to attend professional development on safe and supportive schools for all students (Centers for Disease Control and Prevention, 2019). While 85% of educators report training in bullying and harassment, far fewer respondents reported receiving training in LGBT issues (32.9%) or transgender issues (23.6%). In a survey by Swanson and Gettinger (2016), 87.4% of teacher respondents cited "a lack of training/skills on how to support LBGT youth" and 54.7% cited "not knowing how/when to intervene when bullying/harassment occurs."

Safe Space Training. The Gay, Lesbian, Straight Educator Network (GLSEN) created a professional development model for educators called the Safe Space Kit (SSK) (2019). Training includes resources for educators such as a written guide for best practices and posters to announce themselves as an ally. The implementation of the SSK with educators was determined to have positive effects on participants (Boesen, Giga, Greytak, & Kosciw, 2015). In the study, 94.4% of educators reported that the SSK helped to increase their knowledge and skills regarding LGBT student issues. After training, educators reported that the SSK increased their understanding of LGBT student experiences, reinforced their prior knowledge about LGBT student issues, and provided new resources to use in their work to support LGBT students and improve school climate (Boesen, Giga, Greytak, & Kosciw, 2015).

15

Training time. Time spent in training is critical in improving effectiveness and participant satisfaction. Payne and Smith (2010) examined teacher satisfaction after receiving 30 minutes, 1 hour and 2 hours of LBGTQ training and determined that satisfaction scores improved with longer training times, with increases of 3.84, 4.21 and 4.68 points on a 5-point Likert scale, respectively. In follow up sessions, educators requested additional time to discuss strategies for implementing changes in schools. Kitchens and Bellini (2012) found that 2 hours of training improved teacher candidates' understanding of how to address LGBTQ issues in schools, but requests were made for additional time. Leonardi and Staley (2015) found that teachers requested additional time to discuss strategies amongst themselves after two 2.5-hour sessions. Ratts et al. (2013) found that educators desired at least 3 hours of training to allow adequate time to cover the requisite knowledge and skills needed to become competent LGBTQ allies. This indicates that a longer training time is desirable to discuss and collaborate on strategies to implement Safe Space materials.

Professional reflection. The role of reflection on professional growth of educators has been examined for over a century. Reflection is a cognitive strategy based on the reprocessing of knowledge, understanding, and emotions (Moon, 2005). Educators become more aware of the contradictions between what they do and what they hope to do by reflecting on successes and failures in the classroom (Clark, 1995). The Safe Space training is aimed to stimulate philosophical awareness and understanding of what constitutes good practice in education. To stimulate introspection about good practices for the educators, a follow up reflection activity was scheduled 2 weeks after training was completed.

Strengths, Weaknesses and Literature Gaps

Strengths of the literature include consistency across studies demonstrating the importance of supportive educators and the effectiveness of professional development in improving school climate and experiences for SMY. A weakness noted in the literature is many of the interventions mentioned above have not been evaluated with randomized controlled trials or in large-scale settings. This is difficult to accomplish given the nature of educational settings. Gaps in the literature include studies of appropriate training length and content related to effectiveness. More research is needed to rigorously evaluate the efficacy and generalizability of the professional development interventions to fill the gaps in the literature.

Project Goals & Objectives

The goal of this project is to reduce health disparities for LGBTQ students at Dole Middle School through Safe Space professional development of educators aimed at ally development. A key objective was for 90% of teachers at the middle school to complete 75 minutes of Safe Space training by October 31, 2020. Short-term outcome objectives included: (1) A 25% increase in self-rating of current knowledge of LGBTQ issues between the pre- and post-surveys; (2) A 25% increase in self-rating of comfort level in supporting LGBTQ students between the pre- and post-surveys; (3) An average Likert scale score greater than 3 for self-reported belief of importance of the professional development training; and (4) an average Likert scale score greater than 3 for self-reported belief that the training has the potential for improving school climate for LGBTQ students. The long-term outcome objective was that 3 months post training, teachers report having felt comfortable in using aspects of the training to intervene and support LGBTQ students.

Project Design

The design for this evidence-based quality improvement project was based on the Stetler Model of Research Utilization. The setting for this project was Sanford B. Dole Middle School in Honolulu, Hawai'i, a Title I school with approximately 700 students and 50 faculty (as of Spring 2020) who will serve as participants in this project. The training was conducted in October 2020 during time slots dedicated to professional development. Each participant received a bound copy of the Safe Space Kit, available by free download from GLSEN. This kit included a 45-page guide to supporting LGBTQ students in the school and supplements the training that was conducted. The Safe Space Kit also included a sticker to mark the classroom as a safe space. The training occurred via Cisco Webex conferencing to limit exposure to COVID-19. Contact information for the author was included in the bound materials. During the training, participants were encouraged to contact the author with questions and concerns related to the training.

Evaluation Plan

The plan for evaluation of the project was based on the Stetler Model of Research Utilization. This model encourages evaluation of each of the outcome goals which was accomplished in three ways: 1) anonymous pre- and post-surveys (see Appendices 1 and 2), 2) an anonymous follow-up survey at 3 months (see Appendix 3) and 3) a qualitative summary of the questions and concerns shared by teachers in a professional reflection activity (see Appendix 4) distributed two weeks after the training. The surveys and reflection activity were developed by the author specifically for the current project. Potential survey questions were identified from the literature review and relevant questions were selected based on project goals. The survey was therefore not tested for validity and reliability. The surveys and reflection activity were administered electronically in a manner allowing for anonymous responses. The number of

participants completing the training, the surveys, and the professional reflection was determined. Survey responses were entered into a spreadsheet and average scores determined for each Likert item. Free responses to the open-ended question and the professional reflection were recorded and common themes and keywords identified.

Data Analysis and Results

The training was conducted in two sessions lasting 1 hour 45 minutes and 1 hour 30 minutes providing a cumulative time of 3 hours 15 minutes. The training session filled all available time remaining after faculty announcements were completed. The sessions, while designed for faculty, were open to all school staff who interact with students. The first session was attended by 64 participants and the second session by 59 participants. These participants included teachers, administrators, educational assistants, security personnel, office clerks, guidance counselors, and the school health assistant. Fifty faculty and staff participants completed the pre-participation survey, 30 completed the post-participation survey, 15 completed the reflection activity and 17 completed the 3-month follow up survey.

Pre-participation Survey

Only 16% of participants reported receiving prior LGBTQ awareness or ally development training. To quantify self-ratings of knowledge and comfort, a Likert scale assessing each attribute was used with 1 being very poor and 5 being excellent. The average Likert score for self-rated prior knowledge was 2.84, between poor and fair. In self-rating comfort level, the average Likert score was 3.82, between fair and good.

Post-participation Survey

In the post-participation survey, the mean knowledge self-rating was 3.83 and the mean comfort rating was 4.03. For the question, "How would you rate the importance of this training

for school faculty and staff?" the average score was 4.50. For the question, "How would you rate this training for its potential for improving school climate for LGBTQ students?" the average score was 4.03.

Responses to the question "What did you learn in this training that you will use in your classroom?" were examined for common themes and keywords (Figure 1). The responses were grouped into four main categories or themes: desirable teacher attitudes and characteristics to create a Safe Space, desirable teacher behaviors and strategies to create a Safe Space, the importance of providing a Safe Space, and partnering with school administrators for success. The most common attitudes and characteristics mentioned by teachers were supportive, inclusive, and accepting. The most common behaviors and strategies documented by teachers were open discussions, use of proper pronouns, listening, and defending or advocating for students when needed. Teachers identified adverse childhood experiences such as bullying and abuse as the reason that Safe Spaces are so important.

Figure 1

Post-participation survey common themes

What did you learn in this training that you will use in your classroom?

| Desirable teacher attitudes and characteristics to create a Safe Space (n=28) | Desirable teacher behaviors and strategies to create a Safe Space (n=23) | Why Safe Spaces are important to LGBTQ students (n=10) | Partnership with school administration (n=3) |

Desirable teacher attitudes and characteristics:
Supportive (n=5)
Inclusive (n=4)
Accepting (n=4)
Respectful (n=3)
Loving (n=2)
Aware (n=2)
Empathetic (n=1)
Mindful (n=1)
Consistent (n=1)
Non-judgemental (n=1)
Open-minded (n=1)
Caring (n=1)
Understanding (n=1)
Welcoming (n=1)

Desirable teacher behaviors and strategies:
Open discussions (n=3)
Use appropriate pronouns (n=3)
Listening (n=3)
Speak up/Stick up (n=3)
Safe Space signs (n=2)
Freedom of expression (n=2)
Teachable moments (n=2)
Inclusive curriculum (n=2)
Acknowledge need for change (n=1)
Demonstrate with words and deeds (n=1)
TLC (n=1)

Why Safe Spaces are important:
Difficulties in life (n=3)
Bullying (n=2)
Abuse (n=1)
Targeted by peers (n=1)
Sad statistics (n=1)
Suicidal thoughts (n=1)
One teacher can make a difference (n=1)

Partnership with school administration:
More training (n=1)
Bathroom policies (n=1)
Teachers need support (n=1)

Reflection Activity

A reflection activity was distributed 2 weeks after completion of the second training session. Fifteen surveys were completed with eight responding yes and seven responding no to the question "In the past 2 weeks, were you able to apply knowledge you learned in the Safe Space training to a student?" The eight positive respondents were asked "How did you apply the strategies you learned in the Safe Space training?" and common themes emerged in the responses. There were five mentions of use of preferred name and pronouns, five mentions of heightened awareness, three mentions of equal treatment, two mentions each for support and Safe Space designation, and the remaining single responses included listening, accepting, showing love, and open-mindedness. One teacher expressed happiness that a student felt comfortable sharing ~~preferred~~ their name and pronouns. All seven respondents who denied

having an opportunity to apply what they learned were asked "Is there a student you are planning to apply the strategies to and how might you support them?" Four responses were optimistic with replies such as "When I have students, I hope I can," and "I plan to apply the strategies and support to any student that may need it." One respondent stated no, and one stated unknown.

Three-month Follow Up Survey

In the 3-month follow up survey, the average knowledge self-rating was 3.53 and comfort rating was 4.24. Responses to the question "What did you learn in this training that you have used in your classroom?" were examined for common themes and keywords. The responses were similar to those given on both the post-participation and the reflection activity surveys with the majority of responses falling into two categories, teacher attitudes and behaviors. Responses reflective of desirable teacher attitudes include acceptance (n=4), awareness (n=3), welcoming (n=2), supportive (n=1) and encouraging (n=1). Responses reflective of desirable teacher behaviors include use of desired name and pronouns (n=3), use of signage to designate a safe space (n=1), building positive relationships with students (n=1), and meeting the needs of students (n=1). One teacher reported including a message on supporting LGBTQ students in a social-emotional learning lesson since the Safe Space training occurred. One educator acknowledged that the COVID-19 pandemic has made it even more important for teachers to provide a safe space for students. Three respondents reported being non-classroom teachers, two had missed the training due to being on leave, and two reported difficulties in implementing the content due to distance learning during the pandemic.

Data Analysis

There was a 34.9% increase in self-rated knowledge of LGBTQ issues and concerns in the school environment after the training with average Likert scores improving from 2.84 to

3.83. There was a 5.5% increase in self-rated comfort level in supporting LGBTQ students with average Likert scores improving from 3.82 to 4.03. This indicates that educators feel a "good" (Likert score of 4 equals good) amount of comfort in supporting students. The average Likert score in the professional reflection activity was 4.00 for comfort in supporting students; remaining consistent with the pre- and post-training surveys. Of those teachers who reported having an opportunity to apply knowledge gained in the Safe Space training to a situation with a student in the 2 weeks following the training, the average Likert score for perceived effectiveness of the intervention was 4.13, slightly above "good."

Of the 30 responses to the post-participation survey, the average Likert score for "How would you rate the importance of this training for all school faculty and staff?" was 4.5, between good and excellent. In response to "How would you rate this training for its potential for improving school climate for LGBTQ students?" the average score was 4.03, "good."

Relationship of Results to Purpose/Goals/Objectives

The goal of this project was to reduce health disparities for LGBTQ students at Dole Middle School through professional development of educators aimed at ally development. A key objective was for 90% of teachers at the middle school to complete 75 minutes of Safe Space training. This objective was met with 96.6% attending with two teachers unable to attend. Short-term outcome objectives were a 25% increase in self-rating of current knowledge of LGBTQ issues between the pre- and post-surveys which was met with a 34.9% improvement in baseline knowledge. Another short-term goal was a 25% increase in self-rating of comfort level in supporting LGBTQ students between the pre- and post-surveys which was not met with an increase of only 5.5%. Additional outcome objectives that were met included reaching an average Likert scale score greater than 3, "fair," for self-reported belief of importance of the

professional development training, and reaching an average Likert scale score greater than 3 for self-reported belief that the training has the potential for improving school climate for LGBTQ students, with scores of 4.5 and 4.03 respectively.

Evidence of sustained implementation of the training in the classroom was collected from the 3-month follow up survey. This was met with 52.9% of respondents providing affirmative responses to "What did you learn in this training that you have used in your classroom?" There were 11 mentions of desirable attitudes and six mentions of desirable behaviors that create a supportive environment. One educator reported inclusion of the training material into classroom social-emotional learning lessons for students. There were seven negative responses citing a lack of opportunity to use the training due to a lack of students, lack of a classroom, and absence from work. Only one teacher reported not being able to use the training.

Implications

Results of this project demonstrate that educators feel Safe Space training is important and that it has the potential to improve school climate for all students, but especially for those who identify as LGBTQ. Project results demonstrate training was able to improve self-rated knowledge of LGBTQ issues and concerns in the school environment by educators. Survey response themes indicate increased awareness of desirable teacher attitudes and actions as well as an understanding of the underlying importance of the training with respect to bullying and other stigmatizing behaviors. Eight teachers had an opportunity to use the knowledge learned in the training during the first 2 weeks and nine within the first 3 months.

Strengths/Limitations

A strength of this quality improvement project was the strong commitment of the school principal in supporting attendance of the training. This support extended to ancillary staff who

24

also have frequent interactions with students such as educational assistants, school security, and office staff. Welcoming all school employees to the training expanded the potential benefits in improving school climate. GLSEN's Safe Space program is a nationally accepted training model for schools. The organization's commitment to providing well-trained facilitators strengthened the implementation. Another strength was the ability to tailor the training to include elements of Hawaiian and Pacific Island culture through use of a locally-produced video.

Limitations of this quality improvement project include the inability to address all of the factors that impact health outcomes for SMY or even to change the actions of educators who may have strong religious or personal beliefs against SMY. The ability to improve awareness does not guarantee a corresponding change in behavior to that of a LGBTQ ally.

<div align="center">

Sustainability

</div>

Sustainability of this project is significantly improved by GLSEN's commitment to providing well-trained facilitators to any school expressing a desire for Safe Space training. This training is provided at no charge if the school chooses to distribute the Safe Space Kit electronically or at minimal cost if the school chooses to print copies of the materials. Each Hawaiʻi public school has a budget to use for professional development activities which can be used to cover the cost of stickers to designate classrooms as safe spaces. To aid in expansion of this program across the state, the author could promote the training during the spring when principals are making decisions on professional development trainings for the following school year. A key to success in implementation at each school site is to have a champion to facilitate the process and to foster the improved school climate. This role as champion could be filled by a variety of personnel such as the school principal, counselor, or nurse.

DNP Essentials

This quality improvement project addressed each of the eight DNP essentials (American Association of Colleges of Nursing, 2006). Essentials I and III were demonstrated through the scientific underpinnings of this project in evidence-based practice and a thorough synthesis of the literature (Table 2). Essential II Organizational and Systems Leadership was demonstrated through the implementation of this project under the leadership of the DNP student. Essential IV was demonstrated through effective use of electronic surveys and conferencing to address information technology. Essential V was demonstrated through advocacy for LGBTQ students within the school. Essential VI was demonstrated through collaboration with the Department of Education to implement in the school system. Essential VII was demonstrated through addressing a population health need of LGBTQ health disparities. Essential VIII was demonstrated through the overall use of conceptual models, analysis of literature, and analytical skills in evaluating the link between evidence and practice changes to address the complex medical problem of health disparities in SMY.

Table 2

The Essentials of Doctoral Education for Advanced Nursing Practice

The Essentials of Doctoral Education for Advanced Nursing Practice	Application of the Essentials
I. Scientific Underpinnings for Practice	The minority stress theory, a science-based social science theory, was used to explain the health disparities observed in SMY and the significance of the problem.
II. Organizational and Systems Leadership for Quality Improvement and Systems Thinking	A quality-improvement project was developed to meet the current and future health needs of a target population, SMY, within the larger school population.
III. Clinical Scholarship and Analytical Methods for Evidence-Based Practice	An extensive literature synthesis was conducted to translate the current evidence into a practice change.
IV. Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care	Technological resources such as conferencing software were used to disseminate the training as well as the evaluations during the COVID-19 pandemic.
V. Health Care Policy for Advocacy in Health Care	A practice change was advocated to address the health disparities observed in SMY.
VI. Interprofessional Collaboration for Improving Patient and Population Health Outcomes	Collaboration occurred with Department of Education faculty, staff, and administrators including counselors and support staff.
VII. Clinical Prevention and Population Health for Improving the Nation's Health	A population health quality improvement project was implemented to address population health concerns or health disparities within the SMY population.
VIII. Advanced Nursing Practice	A complex health problem, disparities for SMY, was identified and a quality improvement project was designed, implemented and evaluated to address the problem.

Conclusion

The health disparities of SMY are a complex problem that requires efforts across many areas. Schools present an ideal opportunity for intervention and improving supportive factors, the most effective of which is support from teachers. In this quality improvement project, a

professional development training was used to improve educator self-rating of knowledge about LGBTQ issues and concerns. Survey responses by participants were overall positive with results demonstrating an increased comfort level in supporting LGBTQ students following the training sessions. In addition, a 3-month follow-up survey indicated that 52.9% of the respondents were actively applying knowledge learned within their school setting. Given the success of implementation at this high-need Title I school, expansion to other schools could facilitate ally-building attitudes and behaviors as a protective factor for SMY throughout the state.

References

American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice.* Washington, DC: AACN.

Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental Psychology, 51*(5), 688-696. doi: 10.1037/a0038994

Birkett, M., Newcomb, M., & Mustanski, B. (2015). Does it get better? A longitudinal analysis of psychological distress and victimization in lesbian, gay, bisexual, transgender, and questioning youth. *Journal of Adolescents Health, 56*(3), 280-285. doi: 10.1016/j.jadohealth.2014.10.275

Boesen, M. J., Giga, N. M., Greytak, E. A., & Kosciw, J. G. (2015). *Evaluation of GLSEN's safe space kit: The utility of an educator resource for improving school climate for lesbian, gay, bisexual, and transgender youth.* New York: GLSEN.

Centers for Disease Control and Prevention. (2019). *School Health Profiles 2018: Characteristics of Health Programs Among Secondary Schools.* Atlanta: Centers for Disease Control and Prevention.

Clark, C. M. (1995). *Thoughtful teaching.* New York: Teachers College.

Demissie, Z., Rasberry, C. N., Steiner, R. J., Brener, N., & McManus, T. (2018). Trends in secondary school's practices to support lesbian, gay, bisexual, transgender, and questioning students, 2008-2014. *American Journal of Public Health, 108*(4), 557–564. doi: 10.2105/AJPH.2017.304296

Dragowski, E. A., McCabe, P. C., & Rubinson, F. (2016). Educators' reports on incidence of

    harassment and advocacy toward LGBTQ students. *Psychology in the Schools, 53*(2),

    127–142. doi: 10.1002/pits.21895

Eisenberg, M. E., Mehus, C. J., Saewyc, E. M., Corliss, H. L., Gower, A. L., Sullivan, R., &

    Porta, C. M. (2018). Helping young people stay afloat: A qualitative study of community

    resources and supports for LGBTQ adolescents in the US and Canada. *Journal of*

    Homosexuality, 65(8), 969–989. doi:10.1080/00918369.2017.1364944

Eisenberg, M. E. & Resnick, M. D. (2006). Suicidality among gay, lesbian and bisexual youth:

    The role of protective factors. *Journal of Adolescent Health, 39*(5), 662-668. doi:

    10.1016/j.jadohealth.2006.04.024

Espelage, D. L., Valido, A., Hatchel, T., Ingram, K. M., Huang, Y., & Torgal, C. (2019). A

    literature review of protective factors associated with homophobic bullying and its

    consequences among children & adolescents. *Aggression and Violent Behavior*, *45*, 98–

    110. doi: 10.1016/j.avb.2018.07.003

Frankowski, B. L. (2004). American Academy of Pediatrics clinical report: Sexual orientation

    and adolescents. *Pediatrics, 13*(6), 1827-1832. doi: 10.1542/peds.113.6.1827

GLSEN. (2019). Safe space kit: A guide to supporting lesbian, gay, bisexual, transgender, and

    queer students in your school. Retrieved from https://www.glsen.org/sites/default/

    files/2019-11/GLSEN%20English%20SafeSpace%20Book%20Text%20Updated%

    202019.pdf

Gower, A. L., Forster, M., Gloppen, K., Johnson, A. Z., Eisenberg, M. E., Connett, J. E., &

    Borowsky, I. W. (2018). School practices to foster LGBT-supportive climate:

Associations with adolescent bullying involvement. *Prevention Science, 19(*6), 813–821. doi: 10.1007/s11121-017-0847-4

Graybill, E. C., & Proctor, S. L. (2016). Lesbian, gay, bisexual, and transgender youth: Limited representation in school support personnel journals. *Journal of School Psychology, 54*, 9–16. doi: 10.1016/j.jsp.2015.11.001

Green, A. E., Price-Feeney, M. & Dorison, S. H. (2020). Implications of COVID-19 for LGBTQ youth mental health and suicide prevention. New York, New York: The Trevor Project.

Greytak, E. A., Kosciw, J. G., Villenas, C., & Giga, N. M. (2016). *From Teasing to Torment: School Climate Revisited. A Survey of U.S. Secondary School Students and Teachers.* New York: GLSEN.

Hatzenbuehler, M. L., Birkett, M., Van Wagenen, A., & Meyer, I. H. (2014). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health*, *104*(2), 279–286. doi: 10.2105/AJPH.2013.301508

Holmes, J. R., Ching, L. K., Chosy, E. J., Pham, T., Bowie, A. Y., Young, L. A., … Starr, R. R. (2017). *Hawai'i sexual and gender minority health report*. Hawai'i State Department of Health Chronic Disease Prevention and Health Promotion Division. Honolulu: Hawai'i State Department of Health Chronic Disease Prevention and Promotion Division.

Johns, M. M., Poteat, V. P., Horn, S. S., & Kosciw, J. (2019). Strengthening our schools to promote resilience and health among LGBTQ youth: Emerging evidence and research priorities from The State of LGBTQ Youth Health and Wellbeing Symposium. *LGBT Health, 6*(4), 146–155. doi: 10.1089/lgbt.2018.0109

Kitchen, J., & Bellini, C. (2012). Addressing lesbian, gay, bisexual, transgender, and queer

    (LGBTQ) issues in teacher education: Teacher candidates' perceptions. *Alberta Journal*

    of Educational Research, 58(3), 444-460.

Kosciw, J. G., Greytak, E. A., Zongrone, A. D., Clark, C. M., & Truong, N. L. (2018). *The 2017*

    National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender,

    and queer youth in our nation's schools. New York: GLSEN.

Leonardi, B., & Staley, S. (2015). Affirm gender and sexual diversity within the school

    community. *Phi Delta Kappan, 97*(3), 69–73. doi: 10.1177/0031721715614832

Melnyk, B. M. & Fineout-Overholt, E. (2004). *Evidence-based practice in nursing & healthcare:*

    A guide to best practice. Philadelphia: Lippincott Williams & Wilkins.

Moon, Jenny. (2005). Learning through reflection. *Guide for Busy Academics 4*, 1-3.

Payne, E., & Smith, M. (2010). Reduction of stigma in schools: An evaluation of the first three

    years. *Issues in Teacher Education, 19*(2), 11-36.

Ratts, M. J., Kaloper, M., McReady, C., Tighe, L., Butler, S. K., Dempsey, K., & McCullough, J.

    (2013). Safe Space Programs in K-12 Schools: Creating a Visible Presence of LGBTQ

    Allies. *Journal of LGBT Issues in Counseling, 7*(4), 387–404. doi:

    10.1080/15538605.2013.839344

Saka, S., Gerard, K., & Afaga, L. (2018). *Results of the 2017 Hawaiʻi State and Counties Youth*

    Risk Behavior Survey (YRBS) and Cross-Year and National Comparisons. Honolulu, HI:

    University of Hawaiʻi at Mānoa.

Saewyc E., & Homma, Y. (2017). School safety and connectedness matter for more than

    educational outcomes: The link between school connectedness and adolescent health. In

    S. T. Russell & S. S. Horn (Eds.), *Sexual orientation, gender identity, and schooling:*

The nexus of research, practice, and policy (pp. 39-57). New York, NY: Oxford

    University Press.

Shields, J. P., Cohen, R., Glassman, J. R., Whitaker, K., Franks, H., & Bertolini, I. (2013).

    Estimating population size and demographic characteristics of lesbian, gay, bisexual, and

    transgender youth in middle school. *Journal of Adolescent Health, 52*(2), 248–250. doi:

    10.1016/j.jadohealth.2012.06.016

Stetler, C. (2001). Updating the Stetler model of research utilization to facilitate evidence-based

    practice. *Nursing Outlook, 49,* 272-279. doi: 10.1067/mno.2001.120517

Swanson, K., & Gettinger, M. (2016). Teachers' knowledge, attitudes, and supportive behaviors

    toward LGBT students: Relationship to Gay-Straight Alliances, antibullying policy, and

    teacher training. *Journal of LGBT Youth, 13*(4), 326–351. doi:

    10.1080/19361653.2016.1185765

The Trevor Project (2019, August 28). Research brief: Unstable housing and LGBTQ youth

    suicidality. Retrieved from https://www.thetrevorproject.org/2019/08/28/research-brief-

    unstable-housing-and-lgbtq-youth-suicidality/

Vaillancourt, T., Hymel, S., & McDougall, P. (2013). The biological underpinnings of peer

    victimization: Understanding why and how the effects of bullying can last a lifetime.

    Theory Into Practice, 52(4), 241–248. doi: 10.1080/00405841.2013.829726

Appendix 1

Pre-participation Survey

Have you received training in LGBTQ awareness or ally development? Yes/No

	1	2	3	4	5
	Very poor	Poor	Fair	Good	Excellent
How would you rate your prior knowledge of LGBTQ issues and concerns in the school environment?					
How would you rate your comfort level in supporting LGBTQ students?					

Appendix 2

Post-participation Survey

	1	2	3	4	5
	Very poor	Poor	Fair	Good	Excellent
How would you rate your current knowledge of LGBTQ issues and concerns in the school environment?					
How would you rate your comfort level in supporting LGBTQ students?					
How would you rate the importance of this training for all school faculty and staff?					
How would you rate this training for its potential for improving school climate for LGBTQ students?					

What did you learn in this training that you will use in your classroom?

_____

_____

Appendix 3

3 Month Follow-up Survey

	1	2	3	4	5
	Very poor	Poor	Fair	Good	Excellent
How would you rate your current knowledge of LGBTQ issues and concerns in the school environment?					
How would you rate your comfort level in supporting LGBTQ students?					

What did you learn in this training that you have used in your classroom?

_____

_____

Appendix 4

Professional Reflection Activity

In the past two weeks, were you able to apply knowledge you learned in the Safe Space training

to a student? Yes/No

If NO, is there a student you are planning to apply the strategies to and how might you support

them? _____

If YES, how did you apply the strategies you learned in the Safe Space training?

_____

	1	2	3	4	5
	Very poor	Poor	Fair	Good	Excellent
How would you rate the effectiveness of the ally strategy you applied?					
How would you rate your comfort level in supporting the student?					