



**Michigan  
Technological  
University**

Michigan Technological University  
**Digital Commons @ Michigan Tech**

---

Dissertations, Master's Theses and Master's Reports

---

2020

## **Empowering Women Through Physical Education and Sports in Moldova**

Aprille Hibbard

*Michigan Technological University, arhibbar@mtu.edu*

Copyright 2020 Aprille Hibbard

---

### **Recommended Citation**

Hibbard, Aprille, "Empowering Women Through Physical Education and Sports in Moldova", Open Access Master's Report, Michigan Technological University, 2020.

<https://doi.org/10.37099/mtu.dc.etr/1123>

Follow this and additional works at: <https://digitalcommons.mtu.edu/etr>



Part of the [Public Health Commons](#), and the [Social and Behavioral Sciences Commons](#)

EMPOWERING WOMEN THROUGH PHYSICAL EDUCATION AND SPORTS IN  
MOLDOVA

By

Aprille R. Hibbard

A REPORT

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

In Biological Sciences

MICHIGAN TECHNOLOGICAL UNIVERSITY

2020

© 2020 Aprille R. Hibbard

This report has been approved in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE in Biological Sciences.

Department of Biological Sciences

Report Advisor: *Dr. Amy Marcarelli*  
Committee Member: *Dr. Kari Henquinet*  
Committee Member: *Dr. John Durocher*  
Department Chair: *Dr. Chandrashekhhar Joshi*

# Table of Contents

List of figures .....	iv
List of tables.....	v
Acknowledgements.....	vi
Abstract.....	vii
1 Introduction.....	8
1.1 Women in Influential Roles in The Sports Industry.....	10
2 Empowering Girls and Women Through Physical Activity in the Peace Corps .....	13
2.1 Pre-Intervention.....	14
2.2 Intervention .....	19
2.3 Post-Intervention .....	29
3 Discussion .....	31
4 Bibliography .....	37
A Appendix.....	39
A.1 Grant Surveys .....	39
A.1.1 Student Survey .....	39
A.1.2 Women Community Members Survey .....	39
A.1.3 Female Athletes .....	41
A.2 Activities .....	41
A.2.1 Summer Camp .....	41
A.2.2 Mother Daughter Training.....	45
A.2.3 Soccer Stadium .....	45

## List of figures

Figure 1: Shown in the image, the gymnasium is large with few heaters. ....	20
Figure 2: The layout of the gymnasium and the heater placement before and after the project. ....	21
Figure 3: The image shows the condition of the access hallway to the gym. As shown in the image, the floor is rotten and in most areas missing. ....	22
Figure 4: The image shows the increase in the number of heaters in the gym. ....	23
Figure 5: The image shows the access hallways after the rotten floors were removed. The floor was leveled and filled in with gravel and then concrete was poured over. Durable tiles were added along with a new coat of paint. ....	24
Figure 6: The image shows some of the new sports equipment purchased for the grant. .	25
Figure 7: All students enrolled in the elementary and middle school in Olişcani were surveyed (37 boys, 63 girls), for a total of 100 students. ....	39
Figure 8: 15 women in the community of Olişcani that are involved with the women’s volleyball team completed this survey. ....	40
Figure 9: The female athletes survey was sent to 8 different villages in the district of Şoldăneşti, all of whom compete in volleyball tournaments in Olişcani. We surveyed a total of 120 female athletes. ....	41
Figure 10: The image shows the potato sack races held during the 10-day summer camp. ....	42
Figure 11: The summer camp focused on physical activity and had a different exercise planned for each day. ....	43
Figure 12: The 10-day summer camp featured different personal development and health topics each day. This image shows a lesson on volunteerism and leadership. ....	43
Figure 13: The image shows the participants of the 10-day summer camp along with Peace Corps Volunteer Aprille Hibbard, Vice Principal Vera Botan, and Student Leaders Anton and Elena. ....	44
Figure 14: The image shows the Mother Daughter training for girls (11-13). ....	45
Figure 15: The image shows the field trip to the national soccer stadium. ....	45

## List of tables

Table 1: This table shows the outcome of the needs assessment conducted by a total of 12 teachers at Olişcani Elementary/Middle School in Olişcani, Şoldâneşti. A series of votes was held where each of these projects was compared to one another, and the winner of each of the head-to-head votes is shown in red. The needs assessment was used to determine which project was the most urgent. ....	16
Table 2: Overall budget for the Peace Corps Let Girls Learn (LGL) grant.....	19
Table 3: An in-depth catalog of all equipment purchased for the grant and their respective costs.....	26

## Acknowledgements

I would like to thank my friends and family. Their support in me joining the Peace Corps gave me this wonderful opportunity.

I would also like to thank my wonderful committee for dealing with all of my stress and last minute changes.

I would like to thank the Michelle Obama Foundation and Let Girls Learn for funding my grant project.

I would like to thank the wonderful Peace Corps Moldova Staff and my fellow volunteers, all of whom supported me in their best capacity during my two years as a volunteer.

I would like to express my very great appreciation to the wonderful teachers, community members, and students in Olişcani, Moldova. Without their support and acceptance my Peace Corps service would not have been the most amazing experience of my lifetime.

## Abstract

Girls and women face obstacles when it comes to empowerment, whether it be cultural, socioeconomic, political or religious. As a Peace Corps Volunteer in Moldova, I tried to help the girls and women in my community overcome some of these obstacles by promoting female participation in physical education and sports. Primary obstacles were the poor insulation and heating in the gymnasium, which prevented girls and women from participating in sports and physical education from October-April. Working with a Let Girls Learn (LGL) grant allowed us to repair the condition of the gymnasium, add additional sports teams and clubs to the school, and introduce girls to opportunities in sports through a lecture series. As a result of the interventions, more females participated in physical education classes and sports.



# 1 Introduction

Empowerment is a broad term with multiple definitions that change depending on who you ask. The Oxford Dictionary defines Empowerment as “The process of becoming stronger and more confident, especially in controlling one’s life and claiming one’s rights” [1].

Empowerment can be setting goals for oneself and aiming to achieve those goals or it can be becoming one with who you are as a person. The definition changes and can be broken down into three common terms: improvement, goals, and achievement. Empowerment is determined by how a person perceives improvements, sets their goals and evaluates how they can be achieved [2].

Women’s empowerment has been a topic around the world for over 100 years. In 1893 New Zealand was the first nation to allow women the right to vote [3]. The United States passed the same amendment in 1920, and more recently Saudi Arabia allowed women the right to vote in 2015 [3]. Women’s empowerment is an ongoing process. Past milestones such as gender roles changing during World War II and the Women’s Rights Movement are being followed by fights for women’s reproductive rights today. McCord (2020) states that although women globally are achieving more rights every day, if the progression stays at the current rate, it will take over 100 more years for women to reach full equality with men [3].

Women’s empowerment is usually divided into five categories: psychological, political, social, educational, and economical [4]. For the purposes of this paper, we will be focusing on psychological and social empowerment. Psychological empowerment for women is becoming at peace with themselves and their lives. This can be evaluated as finding their own self-worth, building confidence, and finding the capacity to take control of their own lives, allowing them to overcome the mental barriers and moving in to the physical world [4]. Psychological

empowerment can also be overcoming physical obstacles placed before you, such as structural barriers due to poor conditions in infrastructure.

Social empowerment is taking those ideals on an individual level and applying them towards a larger group as a whole. It is a system that allows women to strengthen their positions and relationships in a social setting. The most common term associated with women's social empowerment is "Feminism" [4]. Feminism is the belief of equality between the sexes both socially, economically, and politically [5]. Perkins (2010) describes empowerment as a collective rather than an individual process. Perkins (2010) believes that participatory empowerment has a larger impact when it comes to overcoming fears and obstacles while increasing satisfaction and overall wellbeing [6]. Empowerment impacts overall wellbeing by having a positive influence on the empoweree's health. Having a positive health status is not determined solely on the basis of the absence of disease, but on mental, physical and social wellbeing [4].

Improving mental, physical and social aspects of health can be achieved by a wide range of activities and interventive measures. One interventive measure that can improve all three health aspects is physical activity. Park et al. (2017) states that physical education classes and other forms of extracurricular sports play a role in developing impulse control in adolescence [7]. Along with mental development milestones, physical activity can also help lessen some forms of mental illness like anxiety, depression and low self-esteem [8]. Physical activity has obvious physical health benefits, but it also helps improve social health by forming a sense of comradery on sports teams and in physical education classes.

For the most part, physical education and sports are social activities that allow girls and women that participate to not only become empowered on an individual level, but on a social level as well. A key benefit for girls that participated in physical education classes in India was

knowledge of the importance of their own lives. They passed this information on to family members and friends, showing an example of empowerment on a social level [9]. Huang et al. (2019) found that in Taiwan more women are overcoming traditional stereotypes by becoming more involved in sports such as triathlons, cycling and track. As a result they are influencing the public in Taiwan to have different viewpoints on women and female gender roles [10].

## **1.1 Women in Influential Roles in The Sports Industry**

Females face adversity every day, particularly in the often male-dominated world of sports and physical education. Facing childhood stereotypes such as “you play like a girl” and “boys will be boys” creates negative perceptions when it comes to girls participating in an otherwise male-dominated domain [11]. These are obstacles that women have been facing for centuries. In the nineteenth century, medical professionals claimed that it was not healthy for women to participate in intense exercise because their bodies were too frail and fragile [12]. The fear was that if girls participated in high intensity activities, they would become sterile and masculine [13].

World War II had both positive and negative effects on women’s sports in the United States. For example, women’s hockey was first introduced into the United States in 1920. But after World War II women’s hockey disappeared as it was seen as a male-only sport [14]. Women’s hockey was not reintroduced in the United States until the 1980s. Since most sports were put on hold due to the war, the All-American Girls Professional Baseball League (AAGPBL) was introduced to fill the time [13]. However, like hockey, the AAGPBL was discontinued post-war and women’s baseball was not reintroduced in the United States until the 1980s [13].

Overcoming gender-based stereotypes has proven to be a challenge not only for female athletes and coaches, but also sports journalists across the world. In the 1970's the entire United States had just 25 female sports writers [13]. The majority of sports editor positions were filled by males, and in 2007 only around 7% of sports journalists were female, the majority being sideline reporters [15]. In 2017 this number had only increased to about 10% [16]. These low percentages are in part caused by the male-dominated field. The other key factors are the different forms of discrimination women face in these positions. Whether it be sexual harassment, lower wages, isolation and more, women do not feel as accepted as men in the sports world [17]. Having a female role model in sports and physical education helps increase participation of girls in these activities [18]. With positive influences in the sports field, we could potentially see an increase of female inclusion in the sports industry.

Female role models have paved the way for generations of female athletes across the world, fighting against cultural, physical, economic, and political barriers. American soccer players Mia Hamm and Alex Morgan are advocates for participation of girls in sports, advising girls that they can also be female athletes [19]. Hamm and Morgan are not the only high-profile women advocating for girls: Maria Helena Cardoso, Susanthika Jayasinghe, and most notably, Billie Jean King all broke down barriers as well.

Maria Helena Cardoso played a significant role in shaping the women's basketball program in Brazil. Cardoso was a member of the Brazilian Women's National Basketball team from 1956-1972. After retiring in 1972, Cardoso became a coach so that she could help other girls in Brazil get involved in sports. As a coach she was able to bring her team to victory in various competitions, winning several titles for Brazilian Women's Basketball. She brought her team to the 1991 World Championship, qualifying them for the 1992 Olympic Games [20].

Cardoso helped shaped the women's basketball program in Brazil and by coaching was able to get other girls and women involved in women's sports.

Susanthika Jayasinghe, like Cardoso, also paved the way for future generations in her country. Jayasinghe, originally from Sri Lanka, was part of the School Athletic Games physical education program, which helped shape her into the athlete she later became. Jayasinghe qualified for the 2000 Sydney Olympic Games, winning the silver medal in the 200m sprinting event. At the time, winning a medal at the Olympics was the most prestigious award that a female could win in Sri Lanka [21].

In the United States one of the most influential women in sports history is Billie Jean King. King is a retired professional tennis player who was ranked number one in the world in 1966, 1967-1968, 1971-1972, and 1974. To this day King still holds the record for most combined Wimbledon titles with 20 wins [22]. King is also a strong advocate for equal pay for women, as well as LGBTQ+ rights. As part of her fight for equal pay, King played professional tennis player Bobby Riggs in the infamous "Battle of the Sexes" [22]. King won the match, creating a historic moment for women in sports [23].

King, Hamm, Morgan, Cardoso, and Jayasinghe all pioneered pathways for girls and women in the athletic industry. The examples they set for young women around the globe continued to drive girls and women to push themselves past the limitations imposed on them by culture, politics, or other factors. As a young female athlete, I looked up to Mia Hamm as a role model. As I entered the Peace Corps, I wanted to set a similar example for my students, teaching them that they can do anything they set their minds to, no matter what others may think or say.

## **2 Empowering Girls and Women Through Physical Activity in the Peace Corps**

As a Peace Corps Volunteer, I served in the Republic of Moldova, one of the poorest countries in Europe. Moldova is a small country in Eastern Europe, situated between Romania and the Ukraine. Moldova has a temperate climate and rich soil, making it one of the best agricultural producers in Europe. One of their biggest products is wine. Being one of the poorest countries in Europe, most of the population grow and cultivate their own food, tend to their own livestock, and make their own wine at home.

As a former Soviet Union country, Moldova has retained most of the Soviet-era infrastructure. The buildings are large and spacious, but built with a substance similar to Styrofoam for insulation. The Styrofoam is then covered with a thin layer of concrete. This design was created with quantity over quality in mind. With two porous materials being used as the exterior walls for the buildings, most of the buildings are not properly insulated and do not retain heat well. Moldova has seasons similar to lower Michigan or New England, with hot summers and cold snowy winters. In the coldest month, January, it is on average 20°F/-7°C.

I lived in the northeastern part of Moldova in the village of Olișcani in the district of Șoldănești. A more rural part of Moldova, Olișcani is located in a valley primarily made up of vineyards, sunflower fields, gardens and farms. The official population of the village is around 2,500, however most men between the ages of 20 and 50 work in other countries across Europe. They often work in Italy, Russia and England, where jobs are more accessible and the wages are higher, and send their earnings back to their families. This means that for most areas of Moldova, the recorded population number does not reflect the permanent residential population. There are fewer people living in villages and district centers than what is recorded, and these residents consist of mostly women and children.

In the Peace Corps I worked as a Health Education Teacher in the local elementary and middle school. I taught Health to grades 3-9 and Personal Development to the 3<sup>rd</sup> and 6<sup>th</sup> grades. As part of my curriculum, I focused on teaching students about the three health aspects: Physical, Social and Mental. One of the most impactful topics covered was the importance of physical activity and exercise in your daily life. One of my main goals was for my students to practice 60 minutes of physical activity a day. The students knew beforehand that physical activity was beneficial, however they did not realize that physical activity is not just working out and exercise. Together we learned how their daily tasks such as walking 45 minutes to school, working in the garden at home, and doing chores around the house all count as physical activity. With this knowledge they gained a better understanding of what it meant to increase physical activity in your daily life.

## **2.1 Pre-Intervention**

As Peace Corps Volunteers, we have access to resources that can greatly benefit the lives of our community members. Of those resources, one of the most advantageous are the Peace Corps grants. The school is one of the older buildings in the village, and has not had many significant repairs or improvements. The previous Peace Corps volunteer that worked at this site received a grant to add a computer lab in the school, and another grant to fix the safety hazards caused by the gas line in the cafeteria, add healthier lunch options, and add hand washing stations so that the kids could wash their hands before they ate. Because of these previous awards, the faculty and staff at the school were motivated to try for another one. So we held a meeting with the school faculty and staff to determine what needed the most attention at the school. Given the other projects that were already completed, and keeping in mind the design of the Soviet-era buildings, most of the teachers focused on the school gymnasium.

A requirement of the Peace Corps small grants committee is that each grant proposal must include a needs assessment (Table 1) and pre-intervention survey data to prove that the need for a grant is there. We held a faculty and staff meeting, where each participant was free to propose a project. Each member was asked to answer the following question, “What program or facility at the school needs the most improvement?”. Having improved the computer lab and the cafeteria in previous years, most of the proposals concerned the gymnasium. After all of the proposals were submitted, we held a series of votes to determine which projects would best benefit the children, community and the school. The needs assessment determined that improving conditions in the gymnasium was the best course of action.

We conducted a series of three surveys for the project to better understand where best to use the grant. The surveys were distributed to all students enrolled in the elementary and middle school in Olişcani, women ages 25-40 in Olişcani, and 13-15 year old female athletes in the district of Şoldăneşti. All students enrolled in the elementary and middle school in Olişcani were surveyed (37 boys, 63 girls), for a total of 100 students. Two additional surveys were also conducted. One surveyed the women in the community that are involved with the women’s volleyball team (15 women), and the other surveyed the female athletes in the district of Şoldăneşti, ages 13-15 (120 female athletes).



Table 1: This table shows the outcome of the needs assessment conducted by a total of 12 teachers at Olişcani Elementary/Middle School in Olişcani, Şoldăneşti. A series of votes was held where each of these projects was compared to one another, and the winner of each of the head-to-head votes is shown in red. The needs assessment was used to determine which project was the most urgent.

<b>Needs Assessment</b>				
<b>Olişcani, Şoldăneşti</b>				
Participants: 12 Teachers				
Problems	Temperature in the Gym	Gym Lockers/Changing Room	Students Behavior (Absences, discipline, etc.)	Access to the gym
Temperature in the gym	/	Temperature in the Gym	Temperature in the Gym	Temperature in the Gym
Gym Lockers/Changing Room	/	/	Gym Lockers/Changing Room	Gym Lockers/Changing Room
Students Behavior (Absences, discipline, etc.)	/	/	/	Access to the gym
Access to the gym	/	/	/	/

The students were asked if they participated in their physical education classes, if they were on a club or competitive sports team, if they were happy with the current condition of the gymnasium, and if they felt that girls and boys equally participated in physical education class (Appendix 1.1). The results indicated that the girls were less satisfied with the current condition of the gymnasium, with 91.9% of the girls voting against the current condition. The boys were not satisfied with the current condition of the gymnasium either, but were less displeased than

the girls, with 75.6% voting against the current condition, although the responses were not significantly different by gender when tested with a chi-squared analysis ( $\chi^2 = 3.96$ ,  $p = 0.14$ ). When asked why the students were not satisfied with the current state of the gymnasium, the top answer selected by 75.6% of the boys and 90.3% of the girls was that it was too cold and deteriorating. When asked if the students feel that the girls equally participate in physical education class, 59.4% of the boys and 77.4% of the girls said that they do not feel that there is equal participation, although again the responses were not different by gender ( $\chi^2 = 5.34$ ,  $p = 0.07$ ). When asked why they felt that there was an unequal distribution of participation between the boys and girl, the top answer for both genders was that the girls refuse to participate because it is too cold.

The women's survey was distributed to 15 community members in the village of Olişcani (Appendix 1.2). It showed that 86.6% of the women were not satisfied with the current condition of the gymnasium, with 73.3% stating that it was due to the cold temperature and the deterioration of the gymnasium and surrounding infrastructure.

The female athletes' survey was sent to 8 different villages in the district of Şoldăneşti, all of whom compete in volleyball tournaments in Olişcani (Appendix 1.3). An open-ended survey was distributed to 120 female athletes in the district. The survey showed that 74.1% of the female athletes enjoy participating in competitions in Olişcani, stating that it is one of the most well-lit and spacious gymnasiums in the district. However, 81.6% of the female athletes stated that they do not enjoy participating in competitions hosted in Olişcani, due to the cold temperatures making conditions uncomfortable. These percentages are contradictory due to the formatting of the survey. The female athletes were asked to answer both statements: "Which two village gymnasiums do you most like to compete at and why?" and "Which two village

gymnasiums do you least like to compete at and why?”. They did not have the stipulation that they could not pick the same village gymnasium for both questions, hence, the Olıřcani gymnasium was both the most liked and the least liked in the district.

All of the surveys showed an overwhelming consensus that the Olıřcani gymnasium was too cold in the winter for adequate participation in physical education and sports activities. The survey responses supported the need for the grant project, reflecting that the gymnasium is a well appreciated facility with one overlying problem, the temperature inside the gymnasium.

## **2.2 Grant Proposal**

Working alongside the physical education teacher and the principal, we developed a project proposal to increase female participation in sports and physical education for our village and district center via infrastructure improvements and community programs. As a requirement of the grant application we had to provide a detailed budget report, projected community contributions, project objectives, proof of a need for the project, and a list of activities that pertain to the overall project theme. The objectives of the grant proposal were to 1. Promote the participation of women in physical activity in Olıřcani and 2. Increase female participation in sports activities held in Olıřcani by 50%. We submitted our proposal to the Peace Corps grant committee and were awarded a Let Girls Learn (LGL) Grant through the Michelle Obama Foundation. The project was carried out from August 2019 until March 2020.

The LGL grant allots \$3,500 to recipients. The additional project total must be raised by the Peace Corps volunteer and their community. As per Peace Corps regulations, the local community must cover a minimum of 25% of the total project cost. The budget for our project was \$12,082.65. Since \$3,500 was provided by the Michelle Obama Foundation and \$7,179.94

was contributed by the community, we raised the remaining \$1,402.71 through individual donations (Table 2). The overall budget was broken down in to 7 categories: equipment, labor, land/venue rental, materials transport, materials/supplies, travel/per diem/food/lodging, and other. The materials cost a total of \$7,722.85 and new equipment cost \$1,730.78. The majority of the budget went towards repairing the gymnasium and access hallway and new gymnasium equipment. The rest of the budget was broken up into labor (\$706.42), land/venue rental (\$67.87), materials transport (\$827.60), other (\$226.24), and travel/per diem/food/lodging (\$800.89).

Table 2: Overall budget for the Peace Corps Let Girls Learn (LGL) grant.

Grant Type	Country	Status	Grant Request Amount USD	Community Contribution	Total Project Cost
Let Girls Learn (LGL)	Moldova	Project Completed	\$4,902.71	\$7,179.94	\$12,082.65

## 2.3 Intervention

Based on the results of our pre-intervention surveys, we concluded that condition of the gymnasium and the sports equipment needed to be improved. The major concerns regarding the gymnasium were the heating system, the changing rooms, and the access hallway. In Moldova the most common form of heating systems are soba ovens and hydronic heaters. Soba ovens are a wood burning heater that look similar to a pizza oven and are used in smaller spaces, typically homes. Hydronic heaters operate by heating water and moving the hot water through sealed pipes to heaters throughout the room. In the gymnasium, there were five hydronic heaters (Fig. 1). Since the space is large, with high ceilings and poor insulation, the heaters were not working

efficiently (Fig.2). This made using the gymnasium during October through April a challenge since the internal gymnasium temperature ranged between 25 – 45°F during this time.



*Figure 1: Shown in the image, the gymnasium is large with few heaters.*

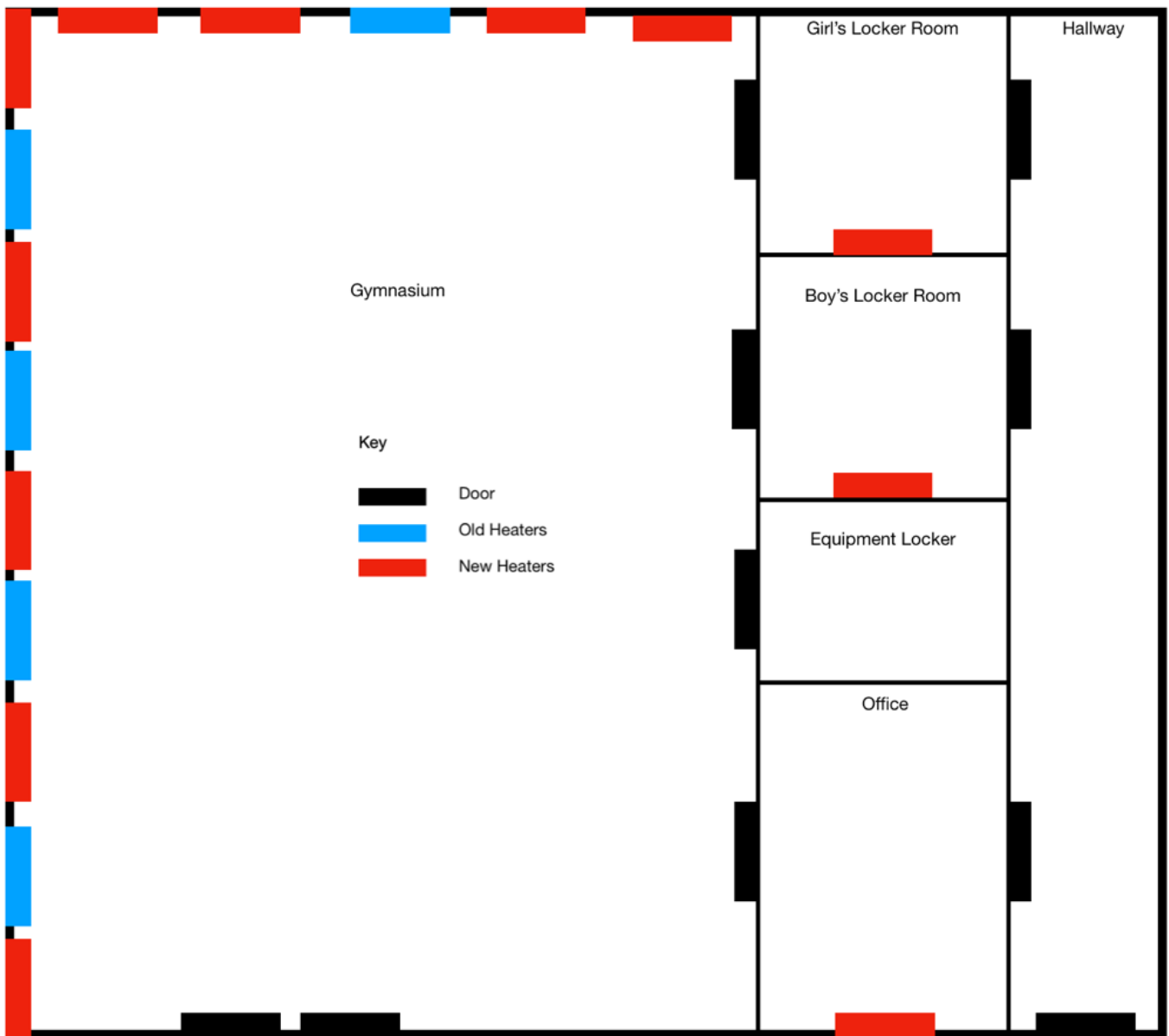


Figure 2: The layout of the gymnasium and the heater placement before and after the project.

Inside of the gymnasium were two separate locker rooms, one for the boys and one for the girls. The locker rooms were supposed to have dual access from both the gymnasium and the corridor. However, the access doorways from the corridor were damaged from the wood freezing and expanding during the colder seasons, and therefore unable to be opened. This was partially a result of the inefficient heating system. The other access doorways from the gymnasium did not

have any doors, so the changing rooms were open to the gymnasium with no security or privacy. Lastly, the floor of access corridor to the gymnasium was rotted and was exposed to the foundation underneath, which was filled with glass, rubble, and other debris (Fig. 3).



*Figure 3: The image shows the condition of the access hallway to the gym. As shown in the image, the floor is rotten and in most areas missing.*

For the repairs, we were able to increase the heating systems output by adding 12 additional hydronic heaters (Fig. 2 and 4). We also added better insulation to the outside walls of the gymnasium to increase heat retention. In addition to the repairs made to the gymnasium's heating system, the floor in the access corridor was also repaired (Fig. 5). The old rotted floor was removed and the base was filled in with concrete and then covered with seasonal tiles. These tiles were selected due to their durability in all seasons and temperatures. The repairs to the corridor and the gymnasium heating system were completed in October 2019, just in time for the start of the cold season. After the floor was completed, the access doorways were repaired to allow access to the changing rooms from the corridor. Lastly, doors with locks were added to both the girl's and boy's changing rooms leading to the gymnasium, allowing both privacy and security for the students in the changing rooms.



*Figure 4: The image shows the increase in the number of heaters in the gym.*





*Figure 5: The image shows the access hallways after the rotten floors were removed. The floor was leveled and filled in with gravel and then concrete was poured over. Durable tiles were added along with a new coat of paint.*

The last major component of the grant was improving the sports equipment in the gymnasium to allow more students to participate in physical education classes at a time, instead of having to sit on the benches and wait turns. We were able to completely stock the equipment lockers with new merchandise, and replace the old and damaged equipment (Table 2). Grant

funding allowed us to provide not only equipment for current sports teams (soccer, volleyball, basketball, table tennis, and tennis), but also equipment for other sports (rugby, football, gymnastics, track and field, and lacrosse), allowing the school the opportunity to create more sports teams and clubs (Fig. 6).



*Figure 6: The image shows some of the new sports equipment purchased for the grant.*

Table 3: An in-depth catalog of all equipment purchased for the grant and their respective costs.

<b>Item Description</b>	<b>Unit Cost USD</b>	<b>Quantity</b>	<b>Total Cost USD</b>
<b>Volleyball</b>	\$22.62	8	\$181.00
<b>Basketball</b>	\$14.14	5	\$70.70
<b>Mini Soccer Ball</b>	\$28.28	5	\$141.40
<b>Football</b>	\$16.69	2	\$33.37
<b>Tennis Table</b>	\$395.93	1	\$395.93
<b>Table Tennis Rackets (Set of 2)</b>	\$11.31	4	\$45.25
<b>Basketball Net</b>	\$5.94	4	\$23.76
<b>Gymnastics Mattress</b>	\$84.84	6	\$509.05
<b>Score Board</b>	\$29.41	1	\$29.41
<b>Assorted Weights</b>	\$5.66	2	\$11.31
<b>Soccer Net</b>	\$28.28	2	\$56.56
<b>Track Obstacles 35 cm</b>	\$2.83	10	\$28.28
<b>Throwing Balls 150 gr</b>	\$1.98	10	\$19.80
<b>High Jump Bar</b>	\$67.87	1	\$67.87
<b>Tug of war rope</b>	\$48.08	1	\$48.08
<b>Sports Cones</b>	\$8.77	4	\$35.07
<b>Trophies</b>	\$11.31	3	\$33.94
<b>Total Equipment Cost</b>			\$1730.78

In conjunction with the repairs, the grant project also consisted of various activities, such as a 10-day sports summer camp (Appendix 2.1), a flag football bootcamp, mother-daughter lectures (Appendix 2.2), a field trip to the national soccer stadium to see a team practice (Appendix 2.3), a district-wide volleyball competition, and a health fair. The 10-day sports camp

was held in August 2019, the field trip was held in September 2019, and the mother-daughter lectures were held throughout the month of October 2019. The health fair, volleyball tournament and flag football bootcamp were supposed to occur in March 2020, but were unable to be held due to the COVID-19 pandemic prohibiting large social gatherings.

The 10-day summer camp focused on personal development, having a different topic each day. Some of the topics were: volunteerism, leadership, self-esteem, and gender equity. Each teacher from the school volunteered for one day of the summer camp. Ten youth leaders from the 9<sup>th</sup> grade helped co-facilitate the summer camp to promote leadership skills and volunteering. While all activities were made to be gender equitable, the majority of the students that signed up for the summer camp were female. Twenty total students signed up; 15 female and 5 male. Each day had two hours dedicated to a topic, followed by an hour of physical education to promote healthy behaviors in the students. We would host soccer games, potato sack races, or balloon tag, I would teach them line dances from the United States, and more. The goal was to promote 60 minutes a day of physical activity for the kids. At the end of the summer camp, each student was awarded a diploma to show their hard work and participation.

The mother-daughter lecture series was held over the course of three weeks. Each week a guest lecturer would come in and speak to a different age group of girls and their mothers. We had a gentleman come in from a local NGO who worked with student involvement in sports as well as a woman who worked at the local youth clinic. The woman from the local youth clinic was a great contact to introduce to the girls, especially the older ones. The youth clinic hosts a variety of events and teaches the kids about different topics, not just physical education. One of the more taboo topics that they cover is reproductive health. Giving the girls access to that

contact was really valuable and allowed them to feel more comfortable when going to the youth clinic.

The topic of the mother-daughter lecture series was “The importance of involving girls in sports”. The lecturers presented topics on health benefits of being physically active, opportunities in the area, how mothers can help their daughters get involved, and more. Each lecture was two hours long, beginning with an informational session for the girls and their mothers and ending with group exercises related to the topics discussed. The age groups were 7-10 years old, 11-13 years old, and 14-16 years old. The girls were split up into these age groups to allow for smaller groups and lectures better curated for that specific age. In total 63 female students and ~30 mothers participated in the lecture series. The mother-daughter trainings cost a total of \$176.46 for the conference spaces and to compensate the lecturers.

Part of our grant project was to expose the students to new sports and physical education activities. One of the goals of Peace Corps is to share American culture with our host countries. One of those activities was to learn about American football, forming a club team in Olişani. American football is not a well-known sport in Eastern Europe, including Moldova. However, the Chişinau Sentinels are a team of Moldovans stationed in the capital that are slowly spreading knowledge of the sport across the country. The Sentinels host boot camps for schools to teach them the rules and regulations for flag football and will often allow the local school flag football teams to watch their football practices and games. The Sentinels started an annual flag football tournament for the schools that participate in their bootcamps. They also provided all of the sporting equipment the teams needed to play, as well as trained the coaches that are advising the teams. As part of the grant, our school had scheduled a field trip to take the students to the capital to watch an American football game. We had also scheduled a training with the Chişinau



Sentinels so that the students could learn flag football and compete in future tournaments. Due to the COVID-19 pandemic these events were postponed and later cancelled.

## **2.4 Post-Intervention**

Unfortunately due to the COVID-19 pandemic, we were unable to finish our grant project because of the global evacuation of all Peace Corps Volunteers. This meant that we were unable to participate in the flag football bootcamp, visit the Moldova Olympic training center, host the district-wide volleyball tournament, and address final repairs and purchases for the gymnasium. The walls in the access hallway were not completed and still needed to be patched where there were cracks and later painted. We were also unable to purchase the last pieces of gym equipment: pull-up bar, track vaults, two additional gymnastics mats, large gym rope, volleyball net, and soccer goals.

Due to Peace Corps grant regulations, the remaining grant balance had to be returned to the Peace Corps when all volunteers were evacuated. Normally in circumstances where a volunteer is unable to finish their project, the project is passed on to another volunteer. However, in this rare circumstance the project was not able to be continued and the remaining grant money had to be returned. The remaining community contributions could still be used at the discretion of the school and the community, but the remaining equipment was not able to be purchased.

Further, we were unable to conduct our post-intervention surveys to determine whether or not the project resulted in an increase in female participation in physical education classes and sporting events. Even though the surveys were never conducted, I observed qualitative data based on my experience as a community member as well as verbal discussions with the women and girls. During the 2018-2019 academic year I observed physical education classes and

community sporting events on numerous occasions before our grant-funded intervention. My observations during this time period agreed with the pre-intervention survey results: girls did not participate in physical education classes from October to April. Similar observations were also made for the community women's volleyball team. They would cancel their practices from October – April due to the gymnasium conditions.

After the repairs to the gymnasium heating system were completed in October 2019, I observed that girls were more actively participating in their physical education classes from October 2019 to March 2020. Instead of sitting on the benches, as they did before the repairs, they participated in the activities with the boys. This was due in part to now having access to a private changing room. The girls reported that they enjoyed no longer having to practice in their school clothes or change in their homeroom teacher's office. They felt that they had a safe and secure space of their own to change into their gym clothes. However, for them the bigger contributing factor was the more comfortable learning environment with the new heating systems, as was discussed by several female students.

Furthermore, we observed an increase in participation in the community women's volleyball team. In the year before the repairs, the women's volleyball team cancelled practice and competitions from October – April due to the frigid indoor temperature of the gymnasium. After the repairs, the team scheduled regular practices three times a week. They were also able to recruit new members to the team and grow to a size that enabled them to compete against other teams in the district. This was especially touching for me, as my host mother, host sister and host aunt all joined the team. They were impressed with the repairs to the gymnasium and excited to finally have a space to stay active year-round.

### **3 Discussion**

Although COVID-19 cut the grant project short and we were unable to complete all of the projects and activities that were originally planned, we were luckily able to accomplish a substantial amount of progress on both the gymnasium infrastructure as well as the physical education program. As was demonstrated in the Peace Corps grant project, COVID-19 has greatly affected sporting events and physical education by limiting gatherings, not only in the Republic of Moldova, but across the world. Moving forward, how can we continue to empower girls and women through both sports and physical education in a post COVID-19 world?

Sports teams have been greatly affected by the global pandemic. With added safety measures put in place, such as physical and social distancing, sporting events and physical activities have been disrupted. In order to ensure the health of athletes and all parties involved, major sporting events have been postponed or cancelled at the regional, national, and international levels [24]. High school and college sporting events are being postponed until 2021 or longer. National sports teams are also being affected, committing to regular COVID-19 testing, playing without fans in the stands, and in extreme cases having to postpone or cancel games due to COVID-19. For the first time in history, the Olympics and Paralympics have been postponed to 2021 [24]. Physical education classes at the school and recreational levels are also being affected. Physical education classes are being held in schools either virtually, or while maintaining social distance. So how can we continue to empower women and girls, while maintaining a social distance of 6 feet apart?

Video conferences are playing a large role by engaging both women and girls virtually in the comfort and safety of their own homes. More people are participating in exercise classes now over virtual platforms than they were previously, with 73% of consumers using pre-recorded



workout videos as compared to 17% in 2019 and 85% of consumers participating in live workout classes compared to the 7% participating in 2019 [25]. With the pandemic limiting social gatherings and activities, an easy activity to do in the comfort of your own home is a virtual exercise class. It is possible that some women may not be comfortable participating in an exercise class with a group of people or working out at a gym. With virtual platforms, they can now stay physically active in the comfort of their own homes, while also building their own self-esteem and self-confidence. It is possible that they could be building the confidence they need to participate in an in-person class when the conditions are safer to do so.

I spoke with two women who teach or coach athletic activities that have been influenced by the COVID-19 pandemic. K.C. Brunini is the owner/instructor at The Bar[re] in Rocky Hill Connecticut. The Bar[re] is a fitness studio that offers classes using the barre method, a low impact fitness class that uses a combination of yoga, Pilates and dance. Brunini got into this field because she loved being creative while also being surrounded by new people and new energies. However, given the current circumstances, she has had to change her point of view. To Brunini, she feels like her job has become more important than it had been before. She has made it possible for her clients to now stream all of the classes, giving those still uncomfortable with going in to the studio a way to continue with their barre classes. Although she has faced several obstacles due to the pandemic, Brunini notes that a positive of COVID-19 is that it forced her to add an on-demand option to her website, allowing her customers access to workouts at any time. This is something she has been meaning to do, but kept putting off. Brunini (2020) states “There is no such thing as being closed now. Because of the pandemic, the fitness industry has turned into a 365 day business. No snow days, no holidays. We are able to reach people virtually anywhere at any time” [26].

Lee-J Mirasolo is Associate Head Coach for the women's hockey team at Harvard University in Cambridge Massachusetts. Her position as has changed since mid-March due to the COVID-19 pandemic. At Harvard University, only first-year students from the US were allowed to live on campus for the Fall 2020 semester. The returning women's hockey team players elected to take a leave of absence from the team in order to maintain their eligibility for this year. Of the four first-year students, two were Canadian, which meant that they currently only have two players on campus. At the beginning of October 2021, Harvard went in to phase 2, allowing sports teams to hold practices. Since there are only two active members of the team, Mirasolo notes that these practices feel more like private sessions. Mirasolo (2020) states, "The amount of attention those two players are receiving from the coaching staff is unmatched" [27]. Due to NCAA rules and regulations, unlike Brunini, Mirasolo cannot use online video conferencing methods for her team. Mirasolo states, "NCAA rules prohibit us from "coaching" any student-athletes who are not enrolled in classes. Therefore, we can only coach (practice, video, etc) the enrolled students living in residence. For Harvard Women's Hockey, that is two" [27].

Although the COVID-19 pandemic essentially cancelled the women's hockey season, Mirasolo notes that it has also had its benefits. Some of the players who elected to take a leave of absence are instead devoting their time to internships. Two of the players are currently working with Voice in Sport (VIC) for their internships. VIC is an organization whose goal is to promote women in athletics. Mirasolo (2020) states, "These two players have been working tirelessly with the VIC, Student-Athlete Advisory Council (SAAC), and Harvard Votes Challenge to get every Harvard student-athlete from all 42 varsity sports to pledge to vote, WHICH THEY DID! Our players have been working to educate themselves on and support the Black Lives Matter movement, as well as fight for social justice for all marginalized communities. They fundraised

~2K for two charities: Black Girls Hockey Club and Equal Justice Initiative” [27]. Without the demanding D-1 athletic schedule, these women are able to participate in activities that they would not have been able to do without the pandemic [27].

As was shown by both examples given by Brunini and Mirasolo, the COVID-19 pandemic has had presented both obstacles and new opportunities. Moving forward, we can use the practices displayed by Brunini, Mirasolo, and other women like them to continue to promote women’s participation in sports and physical education. By utilizing virtual formats for exercise and other physical education classes, as stated by Brunini, we have the opportunity to for these classes to be held 365 days a year. Where weather, holidays, and other factors impacted this in the past, the COVID-19 pandemic has allowed us to reimagine what participation looks like for the physical education world.

There are also applications to empower women through physical education outside of video conferencing methods. In Moldova not all of my students have access to the internet or computers. For those students who cannot access their class materials online, they are assigned the exercises to do at home. By bringing their physical education classes home, they are able to involve other family members and friends. Both video conference and in-person methods of physical education can be used by women across the world. In a world filled with so much despair and uncertainty, now is the best time to get up and stay active.

## 4 Conclusion

Although participating in a Peace Corps grant is not required, I would highly recommend it to any Peace Corps volunteer. The grant provided me with a unique opportunity to help physically empower the girls in my school. We were able to provide them with a space that became more inclusive and safe. One of the objectives of this project was to increase female participation in physical education and sports, and we were able to accomplish that. Through the project we opened the doors for new sports teams and clubs to be formed. With the equipment provided, the girls were able to form a gymnastics club. They are not able to compete at the moment, but I have no doubt that they will in the future. By changing the conditions in the gym we were also able to provide a space, not only for the girls in my community, but for female athletes in the entire district. There are plans for the gym to be a main competition site when group sports are allowed again after the pandemic.

We not only observed an increase of participation in physical education and sports, but we also witnessed the empowerment of others through this project. In this project psychological empowerment is demonstrated as becoming comfortable within ourselves, but also as overcoming physical barriers. In this case the physical barriers were the infrastructure and conditions of the gymnasium. These barriers held these girls back from reaching their full potential. By repairing the infrastructure in the gym we were able to eliminate the barriers that kept these girls from participating in physical education and sports.

We also saw an increase in social empowerment through the formation of new sports teams and clubs, as well as an increase in pre-existing sports teams. As we saw with the women's volleyball team, repairing the gym and replacing the equipment had a positive effect on the team. It motivated more women, like my host mom, to join and participate in a group

activity, empowering others through the social aspect of the volleyball team. The team also allowed younger girls who were not old enough to compete to practice with them. This set a positive example for these girls, motivating them to join the team when they are older.

Empowerment is a broad term. It means something different to different people. Through this project I now define empowerment as striving to improve yourself and the conditions around you every day, no matter how hard it may be or how long it may take. This project would not have been possible without the many dedicated women who saw a physical barrier and strove to overcome it, no matter the cost. In doing so, they provided our village the space to continue to increase female participation in physical education and sports and continue to empower the females of the district, proving that together we can empower ourselves and each other through physical education and sports.

## 5 Bibliography

1. Empowerment. (2019). In *Oxford Online Dictionary*. Retrieved from <https://en.oxforddictionaries.com/definition/empowerment> (Accessed December 2, 2020)
2. Cattaneo, L. B., and A. R. Chapman. 2010. 'The process of empowerment: a model for use in research and practice', *Am Psychol*, 65: 646-59.
3. McCord M. 'This is How Women's Rights Have Progressed'. <https://www.weforum.org/agenda/2020/03/international-womens-day-equality-rights/> (Accessed November 1, 2020).
4. Mandal, Keshab Chandra. 2013. 'Concept and Types of Women Empowerment', *International Forum of Teaching and Studies*, 9: 17-30.
5. Brunell, Laura. 2020. 'Feminism'. <https://www.britannica.com/topic/feminism> (Accessed December 3, 2020).
6. Perkins, Douglas. 2010. 'Empowerment', *Political and Civil Leadership: A Reference Handbook*: 207-18.
7. Park S., Chiu, W., and D. Won. 2017. 'Effects of physical education, extracurricular sports activities, and leisure satisfaction on adolescent aggressive behavior: A latent growth modeling approach', *PLoS ONE*, 12(4).
8. Milner, A. N., and E. H. Baker. 2017. 'Athletic Participation and Intimate Partner Violence Victimization: Investigating Sport Involvement, Self-Esteem, and Abuse Patterns for Women and Men', *J Interpers Violence*, 32: 268-89.
9. Kay, Tess. 2009. 'Developing through sport: evidencing sport impacts on young people', *Sport in Society*, 12: 1177-91.
10. Huang, H. C., L. W. Liu, C. M. Chang, H. H. Hsieh, and H. C. Lu. 2019. 'The Effects of Locus of Control, Agents of Socialization and Sport Socialization Situations on the Sports Participation of Women in Taiwan', *Int J Environ Res Public Health*, 16.
11. Gentile, Ambra, Stefano Boca, and Isabella Giammusso. 2018. 'You play like a Woman!' Effects of gender stereotype threat on Women's performance in physical and sport activities: A meta-analysis', *Psychology of Sport and Exercise*, 39: 95-103.
12. Mujika, I., and R. S. Taipale. 2019. 'Sport Science on Women, Women in Sport Science', *Int J Sports Physiol Perform*, 14: 1013-14.
13. Gregg, E. A., and V. H. Gregg. 2017. 'Women in Sport: Historical Perspectives', *Clin Sports Med*, 36: 603-10.
14. International Ice Hockey Federation. Women's Ice Hockey. <https://www.iihf.com/en/static/5068/women-s-hockey#:~:text=The%20first%20women's%20hockey%20games,in%20the%20post%20war%20era.> (Accessed November 1, 2020).
15. Tamir, Ilan, Moran Yarchi, and Yair Galily. 2017. 'Women, sport and the media: Key elements at play in the shaping of the practice of women in sports journalism in Israel', *Communications*, 42.
16. Women's Media Center. 2019. 'The Status of Women in The U.S. Media 2019'.
17. Antunovic, Dunja. 2018. "We wouldn't say it to their faces": online harassment, women sports journalists, and feminism', *Feminist Media Studies*, 19: 428-42.
18. Spaaij, Ramón. 2009. 'The social impact of sport: diversities, complexities and contexts', *Sport in Society*, 12: 1109-17.

19. Heinecken, Dawn. 2016. 'Empowering Girls Through Sport? Sports Advice Books for Young Female Readers', *Children's Literature in Education*, 47: 325-42.
20. Guedes, Claudia M. 2010. 'Empowering Women through Sport: Women's Basketball in Brazil and the Significant Role of Maria Helena Cardoso', *The International Journal of the History of Sport*, 27: 1237-49.
21. Nanayakkara, Samantha. 2012. 'Crossing Boundaries and Changing Identities: Empowering South Asian Women through Sport and Physical Activities', *The International Journal of the History of Sport*, 29: 1885-906.
22. Billie Jean King Enterprises. 'Biography'. <https://www.billiejeanking.com/biography/> (Accessed November 1, 2020).
23. Ottesen K.K. 'Tennis Icon Billie Jean King on Fighting for Equal Pay for Women: "Pressure is a Privilege".', [https://www.washingtonpost.com/lifestyle/magazine/tennis-icon-billie-jean-king-on-fighting-for-equal-pay-for-women-pressure-is-a-privilege/2019/08/30/4d766498-b7b0-11e9-b3b4-2bb69e8c4e39\\_story.html](https://www.washingtonpost.com/lifestyle/magazine/tennis-icon-billie-jean-king-on-fighting-for-equal-pay-for-women-pressure-is-a-privilege/2019/08/30/4d766498-b7b0-11e9-b3b4-2bb69e8c4e39_story.html)
24. Bas D, Martin M, Pollack C, Venne R. 'The Impact of COVID-19 on sport, physical activity and well-being and its effects on social development', United Nations, <https://www.un.org/development/desa/dspd/2020/05/covid-19-sport/> (Accessed October 25, 2020)
25. Cording J. 'How COVID-19 Is Transforming The Fitness Industry', Forbes, <https://www.forbes.com/sites/jesscording/2020/07/13/covid-19-transforming-fitness-industry/#139a12ed30a7> (Accessed October 25, 2020).
26. Brunini K.C. Personal Communications. 'The Impact of COVID-19 on Fitness Classes'. (Communicated on October 12, 2020).
27. Mirasolo, L.J. Personal Communications. 'The Impact of COVID-19 on Women's Hockey'. (Communicated on October 29, 2020).

## **A Appendix**

### **A.1 Grant Surveys**

#### **A.1.1 Student Survey**

##### Olişcani Student Survey

Age            Gender

Do you practice sports? (Y/N)

If yes, what sports do you practice?

Where do you practice sports?

Are you happy with the current condition of the gymnasium? (Y/N)

If no, why?

Do you compete on a sports team? (Y/N)

If yes, which?

Do you compete in district sports competitions? (Y/N)

Do you think that boys and girls participate equally in physical education classes and sports?  
(Y/N)

If no, Why not?

*Figure 7: All students enrolled in the elementary and middle school in Olişcani were surveyed (37 boys, 63 girls), for a total of 100 students.*

#### **A.1.2 Women Community Members Survey**



## Olişcani Community Members Survey

Age            Gender

Do you practice sports? (Y/N)

If yes, what sports do you practice?

Where do you practice sports?

Are you happy with the current condition of the gymnasium? (Y/N)

If no, why?

Do you compete on a sports team? (Y/N)

If yes, which?

Do you compete in district sports competitions? (Y/N)

*Figure 8: 15 women in the community of Olişcani that are involved with the women's volleyball team completed this survey.*

### **A.1.3 Female Athletes**

#### **Șoldănești Female Athletes Survey**

School            Age            Gender

What sports team are you on?

Do you compete in district sports competitions? (Y/N)

Name 2 schools that you most like to compete at.

Why do you like to compete there?

Name 2 schools that you dislike most to compete at.

Why do you dislike competing there?

*Figure 9: The female athletes survey was sent to 8 different villages in the district of Șoldănești, all of whom compete in volleyball tournaments in Olișcani. We surveyed a total of 120 female athletes.*

## **A.2 Activities**

### **A.2.1 Summer Camp**



*Figure 10: The image shows the potato sack races held during the 10-day summer camp.*





Figure 12: The 10-day summer camp featured different personal development and health topics each day. This image shows a lesson on volunteerism and leadership.



Figure 11: The summer camp focused on physical activity and had a different exercise planned for each day.



Figure 13: The image shows the participants of the 10-day summer camp along with Peace Corps Volunteer Aprille Hibbard, Vice Principal Vera Botan, and Student Leaders Anton and Elena.



### A.2.2 Mother Daughter Training



Figure 14: The image shows the Mother Daughter training for girls (11-13).

### A.2.3 Soccer Stadium



Figure 15: The image shows the field trip to the national soccer stadium