



Research Brief

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Background

BREAKAWAY is a free, web-based, interactive video game containing a narrative that uses soccer as a global language to educate boys and girls worldwide about gender equality and violence against women and girls (VAWG). This educational game was designed by the Champlain College Emergent Media Center for the United Nations Population Fund as part of the UNiTE Campaign to end VAWG.

Since its debut during the 2010 FIFA World Cup, *BREAKAWAY* has been played in 180 countries and translated into 4 languages. An accompanying facilitator's guide contains discussion topics and group activities that encourage dialogue regarding VAWG. An educational camp model that combines the video game and facilitator's guide was developed in Hebron, Palestine in 2012.

In November 2013 and December 2014, the *BREAKAWAY* educational game and youth camps were implemented in Sonsonate, El Salvador, among the highest rates per capita of gender-motivated killing in the world. This research brief summarizes the program evaluations designed and completed by a research team led by Dr. Helen Wang at the University at Buffalo, The State University of New York.

<p><i>BREAKAWAY</i> is the first application of the Sabido methodology of producing social drama on television and radio to developing characters and dialogues in the context of video games. In this first-person role-playing game, the player can become a transitional character by experiencing the consequences of their own choices, which help them change from the negative model portrayed by the antagonist and widely accepted in the community towards the positive model portrayed by the protagonist in the video game.</p>	 <p>Coach Zak Tal</p> <p>Hanna Raina YOU</p>
<p><i>BREAKAWAY</i> is premised as a soccer tryout and tournament. Prosocial messages are purposefully incorporated into the character dialogue about gender-based stereotypes, discrimination, and disrespectful behaviors that exemplify verbal, physical, and psychological forms of VAWG. This narrative engagement mechanism helps enhance players' understanding and acceptance of story-consistent beliefs and behaviors, especially when they strongly identify with the characters.</p>	
<p><i>BREAKAWAY</i> is made to appeal to youth all around the globe. An avatar was created for the internationally renowned soccer player Samuel Eto'o as part of the storyline where he paid a surprise visit and encouraged the team to discuss the meaning of good sportsmanship. Eto'o also served as the game's ambassador at the 2010 FIFA launch. By bringing a real-world icon into the video game through celebrity endorsement, the prosocial messaging can gain more traction and credibility among soccer fans.</p>	

Methods

To evaluate *BREAKAWAY*'s educational impact, our research team conducted two field studies during the *BREAKAWAY* youth camps in El Salvador in 2013 and 2014.

2013 Program Evaluation

Participants

	Analytical sample	AM Camp group	PM Camp group
N	83	38	45
Age			
Range	7-18	7-15	8-18
Median	12	12	12
Mode	12	12	12
M	11.49	11.50	12.29
SD	2.30	2.56	2.05
Sex			
Boys	40	20	20
Girls	29	11	18
Unknown	4	7	7

Research Design

Participants were assigned to either one of the treatment groups (i.e., AM camp group or PM camp group). An attempt to include a control group was not successful due to incomplete data. Campers in both groups first played the assigned game episode of the day and then participated group discussion and finished worksheets from the custom playbook developed by the research team.

Measurement

The custom playbook consists of:

1. A **time-diary** journal was organized by the camp schedule with specific instructions provided for each question.
2. **Participatory sketching** was chosen to serve as another way of data collection, using pencils and drawings as non-textual tools of creative expressions.
3. **Gamification strategies** were used to motivate campers to complete playbook activities and maximize participant feedback.



Playing *BREAKAWAY*



Participating in group discussions



Completing the custom playbook

2014 Program Evaluation

Participants

	Analytical sample	Control group	Game only group (GO)	Game + discussion group (GD)
N	112	21	56	35
Age				
Range	6-19	6-16	6-19	8-16
Median	12	11	12.50	12.50
Mode	10	9	10	14
M	11.85	10.81	12.22	11.91
SD	2.88	2.50	3.18	2.44
Sex				
Boys	56	10	24	22
Girls	51	11	32	10
Unknown	6	0	2	4

Research Design

The experiment used two treatment groups (GO and GD) and one control group. The GO group first played the selected game episode and then complete worksheets from the custom playbook. GD group had facilitated group discussion in between gameplay and playbook. Both groups completed a pretest and a posttest. The control group received no treatment but the pretest.

Measurement

The custom playbook consists of:

1. A **time-diary** journal was organized by the camp schedule with specific instructions provided for each question.
2. **Participatory sketching** was chosen to serve as another way of data collection, using pencils and drawings as non-textual tools of creative expressions.
3. 9-item adapted **Bullying Victimization Self-efficacy Scale** (Kim, Varjas, Meyers & Henrich, 2010)
4. 4-item adapted **Self-Efficacy Scale for Children Scale** (Gambin & Święcicka, 2012)
5. A modified **Implicit Association Test (IAT)** including 21 gender-based word stickers.

Findings - 2013

Response to Game Characters

- A majority of the participants were able to correctly identify with the protagonists by liking Hanna (54%) and Zak (64%) and disliked the antagonist Tal (69%). They also demonstrated empathy by drawing a victim character's feelings and thoughts.



Response to The Antagonist

- Participants were asked to write a letter from Zak to Tal. In a total of 139 quotes, 100 quotes were asking Tal to stop being rude, stop discriminating, as well as change his personality and attitude. For example, one participant wrote *"don't do to others what you don't want them to do to you."* 25 quotes described Tal's behavior and personality as disrespectful. 8 quotes suggested specific negative consequences such as *"everything that you do or say to other people can come back to you."* 6 quotes stated specific reasons why the participants thought Tal should change his behavior. Responses included gender equality, respecting girls, and stopping violence. For instance, participants wrote: *"Males and females alike have rights,"* and *"all the girls deserve respect to"*

○ Escriba algo

• Escriba una carta para Tal.

Estimado Tal,

Findings - 2014

Response to Game Characters

- A majority of the participants were able to correctly identify with the protagonists by liking Hanna (63%) and Zak (81%) and disliked the antagonist Tal (70%). Similarly, they demonstrated empathy by drawing a victim character's feelings and thoughts.



Response To The Antagnist

- A total of 78 quotes were coded from the GO group and 187 quotes from the GD group. Consistent with the 2013 result, participants in both the GO group and GD group discribed Tal's disrespectful behavior and personality (10 quotes/43 quotes), suggested specific behavior change and actions to Tal (45 quotes/93 quotes), and were able to point out the specific reasons to back up their suggested change (3 quotes/19quotes for negative consequences, 17 quotes/25 quotes for reasons like promoting gender equality, having fun, and Tal's personal benefit.) However, participants in the GD group were able to possitively encourage Tal to change his behavior, "*I know you can change*" wrote by one participant. Participants were also showing their support. One wrote "*You know that we support you in everything except bad intentions*" and another wrote "*If you want, I can help you to change.*" Furthermore, one participant in the GD group even applied the concept of celebrity endorsement strategy to persuade Tal, "*Leo Messi wouldn't have a problem with Hanna playing soccer.*"

Findings - 2013

The Great Debate

- When articulating their personal opinions about allowing girls on a soccer team, 88% of the participants completely agreed that girls should have equal rights to play on a soccer team; 11% agreed contingent upon certain conditions such as them not getting hurt; and only one participant, a 12-year-old boy (2%) still disagreed, claiming that "soccer isn't for girls."

Sticker Sheets and Gender-Based Choices

- The stickers quickly became popular among participants and their choices of female versus male soccer player stickers were particularly useful for reflecting their perceptions and attitudes toward gender equality.
- Participants were given opportunities to choose various stickers as rewards to decorate the soccer field worksheet in the playbook. The total number of stickers they earned ranged from 1 to 29. On average, there were more female player stickers than male player stickers chosen by the participants.
- It was interesting to note that girls chose significantly more female soccer player stickers as compared to male soccer player stickers; while boys chose significantly more male soccer player stickers.



RESPECT Rap

- Participants also created rap songs about respect.

*"Respecting that girls can play
Is our responsibility, along with
Discipline and Safety on the field
Passion during training
Working as a team being proud of ourselves
That will lead us to victory"*



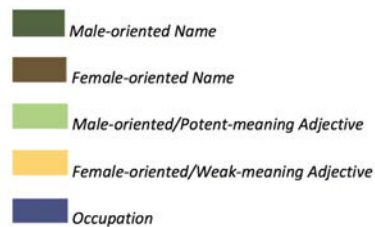
Findings - 2014

The Great Debate

- Overall 96% of the participants agreed that girls should have equal rights to play on a soccer team; 4% answered "I don't know." When breaking down to the two groups, 100% of the participant in the GD group agreed with the idea of having girls on a soccer team, whereas 93% of the participants in the GO group agreed with it.

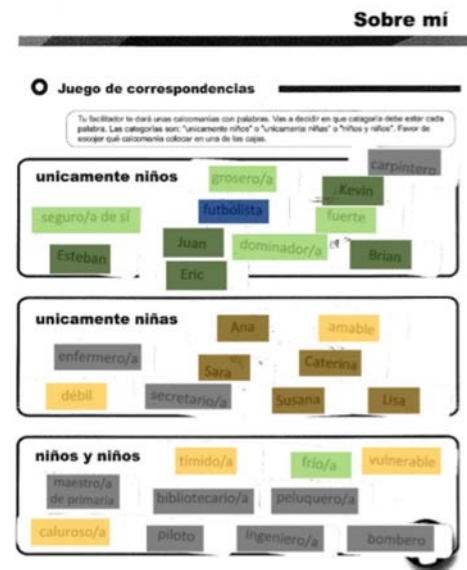
Gender-based Stereotypes

- At posttest, participants overall had decreased their gender-based stereotypes, especially those in the GD group.
- At posttest, participants were less likely to place their "football player" sticker in the "boys only box" and more likely to place it in the box for "both boys and girls", as compared to the pretest.



Attitude Toward Gender Equality

- Both the GO and GD groups chose more female soccer player stickers at posttest as compared to pretest. On average, the number of female player stickers increased from 3.43 to 4.99 out of 11.
- At posttest, less participants chose a male player to be the team captain, as compared to pretest. The percentage dropped from 80% to 63% overall.



Findings - 2013

Overall Ratings

- On a 5-star rating scale, participants rated 4.00 about the overall camp experience, 4.66 about the facilitators, and 4.66 about other campers.
- Participants felt *"the camp is the best thing that has happened to me;" "It opened my mind that girls can do the same things as boys."*

Facebook Insights

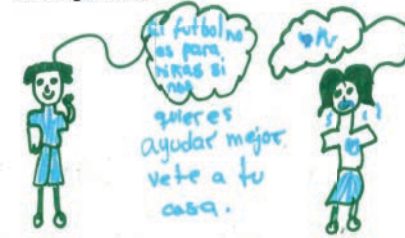
- From mid-November 2013 to the end of February 2014, the *BREAKAWAY* team posted a total of 60 messages regarding the El Salvador youth camps on their Facebook page.
- During the camp, 51 posts from the camps were shared via photos and short videos and there was a spike in the daily number of page likes.
- Some of these posts reached not just hundreds but thousands of Facebook users.
- The most popular video was played almost 100 times.
- In 3.5 months, the *BREAKAWAY* camp posts gained 1,308 likes, 177 shares, and 198 comments; engaged 4,420 Facebook users, on a daily basis, engaged an average of 77 Facebook users (including 60 from Latin America/El Salvador); and some of the trained local facilitators became the most enthusiastic fans on *BREAKAWAY* Facebook page.

Identification of Disrespectful Behaviors

- 90% of the participants were able to correctly identify disrespectful behaviors and reflect their understanding through their drawings.

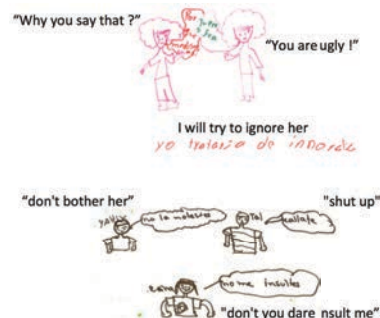
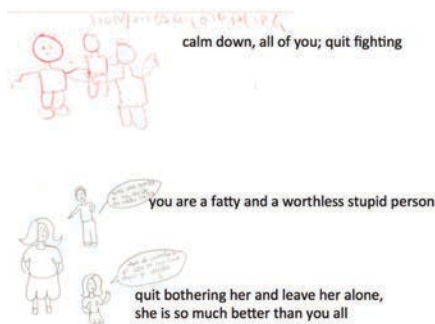


football is not for girls.
If you want to help us
better go home



Learning Practical VAWG Strategies

- 90% of the participants were able to illustrate their correct understanding through creative sketching along with the added character dialogues.



Findings - 2014

Overall Ratings

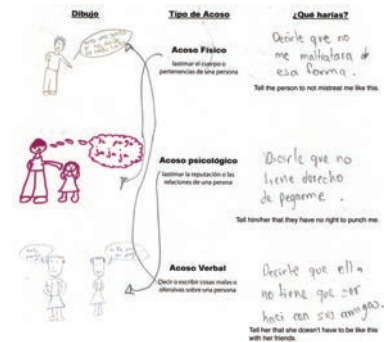
- On a 5-star rating scale, participants rated 4.95 about the overall camp experience, 4.73 about the facilitators, and 4.76 about other campers.
- Participants felt *"I've never had as much fun as I've had at this camp."* One girl was empowered by the camp and wrote: *"it changed my life because us girls have the same rights as men."*

Facebook Insights

- From mid-November 2014 to the end of February 2015, the *BREAKAWAY* team posted a total of 52 messages regarding the El Salvador youth camps on their Facebook page.
- During the camp, 16 posts from the camps were shared via photos; meanwhile, a total of 308 photos were uploaded to the Facebook album.
- During the camp, an average of 3,070 Facebook users saw any of these posts on a daily basis; 6.2% (n=191) of these users looked at the photos uploaded.
- In 3.5 months, the *BREAKAWAY* camp posts gained 696 likes, 45 shares, and 29 comments; engaged 4,079 Facebook users (including 414 Facebook users from Latin America/El Salvador); and 2.1% (n=86) of these users (37 boys and 49 girls) were aged 13-17.

Identification of Disrespectful Behaviors

- Between 49 - 56% of campers were able to identify different forms of disrespectful behaviors (i.e., verbally, physically, and psychologically) and provide proper strategies in response to these situations.



Bullying Victimization Self-efficacy

- Both the GO and GD groups demonstrated desirable trends in bullying victimization self-efficacy and regulation of negative emotions at posttest as compared to pretest.

Color Your Answer

Bullying is being mean to another kid over and over again. Bullying often includes: teasing, talking about hurting someone, spreading rumors, leaving kids out on purpose, or attacking someone by hitting them or yelling at them.

Pick and color one face to show how sure you are that you can...

- talk about your feelings with other people (friends, family, teacher, etc.) about bullying.
- talk to a bully.
- stand up to a bully.
- confront a bully.

Not Sure Very Sure



Colorea tu respuesta

Ser un "bully" significa ser muy malo con otra persona de forma repetida. El "bullying" se ve mucho en estos comportamientos: burlarse, amenazar que vas a hacer daño a otro, regar chismes; no dejar que otros niños jueguen contigo, abusar de alguien con golpes o con gritos.

Pinta la carita (solamente una carita por frase o renglón) que corresponde a tu nivel de seguridad para realizar las siguientes acciones.

- No hacerle caso a un bully.
- Discutir con un bully.
- Calmarte fácilmente cuando sientes miedo.
- Decir a un bully que no quieres pelear con él/ella.

no estoy seguro/a estoy completamente seguro/a



Discussion

VAWG has deep cultural roots discriminating the sex with less power. Despite the social norms against gender equality in El Salvador, participants at the *BREAKAWAY* youth camps obtained useful knowledge about VAWG, practical strategies against bullying, favorable attitudes and behavioral tendencies toward women's rights at the end of these 5-day camps. Our program evaluations supported the importance of role modeling and peer influence for raising awareness, increasing knowledge, building skills, and changing attitude and behavior. It was fruitful in adapting the Sabido methodology from traditional entertainment media to video games. Our participants were able to first learn about the gravity and consequences of VAWG through interactive and experiential gameplay in both the GO and GD groups. Such heightened awareness was then reinforced by group discussions led by trained facilitators and allowed the participants to observe and learn from each other in a guided manner in the GD group. Although our research team faced tremendous difficulty in achieving an experimental design of pre-post tests with a control group for a sizable and robust field study due to constraints of time, budget, and logistics, these preliminary findings provide rich insights and encouraging evidence for social learning through narrative engagement. We hope this *BREAKAWAY* research brief offers useful information for the design, implementation, and evaluation of interventions alike in this area.

Presentations

- Wang, H., DeMarle, A., Choi, J., & Wu, Y. (2014, October). *BREAKAWAY: Combating Violence Against Women and Girls through Soccer Video Game and Youth Camps*. Paper presented at the Meaningful Play 2014, Lansing, Michigan.
- Wu, Y. C. (2015, July). *I Believe I Can BREAKAWAY: The Effect of a Serious Game on Bullying Victimization Self-Efficacy*. Poster presented at the Living With Media International Summer School, Cologne, Germany.
- Choi, J. H., Wang, H., Wu, Y. C., & DeMarle, A. (June, 2016). *BREAKAWAY: An Educational Game Tackling Gender-Based Stereotypes among Youth*. Paper presented at the 66th International Communication Association Annual Conference, Game Studies Preconference, Tokyo, Japan.
- Wu, Y. C., Wang, H., Choi, J. H., & DeMarle, A. (June, 2016). *The Effect of BREAKAWAY Gameplay on Bullying Victimization Self-Efficacy among Youth in El Salvador*. Paper presented at the 66th International Communication Association Annual Conference, Fukuoka, Japan.

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Collaborative Team at the 2014 Meaningful Play conference at Michigan State University. From left to right: Yishin C. Wu, Ji Hye Choi, Helen Wang, Ann DeMarle, Lynn Eyberg, Sarah Jerger, and Adam Walker.



*Empowered lives.
Resilient nations.*




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