

# Rehearsing for Real Life: The Impact of the InterACT Sexual Assault Prevention Program on Self-Reported Likelihood of Engaging in Bystander Interventions

Violence Against Women  
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## Abstract

The interACT Sexual Assault Prevention Program is an interactive, skill-building performance based on the pedagogy of Augusto Boal's *Theatre of the Oppressed*. A longitudinal evaluation of this program compared pretest, posttest, and 3-month follow-up data from 509 university student participants. Results suggested that the interACT performance was successful in increasing participants' beliefs about the effectiveness of bystander interventions and the self-rated likelihood that participants would engage in bystander interventions in the future. Differences in both overall ratings and rates of change were noted. Implications of these results for research and practice are discussed.

## Keywords

bystander interventions, prevention, sexual assault

Despite a virtual explosion of sexual assault prevention programs in universities and communities across the country, overall rates of sexual assault have remained relatively stable (Rozee & Koss, 2001). These dismal results have called into question the didactic approach typically used by rape prevention programs and has prompted the development of more innovative and theory-based rape prevention efforts (Anderson & Whiston, 2005;

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Breitenbecher, 2000; Lonsway, 1996; Townsend & Campbell, 2006). One of the most promising approaches to date is a focus on bystander interventions (Banyard, Moynihan, & Plante, 2007; Banyard, Plante, & Moynihan, 2004). In this article, we describe the interACT Sexual Assault Prevention program, an interactive, skill-building performance that has shown promise in increasing participants' self-rated likelihood of engaging in bystander interventions to prevent rape.

## The InterACT Sexual Assault Prevention Program

The interACT Sexual Assault Prevention program is an interactive performance that seeks to train participants to engage in effective bystander interventions (Rich, 2010). Based on Augusto Boal's (1985) *Theatre of the Oppressed*, the interACT performance uses dramatic techniques to move participants out of the role of passive spectators into the role of active participants. Unlike other performance-based programs, interACT actively engages participants in the performance by inviting them on stage to "try out" their ideas, allowing participants to discover for themselves why some bystander interventions are more effective than others. Through the use of carefully constructed real-life scenarios, participants are encouraged to develop a critical consciousness (Freire, 1997) about the causes of rape and to practice new behaviors in a relatively safe environment. Such techniques provide a "rehearsal for revolution" (Boal, 1985) whereby participants can devise and practice social change behaviors without risking negative consequences for themselves or others. Through an emphasis on social action (rather than just knowledge acquisition), such techniques empower participants to move out of the role of student and into the role of change agent and social activist (Alexander, 2001; Fung, 2001; Paterson 2001; Schutzman & Cohen-Cruz, 1994, Schutzman 2006).

Based solidly on research about the causes and consequences of sexual assault (for reviews, see Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Ahrens, Dean, Rozee, & McKenzie, 2008; Campbell, Dworkin, & Cabral, 2009; Goodman, Koss, Fitzgerald, Russo, & Keita, 1993; Malamuth, 1998 ; Ullman 2010), the interACT Sexual Assault Prevention Program seeks to meet recent calls for the development of more dynamic, interactive rape prevention programs (Borden, Karr, & Caldwell-Colbert, 1998; Schewe, 2002; Townsend & Campbell, 2006). The performance itself unfolds in two phases. In the first phase, audience members watch two brief performances by trained actor-educators: one that involves the provocation of a male character by his friends and one that involves the disclosure of rape by a female character to her friends. In the first scene, we watch as a group of young men come home from a night of drinking. One of the characters starts to joke about another character's girlfriend, invoking male privilege and calling the boyfriend's masculinity into question. The scene quickly escalates and ends on a tense and angry note when the girlfriend and her friends come home. A second scene is then performed where the girlfriend tells her friends that her boyfriend forced himself on her the previous evening and her friends engage in ineffective efforts to help her.

During Phase 2, audience members are invited to call out and ultimately come up on stage to enact bystander interventions that may have helped prevent the rape from occurring.

For example, an audience member might suggest that one of the female friends should convince the girlfriend to leave with her. That audience member would then be invited onstage to try out this behavior. The audience member would then step in as the character of his or her choice and attempt to change the outcome of the scene. Actor-educators then improvise their character's response to the new scene, making sure to react in a realistic manner to the audience member's attempt to change the scene. The goal is not to discover one perfect solution but rather to stimulate dialogue and facilitate a number of intervention strategies that might be efficacious in a similar real-life scenario. A brief discussion identifying effective bystander interventions then follows these performances.

This approach is consistent with many of the recommendations that have emerged from other successful bystander intervention programs, including (a) providing information about inappropriate behavior and early warning signs; (b) providing opportunities to envision safe and effective strategies for intervention; (c) providing role models who can demonstrate safe and effective intervention strategies; (d) providing opportunities to develop skills and practice safe and effective interventions; and (e) creating new social norms that encourage a sense of responsibility for engaging in bystander interventions (Banyard, Eckstein, & Moynihan, 2010; Banyard et al., 2007, 2004; Banyard, Moynihan, & Crossman, 2009; Berkowitz, 2002; Christy & Voight, 1994; DeKeseredy, Schwartz, & Alvi, 2000; Foubert & Newberry, 2006; Katz, 1995; Lanier, Elliott, Martin, & Kapadia, 1998). Although the performance also involves scenes aimed at increasing empathy and prosocial responses toward rape victims (two other key recommendations from the bystander intervention literature), the focus of the current study is on the program's efforts to enhance self-reported intentions to engage in bystander interventions to prevent rape. Readers interested in the impact of the program on empathy and prosocial responses toward victims should see *deleted to ensure blind review* (Rodriguez, Rich, Hastings, & Page, 2006).

## Current Study

The goal of the current study was to determine whether the interACT Sexual Assault Prevention Program is effective in increasing the self-reported likelihood of engaging in bystander interventions over time. We were also interested in determining whether gender, beliefs about the perceived benefits of engaging in bystander interventions, and level of participation in the program were related to different rates of change. Our two specific hypotheses and the literature supporting these hypotheses are described below.

*Hypothesis 1:* Participants will demonstrate significant increases in perceived benefits of engaging in bystander interventions over time.

Specifically, we expect to see significant change in two separate indicators of perceived benefits over our three assessment periods (pretest, posttest, and 3-month follow-up): (a) perceptions of personal benefits and (b) beliefs about the helpfulness of bystander interventions. This hypothesis is grounded in literature suggesting that successful bystander intervention programs often demonstrate significant changes in participants' beliefs about

the costs and benefits of bystander interventions, both for themselves and others (Banyard et al., 2007; DeKeseredy et al., 2000; Foubert & Newberry, 2006; Katz, 1995).

*Hypothesis 2:* The self-reported likelihood of engaging in bystander interventions will change significantly over time but the rate of change will differ across participants.

Specifically, female participants, those who initially hold stronger beliefs about personal benefits of engaging in bystander interventions, those who initially hold stronger beliefs about the helpfulness of bystander interventions, and those who actively engage in the performance are expected to evidence greater rates of change in self-reported likelihood of engaging in bystander interventions. This hypothesis is based on literature suggesting that women generally have higher initial intentions to engage in bystander interventions and slightly higher effect sizes (Banyard, 2008; Banyard et al., 2007). This hypothesis is also based on research suggesting that bystander interventions are more likely when participants perceive more benefits than costs to engaging in bystander interventions (Banyard et al., 2007; DeKeseredy et al., 2000; Fritzsche, Finkelstein, & Penner, 2000) and when participants believe that bystander interventions will be effective (Banyard et al., 2007; Bowes-Sperry & Leary-Kelly, 2005). Finally, this hypothesis is also based on Augusto Boal's (1985) *Theatre of the Oppressed*, which emphasizes active rather than passive participation as an agent of attitudinal and behavioral change.

## Method

### Participants

Five hundred and nine students enrolled in two undergraduate Communication Studies classes participated in the study. The majority of the students were female (71%). Most participants were White (36.2%), Asian (24.6%), or Latino (20.3%). The remaining students were either multiracial (13.8%) or Black (5.1%). Most participants were Freshmen (64.9%) with the remainder fairly evenly divided between Sophomores (11.0%), Juniors (15.2%), and Seniors (8.9%). One quarter of the participants had a history of sexual victimization (24.8%) and 12.4% acknowledged perpetrating acts that qualify as rape. Over half of all participants either knew a rape survivor (55.3%) or knew a perpetrator (49.6%). Few participants were involved in either the Greek or athletic systems (11.4%).

### Measures

*Participant characteristics.* Students were asked about a variety of background characteristics, including age, gender, race/ethnicity, class standing (e.g., freshman, sophomore), and victimization/perpetration history.

*Active versus passive participation in the program.* Participants were asked to indicate how many times they called out a suggestion during the performance and how many times they

went up on stage to enact an intervention. For the purpose of this study, participants were categorized as having actively participated in the program if they called out a suggestion or went up on stage at least once. All other participants were categorized as passive observers.

*Personal benefits of engaging in bystander interventions.* Banyard's (2008) Decisional Balance Scale was used to measure personal benefits of engaging in bystander interventions. This scale consists of 11 items describing potential pros and cons of engaging in bystander interventions (e.g., "I like thinking of myself as someone who helps others when I can"; "I could get physically hurt by intervening"). In the original scale, participants rated how important each consideration was in their decision to intervene on a 5-point scale, ranging from *not important at all* to *extremely important*. The sum of the 6 "con" items was subtracted from the sum of the 5 "pro" items, resulting in an overall alpha level of .69 ( $M = 1.04$ ,  $SD = 5.79$ , with a range from  $-20$  to  $19$ ). In the current study, we modified this scale slightly by asking participants to rate how strongly they agreed or disagreed with each statement (1 = *strongly disagree*; 5 = *strongly agree*). Reliability for this modified version was calculated on pretest data and resulted in an overall alpha level of .69 ( $M = 0.07$ ,  $SD = 5.62$ , with a range from  $-17$  to  $18$ ).

*Self-reported likelihood of engaging in bystander interventions.* A shortened version of Banyard's (2008) Bystander Attitudes Scale was used to measure participants' willingness to engage in bystander interventions. In the original form, this scale presents participants with 51 bystander behaviors and asks them to rate how likely it would be for them to engage in each behavior on a 5-point scale (1 = *not at all likely*; 5 = *extremely likely*). Participants' responses are then summed to form a total scale score for each participant. Banyard (2008) reports an overall alpha of .94 for the full scale ( $M = 198.17$ ,  $SD = 27.77$ , with a range from 73 to 255). In the current study, this scale was shortened to 15 items (see Table 2); reliability for this shortened version was calculated on the pretest data and resulted in an overall alpha of .89 ( $M = 54.64$ ,  $SD = 10.35$ , with a range from 25 to 75).

*Helpfulness of bystander interventions.* We modified Banyard's (2008) Bystander Attitudes Scale (see description above) to include an additional column where participants indicated how helpful they believed each bystander intervention to be (1 = *not helpful at all*; 5 = *extremely helpful*). Reliability for this modified scale was calculated on pretest data and resulted in an alpha level of .87 ( $M = 60.51$ ,  $SD = 9.37$ , with a range from 27 to 75).

## Procedure

The performance and all data collection occurred during class. Students received course credit for participating in the program and completing three surveys (or for completing an alternate assignment). The first survey was completed during the 1st week of class. The interACT troupe then came to class during the following class period to conduct the performance. The posttest survey was then administered during the next class and the follow-up test was administered in class at the end of the semester (3 months later). Although the use of such large audiences is a departure from how interACT is typically conducted, we needed a large enough sample to ensure adequate statistical power for later analyses. Due to changes in class enrollment, attendance, and the decision to complete an alternate

assignment, not all students completed each survey or attended the performance. Of the 509 students who attended the performance, 457 completed a pretest survey, 480 completed a posttest survey, and 355 completed a follow-up survey. Results from a multivariate analysis of variance revealed no significant differences between participants who did and did not participate in the program, Wilk's  $\lambda = .99$ ,  $F(8, 437) = .57$ ,  $p = 0.81$ ,  $\eta^2 = .01$ , did or did not complete a pretest, Wilk's  $\lambda = .98$ ,  $F(8, 437) = .96$ ,  $p = .47$ ,  $\eta^2 = .02$ , did or did not complete a posttest, Wilk's  $\lambda = .98$ ,  $F(8, 437) = 1.38$ ,  $p = .21$ ,  $\eta^2 = .03$ , or did or did not complete a follow-up survey, Wilk's  $\lambda = .98$ ,  $F(8, 437) = 1.08$ ,  $p = .38$ ,  $\eta^2 = .02$ , on any of the nine demographic characteristics that were measured (gender, age, race, class, victimization history, perpetration history, knowing a victim, knowing a perpetrator, participating in the Greek or athletic system).

## Results

The goal of this study was to determine whether students who participated in the interACT Sexual Assault Prevention Program would increase their self-reported likelihood of engaging in bystander interventions over time. We were also interested in determining whether gender, level of participation in the program, and perceived benefits of engaging in bystander interventions would affect the rate at which self-reported likelihood of engaging in bystander interventions changed over time. Below, we provide basic descriptive information about our data and then address each of these hypotheses in turn.

### *Descriptive Data*

Means and standard deviations for each scale are provided in Table 1 and means and standard deviations for specific bystander interventions are reported in Table 2. As can be seen in these tables, most participants felt that engaging in bystander interventions would be effective in preventing rape, but ratings of personal benefits and the self-reported likelihood of engaging in bystander interventions were only moderate. Among the specific bystander interventions, participants were most likely to say they would walk a friend home from a party who has had too much to drink or speak up when they hear someone say, "She deserves to be raped."

As can be seen in Table 3, correlations between all of the scales were significant. Overall, the personal benefits scale was only weakly correlated with perceived helpfulness and self-reported likelihood of engaging in bystander interventions across all time points. In contrast, the correlations between helpfulness and self-reported likelihood of engaging in bystander interventions were much stronger as were the correlations between the same scale over time.

### *Hypothesis 1: Change in Perceived Benefits of Engaging in Bystander Interventions*

Although the first hypothesis predicted that participants would perceive more personal benefits after participating in the program, results of a repeated measures analysis of

**Table 1.** Mean Responses for Each Bystander Intervention Rating at Each Time Point

Scale	Pretest		Posttest		Follow-up	
	M	SD	M	SD	M	SD
Personal benefits	3.26 <sup>a,b</sup>	.51	3.30 <sup>a</sup>	.56	3.25 <sup>b</sup>	.55
Helpfulness	4.08 <sup>a</sup>	.60	4.33 <sup>b</sup>	.61	4.32 <sup>b</sup>	.58
Self-reported likelihood	3.70 <sup>a</sup>	.69	3.85 <sup>b</sup>	.73	3.89 <sup>b</sup>	.69

Note: Within each row, means with different superscripts are significantly different from one another.

**Table 2.** Means and Standard Deviations for Self-Reported Likelihood of Engaging in Bystander Interventions

Variable	Pretest		Posttest		Follow-up	
	M	SD	M	SD	M	SD
Walk a friend home from a party who has had too much to drink.	4.45 <sup>a</sup>	.78	4.59 <sup>b</sup>	.76	4.62 <sup>b</sup>	.70
If I saw a friend grabbing, pushing, or insulting their partner I would confront them.	3.49 <sup>a</sup>	1.07	3.69 <sup>b</sup>	1.04	3.69 <sup>b</sup>	1.01
If I saw a friend taking a very intoxicated person up the stairs to my friend's room, I would say something and ask what my friend was doing.	3.94 <sup>a</sup>	1.15	3.98 <sup>a,b</sup>	1.00	4.08 <sup>b</sup>	1.05
I hear an acquaintance talking about forcing someone to have sex with them. I speak up against it and express concern for the victim.	3.70 <sup>a</sup>	1.18	3.87 <sup>b</sup>	1.08	3.89 <sup>b</sup>	1.08
If I saw a friend grabbing, pushing, or insulting their partner I would get help from other friends or university staff.	3.44 <sup>a</sup>	1.14	3.72 <sup>b</sup>	1.11	3.70 <sup>b</sup>	1.08
Confront friends who make excuses for abusive behavior by others.	3.89 <sup>a</sup>	1.06	3.98 <sup>a,b</sup>	1.04	4.03 <sup>b</sup>	1.02
Speak up against racist jokes.	3.45 <sup>a</sup>	1.28	3.61 <sup>b</sup>	1.19	3.72 <sup>b</sup>	1.17
Speak up against sexist jokes.	3.47 <sup>a</sup>	1.29	3.66 <sup>b</sup>	1.22	3.78 <sup>b</sup>	1.16
Speak up against homophobic jokes.	3.53 <sup>a</sup>	1.24	3.67 <sup>b</sup>	1.24	3.75 <sup>b</sup>	1.18
Speak up against commercials that depict violence against women.	3.30 <sup>a</sup>	1.29	3.40 <sup>a,b</sup>	1.32	3.52 <sup>b</sup>	1.28
Speak up in class if a professor explains that women liked to be raped.	3.68 <sup>a</sup>	1.35	3.83 <sup>b</sup>	1.32	3.82 <sup>b</sup>	1.27
Speak up if I hear someone say "she deserves to be raped."	4.05	1.22	4.10	1.18	4.09	1.08
When I hear a sexist comment, I indicate my displeasure.	3.54 <sup>a</sup>	1.15	3.68 <sup>b</sup>	1.18	3.82 <sup>c</sup>	1.13
Someone I know has been accused of sexual violence. I keep any information I may have to myself. <sup>a</sup>	2.49 <sup>a</sup>	1.27	2.32 <sup>b</sup>	1.27	2.54 <sup>a</sup>	1.38
Educate myself about sexual violence and what I can do about it.	4.03 <sup>a</sup>	1.06	4.34 <sup>b</sup>	.93	4.35 <sup>b</sup>	.97

Note: Within each row, means with different superscripts are significantly different from one another.

<sup>a</sup>This item was reversed scored in scale calculations.

**Table 3.** Correlations Between Bystander Intervention Scales

Measure	1	2	3	4	5	6	7	8	9
1. Benefits 1	—	.24***	.26***	.64***	.21***	.29***	.57***	.17**	.29***
2. Helpfulness 1	—	—	.64***	.19***	.72***	.56***	.15**	.67***	.52***
3. Likelihood 1	—	—	—	.21***	.49***	.74***	.17***	.47***	.66***
4. Benefits 2	—	—	—	—	.24***	.33***	.66***	.15**	.28***
5. Helpfulness 2	—	—	—	—	—	.64***	.16**	.76***	.51***
6. Likelihood 2	—	—	—	—	—	—	.19***	.50***	.75***
7. Benefits 3	—	—	—	—	—	—	—	.16**	.24***
8. Helpfulness 3	—	—	—	—	—	—	—	—	.63***
9. Likelihood 3	—	—	—	—	—	—	—	—	—

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

variance revealed no significant changes in perceived personal benefits over time,  $F(2, 588) = 2.24, p = .11, \eta^2 = .01$  (see Table 1 for means and standard deviations). In contrast, our hypothesis that participants would perceive bystander interventions as more helpful in preventing rape was partially supported. Results of a repeated measures analysis of variance revealed significant increases in participants' ratings of bystander interventions as helpful,  $F(2, 608) = 57.38, p < .001, \eta^2 = .16$ . Pairwise comparisons suggest that this finding is driven primarily by changes in pretest and posttest scores (see Table 1).

### *Hypothesis 2: Differences in Change Trajectories*

The second hypothesis predicted that participants would rate themselves as more likely to engage in bystander interventions over time but that gender, personal benefits, perceived helpfulness, and level of involvement in the performance would predict different change trajectories. To test this hypothesis, a series of latent class growth models were estimated. Conceptually, latent class growth modeling starts by graphing changes in the dependent variable for each individual in the dataset (in this case, changes in self-reported likelihood of engaging in bystander interventions from pretest to posttest to follow-up). The various change trajectories are then compared with one another and grouped into "classes," representing the number of distinct patterns that exist in the data. If all of the participants exhibit the same pattern of change over time, only one "class" will emerge. If there are two distinct patterns of change, two "classes" will emerge. If there are three distinct patterns of change, three "classes" will emerge, and so on. Once these distinct patterns of change have been identified, a series of predictor variables can then be used to determine whether each "class" tends to have distinct characteristics (e.g., are there more women in one group than another?). The major benefit of latent class growth modeling is that all of these calculations are performed simultaneously (as is true of other adaptations of structural equation modeling), thereby reducing error associated with repeated analyses.

In the current study, we used latent class growth modeling to determine whether participants demonstrated significant increases in the self-rated likelihood of engaging in bystander interventions over time. Once it was determined that significant change, or “growth,” existed, we were then able to determine whether different patterns of change in the self-rated likelihood of engaging in bystander interventions existed among our participants. Finally, we were able to examine the characteristics of the different “classes” that emerged to determine whether different patterns of change were significantly associated with gender, level of participation, initial levels of perceived personal benefits, and initial levels of perceived helpfulness. All models were estimated using *Mplus* 6.0.

*Growth model and latent class analysis.* Results revealed significant linear growth over time (unstandardized coefficient = .10,  $z = 6.832$ , 95% CI [.07, .13],  $p < .05$ ), suggesting that self-reported likelihood of engaging in bystander interventions increased significantly over the three time periods. But results also revealed significant variability in the slope (variance = .056,  $z = 3.42$ , 95% CI [.03, .08],  $p < .05$ ), indicating that although self-rated likelihood of engaging in bystander interventions increased linearly, individuals changed at significantly different rates.

To determine whether there were specific “classes” (unobservable groups) of participants who evidenced distinct patterns of change in the self-reported likelihood of engaging in bystander interventions, we then compared separate models (i.e., a one-class model vs. a two-class model vs. a three-class model) to determine whether models with more than one class better represented the data. In all cases, goodness of fit was assessed with the log likelihood, BIC, entropy, Vuog-Lo-Mendell-Rubin likelihood ratio test, and the Lo-Mendell-Rubin adjusted LR (Muthén et al., 2002). As can be seen in Table 4, significant reductions in the log likelihood, AIC, and BIC occur when moving from a one-class to a two-class model, suggesting that the two-class model provides a significantly better fit to the data (i.e., there is less discrepancy between the two-class model and the data than there is between the one-class model and the data). Although the entropy was lower than one would hope (entropy = .635), both the Vuog-Lo-Mendell-Rubin likelihood ratio test and the Lo-Mendell-Rubin adjusted LR Test indicated a significant improvement over a single class (Vuog-Lo-Mendell-Rubin likelihood ratio test mean = 3.69,  $SD = 4.98$ ,  $p < .01$ ; Lo-Mendell-Rubin LRT test = 28.47,  $p < .01$ ), suggesting that a two-class model was a better fit. We then compared the two-class model to a three-class model, but the three-class model did not fit the data and failed to converge, suggesting that the two-class model provided the best fit to the data.

*Predicting rates of change.* After determining that the two-class model provided the best fit to the data, we then set out to identify predictors of these two classes. In accordance with our hypotheses, we entered four predictor variables into the model: (a) gender; (b) level of engagement in the performance; (c) perceived personal benefits of engaging in bystander interventions; and (d) perceived helpfulness of bystander interventions. As can be seen in Table 4, including these predictors in the model significantly improved the model fit (as indicated by the reduced log likelihood, Akaike information criteria [AIC], and Bayesian

**Table 4.** Fit Statistics for Latent Class Growth Models

Model	Log likelihood	dfs	AIC	BIC	Sample size adjusted BIC
Growth Model with 1 latent class and no predictors	-1,044.452	8	2,104.90	2,138.70	2,113.31
Growth model with 2 latent classes and no predictors	-1,029.453	11	2,080.91	2,127.38	2,092.46
Growth model with 2 latent classes and all predictors	-841.732	15	1,713.46	1,774.8	1,727.197

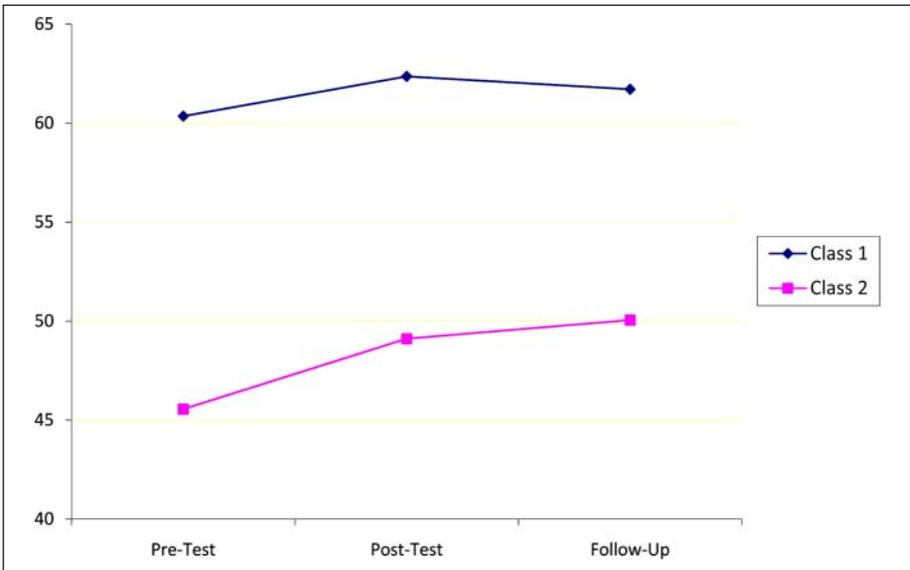
Note: AIC = Akaike information criteria; BIC = Bayesian information criteria.

information criteria [BIC]) and entropy = .711, suggesting that these variables provide important information that can further discriminate between the two classes of participants.

To determine the exact nature of the differences between the two classes, we then identified the specific participants that fell into each class. The final model contained 278 respondents in Class 1 and 163 respondents in Class 2. Ultimately, 92.2% of latent Class 1 was correctly classified, and 90% of latent Class 2 was correctly classified by our model (i.e., a two-class model with four predictors). Although both groups evidence linear change in self-reported likelihood of engaging in bystander interventions over time (latent Class 1 unstandardized coefficient = .06, 95% CI [-.012, .01],  $z = 2.50, p < .05$ , latent Class 2 unstandardized coefficient = .16, 95% CI [.09, .23],  $z = 4.65, p < .05$ .), the slope of latent Class 2 appears to be somewhat stronger. As can be seen in Figure 1, the difference is most evident in the change between posttest and follow-up. Whereas both groups demonstrate significant change from pretest to posttest, only those participants in latent Class 2 evidence continued improvement in self-reported likelihood of engaging in bystander interventions from posttest to follow-up.

We then took a closer look at the influence of our predictor variables. As can be seen in Table 5, latent Class 1 had a higher percentage of female participants, a higher percentage of participants who had actively engaged in the performance, and higher ratings of both personal benefits and beliefs about the helpfulness of bystander interventions. At a statistical level, however, only helpfulness ratings and gender significantly predicted latent class membership (helpfulness unstandardized coefficient = 4.79, 95% CI [-2.93, 7.00],  $z = 2.50, p < .05$ , gender unstandardized coefficient = 1.38, 95% CI [.16, 2.60],  $z = 2.21, p < .05$ ). These results suggest that proportionally more women fell into the pattern represented by latent Class 1. Conversely, 75% of the males in our sample fell into latent Class 2.

These results also suggest that participants whose self-reported likelihood of engaging in bystander interventions level off over time (latent Class 1) tended to have higher initial beliefs about the helpfulness of bystander interventions. Conversely, participants whose self-reported likelihood of engaging in bystander interventions continue to increase over time (latent Class 2) tended to have lower initial beliefs about the helpfulness of bystander interventions.



**Figure 1.** Latent class trajectories of change in self-rated likelihood of engaging in bystander interventions

**Table 5.** Predictors of Latent Class Membership

Class	% Female	% Actively engaged	Personal benefits	Helpfulness
			<i>M (SD)</i>	<i>M (SD)</i>
Latent Class 1	79.4	30.0	1.01 (5.75)	65.69 (6.01)
Latent Class 2	54.6	17.2	-1.56 (4.97)	51.67 (7.24)

## Discussion

In response to poor success rates reported for many rape prevention programs (Anderson & Whiston, 2005; Bachar & Koss, 2002), there has been an increased call for programs focused on bystander interventions (Banyard et al., 2007; Schewe, 2002). The utility of this approach has been demonstrated by a number of recent studies (Banyard et al., 2007, 2009; Foubert & Newberry, 2006; DeKeseredy et al., 2000; Katz, 1995; Moynihan & Banyard, 2008). The current study sought to add to this growing body of success stories by testing two specific hypotheses about the interACT Sexual Assault Prevention Program. Specifically, this study first hypothesized that participants would perceive more benefits associated with engaging in bystander interventions after participating in the interACT Sexual Assault Prevention Program. This hypothesis was only partially upheld. Although

results of two separate repeated measures analyses of variance did reveal significant increases in participants' ratings of bystander interventions as helpful in preventing rape (particularly from pretest to posttest), there were no significant changes in participants' perceptions of personal benefits associated with engaging in bystander interventions. Similarly, our second hypothesis was also only partially upheld. Consistent with our second hypothesis, results of a latent class growth model suggested that participants' self-reported likelihood of engaging in bystander interventions increased significantly over time, but the rate of change differed across participants. Specifically, our results suggested that there were two distinct groups of participants, one whose self-reported likelihood of engaging in bystander interventions leveled off from posttest to follow-up and one whose self-reported likelihood of engaging in bystander interventions continued to increase over time. Contrary to our hypotheses, the group that evidenced the most change consisted of a higher percentage of males and participants with lower initial ratings of the helpfulness of bystander interventions. Neither perceived personal benefits nor actively participating in the program appeared to affect the rate of change in self-reported likelihood of engaging in bystander interventions. Possible explanations for these findings are discussed below.

Consistent with our hypotheses, the current study not only noted substantial increases in participants' self-reported likelihood of engaging in bystander interventions after participating in the interACT Sexual Assault Prevention Program but also noted differences in the rate at which participants changed over time. One group consisted of significantly more women and participants who entered the program believing in the effectiveness of bystander interventions; this group reported a relatively high likelihood of engaging in bystander interventions at all three time points, but evidenced less change over time (particularly from posttest to follow-up, perhaps because of a ceiling effect). In contrast, the second group contained significantly more of the male participants and participants who started out with more moderate opinions about the effectiveness of bystander interventions; this group reported only a moderate likelihood of engaging in bystander interventions at pretest, but demonstrated substantial increases in the self-reported likelihood of engaging in bystander interventions at all three time points. These results suggest that bystander intervention programs may continue to have an effect over time, particularly for participants with lower initial beliefs about the efficacy of bystander interventions and weaker initial intentions to engage in bystander interventions. Future research is clearly needed to unravel the impact that bystander intervention programs such as interACT have on different types of participants, particularly for male participants who often evidence high levels of resistance toward traditional rape prevention programs (Berkowitz, 2002; Foubert & Credemey, 2007; Katz, 1995; Rich, Robinson, Ahrens, & Rodriguez, 2008; Rich, Utley, Janke, & Moldoveanu, 2010).

Contrary to our hypotheses, differences between participants who actively participated in the performance and those who merely observed the performance did not emerge. While such a finding might suggest that active participation is not necessary, the work of both Freire (1997) and Boal (1985) suggests otherwise. Indeed, Freire (1997) contrasts his critical pedagogy approach to a more traditional "banking" approach (wherein participants are given knowledge that they are supposed to store away for future use), arguing that true attitudinal and behavioral change can only occur when participants are actively engaged in

the learning process. Similarly, Boal (1985) emphasizes the transformative role of proactive performance, describing how the use of such techniques radically alters the theatrical space and enables lasting social and behavioral change. In the current study, we operationalized “active” participation as verbal or physical participation, but it is quite possible that participants who did not offer suggestions or enact interventions on stage were still cognitively engaged in the performance. Unlike more traditional “banking” pedagogies, the interACT performance strives to cognitively and viscerally involve all participants through a vivid, engaging, and interactive performance. The fact that an audience member does not choose to speak or enact an intervention (particularly in front of a large audience) does not mean that the participant is not actively engaged in generating solutions or seeing how different interventions play out on stage. Future research is therefore needed to uncover the various ways participants can be “actively” involved in the performance. Future research is also needed to examine the impact of the interACT performance on audiences of varying sizes. The interACT program is typically conducted with relatively small groups of participants (to provide a more intimate and participatory setting), but the performances on which the current study was based were conducted with much larger groups of participants to ensure adequate rates of survey completion. This difference may have affected the willingness of participants to call out suggestions or enact interventions on stage. Future research is therefore needed to further evaluate the impact of various forms of participation (ranging from cognitive to physical) among audiences of various sizes.

Future research is also needed on the impact of the performance on perceived personal benefits. Although the current study noted few changes in participants’ perceptions of personal benefits, the reason for this lack of an effect is unclear. The scale developers themselves report a lack of change over time in their Decisional Balance Scale (Banyard et al., 2007, 2009) and suggest a need for further research to improve the reliability of this scale (Banyard, 2008). But it is also possible that the types of beliefs measured by this scale are less malleable than other beliefs about bystander interventions. Indeed, many of the items in this scale tend to refer more to *other* people’s perceptions of the participants, a factor that is unlikely to change as a result of participants’ *own* participation in the program. While efforts to change social norms toward bystander interventions are clearly necessary (and there are good examples of prevention programs that seek to do so, see DeKeseredy et al., 2000 and Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003), such community-level changes are likely to take longer to institute, requiring a substantial amount of outreach and time for diffusion before they are reflected in evaluation results. Future research is therefore needed to both examine the reliability of the scale itself and to conduct longer term research on the impact of bystander interventions on social norms and beliefs.

Although the current study suggests that the interACT Sexual Assault Prevention Program is effective in increasing perceived helpfulness of bystander interventions and self-rated likelihood of engaging in bystander interventions, there are nonetheless a number of limitations that should be taken into consideration. First, the study was based on a convenience sample of undergraduates enrolled in two Communication Studies classes. While the resulting sample was ethnically diverse, further research is needed to determine the effectiveness of the interACT program with other populations. A second limitation

involves study design. The current study extended only to the end of the semester and did not include an experimentally manipulated control group. While the interACT program has been shown to be more effective than a control group in a pre/post-evaluation of the program (*deleted to ensure blind review*, Rich & Rodriguez, 2007), additional research is needed to compare the interACT program to a control group over a longer period of time. Finally, the current study is limited by a lack of information about changes in actual bystander interventions. Future research is clearly needed to examine changes in actual bystander behavior over time.

In the meantime, the results of the current study have important implications for sexual assault prevention programming across the county. First, this study adds to the growing body of literature suggesting that a bystander approach to sexual assault prevention is effective. By providing a positive, proactive role for all participants, bystander interventions have the ability to bypass resistance, change community and campus norms that promote violence, and engage a virtual army of engaged citizens in the fight against sexual assault (Banyard et al., 2004, 2009). As part of this effort, the current study provides support for the effectiveness of the interACT Sexual Assault Prevention Program, in particular. To date, the interACT troupe has conducted this performance over 150 times for thousands of audience members in different venues across the nation, including college campuses, housing projects, domestic abuse shelters, drug and rehabilitation centers, after-school programs, juvenile detention centers, and professional conferences and training programs. Creating allies across a broad swath of the population through the use of bystander intervention programs in these and other community settings has the potential to radically transform society. Continued efforts by the interACT troupe and other bystander intervention programs across the country are needed to achieve this goal.

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