

## Using Self-Determination Theory to Evaluate Bystander Intervention Programs

Paula M. Adams, Gitanjali Shrestha, Stephanie Roeter, Annelise N. Smith, Laura G. Hill  
Health & Wellness Services, Washington State University (padams@wsu.edu, 509-335-7884)

Interpersonal violence (IPV) (e.g., sexual assault, stalking, dating/domestic violence) is prevalent. Bystander intervention training programs are a popular approach to reducing IPV, but research is limited about effective program components and evaluation methods (Banyard & Moynihan, 2011). Specifically, a clear theoretical foundation to guide program development and evaluation has not been extensively tested.

The basic challenge in evaluating bystander intervention training programs is linking program participation to behavior change. Most evaluations of these programs are based simply on participant satisfaction ratings or include multiple, cumbersome scales, most of which are not clearly linked to behavior change. Ideally, we would have a theoretically-based, easy-to-use tool to assess the likelihood of behavior change after participation in a bystander intervention training program.

Self-Determination Theory (SDT) is a theory of motivation that has been used to explain multiple health-related behaviors (Ryan, Patrick, Deci, & Williams, 2008), and previous research (Adams & Hill, 2013) has shown that SDT-based measures successfully predicted pro-social bystander intervention behaviors. Specifically, SDT indicates that competence and autonomous motivation are important in sustaining behaviors. See Figure 1. (*Autonomous motivation* is performing behaviors because of enjoyment or internal motivations consistent with core values). Thus, SDT may be a good theoretical framework for assessing the effectiveness of Green Dot and other bystander interventions.

The purpose of the present project was to test the usability of an SDT-based evaluation tool that could be used to assess the likelihood of behavior change resulting from any bystander intervention program, regardless of program components.

Participants in The Green Dot bystander intervention program:

- Explored how their core values align with prevention of violence.
- Learned how to recognize and overcome barriers to action.
- Determined the difference between healthy and abusive behaviors.
- Practiced possible intervention options.

### Hypotheses:

- Bystander intervention training, Green Dot, will increase participants' scores on SDT scales.
- At post-test, participants who reported performing intervention behaviors will have higher SDT scale scores than those who did not report intervention behaviors.

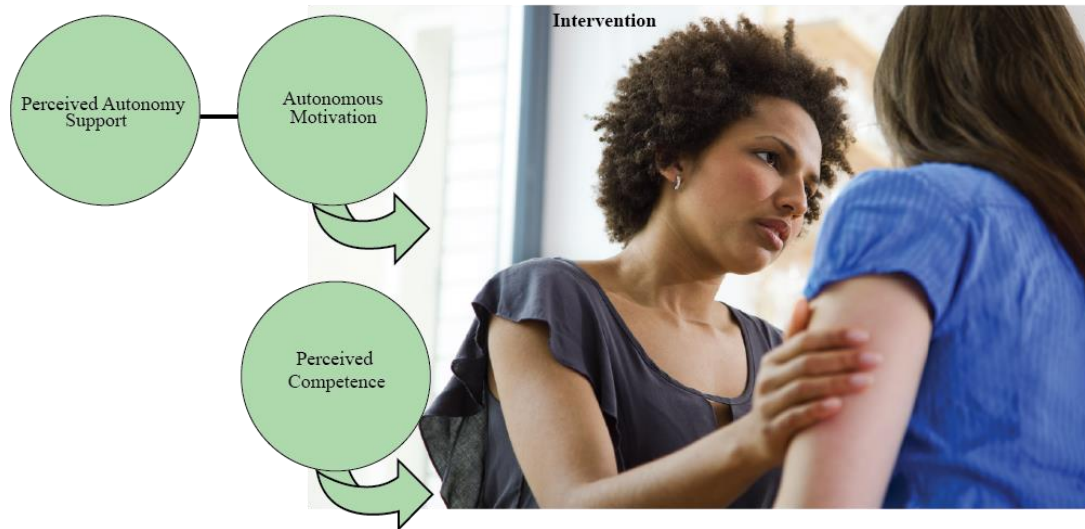


Figure 1. Self-Determination Theory based model of bystander intervention

### Methods

We gave Green Dot participants at a large university in the Pacific Northwest ( $N = 326$ ) a pre-test questionnaire immediately prior to training and a post-test three months later. We collected 326 completed pre-tests, 180 post-tests, and were able to match pre and post-tests for 144 participants (44% response rate). Participants in the matched data were 97% female, 97% ages 18-23, and 77% Caucasian.

In addition to self-reports of bystander intervention behaviors, we included SDT measures adapted to address bystander intervention in IPV. Participants indicated level of agreement with SDT-based items on a 7-point scale ranging from 1 (*not at all true*) to 7 (*very true*) on the following scales:

- Treatment Self-Regulation Questionnaire (TSRQ): six items (Cronbach's  $\alpha = .88$ ) that assessed the level of autonomous motivation to perform bystander intervention behaviors.
- Perceived Competence Scale (PCS): four items (Cronbach's  $\alpha = .94$ ) that assessed perceived level of competence to perform bystander intervention behaviors.

- Health Care Climate Questionnaire (HCCQ): six items (Cronbach's  $\alpha = .94$ ) that assessed the degree to which the campus climate was perceived as autonomy supportive versus controlling in relationship to bystander intervention.

At post-test, participants reported whether they had intervened in a situation of interpersonal violence either directly; by asking for help; or through some other method. A positive response to any of these three questions was coded as intervening.

## Results

After Green Dot training, a t-test comparison of participants' pre and post-test scores showed statistically significant increases in all SDT scale scores. See Table 1. Additionally, at post-test, a t-test comparison showed a statistically significant difference in SDT scale scores between those who intervened and those who did not. See Figure 3.

Table 1.

### *Comparison of Pre and Post-Test SDT Scale Scores*

	<i>Pre-Test</i>	<i>Post-Test</i>	<i>t</i>	<i>d</i>
TSRQ	5.31	5.65	3.83*	.33
PCS	5.20	5.91	6.89*	.67
HCCQ	4.55	5.25	6.96*	.58

*Note.* \* $df = 140$ ,  $p = .000$

Table 2.

### *Comparison of SDT Scale Scores of Participants Who Intervened Vs. Did Not Intervene*

	Intervention Behaviors		<i>t</i>	<i>df</i>	<i>p</i>
	Present ( $n = 137$ )	Not Present ( $n = 38$ )			
TSRQ	5.75	5.30	2.590	171	.010
PCS	5.98	5.46	2.958	172	.004
HCCQ	5.41	4.87	2.668	173	.008

### Discussion & Future Directions

- As predicted, scores on SDT-related measures improved after training, and participants who reported performing intervention behaviors had higher scores on SDT-related measures.
- This study lacked a control group. Increases in scores may be due to maturation; however, analyses of pre-test scores showed no significant differences (SDT-related scores) by age or year in school.
- Participants in this program were primarily female college students. Previous research showed statistically significant differences between males and females in some SDT scale scores. Future research should examine if trainings are equally effective for males and other populations.
- SDT may be a useful theoretical foundation to guide development and evaluation of bystander intervention trainings. Future studies should continue to clarify the link between SDT constructs and intervention behaviors, including proactive behaviors for social change to reduce the likelihood of violence. Additionally, the tool should be tested in additional settings for multiple types of bystander intervention programs.
- An SDT-based tool may be an excellent choice for evaluating multiple bystander intervention programs. Because the tool is grounded in a theoretical foundation that can successfully predict pro-social bystander behaviors, it could eliminate the need to assess actual behaviors. Additionally, a unified tool could provide information about comparative effectiveness of multiple types of bystander intervention training programs.
- The present study highlights the importance of addressing motivation in bystander intervention trainings rather than relying on increased knowledge and skills to change behaviors.

### References

- Adams, P. M. & Hill, L. G. (2013) Application of Self-Determination Theory to bystander intervention programs. Poster presented at the 2013 annual meeting for The Society of Prevention Research.
- Banyard, V. L., & Moynihan, M. M. (2011). Variation in bystander behavior related to sexual and intimate partner violence prevention: Correlates in a sample of college students. *Psychology of Violence*, 1(4), 287-301. doi: 10.1037/a0023544
- Ryan, R. M., Patrick, H., Deci, E. L., & Williams, G. C. (2008). Facilitating health behaviour change and its maintenance: Interventions based on self-determination theory. *The European Health Psychologist*, 10(1), 2-5.