

Preventing Excessive Alcohol Consumption: Responsible Beverage Service Training

Summary Evidence Table

Author, Year -Design suitability; -Quality of Execution; -Location	Population characteristics: <ul style="list-style-type: none"> • Sample size • Participation rate • Type of participants • Type of establishment 	Training Characteristics: <ul style="list-style-type: none"> • Curriculum • Online/offsite/onsite • Materials used • Intensity of the training 	Intervention Characteristics: <ul style="list-style-type: none"> • Mandatory/Voluntary • Management support • Presence of local pre-existing laws • Incentives/ fees 	<ul style="list-style-type: none"> • Author • Design • Execution • Location 	Follow - Up period
Russ, 1987 - Greatest (CBA) -2 (Good) - USA NR	- n(16); - PR= NR; - waiters and waitresses; - Two local taverns;	- Covered all components of the training; - Onsite on consecutive weekends; - Video tapes, leader facilitated discussions, server role play segments; - 6 hours;	- TIPS training - Voluntary; - Not mentioned; - NR; - NR	<p><u>Change in practices</u></p> <p><i>Overall practices:</i> (Total No. of server interventions by 6 consecutive drinks, within two hour period): Pre training (n=24): 18 Trained servers (n=16):55 Untrained servers(n=9): 7 Increase in frequency of server interventions toward pseudopatrons per 2-hour period by trained servers.</p> <p><u>Change in alcohol consumption:</u></p> <p><i>Exit BAC: (average exit BAC)</i> Pre training : 0.096±.028 Served by untrained servers: 0.103±0.033 Served by trained servers: 0.59±0.019 ES between trained vs. untrained= -0.044 (95% CI= 0.022, 0.066)</p> <p><u>Change in proportion of intoxicated patrons leaving the bar:</u></p> <p><i>% of pseudo patrons leaving the bar legally drunk (BAC ≥0.10):</i> Pre training: 37% Served by untrained servers: 45% Served by trained servers: 0% RR: -93.8%</p>	Pre training Post training

<p>Saltz, 1987 -Greatest (CBA); -4 (Fair) -Navy base, USA</p>	<p><i>Establishments:</i> Navy enlisted men's clubs (n=2, 1 intervention and 1 control). <i>Employees:</i> n= 16; -PR: NR; - Waitresses, bartenders, food servers, security staff, and night managers; - Navy enlisted Clubs</p>	<p>-Covered all key components; -Onsite; - Lectures and role playing; -18 hours in 5 week period</p>	<p>Server Intervention Program: included development of new and revised management policies - Voluntary; -Yes; - Dram shop law; -NR</p>	<p><u>Change in alcohol consumption:</u></p> <p><i>1. No. of drinks consumed:</i> Intervention Site Pre test= 5.7; Post test= 4.9; ES= -0.1 Comparison Site: Pre test= 6.2; Post test= 5.5 (Program had no effect, although consumption at test site was dropped in post test, but did not drop more than comparison site)</p> <p><i>2. Rate of consumption (drinks/hr.)</i> Intervention Site Pre test= 3.5; Post test= 2.2; ES= -0.8 Comparison Site: Pre test= 3.2; Post test= 2.8 (Drop is greater in at test site, the test site started at higher rate, its rate dropped below the comparison site at post test)</p> <p><u>Change in proportion of intoxicated patrons leaving the bar:</u></p> <p><i>% of customers with BAC (% males)</i> Intervention Site Pre test= 33; Post test= 21; Absolute (-11%) Comparison Site: Pretest= 30; Posttest= 29 RR: -34.17 (-50.28, -12.82)</p>	<p>3-5 months</p>
<p>McKnight, 1991 -Greatest (CBA); -1 (Good); -8 states - Louisiana; Michigan; Pennsylvania; Texas; Massachusetts; Delaware; Iowa; Washington;</p>	<p>- Intervention: n=1,079 (876 servers and 203 managers) <i>Establishments:</i> n=100 establishments in eight states across the country; -PR: 100%; - Servers and managers; - licensed drinking establishments;</p>	<p>-Covered all basic components of training; - Offsite, from each establishment only one or more employees were invited to participate; - Didactic, videos, discussion, and role play; -6 hours; 1 day for owners and managers; 1-2 days for servers;</p>	<p>Program of Responsible alcohol service - Voluntary; -NR; - Dram shop law in Louisiana, Massachusetts, and Pennsylvania? - Certificate of recognition signed by local official was offered to the participating establishments sending ≥80% of their staff</p>	<p><u>Policy Changes</u> (self-reported) (n=114) Pre = .58±.12; Post: .65±.11 Diff.= 0.07 (7% increase in adherence to the recommendation policies) P= <.01</p> <p><u>Behaviors/Practices</u></p> <p><i>1. Overall practices (Self reported)</i> (n=394)- Self-reported frequency of 22 responsible service practices Pre: 3.13±.67 ; Post: 3.50±.68</p>	<p>12 months</p>

Diff. = 0.37 increase of mean scale score
P= <.01

2.Practices towards pseudo- intoxicated patrons:(Observed)

Intervention:

	Pre (%) (320 obs.)	Post (%) (331obs.)	Diff
None	85.6	73.1	-12.5
Partial	9.4	19.9	+10.5
Full	5.0	6.9	+1.9

Control:

	Pre (%) (459 obs.)	Post (%) (470 obs.)	Diff.
None	83.4	82.6	-0.8
Partial	11.3	13.0	+1.7
Full	5.2	4.5	-0.7

2.6 % pt. increase in refusal to serve intoxicated patrons

3.Server intervention towards actual drinking patrons:

Intervention:

	Pre(%)	Post(%)	Diff(%)
None	97.4	90.8	-6.6
Partial	2.6	6.1	3.5
Full	0.0	3.1	3.1

Control

	Pre(%)	Post(%)	Diff(%)
None	94.5	95.1	.6
Partial	5.5	4.9	-.6
Full	0.0	0.0	0.0

3.1 % pt. increase in refusal to serve intoxicated patrons

<p>Saltz, 1991; - Greatest (CBA); -4 (Fair); - Santa Cruz and Monterey, California;</p>	<p>-(n=4) (2 establishments from each site) 1- commercial program 1-Intensive program 2(comparison)- one from each site; - <u>PR</u>: Santa Cruz= 100% Monterey= 60%; - servers and managers; - commercial establishments</p>	<p>- Commercial program: trained on Dram shop liability laws, detection of intoxication, handling of intoxication Intensive program: Covered all components; -NR; - Lectures, videos, and role playing; - Commercial program: 6 hours Intensive program: 2, three hour sessions;</p>	<p>- RBS training (Commercial program and Intensive program); -Voluntary; -Yes (more at Santa Cruz); -NR; -NR</p>	<p><u>Change in alcohol consumption:</u></p> <p><u>1. Total Alcoholic Drinks (observed)</u> Mean of total drinks consumed(S.D.) Santa Cruz (N=6499) Pre: 2.59 (1.58) Post: Intensive 2.24 (significant reduction of 0.35 of a drink) Commercial: 2.48 (reduction of 0.11 of a drink) Monterey (N=3708) Pre: 2.63 (1.64) Post: Intensive 3.33 Commercial: 2.58</p> <p><u>2. BAC(observed)</u> Mean of BAC at the end of the observation period (S.D.) Santa Cruz (N=6499) Pre: 0.05 (0.039) Post: Intensive 0.041 (decrease of 0.009) Commercial: 0.047 (reduction of 0.003 of a drink)</p> <p>Monterey (N=3708) Pre: 0.04 (0.033) Post: Intensive 0.04 Commercial: 0.04 (No change)</p> <p><u>Change in proportion of intoxicated patrons leaving the bar:</u></p> <p><u>% of Intoxication patrons (observed):</u></p> <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td colspan="2" style="text-align: center;"><u>Santa Cruz</u></td> </tr> <tr> <td></td> <td style="text-align: center;">Pre</td> <td style="text-align: center;">Post</td> </tr> <tr> <td>Intensive:</td> <td style="text-align: center;">16</td> <td style="text-align: center;">11</td> </tr> </table>		<u>Santa Cruz</u>			Pre	Post	Intensive:	16	11	<p>Pre test: June, 1988 every Friday (Santa Cruz) August, 1988 (Monterey)</p> <p>Post: November, 1988- March, 1989(both sites)</p>
	<u>Santa Cruz</u>													
	Pre	Post												
Intensive:	16	11												

<p>Lang, 1998 -Greatest (CBA); -3(Fair); -City of Fremantle(for intervention) City of Northbridge (for control), Australia</p>	<p>N=144(24 managers, 120 staff) n= 88 (12 managers, 76 staff) 61%participation rate Establishments: <i>Fremantle area: (N= 50)</i> met the eligibility criteria n = 7; NR; Managers and staff; Nightclubs and hotels</p>	<p>-Only 3 components of the training were covered: •Licensing laws •effects of alcohol •signs of intoxication; -Onsite; -NR; - Total 7 training sessions of 1-2 hours each</p>	<p>Responsible service training program; -Voluntary; -NR; -NR; - regular hourly wages ~</p>	<p><u>Policy Changes:</u> <i>(Risk assessment of individual premises- mean total scores on policy checklist- max. possible score= +2, min. possible scores= -2)</i> <i>Intervention</i> <i>Pre-test= -0.7; Post-test= 0.9</i> <i>Control</i> <i>Pre-test= -1.8; Post-test= -1.8</i> <i>Net change = 1.6 points increase in mean total scores</i></p> <p><u>Behavior/Practices changes:</u></p> <p><u>1. Intoxicated: (#refusal of service to drunk patrons)</u> <i>Intervention:</i> <i>Pre: 1/11 visits=9.09%</i> <i>Post: 1/13 visits=7.7%</i> <i>FU: 3/14= 21.24%</i> <i>Control</i> <i>Pre; 1/14 visits = 7.14%</i> <i>Post: 1/12 visits= 8.33</i> <i>FU: 1/14 visits= 7.14%</i> <i>Net Change=</i> <i>FU1 = 2.5 absolute % pt. decrease in refusal to serve intoxicated patrons</i> <i>FU(3m) = 12.15% absolute % pt. increase in refusal to serve intoxicated patrons</i></p> <p><u>2. Practices towards underage</u> <i>Underage: # of ID checked</i> <i>Intervention</i> <i>Pre-test= 5 (Y), 19 (N)= 20.83%</i> <i>Post-test= 7 (Y), 17 (N)=29.16%</i> <i>Follow-up= 8 (Y),16(N)=33.33%</i> <i>Control</i> <i>Pre-test= 10(Y), 14 (N)=41.66%</i> <i>Post-test= 9 (Y), 15 (N)=37.5%</i> <i>Follow-up= 11 (Y),13(N)=45.83%</i></p> <p><i>Absolute change: 12.5% and 8.3% increase in ID checks after the training during FU1 and FU2 respectively.</i></p>	<p>FU: 3</p>
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				<p><u>Change in proportion of intoxicated patrons leaving the bar:</u></p> <p><u>%of patrons with BAL >0.08:</u> <i>Intervention</i> Pre-test= 52; Post-test= 37.1 3 m follow-up = 26.9 <i>Control</i> Pre-test= 34.8; Post-test= 28.6 3 m follow-up = 24 Relative change: FU1= -13.42 (-29.98, 7.05) FU2= -24.99 (-41.7, -3.5)</p>	
<p>Buka, 1999; -Least (Before and after) Least (Cross-sectional survey with control); -4 (Fair); -Rhode Island</p>	<p><u>Prospective cohort study:</u> N= 531 (All licensed beverage service establishment personnel from total 80 establishments) n=324 PR: 61% <u>Cross-sectional study:</u> Establishments : Intervention Community N= 76; n=43; PR: 84.3% Subjects: 3 servers were selected from each establishment. Intervention N=153 ; n= 106 ; PR= 69%; -Managers, bartenders, waiters, and waitresses; -Bars, restaurants, private clubs, and men's bars</p>	<p>-Basic components covered; -Face to face training in a group of 5-15 servers in each group; video tapes, manuals were used; -5 hour sessions, total 24 training courses;</p>	<p>Responsible Alcohol Service developed by National Highway Traffic Safety Administration (NHTSA); Voluntary; Not clear; Dram shop laws by Rhode Island Liquor Liability Act; None</p>	<p><u>Behavior/Practices changes:</u></p> <p><u>Overall behavior: (self-reported), (Mean DSBI range 1-5- average frequency of desired services employed)Comm.</u> Intervention (n= 106) 3.59±0.74 Comm. A (n=56) : 3.59±0.61 Comm. B (n=49): 3.24±1.65 Increase in desired behavior: 2 pts (esp. toward young patrons) P= 0.06</p> <p><u>Behavior towards young patrons (Checking IDs of young patrons)</u> Cross sectional survey: Comm. Intervention (n= 106) : 3.42±1.18 Comm. A (n=56) : 3.22±1.00 Comm. B (n=49): 3.08±1.02 P=0.11 { Mean DSBI for intervention comm. was significantly greater than mean DSBI for comm. A&B combined. (P<0.05)}</p>	<p>Pre: 1987 FU 1: 1989, 15 months post training FU2: 1991, 4 years after the training</p>

<p>Toomey 2001,</p> <ul style="list-style-type: none"> - Greatest (CBA); -1 (Good); -Major Metropolitan area of Minnesota 	<ul style="list-style-type: none"> - n=5 bars (9 matched control bars); -Participation rate 50%; - Owners and managers of bars; - Bars (college bars, suburban bars, urban bars, high risk bars, night clubs) 	<ul style="list-style-type: none"> - 5 on site, one-on-one consultation sessions ; - Consultation and written materials, video tapes; -10 hrs. (1-2 hrs. in 5 weeks) 	<ul style="list-style-type: none"> - Project ARM: Alcohol Risk Management to Prevent Sales to Underage and Intoxicated Patrons; - voluntary; -Yes; - NR; - \$ 300 	<p><u>Policy Changes:</u> (Mean±SD) (self report) (Adherence to 19 recommendation policies) Pre= no written policies (most establishments) Post= adoption of 14-18 policies in all 5 bars</p> <p><u>Behavior/Practices changes:</u></p> <p>1) Ever sold to <u>pseudo- intoxicated patrons:</u> Baseline (Pre) After (Post I): I = 68.4% I = 40.0% C = 70.1% C = 72.9% Absolute change: 31.2 % pt. increase in refusal to serve intoxicated patrons</p> <p>2)Ever sold to underage patrons: <u>Sales to underage customers:</u> Two visits were made by an underage buyer to each establishment during each of two survey periods (pretest, posttest), with a single purchase attempt at each visit. (1 = sold, 0 = not sold) Baseline (Pre) After (Post): I = 46.0% I = 42% C = 48.0% C = 49.4% Absolute change: 5.4% increase in ID checks (note: ID checks/ refusal to sell rates calculated by the conversion of purchase rates of underage patrons)</p>	<p>Pre: 2 weeks before training Post: 2 weeks after training</p>
<p>Toomey 2008;</p> <ul style="list-style-type: none"> - Greatest (RCT); -2 (Fair); -Mid western city 	<ul style="list-style-type: none"> - Establishments: (N= 431) n= 231 (122 – full-ARM; 109 ARM-Express as control); - PR: 89.6%; - Managers/ Owners; - Bars, and restaurant; 	<ul style="list-style-type: none"> - State laws and importance of written policies; - On site, one-on-one consultation sessions - Reading materials, discussions, and handouts - 4 sessions, 1-2 hrs. each; 	<ul style="list-style-type: none"> - Voluntary; - NR; - Some other_ training offered by the state's alcohol retail association; -\$100 for participation 	<p><u>Policy Changes:</u> (self- reported)</p> <p>(Adoption of 18 recommendation policies) On average, establishments selected 13 of 18 recommended policies. Non-significant increase in adoption of recommended policies.</p> <p><u>Behavior/practices changes:</u> <u>1.Propensity to sell alcohol to obviously intoxicated patrons:</u> Pseudo-intoxicated alcohol purchase attempts made by 14 actors (7 males and 7 females; aged 21-61 yrs. Mean age 48) Baseline 74% 70%</p>	<p>(FU) Baseline FU1: 1 month FU2: 3 months</p>

				<p>FU1 61% 74% p= 0.06 (baseline to FU1) FU2 75% 82% p= 0.21 (baseline to FU2)</p> <p><i>Absolute change: 17% and 11% increase in refusal to serve intoxicated patrons in FU1 and FU2 respectively.</i></p>	
<p>Johnsson, 2009 -Greatest (RCT); -2 (Good); -Lund University campus, Sweden</p>	<p>- <i>Participants:</i> N=1,200 n: 40 <i>Establishments:</i> n=6; -PR= 100%; -40 bartenders (students) -University pubs</p>	<p>-Covered all components of the training; -On site; - Small and large group discussions; -12 hours long training consisting of 5 lectures</p>	<p>-Educational program based on alcohol Skills Training program (ASTP) manual and Sweden version of RBS; -Voluntary; -NR; -NR; - Servers were given free beer as incentive for his/her services??</p>	<p><u>Change in alcohol consumption:</u></p> <p>1. <u>BAC</u> (60 measurements were taken per bar in two hours' time on weekdays between 11 p.m. to 1-2 a.m.)</p> <p>Baseline: (664 measurements) Intervention group: (n=363) 0.086(0.052) Control group: (n=301) 0.080(0.050)</p> <p>FU1: (658 measurements) Intervention group: (n=360) 0.082(0.53) Control group: (n=298) 0.087(0.51) Net change: -0.011</p> <p>FU2: (593 measurements) Intervention group: (n=338) 0.077(0.60) Control group: (n=255) 0.075(0.52) Net change: 0.004</p> <p><u>Change in proportion of intoxicated patrons leaving the bar:</u></p> <p><u>%Subjects with BAC >0.1%</u> Intervention group: Pre: 40% (n=147) 1 month FU: 39% (n=140) 5 month FU: 29% Control group:</p>	<p>Baseline: before the training FU 1- one month FU2 – 5 months</p>

				Pre: 34% (n=102) 1 month FU: 41% (n=121) 5 month FU: 29% Relative change: FU1(1 m): -19.14 (-33.06, -2.33) FU2 (5m): -15.00 (-34.1, 9.62)	
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