Behavioral Community Psychology

Original concept of “community psychology”: Alternative approach to practice of clinical psychology


Current usage of “BCP”: Use of behavioral research methods or the application of behavioral techniques to examine common social problems found in typical community (noninstitutional) settings

Some Examples
- Environmental preservation (ecology): Littering, recycling, energy consumption
- Health care: Health screening, exercise, diet programs
- Crime prevention: Theft reduction, delinquency prevention, police
- Safety: Speeding, seat belt usage, DWI
- Program evaluation: Seat belt legislation, contingent food stamp programs
- Consumer affairs: Food price posting, courteous service

Van Houten et al. (1985) “Large-scale reductions in speeding and accidents in Canada and Israel: A behavioral ecological perspective”

General focus: Effects of posted feedback to drivers on speeding behavior

Questions:
- Would FB signs + enforcement remain effective at multiple sites?
- Would multiple signs affect speeding on nearby streets?
- Is effectiveness of FB signs related to site characteristics?
- Do FB signs reduce accidents as well as speeding?
- Would the program be effective in another country?

Study 1: Procedures
Participants: Drivers traveling 12 roads in Dartmouth, NS
DV:
- Driving speed, measured by hand-held radar gun (location?)
  High-volume streets: 200 vehicles, M to F, 9 am to 4 pm
  Low-volume streets: ? vehicles, weekdays 45 min per day
  Reliability: 2 sessions/condition/site, agreement = ± 2km/hr
Feedback signs:
- “Drivers not speeding last week = %. Best record = %”
  Based on % ≤ 15km/hr over limit on one randomly selected day
Experimental design: multiple baseline and reversal
- 4 paired sites (other direction measured for gen.) + 1 saturation
- 4 unpaired sites + 1 saturation
- No signs at 4 additional unpaired sites (generalization)
- ABAB at 4 paired and 4 unpaired sites
Sign location?
Study 1: Results
% drivers speeding (>/= 10, >/= 15, >/= 20 km/hr over limit):
Reductions on all measures at 7 of 8 sites, w/ reversal effect
No change at untreated paired or unpaired sites (no generalization)
Saturation sites?
Site characteristics:
   Sign effectiveness correlated with intersections and residences
   No correlation between sign effectiveness and traffic volume
Accident analysis:
   7 sites showing change: Accidents Δ- 42% (2nd posting vs. same months previous yr)
   Dartmouth overall: Accidents Δ- 15%

Study 2: Procedures
Participants: Drivers traveling 14 roads in Haifa, Israel
DV:
   Measurement and reliability same as in Study 1
   100 vehicles (3 randomly selected streets), M to F, 9 am to 4 pm
   Based on % >/= 15km/hr over limit on one randomly selected day
Experimental design: multiple baseline
   Feedback signs:
   Posted 500 m ahead of radar, similar to Study 1, plus:
   Speed limit, “Israeli Police,” emblem, “Let’s prevent accidents”
   Special Programs:
   Warning and info flyer given to speeders
   Thanks, certificate, pen given to nonspeeders (3 streets only)
   Both programs implemented 1.5 hr/day initially, then faded
   Note: Warning program used on all 14 streets (p. 91); how was Thanks program used w/o warning
   program on 2 streets (p. 92)?

Study 2: Results
% drivers >/= 60, >/= 70 km/hr (3 typical streets):
Reductions on both measures at all 3 streets
Injury accident analysis:
   Δ- 65% (vs. same months previous year)
   Δ- 64% (same time, other side of streets)
Other: Thanks program aversive to those stopped and possible S^p for punishment to those not stopped

Implications and Extensions
Major contributions:
   Large-scale replication of effectiveness of feedback signs
   Analysis of accidents, generalization, and site characteristics
Limitation:
   No generalization (other side of street or untreated streets)
Extensions:
   Effects of feedback signs on other driver behavior (e.g., stopping at intersections)
   Effects of other types of S^p’s (fake radar traps?)