

Finding a Few Good People: Strategic Recruiting Using Marketing and Vocational Behavior Theory

Joseph Luchman / Fors Marsh Group LLC and George Mason University
Jennifer Gibson, Brian Griepentrog & Sean Marsh / Fors Marsh Group LLC

PURPOSE

- > Strategic recruitment is important for organizational strategy (Breugh, 2008)
- > Identifying “who” and “where” to recruit optimizes finite HR resources
- > Strategic recruitment is underresearched and practices are undocumented
- > Strategic recruitment needs to be guided by theory and tied to organizational goals
- > The current study integrates marketing and vocational behavior research
 - We propose geographic (zip code) data represent social processes
 - Zip code-level social processes can predict aggregate vocational behavior and guide HR resource expenditure
 - Focus of current study is on Military recruitment

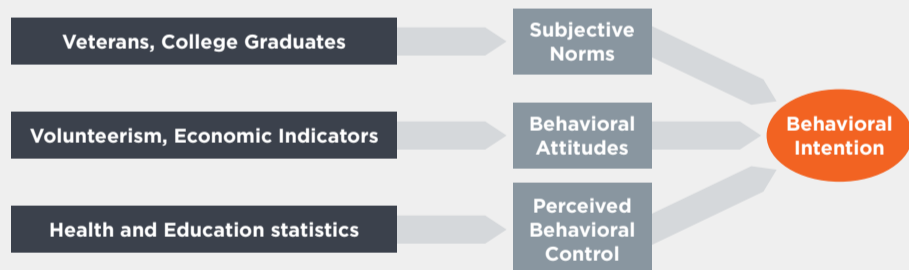


MARKETING METHODS

- > Database Marketing (DBM; Roberts, 1997) has a single guiding principle:
 - Consumer behavior is similar within small geographic areas and is predictable using characteristics of those areas
- > Employees can be conceptualized as *internal customers* (e.g., Mohr-Jackson, 1991)
- > Marketing methods can be generalized to find potential internal customers

VOCATIONAL BEHAVIOR THEORY

- > Theory of Planned Behavior (TPB; Ajzen, 1991) suggests geographic social processes
- > TPB-based data at the zip code-level can:
 - Predict location of potential recruits
 - Provide information about why recruit would consider job (e.g., normative influences)



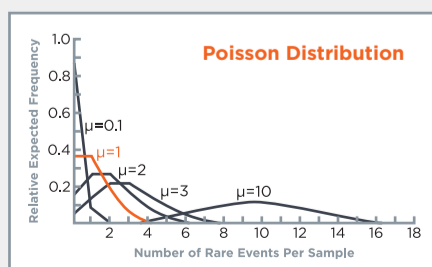
METHOD

- > Data at zip code level
- > Relatively small level of analysis—specific recommendations
- > Minimizes within-group and maximizes between-group variance
- > Obtainable from market research firms (e.g., Nielsen®), governmental surveys (CPS), and Department of Defense (enlistment records)
- > Predictor-criterion relationship is lagged one year
 - Zip code “conditions” in 2006 predicting 2007 Army enlistment
 - Two and three-year lags also evaluated

- > Model was estimated using zero-inflated Poisson (ZIP) regression

- > Army enlistment is low base-rate (i.e., many zip codes have 0 enlistments; hence zero-inflated)

- > Predictors estimated with ZIP regression
 - Logistic or *inflation* component predicts probability of obtaining no enlistments - “opting out” process
 - Poisson or count component predicts number of accessions for zip codes unlikely to “opt out”

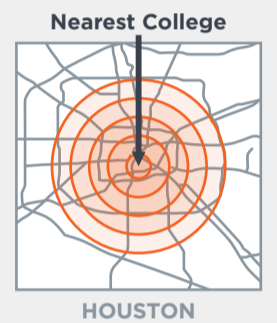
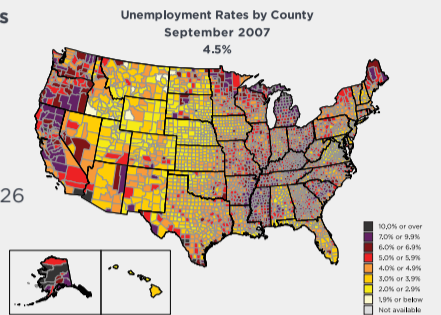


- > Model cross-validation

- Weights from 2006-2007 model applied to 2007-2008 data

IMPLICATIONS AND FUTURE DIRECTIONS

- > Recruitment factors were strongest predictors
 - Army recruiter presence $\beta^* = 1.74$
 - Marine Corps recruiter presence $\beta^* = 0.70$
- > Economic factors also strong predictors
 - Unemployment $\beta^* = 2.01$
 - Aggregate household buying income $\beta^* = 0.26$
- > Alternatives to enlistment important
 - Government jobs per capita $\beta^* = 16.8$
 - Proportion of college graduates $\beta^* = 2.95$
- > Interests and urbanicity (rural vs. urban area)
 - Volunteerism $\beta^* = -5.00$
 - Number of households without automobile $\beta^* = 0.07$
- > Social norms and living conditions
 - Property crimes per capita $\beta^* = 2.75$
 - Veterans per capita $\beta^* = 1.87$
- > Distances to important structures predict enlistment
 - Distance to nearest Military base $\beta^* = 0.30$
 - Distance to nearest College $\beta^* = 0.02$
 - Squared distance to nearest Military base $\beta^* = 0.22$



Overall Model Fit Statistics

- > Nagelkerke $R^2 = 0.764$
- > Efron's $R^2 = 0.657$
- > Cross-validation Efron's $R^2 = 0.444$

β^* - Coefficients can be interpreted as a transformed elasticity (here % change in enlistment per 10% change in predictor)

β^* - From logistic part of model - interpreted as logistic beta weight (change in natural log of odds ratio)

Note - Only predictors statistically significant at $P < 0.05$ presented above. Efron's R^2 is squared correlation between predicted and observed enlistment. Nagelkerke R^2 is ratio of the null model's to the full model's likelihood adjusted to make the upper range of the statistic = 1.

DISCUSSION

- > Zip code characteristics are useful predictors of aggregate vocational behavior
- > Economic, geodemographic, and education-related data represent important career decision processes
- > Results can guide strategic recruitment efforts
 - Can save recruiter time and recruitment expense by avoiding low enlistment areas
- > DBM methods can apply to recruitment situations where vocational behavior can be linked to geography
 - Applicant records aggregated to geographic area (i.e., zip code +4; metropolitan statistical area)
- > Future directions
 - Identifying geographic correlates of high-performing applicants
 - Applications for internet recruiting - 'websites' as geography
 - Additional relevant theories - from economics (relative-pay; subjective utility theory)
- > Limitations
 - Potential for aggregation bias - zip code data proxies for psychological processes
 - Model is reactive - based off of characteristics of recruits from past, doesn't necessarily identify new “markets”
 - Non-recursive relations (reciprocal relationship between recruiter presence and enlistment)