



Published in final edited form as:

Am J Community Psychol. 2009 December ; 44(3-4): 188–195. doi:10.1007/s10464-009-9275-3.

Increases in Tolerance within Naturalistic, Self-Help Recovery Homes

Brad D. Olson,
Northwestern University

Leonard A. Jason,
DePaul University

Michelle Davidson, and
University of Hawaii

Joseph R. Ferrari
DePaul University

Abstract

Changes in tolerance toward others (i.e., universality/diversity measure) among 150 participants (93 women, 57 men) discharged from inpatient treatment centers randomly assigned to either a self-help, communal living setting or usual after-care and interviewed every 6 months for a 24 month period was explored. Hierarchical Linear Modeling examined the effect of condition (Therapeutic Communal Living versus Usual Care) and other moderator variables on wave trajectories of tolerance attitudes (i.e., universality/diversity scores). Over time, residents of the communal living recovery model showed significantly greater tolerance trajectories than usual care participants. Results supported the claim that residents of communal living settings unit around super-ordinate goals of overcoming substance abuse problems. Also older compared to younger residents living in a house for 6 or more months experienced the greatest increases in tolerance. Theories regarding these differential increases in tolerance, such as social contact theory and transtheoretical processes of change, are discussed.

Interventions in natural settings designed to reduce prejudice or, from a more strengths-based perspective, increase tolerance toward others seem highly desirable. Previous research in this area focused on youth within educational settings, such as the impact of community-based service learning experiences combining educational opportunities with real life activities and interaction (e.g., Erickson & O'Connor, 2000). For example, students presented oppression workshops at inpatient substance abuse facilities or camps for juvenile offenders (Carlebach & Singer, 1998). Other educational efforts influenced group norms and created fuller forms of integration within diverse communities (O'Grady, 2000). Interventions reduced intergroup conflict with some promising forms of success (Hewstone & Cairns, 2001), and organizational programs promoted a greater appreciation for diversity (Lindsley, 1998; Rooney-Rebeck, & Jason, 1986). Nevertheless, more research is needed to explore the extent, duration, and stability of these changes using randomized or longitudinal research designs.

Some researchers called for programs set in more naturalistic environments, inclusive of community, preventative, and developmental aspects with long-term implications (Ponterotto & Pedersen, 1993). Related to these issues, other researchers emphasized

creating greater individual strength programs where participants engage in "microcosms of community building" as an effective means to contribute to increases in tolerance (Cheng, Chae, & Gunn, 1998).

A theoretical debate on ways to reduce intolerance differentiates the impact of social contact alone vs. interactive, interpersonal, and cognitive processes that accompany transcend mere contact. Two of these more dynamic processes that may increase tolerance focus on personal as opposed to ingroup/outgroup attributes (Dovidio & Gaertner, 1999; Miller & Brewer, 1986), development of more intensively cooperative interactions, and greater tendency toward perceptual recategorizations of others from a mentality of "them" to "us" (Gardner et al., 1993). Classically, these tolerance building effects explained through separate and sometimes competing groups beginning to ignore less substantive differences between each other and unifying around super-ordinate goals or overarching goals that any individual members or separate groups cannot achieve alone (Allport, 1955; Sherif & Sherif, 1969).

Other models focused on the need for expanded communication (Gallois & Callan, 1998). These perspectives argued that brief interventions were not enough; instead there is a need for the development of more cooperative communities. In such settings, positive relationships begin to form among diverse individuals fostering more frequent communication and accurate understandings of common norms, as well as increased mutual influence toward more effective perspective-taking. Individuals in these circumstances share common goals and values, plus work toward both personal and collective increases in self-esteem and quality of life factors (Aboud & Levy, 2000; Johnson & Johnson, 2000).

More critical theory and laboratory work is needed to understand what precisely increases tolerance, but there is equally a need for more naturalistic research in real-world settings (Oskamp, 2000) consistent with much of the early work in this area (Sherif & Sherif, 1969). Several researchers argue for more macros approaches to tolerance building (Cheng et al., 1998; Roesch & Carr, 2000, Salina & Lesondak, 2002), and others state that interventions are required at three structural levels: social-structural, social influence, and individual susceptibility. Moreover, higher level changes are believed to produce more sustainable changes over time (Chin, 2005; Duckett, 1992). Some scholars have insisted that if prejudice prevention or tolerance interventions are to succeed, they must be multifaceted and omnipresent (Ponterotto, 1992).

Unfortunately, few studies examined the potential changes in tolerance processes that might arise from participants in naturally occurring groups, particularly with large-scale community interventions. Such research seems rare in either longitudinal or randomized designs. One unique therapeutic community setting where both longitudinal and randomized research designs may be employed to study changes in tolerance is *Oxford House* (see Jason, Olson, Ferrari, & LoSasso, 2006; Olson, Jason, Ferrari, & Hutcheson, 2005 for details). Presently, there are over 1,200 Oxford Houses across the country, as well as over 30 Houses in Canada and eight in Australia. Qualitative data (Alvarez, Jason, Davis, Ferrari, & Olson, 2004) and anecdotal information suggested that individuals move into Oxford Houses with different worldviews, varied religious, ethnic, age, and other forms of diversity, and that the mission toward substance abuse recovery supersedes all other possible divisions. The present study examined systematically changes in tolerance over time among Oxford House residents.

One factor that may increase tolerance among addicted individuals living in Oxford House environment relates to the house members' ability to understand and accept the diversities that make each member unique. Within Oxford House settings, a fundamental, explicit tradition is for residents might focus on overcoming addiction by working and living

together as a family (Olson et al., 2005), and becoming more appreciative and tolerant regarding other ethnic, religious, socioeconomic, sexual orientation and other differences (Oxford House Manual, 2005). Individuals living in Oxford House may come from a variety of backgrounds having unique life experiences, thereby making it important to understand how the members respond to and process these diversities over time. Vontress (1979, 1988, 1996) claimed that successful social interactions require an awareness of both similarities and differences among individuals. While people may form strong relationships based on similarities, it is also important to accept those aspects that make them different from others (e.g., race, gender, religion or sexual orientation). The application of appreciating similarities and differences is important in traditional therapist/client settings as well as alternative treatment such as Oxford House, where diverse individuals struggle through the recovery process with others.

Other examinations of Oxford House residents (see Jason, Ferrari et al., 2006) indicated more effective alcohol and substance abuse, employment, and crime outcomes among residents compared to individuals in the usual care condition (Jason, Olson et al., in press). In addition, older compared to younger members living in a house for 6 or more months experienced the most effective outcomes in terms of substance use, employment, and self-regulation (Jason, Olson, Ferrari, Majer, Alvarez, & Stout, 2006). The present study examined tolerance outcomes, and hypothesized that those persons assigned to an Oxford House condition, in comparison to the usual care condition, would evidence more tolerance over time. A randomized two year longitudinal study examining substance use and other outcomes among 150 participants (75 in the Oxford House communal living condition, and 75 in a usual care condition) provided the opportunity to examine how tolerance would change over an extended period of time.

Method

Participants

Participants were recruited from residential substance abuse treatment facilities in and around Chicago, Illinois, USA. Over a one and a half-year period, clients were asked to participate in a research project assessing post-treatment recovery patterns by measuring the function and outcomes related to substance use across two years following discharge (2002–2005: for more details, see Jason, Olson et al., 2006). In order to participate in the study, inpatient residents needed to agree to be randomly assigned to an Oxford House or usual after-care condition.

Of those persons approached to be in the study, only four individuals indicated that they were not interested in being involved in the project. A total of 150 adults approached at treatment centers agreed to participate, and these individuals were randomly assigned to either one of the two conditions. There were 75 adults (46 women, 29 men) in the Oxford House and 75 adults (47 women, 28 men) in the usual after-care conditions.

Procedure

All participants took part in a baseline interview assessment two to three days before discharge from their treatment programs. After participants entered the study, they were interviewed every six months over a two-year period, yielding a total of five assessments (i.e., baseline and 6, 12, 18, and 24 month follow-ups). In order to reach the participants during these four subsequent assessment waves, the interviewers used data from a detailed tracking information sheet developed for this study. This sheet contained, for instance, telephone numbers and addresses of family, friends, neighbors, employers, post offices, credit unions, and tax offices. Name and contact information for the person who always

knew how to reach the participant had also been obtained at the beginning of the study and in each subsequent wave. Participants were paid \$40 for filling out the pretest questionnaire at baseline, and equivalent incentives were used for the subsequent four interview waves.

Participants in the Oxford House condition—Participants assigned randomly to the Oxford House condition were scheduled to visit one of 20 Illinois Oxford Houses with research staff, and voted into the house by existing Oxford House residents. All Oxford House participants except one were successfully voted into a house at this initial attempt. The participant not voted into the first Oxford House visited was brought to a second Oxford House and was then accepted as a resident.

Participants in the usual-care condition—Participants randomly assigned to the control or usual care condition were referred following discharge from the inpatient treatment facility by their case managers to different forms of outpatient treatment, self-help groups, or other resources in the community.

Over the two year follow-up, Oxford House participants spent an average of 256.2 days (range 8–730) in this setting (see Jason et al., 2006 for more details). Over the course of the study, two individuals assigned to the usual care condition applied for and gained admission to an Oxford House (both decided to apply for entry into an Oxford House after spending time at other sites following discharge from the treatment facility). Using intent-to-treat rules, both individuals continued to be assigned to the usual care condition until the end of the study. The completion rate across the 2 years was comparable for participants in the Oxford House (89%) and usual after-care (86%) conditions.

Psychometric Measures

Addiction Severity Index—All participants completed portions of McLellan's (1992) 5th edition of the Addiction Severity Index-Lite (*ASI*), an instrument used in numerous alcohol and drug studies, and which has demonstrated excellent predictive and concurrent validity (McLellan et al., 1992). The *ASI* assessed problems in commonly affected areas related to substance abuse (e.g., age and education). Because the mean and median chronological age of our 150 adults was 37 years old, we used the following age categories in all analyses: those participants 36 and younger and those participants 37 and older.

Miville-Guzman Universality-Diversity Scale (M-GUDS)—Miville et al. (1999) developed the construct of the *Universal-Diverse Orientation* (UDO), reflecting an attitude toward other all other persons which is “inclusive yet differentiating in that similarities and differences are both recognized and accepted; the shared experience of being human results in a sense of connection with people and is associated with a plurality or diversity of interactions with others.” The M-GUDS assessed the construct of UDO through three subscales which measured the cognitive, behavioral, and affective components of UDO. The cognitive component explored the relativistic appreciation one has of oneself and of others. The behavioral aspect measured the degree to which an individual seeks out contact with diverse groups. Finally, the affective component assessed an individual's sense of connectedness with society (Miville 1992). The *M-GUDS* was significantly related to various measures of racial identity, empathy, healthy narcissism, feminism, homophobia, dogmatism, feminism, and androgyny. The coefficient alpha for this scale was sufficient at 0.77. to 0.93, with test-retest reliability of 0.94.

Marlowe-Crowne Social Desirability Scale—All participants completed the revised Marlowe-Crowne Social Desirability Scale – Form C (Reynolds, 1982), a 13-item true/false instrument that assessed each respondent's tendency to provide socially appropriate answers.

The short Form-C used in the present study has strong reliability and validity across several samples and populations (e.g., Andrews & Meyer, 2003). With the current sample, the Form-C scale had an alpha of 0.74 (M score = 4.5; SD = 2.88) at baseline assessment.

Results

Baseline Socio-demographic Analyses

Baseline differences between participants in the two conditions were first evaluated by either *chi-square*, *independent sample t-tests*, or *zero-order correlates*. Results indicated no significant differences between participants in either Oxford House or usual-care conditions on socio-demographic variables (see also Jason, Olson et al. 2006 for more details). Across both conditions, most participants were women (62%). As for ethnic status, our sample consisted of 77.3% African-American, 11.3% Caucasian, 8% Hispanic/Latino, and 3.3% other. Social desirability also was not significantly correlated with overall *M-GUDS* scores at baseline.

Statistical Analyses

For all subsequent major analyses, *Hierarchical Linear Modeling* (HLM) was utilized. This analytical approach examined intra-individual, repeated measures data over time nested within individual (i.e., person-level or inter-individual characteristics such as demographic and condition-related variables; Raudenbush, Bryk, Cheong, & Congdon, 2000) and with the overall *M-GUDS* scores as the dependent variable. The wave trajectory defined by each six-month time period was included as a Level-1 variable. Experimental condition (Oxford House versus usual after-care) and person-level variables (social desirability tendencies, age, and education) were entered as Level-2 variables. Gender and social desirability were entered as control variables.

In the second set of regressions, length of stay in an Oxford House was more closely examined for Oxford House residents. The moderator variable in this Oxford House participants-only analysis focused on whether participants resided in an Oxford House for less than 6 months or 6 or more months. Other than this second-level variable in place of condition, all other first- and second-level variables were equivalent with the prior model.

It should be emphasized that this latter analysis included individuals only from the Oxford House condition, as the interest was in better understanding outcomes for Oxford Houses residents who stayed in the houses for what was considered an optimal period of time. In a prior study with the present sample, Jason, Olson et al. (2006) found at the 24 month follow-up there was less substance abuse for residents living in Oxford Houses for 6 or more months (15.6%) compared to participants with less than 6 months (45.7%) or to participants assigned to the usual after-care condition (64.8%).

Outcome Variables over Time

The findings for the second-level moderators predicting the wave trajectories for tolerance in the present study suggested that at baseline participants had tolerance means that did not significantly differ from each other. An *HLM* analysis was conducted predicting tolerance with time as a first-level predictor. Second-level predictors included the following: social desirability as a covariate, experimental condition (Oxford House vs. usual after-care), age, and education. Significantly more positive tolerance outcome trajectories were found in the Oxford House condition compared to the usual after-care condition (see Table 1), as noted by the gammas for the condition effect of wave trajectory between time and outcome. That is, the condition effect was significant for tolerance toward others based on the *M-GUDS* [$\text{Gamma} = -.08$, $SE = .02$, $t = -3.45$, $p < .001$]

Length-of- Stay Outcome Findings

We examined those Oxford House residents who had lived in an Oxford House for 6 or more months (45.2% of the present sample) versus those residents that had been in an Oxford House for less than 6 months (54.8% of the sample). We again used *HLM* to model whether the dichotomous variable related to length-of-stay residence (i.e., less than 6 months vs. 6 or more months in Oxford House) predicted the wave trajectory for the major outcome variables including the same second-level control variables and moderators as the prior analyses (except, of course, condition). A significant length-of-stay effect was found for tolerance [$\Gamma = .07$, $SE = .03$, $t = 2.02$, $p < .05$]. Residents of Oxford House who remained in the house for at least 6 months had significantly steeper increases in tolerance over time.

Discussion

The present study indicated that Oxford House residents reported more substantial increases in tolerance over time compared to usual care participants, and Oxford House participants who continued residence for six months or more showed the steepest increases in their tolerance trajectories. In other words, Oxford House participants showed an overall increase in tolerance compared to usual care participants, but those men and women who lived in Oxford House for a longer period seemed to have had a greater chance of benefiting from the communal-living experience. The differential condition effects maintained through the regression analyses even when controlling for socially desirable responding. We also believe the randomized design used in the present study increased one's confidence in attributing these increases in tolerance to the Oxford House model.

Anecdotal evidence from Oxford House leaders, residents, and some of our research team's qualitative work, as stated earlier, suggested that the philosophy of the Oxford House movement might account for this effect in tolerance. In a study of Latinos and Latinas in Oxford House (Alvarez et al., 2004), residents reported feeling "... *a little nervous at first, but in 1–2 weeks I blended right into the house. The house became my house.*" Other Latino individuals stated that "*There's really no prejudice there (Oxford House). It's not a matter of skin color, it's only a matter of clean, how clean you are, how willing to be a part of this, just your willingness to be clean is all that matters.*" And "*In this house we don't see each other as different colors, we are a family*"

Theories of psychological change may be useful to understand the ways in which the Oxford House self-help process may facilitate increases in diversity. Processes within the transtheoretical model of change used in the addiction literature may provide insight into increases in tolerance (Prochaska, Norcross, & DiClemente, 1993). In a review of self-help literature, transtheoretical processes such as self-reevaluation, environmental reevaluation, social and self liberation, and emotional factors may be developed within self-help models and are likely to even be more effective in 24-hour self-help living than they are in weekly groups (Olson et al., 2005). Olson et al., in fact, proposed that the Oxford House model provides an excellent field-based setting for exploring transtheoretical processes for men and women in addiction recovery. Many of the group and interactive factors establish a set of new setting norms and reinforce super-ordinate goals, such as overcoming substance abuse, even if residents share only minimal other preexisting characteristics.

In addition to overcoming substance abuse, a common mission also exists within the setting of helping an Oxford House work as effectively as possible. Oxford House settings should not only be thought of as developing new reference groups, but also new family units, and this involves far more extensive interactions than mere social contact. Participants in Oxford House share their background, discuss drug histories, talk about personal and group goals,

eat together, engage in chores, and attend 12-step meetings and go on other outings with one another (Olson et al., 2005).

Future Directions

Despite finding positive tolerance outcomes, it is still unclear how specifically tolerance may develop and what specific psychological mediators led to these reductions within an Oxford House. Future studies might include more broad measures, directly related to tolerance and the processes within Oxford House that may help foster those beneficial effects. Also, future research may examine how changes in tolerance may be related to participants' own perceptions of stigma in regards to their addictions. Within a community framework, mental health and tolerance increases may be seen relevant to concerns of stigma. This outcome seems particularly likely in instances when individuals gather together for advocacy or self-help movements to overcome stigma, only to be hampered by interpersonal differences and other biases in regard to ethnic, religious, or socioeconomic characteristics. Greater appreciation and respect for similarities and differences may contribute to more collaborative work to overcome stigmatized attitudes.

Future studies also might focus on considering whether the changes in tolerance found in the present study buffered against stigma and, in turn, led to more positive health and social outcomes. Moreover, while *HLM* analyses were used to study inter-individual and intra-individual differences, other areas of interest include the examination of higher, house-level predictors (i.e., social climate, ethnic composition of a house) on these individual-level outcomes remains unexplored. As suggested by Duckett (1992), methods of increasing tolerance should be examined systematically, on multiple levels, to more fully understand the moderators and mediators that lead to more widespread and sustainable outcomes.

Whether individuals are faced with addiction, serious mental illness, HIV/AIDS, or other disabilities (Rhoades, Browning, & Thorin, 1987), there is a value to increases in tolerance toward others and an esteem boost in relation to their own and society's perceptions of their conditions (Mayville & Penn, 1998). These methods can be effective whether they are targeted toward substance abuse, disabilities, or HIV/AIDS, whether it is to create changes for individuals in alcohol and substance abuse treatment (Freudenberger, 1976), or other clinical setting where bias or discrimination exist (Safren, 2005). Consumers, practitioners, educators, and policy makers at all system levels can benefit from overcoming these many forms of stigma and prejudice because if it was not for attitudes of social exclusion, individuals could act as more full citizens, actively participating in society as workers, parents, and community members (Sayce, 2000, Rutledge & Abell, 2005).

Acknowledgments

The authors express gratitude to Olushola Olabode-Dada, Kathy Sledge, and Bertel Williams for their contributions to the project. Funding for this project was supported by NIAAA (grant number AA12218).

References

- About, FE.; Levy, SR. Interventions to reduce prejudice and discrimination in children and adolescents. In: Oskamp, S., editor. *Reducing prejudice and discrimination. 'The Claremont Symposium on Applied Social Psychology'*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2000. p. 269-293.
- Allport, G. *Becoming: Basic considerations for a psychology of personality*. New Haven: Yale University Press; 1955.
- Alvarez J, Jason LA, Davis MI, Ferrari JR, Olson BD. Latinos and Latinas in Oxford House: Perceptions of barriers and opportunities. *Journal of Ethnicity in Substance Abuse*. 2004; 3:17–32.

- Andrews P, Meyer RG. Marlowe-Crowne Social Desirability scale and short Form-C: Forensic norms. *Journal of Clinical Psychology*. 2003; 59:483-492. [PubMed: 12652639]
- Carlebach, SW.; Singer, JA. Applying service-learning to the problem of prejudice: A psychology and theater course. In: Bringle, RG.; Duffy, DK., editors. *With service in mind: Concepts and models for service-learning in psychology*. Washington, DC: American Psychological Association; 1998. p. 190-199.
- Cheng WD, Chae M, Gunn RW. Splitting and projective identification in multicultural group counseling. *Journal for Specialists in Group Work*. 1998; 23:372-387.
- Chin, Jean Lau. *Psychology of prejudice and discrimination: Disability, religion, physique, and other traits*, Vol. 4. Westport, CT: Praeger Publishers/Greenwood Publishing Group, Inc.; 2005.
- Davis MI, Jason LA, Ferrari JR, Olson BD, Alvarez J. A collaborative action approach to researching substance abuse recovery. *American Journal of Drug and Alcohol Abuse*. 2005; 31:537-553. [PubMed: 16320433]
- Dovidio JF, Gaertner SL. Reducing prejudice: Combating intergroup biases. *Current Directions in Psychological Science*. 1999; 8:101-105.
- Duckitt, J. *The social psychology of prejudice*. New York: Praeger; 1992.
- Erickson, JA.; O'Connor, SE. Service learning: Does it promote or reduce prejudice?. In: O'Grady, CR., editor. *Integrating service learning and multicultural education in colleges and universities*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2000. p. 59-70.
- Freudenberger HJ. The gay addict in a drug and alcohol abuse therapeutic community. *Homosexual Counseling Journal*. 1976; 3:34-45.
- Gallois, C.; Callan, VJ. *Wiley series in culture and professional practice*. Chichester, England: John Wiley & Sons, Inc.; 1998. *Communication and culture: A guide for practice*.
- Hewstone, M.; Cairns, E. Social Psychology and intergroup conflict. In: Chirot, D.; Seligman, MEP., editors. *Ethnopolitical warfare: Causes, consequences, and possible solutions*. Washington, DC: American Psychological Association; 2001. p. 319-342.
- Jason, LA.; Ferrari, JR.; Davis, MI.; Olson, BD. *Creating communities for substance abuse recovery: The Oxford House model*. Binghamton, NY: Haworth Press; 2006.
- Jason LA, Olson BD, Ferrari JR, Lo Sasso AT. Communal housing settings enhance substance abuse recovery. *American Journal of Public Health*. 2006; 91:1727-1729. [PubMed: 17008561]
- Jason LA, Olson BD, Ferrari JR, Majer JM, Alvarez J, Stout J. Moderators of a randomized longitudinal outcomes study of substance abuse communal housing. *Addictions??*. 2007 in press.
- Jason, LA.; Pechota, ME.; Bowden, BS.; Lahmar, K.; Pokorny, S.; Bishop, P., et al. Oxford House: Community living is community healing. In: Lewis, JA., editor. *Addictions: Concepts and strategies for treatment*. Gaithersburg, Md.: Aspen; 1994. p. 333-338.
- Johnson, DW.; Johnson, RT. The three Cs of reducing prejudice and discrimination. In: Oskamp, S., editor. *Reducing prejudice and discrimination. The Claremont Symposium on Applied Social Psychology*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2000. p. 239-268.
- Lessing EE, Clarke CC. An attempt to reduce ethnic prejudice and assess its correlates in a junior high school sample. *Educational Research Quarterly*. 1976; 1:3-16.
- Lindsley, SL. Organizational interventions to prejudice. In: Hecht, ML., editor. *Communicating prejudice*. Thousand Oaks, CA, USA: Sage Publications, Inc.; 1998. p. 302-310.
- Mayville E, Penn DL. Changing societal attitudes toward persons with severe mental illness. *Cognitive and Behavioral Practice*. 1998; 5:241-253.
- McLellan AT, Kusher H, Metzger D, Peters R, Smith I, Grissom G, et al. The fifth edition of the Addiction Severity Index. *Journal of Substance Abuse Treatment*. 1992; 9:199-213. [PubMed: 1334156]
- Miller, N.; Brewer, MB. Social categorization theory and team learning procedures. In: Feldman, RS., editor. *The social psychology of education: Current research and theory*. New York, NY: Cambridge University Press; 1986. p. 172-198.
- O'Grady, CR. *Integrating service learning and multicultural education in colleges and universities*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2000.

- Olson BD, Jason LA, Ferrari JR, Hutcheson TD. Bridging professional and mutual-help: An application of the transtheoretical model to the mutual-help organization. *Applied & Preventive Psychology: Current Scientific Perspectives*. 2005; 11:168–178.
- Oskamp, S. Reducing prejudice and discrimination. 'The Claremont Symposium on Applied Social Psychology.' Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2000.
- Oskamp, S.; Jones, JM. Promising practice in reducing prejudice: A report from the President's Initiative on Race. In: Oskamp, S., editor. *Reducing prejudice and discrimination. The Claremont Symposium on Applied Social Psychology*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2000. p. 319-334.
- Peterson, DR. Working against prejudice in a large state university. In: Stricker, G.; Davis-Russell, E., editors. *Toward ethnic diversification in psychology education and training*. Washington, DC: American Psychological Association; 1990. p. 43-53.
- Ponterotto JG. The nature of prejudice revisited: Implications for counseling intervention. *Journal of Counseling & Development*. 1991; 70:216–224.
- Ponerotto, JG.; Pederson, PB. *Preventing prejudice: A guide for counselors and educators*. Vol. Vol. 2. Newbury Park, CA: Sage Publications, Inc.; 1993. Book Series Title Multicultural aspects of counseling series
- Quicke, J.; Beasley, K.; Morrison, C. *Challenging prejudice through education: The story of a mental handicap awareness curriculum project*. London, England: Falmer Press/Taylor & Francis, Inc.; 1990. Book Series Title Disability, handicap and life chances series
- Raudenbush, S.; Bryk, A.; Cheong, YF.; Congdon, R. *HLM 5: Hierarchical linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International, Inc.; 2000.
- Reynolds WM. Development of reliable and short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*. 1982; 38:119–125.
- Rooney-Rebeck P, Jason LA. Prevention of prejudice in elementary school students. *The Journal of Primary Prevention*. 1986; 7:63–73.
- Rhoades CM, Browning PL, Thorin EJ. Self-help advocacy movement: A promising peer-support system for people with mental disabilities. *Rehabilitation Literature*. 1986; 47:2–7. [PubMed: 3961261]
- Roesch, R.; Carr, G. Psychology in the international community: Perspectives on peace and development. In: Rappaport, J.; Seidman, E., editors. *Handbook of community psychology*. New York, NY: Kluwer Academic/Plenum Publishers; 2000. p. 811-831.
- Rutledge SE, Abell N. Awareness, acceptance, and action: An emerging framework for understanding AIDS stigmatizing attitudes among community leaders in barbados. *AIDS Patient Care and STDs*. 2005; 19:186–199. [PubMed: 15798386]
- Safren SA. Affirmative, evidence-based, and ethically sound psychotherapy with lesbian, gay, and bisexual clients. *Clinical Psychology: Science and Practice*. 2005; 12:29–32.
- Salina, DD.; Lesondak, LM. Preventing racist, sexist, and heterosexist behavior. In: Jason, LA.; Glenwick, DS., editors. *Innovative strategies for promoting health and mental health across the life span*. New York, NY: Springer Publishing Co.; 2002. p. 301-323.
- Sayce, L. *From psychiatric patient to citizen: Overcoming discrimination and social exclusion*. New York, NY: St Martin's Press, Inc.; 2000.
- Sherif, M.; Sherif, CW. *Social psychology*. New York: Harper & Row; 1969.

Table 1

Second level predictors including condition on the relationship between wave trajectory and tolerance outcome

Effect	Tolerance/M-GUDS		
	Gamma	SE	t
On Intercept			
Intercept	3.56	.29	12.24 ***
Social Des.	.04	.02	2.66 **
Age	.09	.09	.94
Education	.06	.02	2.76 **
Condition	.07	.10	.73
On Wave Traj.			
Intercept	.27	.09	2.86 **
Social Des.	-.00	.00	-1.12
Age	-.06	.023	-2.47 *
Education	1.01	.01	-.78
Condition	-.08	.02	-3.45 ***

*
=.05

**
=.01

=.001