
Rediscovering Community

Interethnic relationships and community gardening

August John Hoffman

Metropolitan State University and Compton Community College

Julie Wallach

Eduardo Sanchez

*Gateways: International
Journal of Community
Research and Engagement*
Vol 3 (2010): 171–184
©UTSePress and the authors

ISSN 1836-3393

The areas of community service work, civic or cultural engagement and volunteer work with society are rapidly becoming popular topics of research, as many individuals are discovering the value and psychosocial need to contribute to a community or social event (Ferber 2007). The value of community service work in relation to how individuals communicate and identify with others as well as within their own cultural and ethnic group has been well established (Chun & Akutsu 2003; Martin & Nakayama 2004). When specific types of environments are created and established, allowing individuals to contribute to the community and work with each other, prosocial behaviours develop more readily, which improves the overall context of other relationships in society and culture (Bond & Smith 1996). Current research suggests that increased contact with ethnically diverse groups can in fact reduce prejudice and racial conflict (Paolini et al. 2004; Pettigrew 1997).

Given the fact that increased contact (via superordinate goals) with different ethnic groups has been shown to help reduce racial conflict and improve race relations, we decided to create a conceptual replication of past research where a gardening environment would allow for members of ethnically diverse groups to interact and work on a variety of gardening-related projects. While there have been numerous studies exploring the relationship between group work and general interethnic relations (see, for example, Gaertner et al. 1989; Hoffman & Wallach 2007a; Pettigrew 1997), little empirical research to date has explored the relationship between actual community service gardening activities and reductions in ethnocentrism.

Because different theorists have different perceptions of what community service work actually is, we define community service work as any community volunteer service that is primarily devoted to improving the environment and relationships of those who comprise any community. Community service activities (such as those in the current study) are organised under the direction of supervisors (or mentors) who help train and educate

the community members who work in some way to improve the environment (such as cleaning parks and recreational systems) or society.

WHY IS COMMUNITY SERVICE WORK EFFECTIVE?

A popular and relatively new discipline in psychology today is evolutionary psychology (Buss 2004). Evolutionary psychology describes the development of prosocial behaviours necessary for groups of individuals to engage in positive and mutually beneficial acts in order to ensure the survival of members within the group (Trivers 1971). An argument can be made based on this theory that the reason why community service work remains a vital component among groups of individuals is that we have evolved the capacity and need to not only benefit from the services of others, but to also provide those benefits to others in society.

One theory that describes the popularity and effectiveness of community service work is simply that of identification with others who need help, a concept that is commonly referred to as 'empathy', where individuals who observe others in need of assistance feel inherently compelled to engage and interact with them, offering support and help whenever possible (Penner et al. 2005). This theory is very compelling for many evolutionary psychologists, who argue that significant early behaviors such as altruism and group or community engagement evolved from necessity and now literally provide the 'glue' for the fabric of modern behavior. These early behaviors have helped to shape group norms that are now manifest in the social interaction and prosocial behaviors of society today (Buss 2004).

When group members work cooperatively with one another, they tend not only to communicate more effectively, but also to return or reciprocate prosocial behaviours, an evolutionary concept that is referred to as 'reciprocal altruism' (Cosmides & Tooby 1992; Trivers 1971). However, when societies and cultures (that is, individualistic cultures) prevent individuals from engaging in cooperative group work that allows them to share their skills and aptitudes, conflicts often develop from a lack of understanding of the values of other cultures and societies (Tjosvold 1993). Additionally, when group members perceive others as behaving in a self-centred or egoistic manner, they tend to respond in a similar egoistic manner (Kerr & Kaufman-Gililland, 1994). Thus, it is important that communities (especially those communities with diverse cultural backgrounds) embrace the numerous potential advantages and opportunities that are offered through the basic principles of community service work.

In the current study we hypothesised that participation in the community gardening program would significantly reduce reports of ethnocentrism and increase perceptions of the importance of community service activities. The benefits of community service work are more than improving a segment of society and helping individuals to work more cooperatively with

each other. Community service involvement has also been shown to help individuals to understand the value and importance of civic responsibility, social participation and commitment to the community to which they belong (Jones & Hill 2003). Cooperation and interdependency have been shown to be critical factors that influence the group's ability not only to solve problems more effectively, but to allow group members to develop and return favours to each other that ultimately enhance the resilience and integrity of the group itself (Komorita & Parks 1995).

Additionally we hypothesised that the development of a community service gardening program would foster appreciation and value of future work in community service activities. Gardening and horticulture are very rewarding activities but can also be very laborious due to the scope of the responsibilities involved in maintaining a community garden. Given the fact that gardening activities can be effectively accomplished by groups of individuals working cooperatively, we decided to explore the effects of community gardening in terms of improving interethnic relationships and decreasing ethnocentrism.

METHOD

Participants

Thirty (n = 30) participants (15 female and 15 male) were randomly selected for the study. Participants were undergraduate students who volunteered (convenience sample) to participate in the study and were enrolled in an undergraduate psychology course at Compton Community College (CCC). Ten female and 10 male participants from CCC were Hispanic and the remainder (five female and five male) were African American. Ages of the participants ranged from 18 to 32 years.

Apparatus

The community service gardening activities took place in the northern section of the Compton Community College campus (spanning two acres). The location of the garden itself was critical to the study, as participants had relatively easy access to the tools and equipment that facilitated the maintenance and continued development of the program. Participants were able to engage in the gardening work relatively easily without logistical problems of transportation, etc.

Equipment used in the current study consisted of a variety of traditional gardening tools and equipment: 10 shovels, five rakes, 10 hand spades, one string edger, three (power) mowers and one push-variety lawn mower. All participants were provided with instructions on how to complete work assignments in the garden. Depending upon weather conditions, students watered the plants and engaged in cultivating and weeding exercises. The participants planted a variety of flowers, roses and vegetables throughout the program and prepared the soil to accommodate new plants. The garden includes over 100 citrus trees, rose plants,

artichokes, various herbs, grapevines, watermelons, strawberries, and several native plants and perennial flowers. During the course of the project participants planted the following vegetables in the vegetable garden: 25 celery plants (*A. graveolens*); 25 collard greens (*Acephala*); over 50 different white and yellow corn plants; a variety of red, yellow and white onions (*Allium*); 25 common 'cherry' tomato plants; 25 'Thumb' carrots (*D. carota*) and 25 common red beets (*Vulgaris*). Seven citrus trees (three navel orange, two kumquat and two Oro Blanco) and two Bacon avocado trees were planted in the garden area. The flowers that were planted in the rose garden consisted of different varieties, including *Dianthus*, *Chrysanthemum*, *Cosmos*, sunflower and poppy.

PROCEDURE

Ethnicity and Demographics

Compton Community College is a very ethnically diverse college located in south-east Los Angeles, California. The city has changed dramatically from an ethnic demographic perspective within the last 20 years. Prior to 1950, the area was middle income, comprising primarily Caucasian residents. However, during the 1960s through to 1975, the demographics changed significantly, with African Americans growing to comprise over 75 per cent of the city of Compton. These demographic and ethnic changes are most clearly reflected in the student body enrolled on campus at CCC, where today over 60 per cent of the campus students identify as 'Hispanic' or 'Mexican American' and 30 per cent of the students identify themselves as 'African American'. The remaining 10 per cent of students identify themselves as 'Caucasian' or 'Other'. Given the highly diverse ethnic backgrounds of the students at CCC, we decided to focus on the relationships between community service gardening work and interethnic attitudes.

A within subjects (paired samples) design was used in this experiment in which all subjects received the same levels of treatment as a means of increasing internal validity and reducing random error. The treatment consisted of the activities of planting the flowers, trees and vegetables in the community garden over a span of 16 weeks (one academic semester). Participants ($n = 30$) were administered a pre-test measuring ethnocentric attitudes and attitudes towards community service work (see Appendix 1: 'Ethnic Ultimate Attribution Error' scale).

After completing the pre-test measure, all of the participants arrived at Compton College each Saturday morning (Spring semester 2007) from 7 am to 12 noon. Because gardening work becomes more physically challenging and demanding as the temperature heats up, participants were requested to report to the community college garden area promptly at 7 am. All participants were asked to sign in with the experimenter once they arrived at the work site and to sign out upon completing their assignment.

Three of the participants were not able to report to the campus until 9 am, and they were assigned to a mentor with other students upon their arrival.

Overall actual attendance throughout the 16-week project was surprisingly strong, testament perhaps to the popular nature of gardening activities. Many of the participants had indicated that they appreciated the opportunity to ‘work outdoors’ owing to few such locations available to them in the urban city area where they lived. Of the entire 30 participants in the study, three absences were due to ‘personal problems’ and two absences were due to preparing for academic assignments.

The participants were given preliminary instructions in terms of how and where to plant the various trees, shrubs, vegetables and flowers. The participants were also given instructions to work closely with each other and to provide support and assistance to each other while completing each gardening assignment. Participants typically worked in groups of three, four or five and were given detailed assignments by the experimenter, such as weeding a specific area of the garden (least popular) and planting three to four citrus trees or rose bushes (most popular). Additionally (and perhaps most importantly), the participants were encouraged to engage in dialogue with each other when they needed help or if they were unclear on a particular assignment. They were also encouraged to share their ideas with each other throughout the work experience, and to discuss their future academic and educational plans after completing CCC.

Two key topics were assigned to each participant throughout the study which would be collected by the experimenter at the end of the project:

- What were their subjective feelings and experiences in working with other students from different cultural and ethnic backgrounds while participating in the community garden?
- How would they identify their future academic and professional goals?
- What were their plans after graduating from the community college?
- What was the overall impact of their community service activities?

An important function of the study was to help the participants realise their goals in working in the community garden with other students from different ethnic and cultural backgrounds. Each work assignment lasted approximately 45 minutes to two hours, and at the end of two hours all of the participants enjoyed a 45-minute lunch break. During this period participants were able to share experiences with each other about things they liked (and disliked, such as weeding and manual physical labour).

After this much-needed break, all participants resumed work with randomly assigned group members. This change in group status provided the participants an opportunity to engage in work with different members. The final phase of the work day included

the cleaning-up process, sweeping, throwing rubbish in containers and finally watering. All participants were instructed to sign in in the morning once they arrived and to sign out upon completing their assignments. The average actual 'work time' that the mentors and community college participants spent working together varied from group to group, but averaged 90 minutes to two hours depending on when the gardening assignment was completed.

An important goal and component of the study was establishing supportive relationships among participants and a better ability to understand and communicate with each other while completing their specific tasks. We hypothesised that the positive relationships that developed among the participants and mentors would reduce any levels of pre-existing ethnocentrism and increase perceptions of the value of community service work.

In some cases the work that was completed by the student participants and mentors was very specific and required detailed instructions (such as cultivating a particular area of land, mixing and mulching the soil and then planting vegetables like corn) and in other situations the work was very mundane and simple – some may even refer to it as 'boring' (for example, picking up rubbish and litter in the garden area, sweeping sidewalks or simply weeding). All participants worked together cooperatively and this form of positive collaboration made the mundane and boring work 'more tolerable' according to the participants.

ETHNIC ULTIMATE ATTRIBUTION ERROR (EUAE) SCALE AND COMMUNITY SERVICE WORK ATTITUDES

An important component of the community service program was not simply helping interethnic groups to improve communication with each other, but also to identify how attitudes may have changed in terms of appreciating the value and importance of community service work. At the conclusion of the study, all participants were administered the Ethnic Ultimate Attribution Error scale (EUAE), a questionnaire that measures two variables:

- reports of satisfaction while completing a community service project
- reports of subjective experiences in working in ethnically diverse environments, and attitudes of members of ethnically diverse groups.

The EUAE is a likert-based scale designed to measure attitudes of individuals working within ethnically diverse groups as well as self-report responses regarding satisfaction and importance in engaging in community service activities. The reliability of the responses concerning both attitudes towards ethnically diverse populations as well as the value of community service work was high, with agreement between raters exceeding 80 per cent ($r = .82$). Additionally, a 'reflection paper' was required by participants which explored anecdotal comments by each participant regarding their overall subjective experiences throughout the study (see Appendix 2).

RESULTS

The results of the study strongly support the hypothesis that community service gardening activities significantly reduce levels of ethnocentrism among community college participants. As predicted, there were significant changes in the results for ethnocentrism among the participants from the pre-test to the post-test scores. Pre-test: (M = 80.73; SD = 8.30); post-test: (M = 59.55; SD = 24.98); $t(10) = -2.53$; $p < .03$ (where SD = Standard Deviation, M = Mean, t = statistical t value; see Table 1 at the end of the article for extended information).

DISCUSSION

The results of the study strongly support the hypothesis that ethnically diverse community service work significantly reduces ethnocentrism. The participants worked together, cooperatively and collectively, to achieve the desired goal of improving the community college and garden area. The results of the study are a direct result of the benefits of a 'superordinate' goal – that is, a goal only capable of being achieved through the cooperation and assistance of all members, regardless of ethnicity or gender. The fact that the community college participants were ethnically diverse and were able to work cooperatively with other participants supports previous research addressing cooperative group work with multiethnic populations (Triandis 1990).

By working cooperatively with each other the participants soon learned about the mechanics of community gardens. More importantly, they learned to work with each other despite economic and physical differences. Additionally, the community college students learned that they actually had more in common with each other than not, a concept that is referred to as the 'norm of homogeneity' (Bond & Pyle 1998). The pre- and post-test ethnocentrism scores that were provided by the EUAE scale reflect this result.

The benefits of the community service gardening activity were further supported by the anecdotal comments provided by the students in post-experiment interviews. One participant (Raul) commented: 'I had the chance to participate in the gardening program and got to meet people that I normally would have never met. It was a great experience to work with other students and to achieve something beautiful that could be shared by others. It is a "win-win" situation and I would recommend it to anyone.'

A second participant (Ani) wrote: 'I think the gardening activity is a great idea because it gets you outdoors and working with people. It helps an area [Compton College] that needs improvement and it also helps everyone to get along better. I enjoyed the time I spent there and am happy that our work was so appreciated by everyone.'

The ramifications of the study are very important if we wish to improve interethnic relationships and reduce a disturbing growing trend of ethnic conflict and violence within our

community. Perhaps the most important finding of the study is that there are in fact several community-related activities that can promote positive interethnic behaviours that successfully reduce conflict within our society. Communities and civic leaders can become proactive in reversing the trend of inner-city violence by establishing more programs that embrace the philosophical and fundamental principles of community service work.

City leaders and governmental agencies can create more inner-city programs to help younger individuals recognise the positive strengths in interethnic collaborative group work. Gardening programs that help students to work together and produce foods for the community can help replace gang activity within our communities and schools. Rakes and shovels can replace graffiti and guns. Most importantly, community gardening programs help teach participants the inherent positive value of interethnic work and achieving goals by working together.

The key component in the success of the community service activities was based (in part) on interdependence – the concept that goals can only be reached if all participants set aside their perceived differences and work cooperatively together. In the current study the sheer magnitude of the project ensured interdependency. A few well-intentioned individuals clearly could not have achieved the ultimate goals of the community service gardening project. The combined efforts of all of the participants were necessary to achieve the development and proliferation of a beautiful two-acre garden over the span of 16 weeks. When the participants realised that they needed to work together under the direction of the mentors, their work became more cooperative and unified as a group – which is the essence of community service work.

Many of the participants indicated to the experimenter that they ‘felt pride’ in the work that they were participating in and enjoyed the aesthetic beauty of the campus at the end of the work day. Thus, the realisation of the need in others, regardless of ethnicity or gender, to complete a project of this size, is what contributed to the important development of interdependence and resulted in the reports of reduced ethnocentrism in the post-test phase of the experiment.

This sense of unity and colourblind ‘wholeness’ is essentially the substance and crux of the many benefits of community service work. Based on our significant findings, we feel compelled to make several suggestions for future research.

Our first recommendation is for an increase in the number of participants in future studies. In the current study nine community college participants discontinued participation for several reasons. While attrition rates vary in empirical research, it should be noted that the overall attrition rate for Compton Community College students is relatively higher than the national average, with an average semester attrition rate of 30–40 per cent (over 80 per cent of the students are currently on financial

aid). The reasons for this disproportionately higher attrition rate are complex; however, the majority of students indicated that 'economic reasons' are the most common reason why they need to drop classes or even discontinue attendance.

For future studies we recommend at least 50–100 participants as a more effective base in determining the relationship between ethnocentrism and community service work. Additionally, we recommend traditional between-subjects design (that is, separate groups for the experimental and control groups) be implemented, where participants are randomly assigned to either a control or an experimental group. The between-subjects design may help improve the internal validity of the study to better determine the effects of the community service work. A third recommendation for future work concerns the external validity of the study. In the current study our primary ages ranged from 18 to 30 years. This relatively young sample may not accurately reflect the overall effects of community service work on older participants.

Notwithstanding these limitations of the study, we feel that community service work has many positive and valuable applications to the community and society. Participants reported feeling overall 'very satisfied' after the community service gardening program and indicated that they looked forward to working with the other participants during the day. One participant commented: 'Every Saturday morning when I wake up I look forward to planting my vegetables and working with the other students. The gardening program really gave me a sense of accomplishment and helped me to feel good about myself because I was doing something good for other people.'

One of the mentors (Luz) commented: 'Now I can appreciate the fact that I can do something that can help others here at the school. It was great to work with different people and to get to know them over the course of several weeks. I just felt better about myself because I was doing something productive to help people less fortunate than me every Saturday ... I want to do this [community service] again next semester!'

In conclusion, the community service program was successful not because of individual efforts, but because of group efforts in working cooperatively towards a single goal. The community service work helped our participants to look beyond their superficial differences (that is, ethnicity or socioeconomic status) and identify their common interests – improving a community college by planting and tending flowers, vegetables and shrubs. The participants took pride and ownership in what they were doing and offered help to each other throughout the program.

Finally, there were many secondary benefits that we attribute to the community service activities in addition to the reduction of ethnocentrism. For example, the participants were able to communicate and interact more often with members of diverse ethnic groups. This process allowed them to discover that their

perceived differences were small compared to the numerous similarities they shared with each other. If we, as a society, truly wish to reach out to more communities and help reduce ethnic conflict and violence, we need to re-examine how groups interact with each other and create more programs that are designed to facilitate the principles of community service work and interdependency.

APPENDIX 1

'Ethnic Ultimate Attribution Error' (EUAE) Scale

Please give each statement a score of '1' through '5', where scores indicate:

- 1 = Strongly disagree
- 2 = Disagree somewhat
- 3 = Not sure / Don't know
- 4 = Agree somewhat
- 5 = Strongly agree.

Community Service Attitude Scale

- 1 I feel that it is important for different ethnic groups to work together on community projects____
- 2 I feel that it is possible for people from different cultural and ethnic backgrounds to live and work together in harmony____
- 3 I believe when people from all backgrounds work together on a common project, people tend to understand each other better and get along more____
- 4 I believe that ethnic diversity can strengthen and improve our community in many different ways____
- 5 I am just as likely to establish friendships and communicate with members of different ethnic groups as my own ethnic group____
- 6 I believe that racism and discrimination are traits that are learned (not something that is inherited) and if something is learned, it may be 'unlearned'____
- 7 I believe that our school systems (such as high schools and primary schools) should develop community service projects for the students to get involved with (i.e. help clean litter, plant gardens, work in food shelters, etc.)____
- 8 Higher educational systems and communities both work more effectively for students when they establish programs that encourage ethnically diverse groups to work together____
- 9 I believe community service programs can help children to become more autonomous and responsible persons as adults____

- 10 I believe that community service programs (such as gardening) can help students to identify their vocational strengths and career interests____
- 11 Usually when I accomplish something I believe it is due to my skills and talents____
- 12 I believe that there are many people who accomplish things not necessarily out of skill, but rather they happen to be in the right place at the right time or just simply luck____
- 13 I feel that I can pretty much control the outcome of events that occur in my life, whether they are good or bad events____
- 14 I feel that many people who suffer from health problems (e.g. obesity) simply have a tendency to remain inactive or sedentary in their lifestyle____
- 15 When something goes wrong in my life it usually is due to some circumstance that I can change as long as I put my mind to it____
- 16 It is difficult for me to rely on others because I generally feel that pretty much I can do the best job____
- 17 I feel that when members of the same ethnic group get together they pretty much look out for each other more than members of a different group____
- 18 I feel that some groups of people are more prone to failure due to circumstances that they in fact have control over____
- 19 I prefer working with and socialising with members of my own group____
- 20 I believe that people are biologically predisposed to prefer being with those who are more like them____

APPENDIX 2

Reflection Paper

The last several weeks you have participated in a community-service oriented program designed to improve a community college that serves underrepresented student populations. Please briefly comment about your overall subjective experiences (both positive and negative) and provide any insight or suggestions to the program, such as:

- What types of experiences with your participating partners came to mind while you completed the gardening program?
- How can the gardening program be improved?
- Have your attitudes toward community service work or volunteer behaviours changed since participating in this program? If so, how?

—Does any single experience stand out in your work in the garden with your partners? — Thank You!

TABLE 1

Group statistics

	School	N	Mean	Standard Deviation	Standard Error Mean
Pre-test	Compton	17	81.94	7.830	1.899
	CSUN	8	80.00	6.949	2.457
Post-test	Compton	11	59.55	24.985	7.533
	CSUN	8	82.38	4.658	1.647

Paired Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Standard Error Difference	95% Confidence Interval of the Difference	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Pre-test	Equal variances assumed	0.552	0.465	0.598	23	0.556	1.941	3.247	-4.775	8.658
	Equal variances not assumed			0.625	15.451	0.541	1.941	3.105	-4.661	8.543
Post-test	Equal variances assumed	84.706	0.000	-2.533	17	0.021	-22.830	9.012	-41.843	-3.816

REFERENCES

- Allen, T 2006, 'Rewarding good citizens: The relationship between citizenship behavior, gender and organizational rewards', *Journal of Applied Social Psychology*, vol. 36, pp. 120–43.
- Bond, R & Smith, P 1996, 'Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task', *Psychological Bulletin*, vol. 119, pp. 111–37.
- Bond, M & Pyle, J 1998, 'Diversity dilemmas at work', *Journal of Management Inquiry*, vol. 7, no. 3, pp. 252–69.
- Buss, D 2004, *Evolutionary psychology: The new science of the mind*, 2nd edn, Allyn & Bacon, Boston.
- Chun, K & Akutsu, P 2003, 'Acculturation among ethnic minority families', in K Chun, P Organista & G Marin (eds), *Acculturation*, American Psychological Association, Washington, DC.
- Cosmides, L & Tooby, J 1992, 'Cognitive adaptations for social exchange', in J Barkow, L Cosmides & J Tooby (eds), *The adapted mind*, Oxford University Press, New York, pp. 163–228.
- Ferber, J 2007, 'Encouraging a culture of interest in others: American and Russian children connect', *Community Works Journal*, summer issue.
- Gaertner, S, Mann, J, Murrell, A & Dovidio, J 1989, 'Reducing intergroup bias: The benefits of recategorization', *Journal of Personality and Social Psychology*, vol. 57, pp. 239–49.
- Hoffman, A & Wallach, J 2007, 'The effect of service-learning on student connection to the professor, campus and community', *The Vermont Community College Journal*, summer issue.
- Jones, S & Hill, K 2003, 'Understanding patterns of commitment', *The Journal of Higher Education*, vol. 74, no. 5, pp. 516–39.
- Kerr, N & Kaufman-Gilliland, C 1994, 'Communication, commitment, and cooperation in social dilemmas', *Journal of Personality and Social Psychology*, vol. 66, pp. 513–29.
- Komorita, M & Parks, G 1995, 'Interpersonal relations: Mixed-motive interaction', *Annual Review of Psychology*, vol. 46, pp. 183–207.
- Martin, J & Nakayama, T 2004, *Intercultural communication in contexts*, 3rd edn, Prentice Hall, Upper Saddle River, NJ.
- Paolini, S, Hewstone, M, Cairns, E & Voci, A 2004, 'Effects of direct and indirect cross-group friendships on judgments of Catholics and Protestants in Northern Ireland: The mediating role of an anxiety-reduction mechanism', *Personality and Social Psychology Bulletin*, vol. 30, pp. 770–86.
- Penner, L, Dovidio, J, Piliavin, J & Schroeder, D 2005, 'Prosocial behavior: Multilevel perspectives', *Annual Review of Psychology*, vol. 46, pp. 365–92.
- Pettigrew, T 1997, 'Generalized intergroup contact effects on prejudice', *Personality and Social Psychology Bulletin*, vol. 23, pp. 173–85.
- Tjosvold, D 1993, *Learning to manage conflict: Getting people to work together productively*, Lexington Books, New York.

Triandis, H 1990, 'Cross-cultural studies of individualism and collectivism', in J Berman (ed.), *Nebraska symposium on motivation, 1989*, University of Nebraska Press, Lincoln, pp. 41-133.

Trivers, R 1971, 'The evolution of reciprocal altruism', *Quarterly Review of Biology*, vol. 46, pp. 35-57.