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Cultivating a better society:  
Anti-Mafia farm participation increases prosocial motivations

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### **Abstract**

The present research tested whether an Anti-Mafia experiential education program would influence self-reported prosocial motivations in a group of 79 Italian participants. The Caprara Prosocial Questionnaire was used to evaluate prosocial motivations and was completed before the camp began, when it ended and three months after it ended. Participants also completed a Measure of Social Status and other demographic information. Results indicated that participant prosocial motivations were higher than normative data and that these motivations increased following participation in the camp and remained stable over time. In addition, participants with a high SES were more likely to have increased prosocial motivations. In discussing prosocial changes Camp dynamics and the correlation with SES and individual vs. group participation are examined.

**Keywords:** prosociality, outdoor and experiential education, community involvement, anti-mafia, civics.

## Cultivating a better society: Anti-Mafia farm participation increases prosocial motivations

### Introduction

Most civilizations view prosociality as a fundamental virtue. Prosocial behaviour has been described as being essential for the creation of an efficient civilization as it increases desired behaviours like compassion, empathy, care, fairness, and responsibility (Erikson, 1964; Lam, 2012; Lee Preston, Salomon, & Ritter, 2013; J. Santrock, 2008).

Prosocial behaviour refers to voluntary actions directed at favouring other people, groups or society (Batson & Powell, 2003; Eisenberg, Fabes, & Spinrad, 2006; Penner, Dovidio, Piliavin, & Schroeder, 2005). Neither compensation expectations nor reciprocity are considered to be the driving motive of prosocial behaviour (Roche, 1995, Simpson & Willer 2008), rather it is the desire to perform actions that will benefit other people (Batson, 1987).

In this article, we first briefly review how prosocial motivations can be either trait or state-based, and how gender, socioeconomic status and participation status (as an individual vs. part of a group) can significantly influence prosocial motivations. We then propose a straightforward quasi-experimental study where prosocial motivations were measured before, at completion and three months following participation in an Anti-Mafia farming volunteer camp program in Italy.

### Prosocial Motivations and Their Influences

#### *Trait vs. State-Based*

Prosocial motivations has been conceptualized as both trait-based and as a state-based. As a trait, prosocial motivation is reflected in the five-factor model of personality as agreeableness (Costa Jr, McCrae, & Dye, 1991; McCrae & Costa Jr, 1999) as being predisposed towards empathy and helpfulness (Eisenberg & Miller, 1987), and as being concerned about others (Schwartz, 2010). As a state, prosocial motivation involves a situational influence (McNeely & Meglino, 1994) – e.g., seeing a person in need, that drives one to focus on promoting the welfare of other people (Gebauer, Riketta, Broemer, & Maio, 2008).

#### *Gender*

It is a common belief that women are more prosocial than men and in fact both males and females view females as more prosocial than males (Eagly & Crowley, 1986; Eisenberg, Morris, McDaniel, & Spinrad, 2009; Penner & Finkelstein, 1998). Gender has been consistently correlated with prosociality by several studies in young people (Carlo, Crockett, Wolff, & Beal, 2012), and has been shown to be associated with more self-reflective internalized concerns for others and therefore prosocial moral

reasoning (Carlo, Koller, Eisenberg, Da Silva, & Frohlich, 1996). However, gender is not a strong moderator of socialization outcomes while social expectation may bias women towards prosocial behaviour, especially on observational studies (Hastings, Utendale, & Sullivan, 2007).

#### *Socioeconomic Status*

Previous research leaves an unclear picture on the relationship between Socioeconomic Status (SES) and prosocial motivations making it difficult to propose a directional relationship between the two. Several studies demonstrate that children, adolescents and young adults with a low SES are less likely to demonstrate prosocial behaviours both in the short and long-term, e.g., (Brian Brown & Lichter, 2006; Haapasalo, Tremblay, Boulerice, & Vitaro, 2000; Lichter, Shanahan, & Gardner, 2002). This could be the consequence of stress associated with poverty that increases people's concern for personal welfare or could be linked to the limited availability of prosocial role models people with a lower SES (J. W. Santrock, 2011). Other research contradicts these findings as people with lower SES have been found to be more reliant on others in everyday life (Kraus & Keltner, 2009; Kraus, Piff, & Keltner, 2009), while in a study by Piff, Kraus, Côté, Cheng, and Keltner (2010), people with a lower SES were more generous, charitable, trusting, and helpful than those with a higher SES.

#### *Participation Status*

The desire to engage, as an individual, in prosocial behaviour is typically associated with intrinsic motivations while as part of a group, has been shown, at times, to be associated with extrinsic motivations (Ariely, Bracha, & Meier, 2009; Edward L. Deci, Koestner, & Ryan, 1999). The motivation to help others can be described as either pleasure based, where there is an anticipation (and often satisfaction) of positive affect, or as pressure based, where conformity to a social norm or when one feels pressure from institutions, friends or even the situation (Gebauer et al., 2008). This distinction between pleasure and pressure based prosociality mirrors fairly well with the difference between intrinsic and extrinsic motivation (Edward L Deci & Ryan, 1985; see also Grant, 2008) where pleasure based prosocial motivation is fundamentally an intrinsic motivation whereas pressure based is fundamentally an extrinsic motivation. In related research, empathy has been found to be associated with independently choosing to help others rather than dependently being told to help others has been found a (Pavey, Greitemeyer, & Sparks, 2012).

### ***Libera! Summer Camp an Outdoor Experiential Education***

Several Italian Anti-mafia organizations convert lands (typically a farm, orchard or grove) confiscated from the mafia into business and educational opportunities for young people. The main organization that does this is called "Libera" (Free). Libera was founded in 1995, after the murder of Falcone and Borsellino, both magistrate judges. Approximately 6000 people (mainly from Italy)

participate each summer in one of the many volunteer camp programs of Libera, “E!State Liberi” (Pucciarelli, 2013) where goods produced are then sold to supermarkets, boutique stores and online. The main objective of the summer volunteer camps is to promote a culture of legality and social justice that can successfully counteract the attitude of violence, privilege and blackmail that are typical of the mafia (Libera, 2014).

A typical camp lasts about a week and includes around 30-40 volunteers. A typical day at the camp is divided in two parts. In the morning, volunteers work on the land while in the afternoon and evening, volunteers attend educational and informational activities about the mafia and anti mafia politics in Italy and around the world. Activities include things like meeting with mafia victim families, attending seminars with law enforcement professionals who are investigating the mafia business, and meeting with people who live and work in areas with a high mafia presence (Piobbico, 2014).

Volunteering at the Libera! Camp is fine example of an outdoor education (i.e., experiential education that occurs outdoors). Experiential education harnesses the fact that personal reflection and social meaning construction are intrinsically interconnected with the direct experience (Beard & Wilson, 2006; Dewey, 1938; McGill & Beaty, 2001; Weil & McGill, 1989). Outdoor education combines a mixture of experiential learning and life skills experiences with some organized activities in a relatively natural environment (Neill, 2008). According to Priest Priest (1986) outdoor education is primarily about building relationships with nature and between those involved in the activities.

### **Current Research Project**

With the present research we tested whether an outdoor experiential education experience promoted by the summer volunteer camp program of Libera, “E!State Liberi”, would influence self-reported prosocial motivations. The following research questions were addressed: (a) How do participants compare to Italian normative data regarding prosociality? (b) Do prosocial motivations increase following the camp experience? (c) If the experience is associated with higher prosocial motivation, is that stable over time? (d) How does gender, (e) socioeconomic status and (f) participation status (as an individual vs. part of a group) influence prosocial motivations?

Our predictions for this research are as follows: (a) Participants will have higher prosocial motivations than the Italian normative data; (b) Prosocial motivations will increase following the camp experience; (c) Increases in prosocial motivations might be stable over time; (d) Females will have higher prosocial motivations than males; (e) SES will correlate with prosocial motivations (though the direction is unclear); (f) Individual participation will yield a greater increase in prosocial motivations than group participation.

### **Method**

#### *Participants*

151 participants volunteered at one of the annual Summer Camps of the “ElState Liberi” program hold in three different location in Italy (Pietralunga, Umbria; Cerignola, Puglia; and Naro, Sicily. Of the 151 participants who completed the questionnaires at  $T_0/T_1$  only 79 completed all three phases of the experiment. The majority of participants were female (66,7%) and across all participants the mean age was 23.8 years ( $SD = 8.7$ , range 16-59, with 72.1% being under 25). 72.1% of the participants were students 22.8% were employed and the remaining 5.1% were unemployed. Among the student subsample, 54.4% were studying at university and 45.6% attended high school. 58% of the participants volunteered as part of a group and 51.9% were categorized as having a “high” SES (above the mean of 37.7). Participants could sign up for a camp in one of the two ways: as an individual, with a direct application on the ‘Libera’ website, or as a pre-existing structured group (for instance, a scout unit, a sports club, a church group, a volunteer or political association, etc.). Out of all the subjects who completed the three phases of the study, 47 people were part of a pre-formed group, while 34 participated as individuals.

#### *Materials*

Participants completed the Caprara, et al. Prosocial Questionnaire, a self-report questionnaire that measures prosocial behaviour motivations via questions on sharing, helping, and caring (Caprara, Steca, Zelli, & Capanna, 2005). The scale’s 16 items describe prosocial affirmations, e.g., “I try to help others” or “I’d easily lend money or other things to others”) and respondent were asked to rate on a five-point Likert scale whether the statement was never/almost never true, occasionally true, sometimes true, often true, and almost always/always true. Higher total scores on the scale indicate higher prosocial attitudes. The scale was developed and validated in Italy with 2574 respondents,  $M$  prosociality=56.27,  $M$  item=3.52, Cronbach  $\alpha$  for all items is 0.91 and the inter-item correlation is .59 (Caprara, Alessandri, & Eisenberg, 2012; Caprara & Steca, 2007; Caprara et al., 2005).

Socioeconomic status was assessed using the Barratt Simplified Measure of Social Status (Barratt, 2006), which updated a widely used version of the common Hollingshead’s Four-Factor Index of Social Status (Hollingshead, 1975) and takes into account both individual as well as parental education and occupation which is used as a proxy for socioeconomic status. Higher scores indicate higher socioeconomic levels.

#### *Design*

The research followed a quasi-experimental prospective design where the Capara, et al. (2005) prosocial motivations questionnaire was completed by participants at  $T_0$  (before camp began),  $T_1$  (when camp ended) and  $T_2$  (three months after camp ended). At  $T_0$  the Socioeconomic Status questionnaire (i.e., Barratt Simplified Measure of Social Status - BSMSS) and other demographic information (i.e., gender, participation status) was also completed.

### *Procedure*

Camp managers asked participants to complete the prosociality questionnaire, the demographics and socioeconomic status form. All camp managers involved with questionnaire administration were specifically trained by one of the authors. Participants were told that responses were confidential, data analysis would be done as a group and not individually and that there were no right or wrong answers to any of the questions and that honest responses were of great importance in the study. It took around 15 minutes for the participants to complete the questionnaire as well as the demographics and socioeconomic status form.

### **Results**

Given the difference in variance and sample size between our participant and Italian normative data a more conservative Welch's t-test was used to compare participant prosocial motivations from the average across  $T_0$ ,  $T_1$  and  $T_2$  ( $M=62.56$ ) to the Italian normative data ( $M=56.27$ ) revealing a significant difference,  $t(79)=8.50$ ,  $p<.05$ .

In order to test whether prosocial motivations increased following the camp experience (ignoring all other factors - i.e., SES, gender and participation), the difference between  $T_0$  ( $M=60.74$ ) and  $T_1$  ( $M=63.17$ ) was found to be significant ( $t=2.21$ ,  $p<.05$ ) while the difference between  $T_1$  and  $T_2$  ( $M=63.77$ ) it was not  $t=.50$ ,  $p>.05$  revealing that the higher prosocial motivations due to the camp experience were stable over time (see Table 1).

--- insert table 1 here ---

In order to further test whether prosocial motivations increased following the camp experience including SES, gender and participation status, a repeated measures ANOVA was performed revealing a non-significant difference for prosocial motivations across time ( $F(2,150)=.31$ ,  $p>.05$ ). SES was found to significant influence prosocial motivations across time ( $F(2,150)=3.81$ ,  $p<.05$ ), while participation status and gender did not. None of the pairwise comparisons at  $T_0$ ,  $T_1$  or  $T_2$  were found to differ significantly. It should be noted that individual participation status and female participants were always associated with higher prosocial motivations than group participation status and male participants (see Table 1).

In order to test whether gender, socioeconomic status and participation status (as an individual vs. part of a group) influenced prosocial motivations two multiple regressions were performed where the prosociality motivation differences between  $T_1-T_0$  and  $T_2-T_0$  were the dependent variables and gender, SES and participation and their interactions were the independent variables (see Table 2).

--- insert table 2 here ---



Results revealed that prosocial motivation differences between  $T_1$ - $T_0$  were not significantly influenced by the independent variables and their interactions ( $F(6, 72)=1.74, p > .05, R^2 = .13, R^2_{\text{Adjusted}} = .05$ ). However, the analysis demonstrated that as SES increased ( $\beta = .48, t(78) = 1.98, p < .05$ ), and participants were female ( $\beta = .77, t(78) = 1.98, p < .05$ ), prosocial motivations increased from  $T_1$ - $T_0$  while participation status (individual vs. group) and none of the other interactions were found to be significant predictors. Results for the prosocial motivation differences between  $T_2$ - $T_0$  were similarly found to not be significantly influenced by the independent variables and their interactions ( $F(6, 72)=1.63, p > .05, R^2 = .12, R^2_{\text{Adjusted}} = .05$ ). However, the analysis demonstrated that only SES ( $\beta = .48, t(78) = 1.98, p < .05$ ) significantly predicted the increase in prosocial motivations from  $T_2$ - $T_0$  while gender, participation status and none of the other interactions were found to be significant predictors.

### **Discussion**

It is clear that participation in the camp had an overall positive effect on prosocial motivations and that this effect was stable over time as the average prosocial motivation scores three months following participation did not differ from those immediately following participation. While this difference is encouraging a closer look at the underlying factors that might influence this difference is discussed in detail below.

It is interesting to note that the sample of the present study is not representative of the Italian population but comes from a very specific and self-selected cohort – i.e., young people who consciously decided to spend one week in a prosocial program designed to fight corruption and injustice. This difference is reflected in the significant difference between participant prosocial motivations and the Italian normative data. Considering the high prosocial motivations found in our sample, it was therefore possible that participation in Libera's camp could have led to a non-significant increase in prosociality. Results did not demonstrate this null effect. The female participants were more likely to increase their prosociality motivations than male participants, which is line with previous research (Carlo et al., 2012; Eisenberg et al., 2009).

Also those with a higher SES across  $T_1$ - $T_0$  and  $T_2$ - $T_0$  were consistently associated with higher prosocial motivations. One possible reason is that the experiential component of the program (i.e., high level of interaction within a crowded situation, daily physical work, living in an environment with strong social bonds), is already part of the daily experience of those people with a low SES while it represents a rather new component for people with a higher SES. Another reason could be linked to the educational and cognitive component of the “E!State Liberi” camp program: we could hypothesize that individuals coming from a richer cultural environment and with a higher education elaborate this information better than those with a lower SES. A third reason could be that people with a higher SES

feel that they benefit from so-called “economical injustices” more so than those with a lower SES and therefore may feel responsible for these “injustices.”

The relationship between prosocial motivations and those participating status (i.e., individual vs. as part of a group) is compelling. The fact that that participating individually was associated with a greater increase in prosocial motivations than those participating as part of a group could be related to the need to belong and be accepted in a group (Wentzel & McNamara, 1999). It is possible therefore that those participating on an individual level were driven to behave altruistically to improve their acceptance and belonging within the group consistent with the findings of Ariely et al. (2009) and Edward L. Deci et al. (1999) who reported that within a group prosociality is driven by extrinsic motivations. On the other hand, for those participating as part of a group, due to previous group experiences, the camp might have lost its novelty.

### **Conclusions**

The Libera summer camp demonstrates that one way improve prosocial motivations is by engaging in prosocial behaviours with both a direct experience (i.e. working on the confiscated land) and a more idealistic component (i.e., being connected of a wider movement to better the society). Several studies have been related with the development of prosocial traits both in children and youths who participate in voluntary and public-spirited activities (Hastings et al., 2007; Riedel, 2002). For instance, Hart, Donnelly, Youniss, and Atkins (2007) found that high school curriculum based community service and involvement in extracurricular activities were all predictors of adult voting and volunteering. Additionally, such activities have been found to improve also academic functioning and reduce of at risk behaviours (Kuperminc, Holditch, & Allen, 2001). According to Hastings et al. (2007), involvement in altruistic programs leads young people to progressively value others-oriented behaviours as important characteristics to look into a mature person and such value shift would support prosocial development. The authors argue that learning of prosocial behaviour would probably occur as the consequence of some kind of active social-based internalization, where people become prosocial by doing prosocial.

This study has its limits. Not having a control group limits our conclusions. We had a significant problem matching experimental and control participants - mostly because our experimental participants had such a high level of prosocial motivations at baseline.

There is self-selection bias present in the sample as participants were found to have a higher level of prosocial motivation at  $T_0$  when compared to the Italian population and results from this study might not be extendable to the population at large.

Another issue to consider is that while the sample was large enough to address overall changes in prosocial motivations across time as well as demonstrate the relationship between individual vs.

group participation, and how SES interacted with prosocial motivations, factors like the subsample of type of group participating (e.g., political, volunteer, sport/recreational) were too limited to reach statistical significance.

The possibility that those participants who didn't complete  $T_2$  were probably those with lower prosocial motivations, therefore biasing the results, is not supported by the data. The difference for prosocial motivation at  $T_0$  and  $T_1$  between those participants who completed all three phases of the experiment and those who completed just the first two was not significant ( $T_0$  difference  $t=.986, p>.05$ ;  $T_1$  difference  $t=1.56, p>.05$ ). It should also be noted that the trend of increasing prosocial motivations was present for those participants who completed only  $T_0$  ( $M=59.53$ ) and  $T_1$  ( $M=61.24$ ), but the difference was not significant,  $t=1.26, p>.05$ .

Future studies could further investigate the effect of similar camps on people belonging to different associations (e.g. sport, political, volunteer) to better understand how belonging to particular groups can mediate prosocial motivations. Since prosocial motivations is a strong prevention factor for at risk behaviour in young people (Ludwig & Pittman, 1999) it would be useful to further investigate why prosociality in people with lower SES improves less than those people with higher SES. One possibility to increase prosociality amongst people with lower SES is to prolong the duration of the program or include correlated activities before and after the camp. As demonstrated by Furman and Sibthorp (2013) a specifically design treatment curriculum significantly increases long time learning of prosocial behaviour. Learning transfer into different life contexts can be improved by a bio ecological approach, for instance linking different life fields with a proper communication structure (Capurso & Borsci, 2013), highlighting perceived connections between different life contexts (Engle, 2006) and by establishing a pre-camp goal setting method and post-camp reflection (Boyd & Fales, 1983; Leberman & Martin, 2004).

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	<b>T0 Prosocial</b>	<b>T1 Prosocial</b>	<b>T2 Prosocial</b>
<i>Overall</i>	60.74	63.17	63.77
<i>Female</i>	61.17	63.94	64.55
<i>Male</i>	60.35	61.67	63.1
<i>Group</i>	60.46	62.62	62.49
<i>Individual</i>	60.95	63	65.52

Table 1. Mean prosocial motivations at T<sub>0</sub>, T<sub>1</sub> and T<sub>2</sub>.

		<b>T1-T0 Prosocial</b>	<b>T2-T0 Prosocial</b>
<b>Gender</b>	<i>Female</i>	7.16*	4.13
	<i>Male</i>	1.44*	2.37
<b>Participation</b>	<i>Individual</i>	0.95	4.18
	<i>Group</i>	0.25	4.58
<b>Participation x Female</b>	<i>Individual</i>	8.38*	5.79
	<i>Group</i>	4.80*	5.60
<b>Participation x Male</b>	<i>Individual</i>	1.00	4.20
	<i>Group</i>	0.18	4.87

Table 2. Difference in prosocial motivations at T<sub>1</sub>-T<sub>0</sub> and T<sub>2</sub>-T<sub>0</sub>. \* indicates  $p < .05$ .

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### **Authors' contributions**

All the authors have made substantial contributions to the design of the study, the interpretation of the data, and critical revisions of the manuscript. M.C. initiated and designed the research project, coordinated the collection of the data, discussed the analyses and interpretation of the data, and reviewed the manuscript critically. J.L.D. analyzed and interpreted the data and designed and drafted the manuscript. G.P. contributed to the collection of the data, organized the data, and contributed to the discussion and interpretation of the data. All authors have reviewed the manuscript in the form in which it is being submitted and have agreed with the order of authorship.

Conflict of Interest: The authors declare that they have no conflict of interest.