This paper proposes that schools can participate with communities to partially alleviate the concerns about a steady blood supply. A review of the literature reveals the effective use of social learning models to encourage high school students to participate in blood drives. Combining an educational approach with a psychological approach to obtain higher rates of participation, expected outcomes are similar to those cited for service learning projects. Additionally, it is noted that the act of donating blood increases self esteem, and that blood donors have more favorable attitudes than non-donors as demonstrated by scores on measures that assesses affective, cognitive, and behavioral domains. It is believed that schools can incorporate information and activities into their service learning projects that will promote motivation to make the decision to donate blood. (Contains 41 references.) (GCP)
Developing Altruistic Behavior and Motivation to Donate Blood: 
A Role for Educators and Service Learning Projects

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DEVELOPING ALTRUISTIC BEHAVIOR AND MOTIVATION TO DONATE BLOOD:
A ROLE FOR EDUCATORS AND SERVICE LEARNING PROJECTS

In the wake of September 11, 2001, many news reports cited blood donation as one of the most beneficial ways persons at great distance from New York City could respond to the crisis. And, blood donations increased as they typically do in times of such crises. The American Red Cross collected approximately 700,000 donations of blood nationwide between September 3 and October 3, 2001 with one-third of these donations coming from first-time donors (Fugate, 2002). In fact, the rate of donations during this period exceeded the demand to the point where some supplies had to be destroyed because they were not used within the 42-day expiration period (Fugate).

A concern for social psychologists and blood donation professionals, however, is how to maintain an adequate and steady blood supply in the absence of a crisis. This is especially true in the context of new surgical developments and more frequent serious traffic accidents that have increased the demands for blood (Staallekker, Stammeijer, & deWit, 1980). The typical blood supply often falls short of demand. In contrast to the donation response in the immediate wake of September 11, an emergency appeal for donations of all blood types was reported less than one year later (“Donating Blood,” 2002). This appeal was made in an attempt to meet expected demands during an upcoming holiday weekend. Such appeals for emergency blood donations are all too common for a variety of reasons. For example, the majority of first-time donors do not return to make further donations (Royse, 1999). In addition, only 5% of the eligible population donates blood in any one year, and many of the older steady donors are dying at a rate of 1,300 per day (Fugate, 2002).

Blood banks need a larger number of repeat donors who make donations on a regular schedule in order to avoid the necessity of emergency appeals and a blood supply crisis in the future. Increasing the number of steady, repeat donors requires a better understanding of what motivates blood donation decisions.

Characteristics of Blood Donors

An extensive review of the PsychInfo database yields much research that examines various characteristics of first-time and repeat donors and factors that motivate or constrain their blood-donating behavior. According to American Red Cross criteria (2002), donors must be at least 17 years old, be in good health, and weigh at least 110 pounds. They must not have received a tattoo within the year prior to donation, and they must not have donated whole blood within the past 56 days.

Approximately equal numbers of men and women make blood donations, but men donate more frequently on average than women (Lightman, 1982). Many donors give blood only once, and only a
small percentage consider themselves regular, committed donors (Royse, 1999). Role identity as a blood donor is linked to donation frequency; that is, the more times a person donates blood, the more likely that person is to develop a blood donor identity (Charn, Piliavin, & Callero, 1988) and become merged with the role of donating blood (Callero, Howard, & Piliavin, 1987). Individuals most likely to develop a blood donor identity are college-educated, white males who have healthy lifestyles, are model citizens, and volunteer in other areas as well as blood donation (Royse & Doochin, 1995). First-time donors, members of minority groups, and those with less education are least likely to become repeat donors (Thomson, Bethel, & Lo, 1998).

Results of self-report studies with college students linked their motivation for blood donation behavior to humanitarianism and peer pressure (Oborne & Bradley, 1975; Oswalt & Npoliello, 1974; and Pomazal & Jaccard, 1976). McCombie (1991) reported that influence of friends is greater than influence of family members in college students’ decisions to donate blood. On the other hand, a decision by any individual not to donate blood may be motivated by medical excuses, apathy, inconvenience, fear of various aspects of the donation procedure (e.g., needles, finger/ear pricks, sight-of-blood weakness), or negative physical reactions during blood donation attempts (Oswalt, 1977). Such constraints on blood donor behavior, however, may be overcome.

Thomson, Bethel, and Lo (1998) found the strongest predictors for projected return visits by blood donors were (1) treatment by staff involved in the blood donation procedures and (2) the donor’s physical response during and after these procedures. In this study, donors were asked about their intent to return for future blood donations. Those who rated their treatment by staff and their physical well-being as “good” or “excellent” were most likely to indicate they planned to return. The Thomson, Bethel, and Lo study did not, however, address the question of which donors actually return to donate additional blood.

Foss and Dempsey (1979) concluded that using personal contact with blood donors to obtain their verbal commitment to be a repeat donor did not increase donation compliance; this contact was not significant enough to affect a behavior that is psychologically costly to perform. The likelihood of a blood donor’s return visit can be increased, however, by obtaining an initial verbal commitment at the time of the donation and then obtaining an additional commitment through a reminder call (Lipsitz, Lallmeyer, Ferguson, & Abas, 1989). The Blood and Injury Fears subscale of the Fear Survey Schedule and the Mutilation Questionnaire are two instruments that can be used to predict sensitivity reactions in both first-time and veteran donors (Meade, France, & Peterson, 1996). Donors at high risk for negative physical reactions can be identified, using these scales, and can be given instructions to reduce fainting, the most common physical reaction. The most important determinant of return visits, however, may be whether the donor has an altruistic identity.
Altruism and Blood Donation

An altruistic identity is a common theme in most literature on the characteristics of regular blood donors (Piliavin & Callero, 1991). Some authors equate blood donation with altruism, whereas a few question whether altruism even exists. Piliavin (1990) concluded from extensive review of related research that altruism is the most cited reason for donating blood. Condie, Warner, and Gillman (1976), in contrast, reported no association between blood donation and altruism. Although many researchers do not believe an altruistic identity exists, Rushton, Chrisjohn, and Fekken (1981) did not agree with that assertion. They found evidence for a broad-based trait of altruism through their own research using the Self-Report Altruism Scale which includes the item “I have donated blood” as 1 of 20 behaviors that are rated for frequency of performance.

Paulhus, Shaffer, and Downing (1977) concluded that altruism is a stronger characteristic of veteran blood donors than rookie donors. They used an altruism manipulation technique where donors were asked to read one of four paragraphs prior to making a donation. Those donors who read paragraphs about altruistic motivations were more likely than the ones who read paragraphs about personal motivations to become repeat donors. The researchers who conducted this study also found that veteran blood donors report stronger motivation as a result of having given blood, greater likelihood of donating again, and less aversive perceptions of the donation procedure.

Batson, Bolen, Cross, and Neuringer-Benefiel (1986) discussed the altruism controversy in terms of whether helping others exists in the absence of personal gain or is always accompanied by selfish motives. They defined motivation to help in two ways based on individual acts of helping. Altruistic motivation is defined as helping another person as an end in itself, whereas egoistic motivation is defined as helping another person as a means to avoid shame and guilt for not helping. Anderson, Neivell, and Kilcoyne (1999) reported that student blood donors can be responsive to both altruistic and self-interest motivations. Hoffman (1981) found that humans, even when socialized in a highly individualistic society, usually respond empathically and altruistically to others in distress. He noted that response to others’ distress is often impulsive and concluded that an egoistic view of motivation is difficult to accept. Schwartz (1993) contrasted the idea of egoistic motivation with true altruism which he described as apparently impossible, nonetheless omnipresent. He stated that each person has power to decide to act either independently or interdependently, to create a system where only egoists survive or to connect personal interests to the interests of others. Despite this freedom of choice, Schwartz noted that altruistic behavior is not unusual. He found that both mundane and dramatic examples of helping, sharing, comforting, and cooperating occur among both adults and children, among acquaintances and strangers, and in diverse settings.
Oswalt (1977) addressed the altruism controversy from the perspective of blood donation. He concluded from a review of studies spanning a 20-year period that blood donors may unconsciously want a "pat-on-the-back" for their effort, but are nonetheless motivated by altruism. For most authors, altruism was viewed as more than a simple motivator for blood donors; an altruistic identity was listed regularly as one of the most significant characteristics of veteran blood donors.

### Developing Altruism

Social psychologists engaged in blood donation research have applied various models to explain the presence of an altruistic identity in committed blood donors. Piliavin and Callero (1991) reported an extensive examination of such models in their book *Giving Blood: The Development of an Altruistic Identity*. The models they examined include Becker's Model of Commitment, Opponent-Process Theory, the Attribution/Self-Perception Framework, Identity Theory, and the Theory of Reasoned Action. Details of these models are beyond the scope of this paper, but Piliavin and Callero's conclusions have implications for educators who are in an ideal position to promote altruistic behavior of students both in blood donation and in other situations.

Piliavin and Callero (1991) grouped the five models they examined into a hierarchical arrangement within a single framework that includes four dimensions: self, situation, social structure, and time. Self-based variables include "attitude, beliefs, behavioral intention, emotional response, physical reactions, personal norms, self-definitions, self-attributions, role salience, and role merger" (p. 200). Situation-based variables include "all aspects of the immediate environment that have an effect on blood donation behavior" (p. 202). Examples of situation-based variables are characteristics of the donation site (i.e., mobile or fixed), social factors such as the presence of other donors, and the place where donation decisions are made (e.g., home or work). Social structure-based variables include "general aspects of the setting that transcend specific situational and self differences and reflect important features of the local community, the larger society, and our culture" (p. 204). The time dimension refers to the idea that "committed blood donors are made, not born" (p. 207). This dimension, however, involves more than a simple process of turning first-time donors into regular donors. Piliavin and Callero stated "Not only does the influence of each dimension change with time, but the relation among the three dimensions also change" (p. 207). They believe that any theoretical explanation of regular blood donations by committed donors must take into account all four dimensions and that these dimensions are mutually dependent. They also believe their conclusions extend beyond motivating blood donations and hold promise as a model for other acts of behavioral commitment.

Further evidence for a developmental view of altruism was found by Rushton, Fulker, Neale, Nias, and Eysenck (1986) who noted that altruism increases with age. Schwartz (1993) agreed and linked the
increase in altruism with socialization practices in the home and in schools. For example, "parents can enhance altruism by engaging in altruistic behavior themselves" and by "using certain disciplinary techniques when their children are responsible for another's distress" (p. 322). Cooperative learning, play settings, mixed-age groups, friendships, and the use of intrinsic rewards are included among the factors listed by Schwartz for socialization in school settings. Rushton et al. (1986) found a decrease in aggressiveness that corresponded to increases in altruism. This decrease in aggression suggests a possibility that using strategies like those named above to develop and enhance altruism has potential to reduce the violence and conflict that have plagued our nation's schools in recent years. One approach whereby this might be accomplished in school settings is through the use of school-based service learning projects.

Service Learning

Some schools have instituted service learning projects to foster characteristics of altruism among their students. Some projects are integrated into the school curriculum and are predominately school-based; others are based in the community with the school as a partner. Such projects provide benefits not only to the community, but also to the school and the students themselves (Obert, 1995). Obert hypothesized that participation in school-based service learning is likely to promote this type of giving later in life. Her hypothesis is supported by Perry and Katula (2001) who reviewed 37 empirical studies to conclude that a positive relationship exists between early voluntary community service and later volunteering and giving. They found that service learning produced positive results more consistently than other types of service, perhaps because service learning offers better opportunities to control associated conditions and to formalize a process of reflection. Another factor may be the opportunity for "hands-on" experience afforded in service learning projects. Morse (1993) reported that a group of individuals who were asked to tell how they learned to be good citizens said their early conceptions of citizenship were influenced by observing adult models, but these conceptions were cemented by their own practice of behaviors that enabled them to become more aware of the world, its needs, and its diversity.

Many examples of school-based service learning projects have been reported in the literature. We make no claim of having reviewed all of them, but will include a few examples here. Adams (1993) described a large number of projects with middle school students in Pennsylvania; she noted that students may begin volunteering with the idea they are helping others, but find that they have acquired new attributes (e.g., sense of satisfaction, sense of responsibility) themselves. Ediger (1993) described the efforts of one sixth grade teacher to involve her students in the community through projects that involved picking up trash in the school's neighborhood as well as interacting with residents of a nursing home and the city police department. Kiner (1993) reported a remarkable level of community service activities in a
South Dakota middle school program to promote academic encouragement, social growth, activity involvement, and service to humanity. Kraus (1993) included service projects among the activities that can be used to help students begin to feel part of a unified group as they move from several feeder elementary schools into a single middle school. McKeon and Rosenberg (1998) include service learning projects among their recommendations for ways to deal with students who exhibit persistent behavioral and academic problems. They reported positive outcomes that included declines in school absence and tardiness, improved interactions with their teachers, improved attitudes toward school, and greatly reduced incidence of disciplinary measures (e.g., detentions, suspensions) among the “at-risk” student participants in their program.

If service learning projects are to produce their desired outcomes, those who institute and coordinate them must be deliberative in their planning and implementation (Morse, 1993). Several authors provided recommendations regarding the use of service learning projects by schools.

Recommendations

School officials who wish to implement service learning projects need to be aware of differences in the ways such projects may be structured and the different outcomes that can be expected (McPherson, 1997). For example, projects that include “learning in the community” complement the efforts of schools and are more likely to promote civic responsibility and ethical, personal, and social development because of their focus on social causes. Kiner (1993) cited several factors that increase the success of community-based service learning projects for middle school students. These include projects of brief duration with specific starting and ending dates, action-oriented projects with large numbers of students participating, student involvement in planning for the project, faculty support and guidance for the project with cooperation of classroom teachers, fiscal procedures with a faculty advisor having responsibility for handling funds collected by students, emphasis on intrinsic (internal) incentives, communication between the school and the community service agencies, and celebration of successfully completed projects. These guidelines were repeated by Obert (1995) who also suggested that projects should be scheduled “throughout the year as opposed to one or two isolated projects” (p. 32).

Based on a review of empirical studies of service learning projects, McPherson (1997) offered the following observations:

- The more students feel service has value in the community, the greater the impact of the experience (p. 12).
- The greatest impact of service learning often occurs among “at-risk” and minority youth (p. 12).
- Service learning frequently enables youth to become better learners by fostering a sense of efficacy, a sense of personal competence, and more positive attitudes toward adults (p. 13).
Service learning students showed the clearest gains in factual knowledge when the tests measure what they actually encountered in their field experiences (p. 13).

Middle school students participating in service-learning programs do better on subject matter achievement when the service is highly integrated into course content (p. 13).

**Discussion**

We propose that schools can participate with communities to partially alleviate the concerns about a steady blood supply that were presented earlier in this paper. Sarason, Sarason, Pierce, and Shearnin (1991) used a social learning model to encourage high school students to participate in blood drives. They combined an educational approach (i.e., information packets) with a psychological approach (i.e., scenes of high school students engaged in blood donations) to obtain higher rates of participation. This participation can be expected to produce outcomes that are similar to those cited for service learning projects. Specifically, Burnett (1981) found that the act of donating blood increases self esteem. Similarly, Breckler and Wiggins (1989) found that blood donors had more favorable attitudes than nondonors as demonstrated by scores on measures that assessed affective, cognitive, and behavioral domains. We believe that schools can incorporate information and activities into their service learning projects that will promote motivation to make the decision to donate blood. With older students, schools can participate with communities in scheduling recurrent activities that promote the development of the commitment that characterizes regular blood donors. Recurrent opportunity is a critical factor, perhaps the most critical, in predicting whether first-time donors will become regular donors (Piliavin & Callero, 1991), so schools may want to schedule on-site mobile blood drives on a regular and continuing basis.
REFERENCES


Altruism and Blood Donations


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