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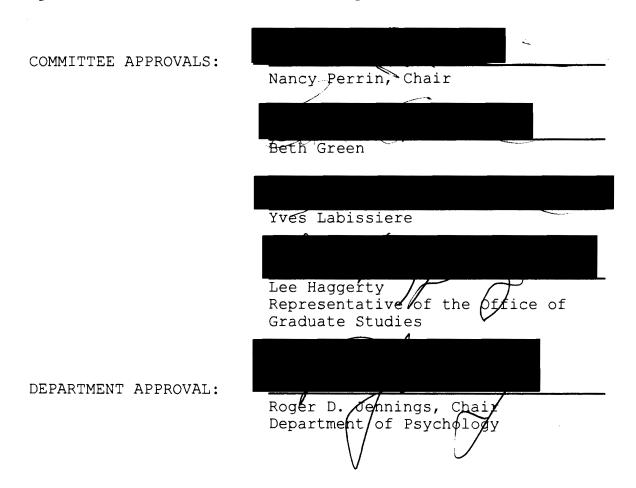
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## THESIS APPROVAL

The abstract and thesis of Carol Berubee for the Master of Arts in Psychology were presented May 8, 1998, and accepted by the thesis committee and the department.



#### **ABSTRACT**

An abstract of the thesis of Carol Berubee for the Master of Arts in Psychology presented May 8, 1998.

Title: The Effects of School-Mandated Community Service on Subsequent Intrinsic Motivation to Volunteer.

Many American high schools and universities require students to perform community service. Although social psychological research shows that intrinsic motivation for an activity decreases when that activity is rewarded or when the actor perceives little self-determination in performing the activity, no research has examined the effect of intrinsic motivation on volunteerism subsequent to mandated community service.

The purpose of the present study was to determine if students who had been required to perform community service would be less likely to volunteer in the community at a later date than would those students who had not been required to serve. In addition, the mechanisms by which that decrement in volunteerism may occur were explored.

Participants were 434 lower-division students at

Portland State University (PSU; Sample 1) and 97 students enrolled in Senior Capstone (service-oriented) courses at PSU (Sample 2). Sample 1 participants were asked by a confederate to volunteer in the community. Approximately ten days later, a different confederate administered a questionnaire to the participants ascertaining their prior service experience and their feelings about that experience. Participants in Sample 2 were only given the questionnaire, which was changed slightly to reflect their feelings about their current service work in the Capstone courses.

Sample 1 chi-square results indicated that students who had been required to serve were no less likely to volunteer than were students who had had volunteer experience. Multivariate analysis of variance (MANOVA) indicated that those who volunteered had higher intrinsic motivation than did those who did not volunteer. Finally, multiple regression analyses indicated that those who had made internal attributions about their previous service were more intrinsically motivated to volunteer, and those who had made external attributions were more extrinsically motivated to volunteer.

Sample 2 MANOVA results indicated that those students who had taken a Capstone as a requirement had a more negative view of the Capstones, made more external

attributions about their Capstone experience, and were more extrinsically motivated to volunteer in the future than were those who had taken the Capstone as an elective.

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# THE EFFECTS OF SCHOOL-MANDATED COMMUNITY SERVICE ON SUBSEQUENT INTRINSIC MOTIVATION TO VOLUNTEER

by

CAROL BERUBEE

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS in PSYCHOLOGY

Portland State University 1998

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Community service has been implemented as a requirement for graduation in many of America's public schools. Many of the programs cite the promotion of volunteerism and prosocial behavior in students as a program goal. While this may be a noble ambition, there appears to be no empirical literature to support the notion that mandatory service leads to subsequent prosocial behavior (Sobus, 1995). On the contrary, much empirical work exists that suggests that mandatory volunteerism may have the opposite effect: it may reduce students' previous intrinsic motivation to volunteer.

The current study will examine the social psychological literature concerning intrinsic motivation and will propose that those students who are mandated to perform community service will be less likely than those who are not mandated to volunteer for subsequent service. But first, an overview of community service in high schools will be presented as will a discussion about the origins of "experiential education."

## Community Service in American Public Schools

Many high schools now require community service as a prerequisite to graduation. According to Felten (1994), 25% of America's public high schools were mandating community service and another 10% were planning to do so

within the year (as cited in Sobus, 1995). Universities and colleges are no exception. Theus (1988) pointed out that at least three colleges were requiring community service for graduation. That was nine years ago. While there appears to be no comprehensive report on how many colleges and universities are currently employing such requirements, it is safe to say that there are now probably many more than three.

Because fewer higher education institutions have implemented service requirements, and because the welfare of younger high school children is more of a concern to parents, much of the controversy has focused on public high school service requirements. Some students and parents feel that mandatory service is a violation of individual rights granted by the Fourteenth Amendment. In Steirer v. Bethlehem Area School District (1993), the court ruled that public high schools could require community service for graduation (as cited in Sobus, 1995). The court denied the plaintiffs' assertion that mandatory service is a violation of students' First Amendment rights. The court also denied that mandatory service for students constitutes involuntary servitude. The court explained that "...we follow the Supreme Court and other courts of appeals in taking the contextual

approach to involuntary servitude by confining the Thirteenth Amendment to those situations that are truly 'akin to African slavery'" (as cited in Sobus, p. 155). However, some educators have expressed that students' service not only educates students, it provides communities with cheap labor. For example, a project manager at a wetlands at which middle school children were working, said, "...the kids get to learn stewardship, and we get some desperately needed labor" (Riley, 1996). It is clear that community service among school students is controversial for many reasons.

The Bethlehem (Pennsylvania) program stated that all students should be required to do community service because, absent a mandate, some students may not volunteer. In Maryland, the Board of Education implemented mandatory community service of 75 hours for all high school students. According to Townshend (1993), a Board member, the service mandate in Maryland was necessary because "students don't know how to be good citizens" (as cited in Sobus, 1995, p. 156). According to the Maryland and Bethlehem programs, one intention of requiring service is to promote volunteerism among students. Felten (1994) quoted a student volunteer (Boy Scout) as saying, "I don't think it's volunteering if it's mandatory" (as cited in

Sobus, 157). This Boy Scout's volunteer work did not count toward his school's service requirement because the district felt that merit badges are rewards that would "undermine the service nature of the [school] program" (as cited in Sobus, p. 157). The Boy Scout pointed out that earning a high school diploma for doing service work is also a reward for community service rendered, but the district disregarded his comment. According to Sobus (1995), a Bethlehem student who was an active volunteer before the implementation of mandatory service said, "People should volunteer because they want to -- not because of a government threat....So many kids treat it as a joke. They do the minimum to get the credit. That's not what volunteering is about." Another student said, "When people are forced to serve...it takes the fun out of it...[i]f it is required, you don't feel like you're giving anything" (p. 158).

On the other hand, some students who have performed community service under a mandate have expressed positive feelings. One student said, "We wanted to put something back into the community" (DiRado, 1996). But because most of the community service performed by school students is voluntary, it is difficult to find students' expressed feelings, either positive or negative, concerning

mandatory service. However, as more schools mandate community service, the controversy, and the emotion that goes with it, is expected to increase.

# The Origin of Experiential Education

With one third of America's public high schools requiring community service, one may wonder where the idea came from. As mentioned above, many educators feel that children need to be socialized as volunteers, and that it is up to the schools to do the socializing. But that is only part of the impetus for the implementation of service mandates. Fertman (1994) explained that service learning emerged from the writings of Dewey. While many educators concur with Fertman, they are not entirely correct. Dewey (1938/1963) did believe that education should be linked to practical experience, but he stressed that those experiences must be "worthwhile educationally" (p. 33). Dewey wrote about the "continuity of experience," meaning that educational experiences should lead to other, growthoriented experiences. He cautioned that not all experiences are continuous and that educators need to discriminate between those experiences which may be imposed merely for the sake of gaining the label of "progressive" and those experiences which are truly beneficial to the students' growth. The section above

detailed how community service has taken American public education by storm. What is not known is how many of those programs employ thoughtful educational experiences solely for the benefit of students and how many use students simply to gain national recognition for being progressive. Dewey's (1938/1963) later work was a reformulation and a rethinking of his earlier work that had been taken to the extreme by many educators. Educators, after reading <a href="Democracy and Education">Democracy and Education</a> (1916), wanted to apply Dewey's ideas, but in so doing, they tended to disregard traditional education completely (as cited in Dewey, 1938/1963). Dewey warned in his later work that an "either-or" approach was dangerous and could not benefit the student.

Dewey (1938/1963) also wrote about the objective and the internal factors surrounding experience. He posed that in a healthy situation, there is an interaction between objective demands, or impositions from some external source, and one's internal condition. For example, if a student is allowed to control all aspects of his educational experience, or, conversely, if an outside source is responsible for controlling the student's experience, there will be no interaction. This phenomenon can be linked to what Dewey described as an "either-or"

situation. Dewey felt that the student and the educator must work together to bring about educational growth. It is only through this interaction that true educational experience of a continuous sort may develop. As will be developed in later sections, when a student's experiences are controlled by external sources, the student's motivation to have similar experiences later may be diminished.

Dewey (1938/1963) believed that the student enters into an interaction as one factor in that interaction, and that the educator is to provide the objective, the "social set-up of the situation" (p.45). It is important to note that the individual, as he enters the situation, "is what he is at a given time" (p. 45). It may be inferred, then, that if the student is not ready for a certain experience, then the quality of the interaction will not be beneficial; the experience will not be of the continuous variety that Dewey postulated was the only worthwhile type of experience to have. The educator, according to Dewey's philosophy, is to provide the student with the tools necessary to have a meaningful experience. Those tools may be anything from books, to games, to equipment, to any other materials necessary for the experience. It is then up to the student to engage the materials, to make the

most of the experience. The educator is there to guide the student, to provide the situation.

The work of Dewey (1916) has been embraced by most educators and by the federal government. It appears that Dewey's (1916) work has been taken out of context, and that many have not read, or have dismissed, his later (1938) writing. He stresses in his subsequent work that experiential education should be carefully considered. Not all students are ready for certain experiences, and not all experiences are beneficial to the students. However, Dewey (1938/1963) advocated experiential education whenever possible. Dewey's (1929/1994) philosophy was that "experience is not a veil that shuts man off from nature; it is a means of penetrating continually further into the heart of nature" (p. xv). Applied to education, Dewey's philosophy manifests itself in the application of experiential learning. Dewey believed that in order for students to learn, they must first have practical experience. Those students who have the opportunity to apply their learning in a context other than a traditional lecture classroom may be better able to retain that knowledge than those listening to a traditional lecture. Recent empirical literature appears to support Dewey's argument (e.g., Markus, Howard, & King, 1993), although

both Dewey and current researchers caution that we must not abandon the traditional lecture (Dewey, 1938/1963; Markus et al.).

While there appear to be some advantages to experiential learning, there are also some disadvantages. One form of experiential learning that is currently sweeping the nation is service learning, in which students work in the community, applying what they have learned in the classroom. If service learning is presented in particular ways, that type of experience can be truly educational. However, if service learning is presented such that the students do not feel ready, or that the students feel pressured, there may be psychological implications. One such implication may be the decrement of intrinsic motivation for subsequent service. It is recognized that most service learning programs have more than one goal. Typically, there are at least two goals, one of which is that students can apply what they have learned in the classroom to a "real world" situation, and the other of which is the promotion of volunteerism among the students. While the former goal has been empirically shown to have been achieved in some service learning programs, the latter goal has not been addressed in the psychological literature.

Although Dewey did not use the words "intrinsic motivation," he nevertheless posed some quite intriguing thoughts concerning students' educational experiences. The current study focuses on one particular statement that Dewey (1938/1963) made:

The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative. Experience and education cannot be directly equated to each other. For some experiences are miseducative. Any experience is mis-educative that has the effect of arresting or distorting the growth of further experience. An experience may be such as to engender callousness; it may produce lack of sensitivity and of responsiveness (pp. 25-26, italics added).

Education (1938/1963) in which Dewey sought to reformulate and restate his positions on education due to the misuse by educators of his earlier (1916) writing. The current study examines the latest trend in education to mandate community service as a graduation requirement. Taking Dewey's statement into account, it may be reasoned that mandating community service could "arrest or distort" the students' experiences. Theory in the area of intrinsic

motivation sheds light on the possibility that requiring community service can decrease students' intrinsic motivation for volunteering.

The following sections will describe a few different psychological theories, principles, and hypotheses that can explain a subsequent decrease in intrinsic motivation following experiences with external constraints, rewards, and punishments. Although a direct approach utilizing the findings of the intrinsic motivation literature is to be expected, literature on self-perception theory, attribution theory, and altruism is critical if one is to fill the gaps left by the traditional intrinsic motivation literature (Sobus, 1995). Thus, the following sections will present some of the findings from these aforementioned areas of psychology. Each section is not meant to be an exhaustive review, but will be integrated with other sections in order to present a more complete picture of some of the explanations for decreases in intrinsic motivation.

## Psychological Theory

Attitudes and Behavior. The social psychological literature contains a plethora of studies designed to provide evidence that either behaviors cause attitudes or

that attitudes cause behaviors. Cognitive dissonance theory states that when one has two or more inconsistent cognitions, one will be driven to reduce that inconsistency; hence, one must then change one or more of the cognitions. For example, in the context of mandated community service, one may feel that being forced to work for free is wrong. However, if one subsequently engages in the forced activity, one may come to change his attitude about the nature of that activity; hence, one may cultivate the attitude that it is okay to work for free. While dissonance theory can explain why one would change one's attitude about a behavior that one previously did not like, dissonance theory cannot address what happens to the attitude toward a behavior that one enjoys. Thus, for those students who previously did not want to participate in community service, actually having to perform that service may facilitate a positive attitude change. However, while one may cultivate a positive attitude toward mandated service, there are other psychological phenomena that may interfere with one's newfound attitude. For example, Bem (1972) proposed that when one's internal attributions about one's behaviors are weak or ambiguous, one will look to others for external cues. Thus, if one is uncertain whether he is performing community service

because he wants to or because he has to, he will tend to look to others for cues. As will be elaborated upon later, others' attributions about our own behavior can significantly influence how we perceive ourselves and can influence our subsequent behavior.

For those students who previously enjoyed doing community service, however, dissonance theory cannot explain the outcome for those students who are then forced to serve. Bem's (1972) self-perception theory, though, can explain changes in intrinsic motivation. Because the focus of this study concerns the effects of mandated service on subsequent intrinsic motivation, the majority of the remaining literature review will focus on the work that has implications for intrinsic motivation and has stemmed from Bem's theory.

Self-Perception Theory. Bem (1972) explained self-perception theory with two propositions: one comes to know his or her own attitudes and internal states by observing his or her own behavior and making inferences; and, if the internal cues are weak or ambiguous, one is in the same position as an outside observer, such that one must rely on external cues to make inferences. In addition, if constraints to behavior are present, they can influence how we interpret that behavior. One will use his

or her own behavior to make inferences about one's own beliefs and attitudes to the extent that external contingencies are either non-existent or are very subtle. For example, if one donates twenty hours of community service to a homeless shelter because doing so would fulfill a graduation requirement, one may believe that he or she is providing service because of that requirement. If, however, one provides twenty hours of service to a homeless shelter when no external constraints or contingencies are present, one may attribute one's behavior to an internal drive, or intrinsic interest.

Lepper, Zanna, and Abelson (1970) conducted a study in which children were told that a highly valued toy was to no longer be played with. The children were then left alone during the "temptation period" while unobtrusive observers noted whether the children began to play with the toy again. Those children who had been given a mild threat, as opposed to a severe threat or no threat, were least likely to engage the toy during the temptation period and reported that they no longer liked the toy. Lepper et al. found that if the children were told prior to the temptation period that other children had refrained

The classic intrinsic motivation studies were conducted with children. However, later studies were conducted with young adults, with similar results. Those studies will be addressed later.

from playing with the toy when asked, the children in the mild-threat condition no longer devalued the toy. From a self-perception perspective, Bem (1972) explained that if everyone behaves in the same manner, one cannot use this normal behavior to gain some insight about one's unique attitude. Thus, one's own attitude is discounted and the group norm becomes the referent.

More Than One Cause: Overjustification Hypothesis.

Overjustification effects were apparent in the studies of self-perception theory. Bem (1972) stated that a person is intrinsically motivated to perform an activity to the extent that external contingencies are absent. If external cues are absent, the person will attribute his behavior to his own internal motivation. Bem explained that an overjustification effect is present to the extent that external contingencies cause a person to infer that he or she did not want to perform the activity, or that he or she did not believe in the activity.

Numerous studies were conducted in the 1970s that tested the overjustification hypothesis. Lepper, Greene, and Nisbett (1973) conducted a study in which children were observed to be intrinsically motivated to perform a certain play activity. Children in the Expected-Award condition were told they would receive a reward for

performing the activity. Children in the Unexpected-Award condition were not told about a reward. Children in both of these conditions received a reward following the activity. Children in the No-Award condition received no information about a reward, nor did they actually receive a reward. In a subsequent free-play period, the children in the Expected-Award condition spent less time in the previously intrinsic activity than did the children in the Unexpected-Award condition or the No-Award condition. Lepper et al. concluded that if the reward is known prior to the performance of an interesting activity, the time spent on the activity following receipt of the reward will be reduced. Lepper et al. explained that the overjustification effect was present, in that the children in the Expected-Award condition attributed their activity to the external contingency and not to intrinsic motivation. When the prospect of reward was no longer present (in the free-play period), the children who had previously been induced to perform for a reward spent less time on the activity they had once enjoyed.

Kelley (1967, 1971) explained that causal attributions for engagement in a task could be attributed to the "discounting principle," such that the "attributor's confidence in the role of a given cause in

producing an effect is inversely related to the number of causes that seem plausible" (as cited in Kruglanski, 1978, p. 25). Eagly and Chaiken (1993) explained the discounting principle such that when one can find more than one cause for his or her behavior, one will discount the cause that once had priority (as cited in Sobus, 1995). In the case of the Lepper et al. (1973) study, the children were intrinsically motivated to perform the chosen activity. Internal motivation, not external rewards, was the priority; hence, the discounting principle explains the decrease in intrinsic motivation for those children who expected and received external rewards.

The implications of the overjustification research for mandated community service may now be apparent. It can be reasoned that if students can identify external rewards as reasons for performing community service, students may not cite internal motives for volunteering. If that happens, students would then tend not to continue to perform community service once the external rewards are no longer present. But self-perception theory and the overjustification hypothesis explain a decrease in intrinsic motivation only for those who were initially intrinsically motivated. It is safe to assume that not all students are intrinsically motivated to perform community

service. If that is true, self-perception theory and the overjustification hypothesis would only explain behavioral changes in those students who could be previously identified as intrinsically motivated for the activity. In fact, Lepper et al. (1973) proposed that when initial intrinsic motivation is very low, reward systems such as token economies can serve to raise intrinsic interest.<sup>2</sup>

Although self-perception theory and the overjustification hypothesis may explain only part of the phenomenon, there is other psychological evidence to suggest that people will lose intrinsic interest if they do not have freedom and choice.

Cognitive Evaluation Theory: Self-Determination. Decial and Ryan (1980) proposed that the level of intrinsic motivation for an activity depends on one's feelings of self-determination and freedom; and freedom implies choice in one's activities. External cues will affect intrinsic motivation to the extent that they influence one's perception of locus of causality. If the locus of causality is perceived to be external, intrinsic motivation will diminish. While Lepper et al. (e.g., 1973)

<sup>&</sup>lt;sup>2</sup>However, these researchers caution that such reward systems be used only when all else has failed because the proper implementation of a token economy takes a great deal of training, effort, and sensitivity on the part of the provider.

proposed that one makes attributions about their own behavior (internally or externally driven), Deci and Ryan contend that changes in intrinsic motivation are due to one's perceptions of self-determination and control. Thus, one could attribute her behavior to an external source, but if she still perceives herself to be in control of her behavior, intrinsic motivation will not diminish. Deci and Ryan contend that one can feel competent and selfdetermined in a situation or not. One's feelings of selfdetermination are influenced by external cues. If an external cue is perceived by the actor as informational, intrinsic motivation should not decrease. If, on the other hand, an external cue is perceived by the actor as controlling, intrinsic motivation should diminish. Deci and Ryan note that all behavior takes place in order for the actor to achieve some outcome. What determines one's level of intrinsic motivation depends on the perception one has about personal freedom and control. On a practical level, researchers who conducted a study of the top community service programs at community colleges rated those programs the highest that, among other variables, afforded students the decision of whether or not to volunteer and, once in the program, the freedom to enter and exit at any time (McGuire, 1988/1996). In the context

of Deci and Ryan's research, students in such a program should perceive high levels of self-determination and control and, hence, high intrinsic motivation.

Rigby, Deci, Patrick, and Ryan (1992) suggested, however, that an intrinsic-extrinsic dichotomy may not be as useful as would be a recognition of one's selfperceived autonomy relative to differing contexts. If that is so, it may be that one's prior level of intrinsic motivation may not be as important as one's current perception of self-determination and control in a particular situation. Thus, if a student felt rather ambiguous about entering service under a mandate, his subsequent perceptions of his experiences once under that mandate would be subject to his perceptions of selfdetermination and freedom in that context. Similarly, if a student had previously been intrinsically motivated to perform community service, that student, under a mandate, would have his or her own perceptions of selfdetermination. While the overjustification hypothesis explains decrements in intrinsic motivation only for those who were previously highly intrinsically motivated, Deci and colleagues' cognitive evaluation theory could be applied to people of varying motivations.

Similarly, Kruglanski (1978) asserted that the

crucial factor in determining whether intrinsic motivation will change is how one attributes causes of one's behavior. If one believes that his or her behavior is externally determined, one will feel that the behavior is merely a means to an end. To the extent that the behavior is attributed to internal causes, the behavior will be perceived by the attributor to be an end in and of itself. If externally driven, one sees oneself as less self-determined. Kruglanski and Cohen (1973) point out, however, that contingencies may be discounted if a person has consistently behaved in a particular way in similar situations. But if one can rule out intrinsic motivation, external causes gain attributional priority. For example, if one has a history of volunteering, one may discount external contingencies (mandates). If the external causes are strong enough, though, they may override internal attributions. For example, if a service mandate is presented such that a course grade and the possibility of graduation are contingent upon completion of the service, that external contingency may be strong enough to override an internal attribution of behavior.

Deci and Ryan (1980) further suggested that constraints on behavior diminish feelings of freedom and choice, thus linking the behavior to the constraints. When

the constraint is absent, the behavior diminishes or disappears. Deci and Ryan, however, do not believe that extrinsic attributions are solely responsible for decreases in intrinsic motivation. They suggest that one's perceptions of self-determination and control are more important than actual amount of control. The work of Kruglanski (1978; Kruglanski & Cohen, 1973) and Deci and Ryan suggests that if one does not see one's behavior as self-determined, intrinsic motivation for that behavior may diminish. Self-determination may be diminished in such situations as mandated community service, where the student knows that his or her course grade and actual graduation are in jeopardy if the service is not completed. These contingencies are strong and may not be easily ignored by the student.

Exploring the possibility that not only external cues such as tangible rewards can diminish intrinsic motivation, Lepper and Greene (1975) demonstrated that situational cues, such as adult surveillance, determine how we interpret our behavior. They used a natural classroom setting to examine the effects of both extrinsic rewards and adult surveillance on subsequent intrinsic motivation. Children were to complete puzzles as fast as they could. Some children expected rewards and others did

not, but all received rewards. Some children were told that they were being watched quite often, others were told they were being watched every now and then, and others were not watched, nor were they told anything about being watched. Although the method was different for this study than had been previously employed (Lepper et al., 1973), the results were the same. Children who expected and were given a reward were less likely to show interest in the activity when rewards were absent. In addition, those children who thought that they were under adult surveillance, regardless of whether they were watched often or watched every now and then, were less likely to engage in the activity later (under no surveillance) than were those who were not watched at all. From the perspective of the self-determination hypothesis, the surveillance may have been perceived by the children as controlling their behavior, thus leading the children to attribute their behavior to an external locus of causality, and subsequently diminishing the children's intrinsic motivation.

Pittman, Davey, Alafat, Wetherill, and Kramer (1980) followed up on the Lepper and Greene (1975) study. Pittman et al. examined verbal reward in the context of high, medium, and low surveillance. Subjects were either told

that they were doing well in solving some puzzles (informational), or they were told that if they did not continue to work quickly, their data would be useless (controlling). Pittman et al. found that the informational verbal reward did not undermine subsequent intrinsic interest. Those in the controlling condition, however, were less interested in the task during a free-choice period. In addition, there was a significant linear trend for amount of surveillance, such that those in the high surveillance condition spent less time on the activity in a free-choice period than did those in the medium surveillance condition. Those in the medium surveillance condition spent less free time on the activity than did those in the low surveillance condition. These findings confirm the propositions concerning informational and controlling events set forth by Deci and Ryan (1980) that were discussed earlier. Thus, it appears that trying to meet someone else's goals can diminish intrinsic motivation.

Another variable of interest for researchers, aside from tangible rewards and surveillance, is time constraints. Amabile, DeJong, and Lepper (1976) measured intrinsic motivation decrements by having participants complete puzzles in one of four conditions. Participants

were either given no deadline, an explicit deadline, an implicit deadline, or were told to simply work quickly. After 15 minutes, participants were given the opportunity to do whatever they wanted: continue to work on the puzzles, read a magazine, sit and do nothing, etc. Those who were in the explicit and implicit deadline conditions spent less free time working on the puzzles than did those in the no-deadline and work-fast conditions. Amabile et al. concluded that deadlines are situational constraints that can diminish intrinsic motivation.

Summary. The overjustification hypothesis that stemmed from self-perception theory indicates that rewards can diminish intrinsic motivation when the rewards are specified prior to a manipulation period. But the overjustification hypothesis does not address feelings about behaviors that were not previously intrinsically motivating. But constraints, even if rewards are not present, can also serve to impact intrinsic motivation. If the behavior is contingent upon those constraints, the removal of those constraints may lead to diminished behavior. In addition, if one perceives his behavior as self-determined, rather than controlled by some external force, he is more likely to remain or become intrinsically motivated.

While the discussion to this point has focused only on one's self-attribution, self-perception, and self-determination, other psychological research suggests that others' attributions about our behavior can influence our perceptions and our subsequent actions.

Prosocial Behavior: Internally or Externally Driven? Fertman (1994) asserted that too often adults view children as materialistic and uncaring. Fertman went on to explain that by requiring youth to perform community service, adults will be able to see these children as "proactive contributors" to society. However, Fertman's work was not an empirical study; rather, it was more of a "how to" pamphlet for educators seeking to integrate service learning into their classrooms. Quigley, Gaes, and Tedeschi's (1989) empirical work, however, suggests that people view another's prosocial behavior positively when the behavior is not constrained or externally motivated. If, on the other hand, the observer sees the behavior as externally driven, the observer will discount the behavior and apply less positive attributions to the performer. Fertman may be able to say that youths who are forced to serve are seen by adults as "contributors," but if Quigley and colleagues' work is any indication, adults may not see mandated youths as "proactive."

Kelley (1967) proposed that one's attributions about another's behavior could be classified along three dimensions: consistency, consensus, and distinctiveness. One is seen as consistent to the extent that she always behaves in a certain way in like situations. One is seen as consensual if others behave in the same manner as she does in like situations. One is seen as distinctive if she behaves the same way in different situations. To the extent that one is seen as consistent, not consensual, and not distinctive, one will be seen by others as internally motivated. In other words, the person and not the situation will be seen as the catalyst for the behavior (as cited in Sobus, 1995).

Leahy (1979) found that both children and adults were willing to reward actors they perceived to be highly consistent and minimally distinct. Adults were aware of situational factors and rewarded prosocial behavior when it was more difficult to perform and discounted prosocial behavior when it was required or mandated. This confirms the discounting principle, such that if external causes are apparent, observers will discount any internal causes of behavior; and it connects to Bem's (1972) self-perception theory, such that if one's self-attributions are weak or ambiguous, one will look to others for cues

about one's own behavior. Similarly, Peterson and Gelfand (1984) reported evidence of the discounting principle in a study in which participants were to rate the behaviors of actors in short vignettes. Peterson and Gelfand found that if observers know that rewards or coercion are responsible for the performers' helpful behavior, the observers will attribute the behavior to social pressures, not to intrinsic motivation. Specifically, adults rated the following behaviors from intrinsically motivated to extrinsically motivated, respectively: helping because of empathy or for no specified reason; for praise; for tangible reward, reciprocity, or consensus; out of fear of criticism; out of fear of physical punishment.

If these studies are any indication, students who are mandated to serve will not necessarily be seen as prosocial or altruistic. Accordingly, informational verbal rewards that adults might otherwise give to volunteers may not be forthcoming. Hence, intrinsic motivation that may have been bolstered, or at least maintained, through informational verbal rewards (Deci & Ryan, 1980) could be diminished. Not only might the mandated students receive less praise, they may refer to the adults for clues about their own behavior (Bem, 1972). If the students perceive that the adults are attributing the students' behavior to

external constraints or contingencies, the students' intrinsic motivation may diminish further.

Sobus (1995) pointed out that not only do others make attributions about us, but people make attributions about their own behavior based on their behavior and the situation in which that behavior occurred. Lepper (1981) proposed that self-attributions are as important as others' attributions about ourselves. If we can make internal attributions about our helpful behavior, we should continue to be helpful. If we can only attribute our behavior to external sources, our behavior is likely to diminish or cease in the absence of external contingencies (as cited in Sobus, 1995).

In a study (Grusec, Kuczynski, Rushton, & Simutis, 1978) in which children were either directly told to share with others or were exposed to an adult model who shared with others, and in which the children were told that either they were good children for sharing (internal attribution) or were told that sharing is good (external attribution), children shared more with others after seeing the model's sharing behavior and after they were given an internal attribution for their sharing. Grusec et al. explained that those who were told to share were not very giving later no matter which attribution condition

they were in. Because they were told to share, they could not attribute their behavior to some internal disposition. Those who were in the modeling condition, however, could have attributed their behavior to either internal or external cues, so were open to the influence of others' attributions about their behavior. If they shared after seeing the model share and were given an internal attribution for doing so, they continued to share at a later time and in a different situation.

Grusec and Redler (1980) then conducted another series of experiments in which young children were given opportunities to share after they had been exposed to an adult's attributions about the children's previous sharing. When children were provided with an internal attribution (verbal attributions of the children's dispositions) for their prosocial behavior, children subsequently shared more with others. When children were provided with either external attributions (verbal reinforcements of the behavior itself) or no attributions for their behavior, they subsequently shared less. Those in the internal condition also displayed prosocial behavior in other situations at a later time, while those who were merely reinforced or who did not receive any attributions did not. Grusec and Redler concluded that

attributions about one's character can be generalized by the individual to other situations in which no rewards or punishments are present. In contrast, attributions (reinforcers) about one's specific actions do not appear to carry over to other situations where external contingencies are absent. However, Grusec and Redler cautioned that older children, unlike the younger children, can generalize reinforcement to other situations, but that the mechanism by which attributions (both internal and external) are generalized is still unclear.

Internal and external attributions are typically elicited by either rewards or (threats of) punishment. The discounting principle states that these contingencies can present such salient external constraints that internal attributions are diminished (Sobus, 1995). However, it has been shown that certain rewards can elicit internal attributions (e.g., Grusec et al., 1978; Grusec & Redler, 1980). Smith, Gelfand, Hartmann, and Partlow (1979) found that monetary rewards for sharing led to external attributions, whereas praise rewards led to internal attributions. Those who made internal attributions were more likely to share with others later. Those who were given both praise and money were more likely to make

external attributions for their behavior than were those who received only praise. Rewards, as has been shown throughout this discussion, can serve to maintain internal motives, as long as the reward serves as feedback concerning one's internal drive. What is perhaps most useful in the context of mandated community service is that Smith et al. reported that those children who either received money or were fined for sharing or not sharing discounted their intrinsic motivation and attributed their sharing behavior to external contingencies. In contrast, those who received either praise or mild verbal rebuke for sharing or not sharing attributed their sharing behavior to intrinsic motives.

Sobus (1995) contends that while some rewards can lead to attributions of internal disposition, punishments do not seem to lead to internal attributions. Sobus pointed out, though, that not enough research has been conducted in that area. The point for Sobus was that the goal that many schools are trying to achieve is one of facilitating and maintaining prosocial behavior in their students. But the research has been conducted such that the researchers encouraged internal attributions in situations in which the prosocial behavior was requested, not mandated. When punishments were used, external

attributions were made. When rewards were used, internal attributions were made in only those cases in which the rewards were social praises directed at the actor's personal disposition and not the activity itself (e.g., Grusec et al., 1978; Grusec & Redler, 1980; Smith et al., 1979). In all of these cases in which internal attributions were made, the prosocial behavior was requested, not mandated.

Sobus (1995) also explained that because the aim of most parents is to instill prosocial behavior in their children, much of the research has been done throughout the childhood years. However, the socialization of adults has not been of as much concern to researchers; yet adults are faced with rules and regulations on a daily basis. What has yet to be examined empirically is the possibility that mandated community service will either reduce a young adult's prior intrinsic motivation to serve or will prevent that young adult from ever acquiring an intrinsic motivation to serve. However, some studies have been conducted in which young adults either volunteered to help or were coerced to help. These young adults' subsequent attributions and prosocial behaviors will be examined next.

Batson, Coke, Janoski, and Hanson (1978) recruited

college students to code data. In line with the classic overjustification research, there were three conditions: expect pay, receive pay; expect no pay, receive pay; and expect no pay, receive no pay. Those who expected pay and were paid saw their work as less altruistic than those in either of the other two conditions. This confirms the overjustification hypothesis. But again, this behavior was voluntary, not mandated (Sobus, 1995). Other research (Batson, Harris, McCaul, Davis, & Schmidt, 1979) showed that when helping behavior was coaxed by a confederate, those who were led to make an internal attribution were more likely to help later than were those who were led to make an external attribution. In addition, after attributions were made, those who made internal attributions were more happy than those who made external attributions. What is interesting is that even though these participants volunteered, they could still be induced to make external attributions.

Thomas and Batson (1981) conducted another study with college students. These researchers reasoned that social norms, like money, could be perceived by actors as external constraints. Thus, one who helps under those social pressures could lose intrinsic interest in helping. Some participants were led to believe that everyone else

had helped the experimenter on some unrelated task (consensus) and these participants were asked to help also. Thomas and Batson found that those who complied with the social norm saw their behavior as less altruistic. In addition, those who felt indebted to another person reciprocated. These participants felt less altruistic than did those who helped for reasons other than indebtedness. Also, this effect was moderated by whether or not the participant knew that everyone else had helped. When the participant knew that everyone else had helped and the participant helped due to social constraint (indebtedness), the participant's internal attribution of altruism decreased. Unfortunately, Thomas and Batson measured only participants' attributions about their reasons for helping under different conditions, but did not measure the amount or the quality of actual helping behavior of participants.

Finally, Thomas, Batson, and Coke (1981) conducted a study on the premise of self-perception theory, such that a person perceives his action to be intrinsically motivated to the extent that it is free from external constraint or pressure. Thomas et al. reasoned that one may feel social pressure when exposed to highly helpful others. Some participants (college students) were exposed

to vignettes in which people were described as very helpful. Other participants were exposed to vignettes in which people were moderately helpful. In addition, some of the participants were asked to help the researcher on an extra task while other participants were not. When participants were exposed to very helpful others before they were asked to help on the extra task, these participants saw themselves as less altruistic than those who were exposed to the moderately helpful others. They felt that they were only conforming to the social norm. While these participants did not perceive their helpfulness as any less trivial than did those in the moderately helpful condition, they did attribute their prosocial behavior to external causes.

Summary. The research discussed here suggests that external contingencies such as rewards and punishments, social norms, and pressure to comply can cause one to attribute one's prosocial behavior to an external source. In the absence of an external contingency such as a promised reward, it is likely that one will discontinue the prosocial behavior (if that person is used to operating under a contingency). In addition, one makes attributions about one's prosocial behavior that depends on the situations in which the behavior occurs. If the

behavior occurs due to a social norm or due to compliance, one is likely to make an external attribution about one's motivation to behave prosocially. Without internal attributions for one's prosocial behavior, one is likely to discontinue the prosocial behavior unless socially pressured. Thomas and Batson (1981) warned that society's expectation that its citizens must serve may undermine intrinsic rewards for prosocial behavior. If one knows that "everyone else helped," one may only help when social norm dictates. Prosocial behavior may be seen not as a positive reward reflecting one's self-disposition, but as a way to avoid social censure as one perceives it.

# Summary and Hypotheses

Bem's (1972) self-perception theory states that one comes to know his or her own attitudes and internal states by observing his or her own behavior and making inferences; and, if the internal cues are weak or ambiguous, one is in the same position as an outside observer, such that one must rely on external cues to make inferences. In addition, if constraints to behavior are present, they can influence how we interpret that behavior. One will use his or her own behavior to make inferences about one's own beliefs and attitudes to the extent that external contingencies are either non-existent

or are very subtle.

The overjustification hypothesis uses the discounting principle to explain a decrease in intrinsic motivation following the receipt of an expected reward. For those who were intrinsically motivated, the external contingency (reward) can lead one to discount the intrinsic motivation and attribute one's behavior to the reward. While the overjustification hypothesis can explain a decrease in previously high intrinsic motivation, Deci and Ryan and colleagues (Deci & Ryan, 1980; Rigby et al., 1992) specified cognitive evaluation theory, which can explain changes in intrinsic motivation, depending on one's perceptions of self-determination in differing situations. Self-determination can be influenced by such factors as informational versus controlling rewards, where informational rewards can serve to maintain or bolster perceptions of self-determination, and controlling rewards can serve to diminish perceptions of self-determination.

Both rewards and punishments can affect attributions one makes about one's own behavior. Verbal rewards, such as social praise, can lead one to attribute one's behavior to intrinsic motivation. Tangible rewards, such as money, can lead one to attribute one's behavior to external contingencies. Punishments, such as monetary fines, can

lead one to make external attributions, while mild verbal punishments can lead one to make internal attributions.

People can make attributions about themselves and their behavior, but people also can make attributions about others' behavior. To the extent that one can make an internal attribution about one's own behavior, one will feel intrinsically motivated. To the extent that one can make an external attribution about one's own behavior, one will feel extrinsically motivated (or less self-determined and more controlled). In the context of Bem's selfperception theory, people may use external cues (e.g., others' attributions) to make attributions about their own behavior if internal cues are weak or absent. Thus, if one perceives one's behavior as generally externally driven, others may also make that attribution. If others make an external attribution about one's behavior, that external attribution may serve to further diminish one's ability to make an internal attribution or to feel self-determined.

Thus, the following four hypotheses have been posited:

1. Those students who have experienced required community service will be less likely to subsequently volunteer for a community service activity than will those students who have experienced voluntary community service.

- 2. Those who do subsequently volunteer will have higher internal attributions and lower external attributions about their previous work than those who do not subsequently volunteer. Likewise, volunteers will have higher intrinsic and lower extrinsic motivation.
- 3. The type of prior service experience (mandated or voluntary) one has had, as well as the type of attribution (internal or external) one has made about that service experience, will be related to one's type of motivation (intrinsic or extrinsic) for subsequent volunteerism.
- 4. Students enrolled in a Senior Capstone course prior to the implementation of the graduation requirement will have higher internal attributions and higher intrinsic motivation than those students enrolled in a Senior Capstone under the mandate.

#### Method

#### Pilot Data

Participants in the pilot study were 361 upperdivision college students at Portland State University (PSU). Ages ranged from 19 to 64, with a mean of 26 (SD = 7.28). The majority of the sample was female (63%). A questionnaire (Appendix A) developed by the author was administered in order to perform factor analyses and to test for order effects. Six possible configurations of the

questionnaire were designed. The questionnaires were then randomly mixed and distributed to the students.

Sections I, III, and IV were each factor analyzed and the results are presented in Tables 1, 2, and 3, respectively. Factor analysis for each Section consisted of a principle components model first to determine eigenvalues and was followed by principal axis factoring. For the Capstone section (Section I), principle components yielded two factors. Factor 1 (eigenvalue = 6.14) accounted for 36% of the variance, while factor 2 (eigenvalue = 1.90) accounted for 11%. (A third factor was extracted with an eigenvalue of 1.12 and accounted for 6.6% of the variance. A scree plot indicated a definite drop after factor 2.) Oblique (direct oblimin) rotation was employed with the two identified factors. After rotation, factor 1 uniquely accounted for 22% of the variance (common variance = 27%), while factor 2 uniquely accounted for 15% of the variance (common variance = 21%). Items 3 and 7 were dropped because although the loadings (.49 and .45) were somewhat respectable, the goal was to eliminate any questionable items and to reduce the total number of items in the questionnaire. Item 9 was dropped due to cross-loading and items 14 and 17 were dropped due to low factor loadings (.28 and .33, respectively; see

Table 1). Factor 1 was labeled "Negative" and factor 2 was labeled "Positive." Negative refers to a more skeptical or critical view of the Capstone requirement, while Positive refers to a more accepting or endorsing view.

For the Attribution section (Section III), principle components yielded two factors. Factor 1 (eigenvalue = 6.57) accounted for 33% of the variance, while factor 2 (eigenvalue = 2.08) accounted for 10%. (Eigenvalues for factors 3 through 5 ranged from 1.35 to 1.02, with variances ranging from 6.7 to 5.1. A scree plot indicated a definite drop after factor 2.) Oblique rotation was used with the two factors. After rotation, factor 1 uniquely accounted for 25% of the variance (common variance = 28%), while factor 2 uniquely accounted for 10% (common variance = 15%). Items 23 and 33 were dropped due to cross-loading. Items 28, 31, 34, 36, and 37 were eliminated due to low loadings (see Table 2). Factor 1 was labeled "Internal" and factor 2 was labeled "External." Internal refers to an internal attribution and external refers to an external attribution, where higher scores on the respective factors indicate a higher likelihood of making that type of attribution about previous behavior.

Finally, for the Motivation section (Section IV), principle components yielded two factors. Factor 1

(eigenvalue = 4.49) accounted for 26% of the variance, while factor 2 (eigenvalue = 2.14) accounted for over 12% of the variance. (Eigenvalues for factors 3 through 5 ranged from 1.41 to 1.00, but with variances ranging from only 8.3 to 5.9. A scree plot indicated a definite drop after factor 2.) After oblique rotation with the two factors, factor 1 uniquely accounted for 17% of the variance (common variance = 19%), while factor 2 uniquely accounted for 14% (common variance = 16%). Items 43, 44, 51, 52, and 54 were dropped due to low loadings (see Table 3). Factor 1 was labeled "Intrinsic" and factor 2 was labeled "Extrinsic." Intrinsic refers to intrinsic motivation and extrinsic refers to extrinsic motivation, where higher scores on the respective factors indicate a higher likelihood of having that type of motivation to volunteer.

After factor analysis, the mean for each subscale was computed. Multivariate analysis of variance (MANOVA) was used to test for order effects and none were found, Wilks'  $\Lambda = .88, E(5, 264) = 1.10, p = .33.$ 

## Participants (Main Study)

Participants in Sample 1 were 434 college students at PSU. Ages ranged from 17 to 52, with a mean of 23 ( $\underline{SD}$  = 6.21). The majority of the sample was female (71%).

Twenty-one percent of the sample were freshmen, 37% were sophomores, 23% were juniors, 11% were seniors, and 8% were of "other" categories.

Participants in Sample 2 were 97 college students from PSU, but were specifically enrolled in "Senior Capstone" projects. Senior Capstone projects operate within interdisciplinary groups of students who perform community service presumably linked to those students' academic interests. Some of the sample ( $\underline{n} = 58$ ) were drawn from Capstones during the year prior to the implementation of a graduation requirement (1996-97). Most of these students were enrolled in the Capstones voluntarily; that is, the Capstone curriculum was in the pilot stage and students were taking the courses as electives. The rest of the sample ( $\underline{n} = 39$ ) was drawn during the first term under the new graduation requirement (1997-98). Ages ranged from 18 to 48, with a mean of 27 ( $\underline{SD} = 7.05$ ). The majority of the sample was female (66%). Seventy-five percent of the sample were seniors, 13% were juniors, 11% were either

post-baccalaureate or graduate students, and 1% were sophomores.

#### **Materials**

<u>Sample 1.</u> There were two questionnaires for Sample 1 students. Questionnaire 1 asked students what type of

voluntary service they would be interested in performing, if any. Type of service was broken into six broad categories, including an "other" category. This questionnaire also asked students for their names, phone numbers, and grade level in college (see Appendix B). A list of approximately 15 volunteer projects available in the metropolitan area was also provided to students in Sample 1. This list provided brief descriptions of each project, along with a phone number of the sponsoring agency (see Appendix C for a representative sample; the actual list varied depending on when data were collected).

Questionnaire 2 (Appendix D) consisted of five sections addressing the following: Section I presented participants with information about Portland State University's Capstone requirement. Participants were asked to respond to a series of statements, using 6-point Likert-type scales, regarding their perceptions of the work required for the Capstone requirement that they would have to perform.

Section II allowed participants to indicate what type(s) of community service they have performed, such as None,

School-Mandated, Court-Mandated, Voluntary, or a Combination of experiences. Definitions and examples were

provided for the participants to help facilitate answers.

Section III asked participants to indicate, using 6-point Likert-type scales, the circumstances under which that service was performed and how they felt about having performed that service. (Those who had no prior experience were instructed to skip to Section IV.) Section III was designed to ascertain whether participants may have made internal or external attributions about their prior service and how they felt, in general, about their prior service.

Section IV asked participants to indicate, using 6-point Likert-type scales, under what conditions they would volunteer in the future if given an opportunity. This section was designed to elicit intrinsic and extrinsic motivations for volunteering that the students may have had. Finally, Section V collected sex, age, and coding (last 4 digits of social security number) information. In addition, this section asked students how many hours they were involved in different roles, and asked how they felt about the course in which they were currently enrolled.

<u>Sample 2.</u> A questionnaire (Appendix E) consisted of four sections addressing the following: Section I for Sample 2 asked students to respond to statements

concerning the Senior Capstone as a requirement for graduation. This section was identical to Section I for Sample 1, except that some of the wording was changed to reflect the fact that those in Sample 2 were currently performing a Capstone service.

Section II asked participants to consider the community service work they were currently performing as part of the Senior Capstone project and to respond to statements concerning their perceptions of the work. These statements were identical to those in Section III for Sample 1 (conditions under which service was performed that would lead to internal or external attributions; the tense was changed to reflect the current nature of the work being performed).

Section III for Sample 2 asked students to imagine they were presented with an opportunity to volunteer for a community service project in the future and then respond to statements regarding the conditions under which they would volunteer. This section was identical to Section IV for Sample 1 (to ascertain intrinsic and extrinsic motivation levels).

Finally, Section IV collected sex, age, and level in college information. In addition, this section asked participants how many hours they were involved in

different roles, and asked how they felt, in general, about the Capstone project in which they were currently enrolled.

### Measures

Sample 1. In the Capstone section, items 1, 2, 3, 5, and 7 were regarded as Positive statements about the Capstone requirement. The higher the scores on these items, the more positive the participants felt about the Capstone requirement. Items 4, 6, 8, 9, 10, 11, and 12 were regarded as Negative statements about the Capstone requirement. The higher the scores on these items, the more negative the participants felt about the Capstone requirement (see Appendix D). Confirmatory factor analysis (CFA) indicated that these items/factors did fit the model,  $\chi^2$  (53, N = 434) = 176.43, p < .0001 (see Table 4). <u>T</u> values ranged from 8.64 to 21.71; modification indices ranged from 2.06 to 13.71 (item 3), with the majority ranging from 2 to 5. The Negative view factor uniquely accounted for 27% of the variance and the Positive view factor uniquely accounted for 23% of the variance. Cronbach's alpha for the Negative factor was .82 and for the Positive factor was .90.

In the Attribution section, items 13, 14, 15, 16, 18, 20, 22, 23, 24, and 25 were expected to comprise an

Internal Attribution factor. The higher the scores on these items, the more likely the participants made an internal attribution about their previous service experience (item 15 was reverse scored in subsequent analyses). Items 17, 19, and 21 were expected to make up an External Attribution factor. The higher the scores on these items, the more likely the participants made an external attribution about their previous service experience.

CFA indicated that these items/factors were not a good fit,  $\chi^2$  (64, N = 318) = 465.32, p < .0001 (see Table 5). T values ranged from 5.08 to 9.60; modification indices ranged from 2.41 to 25.63 (item 21), with all except item 21 less than 7.65. The Internal attribution factor uniquely accounted for 33% of the variance, while the External attribution factor accounted for 10%. With an adjusted goodness-of-fit index of only .67, however, exploratory factor analysis was then used to determine a better fit. Principal components indicated that there were three factors. Factor 1 (eigenvalue = 5.21) accounted for almost 40% of the variance, factor 2 (eigenvalue = 1.60) accounted for over 12%, and factor 3 (eigenvalue = 1.41) accounted for 11%. (All other factors had eigenvalues less than .79.) After rotation, item 21 was dropped due to low

factor loadings (-.06, .23, and .29 on factors 1, 2, and 3, respectively). After dropping item 21, principal components indicated that factor 1 accounted for 42% of the variance, factor 2 accounted for 13%, and factor 3 accounted for 11.5%. After rotation, factor 1 uniquely accounted for 23% of the variance (common variance = 33%), factor 2 uniquely accounted for 10% (common variance = 13%), and factor 3 uniquely accounted for 21% (common variance = 31%). The final factor loadings for the three attribution factors are given in Table 6. Rather than finding the expected Internal/External split, analyses indicated that some of the Internal items could be regarded as stemming from other people in the environment, while other items pertained to one's inner feelings. The former statements all contained the words "they" or "others," while the latter statements all contained the word "I" (see Appendix C, items 13 through 25). Cronbach's alpha for the Internal-Other factor was .84, for Internal-Self was .86, and for External was .71.

Finally, in the Motivation section, items 26, 27, 33, 34, 36, and 37 were expected to comprise an Intrinsic Motivation factor. The higher the scores on these items, the more likely the participants were intrinsically motivated to volunteer in the future. Items 28, 29, 30,

31, 32, and 35 were expected to make up an Extrinsic Motivation factor. The higher the scores on these items, the more likely the participants were extrinsically motivated to volunteer in the future. CFA (Table 7) indicated that there were two factors,  $\chi^2(53, N=434)=515.49$ , p<.0001. T values ranged from 4.47 to 17.53. The Intrinsic motivation factor uniquely accounted for 22% of the variance, while the Extrinsic motivation factor accounted for 19%. Items 28, 33, and 34, however, had modification indices over 20 and were cross-loading. Those three items were dropped after reliability analyses also indicated that doing so would increase alpha. Item 32 was also dropped due to a low factor loading. Cronbach's alpha for the Intrinsic factor was .78 and for Extrinsic was .75.

Sample 2. In this sample, the participants were currently enrolled in a Capstone course. The questionnaire consisted of essentially the same items as in Sample 1, but the tense of the items was changed to reflect the fact that the service about which these students were answering questions was the current Capstone service and not some service experience in the past. Therefore, the same item/factor distribution as above pertained to this sample.

Because there were only 97 participants in this sample, confirmatory factor analysis could not be performed. Therefore, the subscale reliabilities were used for comparison. Cronbach's alpha for the Positive and Negative Capstone factors were .86 and .78, respectively; for the Internal-Other, Internal-Self, and External attribution factors were .72, .80, and .53, respectively; and for the Intrinsic and Extrinsic motivation factors were .75 and .83, respectively.

### Procedure

Sample 1. A confederate of the researcher approached students at Portland State University at the beginning of their classes and with the respective instructors' consent. Students were informed that several volunteer agencies in the Portland area were in need of help. These projects were legitimate volunteer projects in the area. Students were told that they were under no obligation to volunteer for any project, but were told that their help would be appreciated. They were informed that their decision to volunteer or not volunteer would in no way affect their course grade or their standing at Portland State University. The confederate distributed to all students the list of volunteer projects available (see Appendix C).

Next, the confederate distributed Questionnaire 1 (Appendix B) and informed students that their answers were needed to provide the volunteer agencies with a better understanding of the types of projects volunteers are most interested in and to ascertain which students (Freshmen, Sophomores, etc.) are most likely to be interested. Students were told that if they indicated an interest in volunteering, they may receive a phone call from an agency, but generally, all interested students were expected to call the agencies with whom they would like to work in order to set up a time to meet. Students were told that whether or not they were interested in volunteering at that time, all of the other information (name, phone number, and grade level) was still necessary if volunteer agencies are to better serve their communities. Finally, students were told that if they decided not to volunteer at that time, they would not be contacted by any agency at any time. (Actually, no one was contacted by any agency. The researcher wanted to determine who those students were who were most intrinsically motivated to volunteer. It was reasoned that if a student was first asked to supply his name, he would then be more honest about whether or not he would volunteer.) The confederate then collected the questionnaires from all participants and inserted them

into a manila envelope designated for that particular class. All students were encouraged to keep and use the list of volunteer projects.

Approximately ten days later, Questionnaire 2 (Appendix D) was distributed to the same students, but by a different confederate. The students were told that the researcher was studying students' attitudes toward volunteerism. The students were told that their participation was voluntary and that their names would not be collected. Students were told that it takes approximately 15 minutes to complete the questionnaire and that they could discontinue their participation at any time. When the participants completed their questionnaires, they put them into a manila envelope. A different manila envelope was used for each different course so that analyses could be performed indicating whether students differ with regard to feelings concerning course content and individual instructors.

Sample 2. The questionnaire for Sample 2 (Appendix E) was distributed to students performing community service for Senior Capstone projects at Portland State University. These questionnaires were distributed toward the end of the term so that students could make informed judgments about the course. Students were told that the researcher

was studying students' attitudes toward the Senior
Capstones and community service in general. The students
were told that their participation was voluntary and that
their names would not be collected. Students were told
that it takes approximately 10 minutes to complete the
questionnaire and that they could discontinue their
participation at any time. When the participants completed
their questionnaires, they put them into a manila
envelope. A different manila envelope was used for each
different course so that analyses could be performed
indicating whether students differ with regard to feelings
concerning course content and individual instructors.

Confidentiality and Debriefing. After Questionnaire 1 data were collected from each class (Sample 1), the researcher matched names with student identification numbers from class rosters and then cut off the names and phone numbers on Questionnaire 1. The names and phone numbers were shredded and discarded prior to the collection of data from Questionnaire 2.

Following the completion of data collection, each instructor whose students were solicited for information received a packet of debriefing sheets to hand out to his or her students. This sheet informed the students about the nature of the study and provided them with the names

of those to contact should they have questions or concerns (see Appendix F).

# Results

Data generated by students from different courses (within each Sample) were analyzed to ensure that the students did not differ, between courses, in their opinions of the courses and/or instructors. If, for example, there were significantly more volunteers from a particular course than from all other courses, it may have been that that course and/or instructor had had a significant impact on the students relative to their volunteerism. The mean for each course for the four items combined (numbered 38 through 41 for each Sample; see Appendix C) measuring students' attitudes toward their respective classes and instructors were compared with a one-way analysis of variance (ANOVA; Cronbach's  $\alpha$  for the four-item scale = .91). There were no significant differences between classes, F(10, 423) = 1.61, p > .05.

For Hypothesis 1, a chi-square test was performed to examine whether those who had had volunteer experience were more likely to volunteer than were those who had had mandated experience. Those who had had volunteer experience (which could have included an elective course in school) were compared with those who had had required

service, but no significant difference was found,  $\chi^2(1, N) = 92$  = 1.40, p > .05 (see Table 8). A second chi-square analysis was planned, but due to the low sample size (n = 9), the analysis was not performed. That chi-square was designed to compare those who had had school elective experience only with those who had had school mandated experience only. There were only 2 students who had taken electives, both of whom were willing to volunteer, and the same 7 as above who had taken required courses, of which 1 was willing to volunteer.

For Hypothesis 2, two MANOVAs were used, with volunteer choice as the independent variable each in analysis (0 = did not volunteer, 1 = did volunteer). For the first MANOVA, composite score means of the Internal-Self, Internal-Other, and External attribution factors were the dependent variables. It was expected that those who volunteered would have higher internal attributions than those who did not volunteer, and that those who volunteered would have lower external attributions than those who did not volunteer. Results indicated that there were no significant differences, Wilk's  $\Lambda = .98$ , F(3, 131) = .94, p > .05. For the second MANOVA, the composite score means for the Intrinsic motivation and Extrinsic motivation factors were the dependent variables. It was

expected that those who volunteered would have higher intrinsic motivation than those who did not volunteer, and that those who volunteered would have lower extrinsic motivation than those who did not volunteer. Results indicated that there was a significant difference in motivation, Wilk's  $\Lambda = .91$ , F(2, 181) = 8.42, p < .0001. Univariate F tests indicated that those who volunteered (M = 4.93) had higher intrinsic motivation than those who did not volunteer (M = 4.35), F(1, 182) = 16.84, M < .001. The other M test indicated no significant difference between volunteers (M = 1.67) and non-volunteers (M = 1.83) on extrinsic motivation, M = 1.63, M = .20. All composite score means and means of individual items are given in Table 9.

For Hypothesis 3, two multiple regression analyses were run, one with Intrinsic motivation as the dependent variable and the other with Extrinsic motivation as the dependent variable. Each regression had the following independent variables: the three Attribution factors (Internal-Other, Internal-Self, and External), type of prior community service (0 = voluntary, 1 = required), and the three interaction terms. For Intrinsic motivation, the regression was significant, E(7, 310) = 18.14, E(8, 310) = 18.14

the Internal-Self factor was the only significant variable,  $\underline{t}(317) = 7.08$ ,  $\underline{p} < .0001$ , such that those with a higher Internal-Self mean were more intrinsically motivated to volunteer,  $\underline{b} = .39$ ,  $\underline{SE} \ \underline{b} = .05$ . Table 10 contains the  $\underline{b}s$ , standard errors, and  $\underline{\beta}s$  for all the variables.

For Extrinsic motivation, the regression was also significant,  $\mathbf{F}(7,\ 310)=11.14$ ,  $\mathbf{p}<.0001$ ,  $\mathbf{R}^2=.20$ . The only two significant variables were the Internal-Self factor and the External factor,  $\mathbf{t}(317)=2.56$ ,  $\mathbf{p}=.01$  and  $\mathbf{t}(317)=4.76$ ,  $\mathbf{p}<.0001$ , respectively. Those with a higher Internal-Self mean were less extrinsically motivated to volunteer,  $\mathbf{b}=-.13$ ,  $\mathbf{SE}\ \mathbf{b}=.05$ . Those with a higher External mean were more extrinsically motivated to volunteer,  $\mathbf{b}=.23$ ,  $\mathbf{SE}\ \mathbf{b}=.05$ . Table 11 contains the  $\mathbf{b}$ s, standard errors, and  $\mathbf{g}$ s for all the variables.

Prior to conducting the analysis for Hypothesis 4, the mean of the four items (38 through 41) that measured Capstone students' feelings about the course and the instructor was obtained (Cronbach's  $\alpha$  = .90). An ANOVA was used to determine whether students differed, between voluntary and required Capstones, on these general feelings. Results indicated no significant difference, E(1, 95) < 1.00, p > .05.

For Hypothesis 4, a MANOVA was used to ascertain whether students in the voluntary Capstones had higher internal attributions, higher intrinsic motivation, and a more positive view of the Capstones than did those in the required Capstones. The result of the MANOVA was significant, Wilk's  $\Lambda = .80$ , F(7, 89) = 3.21, p < .005. Univariate  $\underline{F}$  tests revealed that those in the required Capstones ( $\underline{M} = 3.32$ ) had a more negative view of the Capstones than did those in the voluntary Capstones ( $\underline{M}$  = 2.71),  $\underline{F}(1, 95) = 8.73$ ,  $\underline{p} < .005$ . In addition, those in the required Capstones ( $\underline{M} = 2.53$ ) made more external attributions about the Capstone experience than did those in the voluntary Capstones ( $\underline{M} = 1.87$ ),  $\underline{F}(1, 95) = 12.41$ ,  $\underline{p}$ < .001. However, those in the required Capstones (M = 1.70) were not more extrinsically motivated to volunteer in the future than were those in the voluntary Capstones  $(\underline{M} = 1.45)$ ,  $\underline{F}(1, 95) = 4.65$ ,  $\underline{p} = .12$ , although the means were in the direction hypothesized.

Another way of looking at the Capstones, however, was to compare those who took it as an elective versus those who took it as a requirement, regardless of the term in which the course was taken. For example, some of the students who took the course before the requirement began were still taking it to fulfill the requirement. Likewise,

some students taking the course during the term the requirement began were not taking the course to fulfill the requirement, but were taking it simply out of interest. Thus, another MANOVA was conducted with the reason for taking the course as the independent variable. The result of the MANOVA was significant, Wilk's  $\Lambda$  = .81,  $\underline{F}(7, 89) = 2.89, \underline{p} < .01$ . Univariate  $\underline{F}$  tests revealed that those taking a Capstone as a requirement ( $\underline{M} = 3.24$ ) had a more negative view of the Capstones than did those taking a Capstone as an elective ( $\underline{M} = 2.59$ ),  $\underline{F}(1, 95) = 10.33$ ,  $\underline{p}$ < .005. Those in the elective Capstones (M = 4.59) had a more positive view about the Capstones than did those taking a Capstone as a requirement ( $\underline{M} = 4.04$ ),  $\underline{F}(1, 95) =$ 5.76, p < .02. Those taking a Capstone as a requirement (M = 1.75) were more extrinsically motivated to volunteer in the future than were those taking the Capstone as an elective (M = 1.42), F(1, 95) = 5.56, p < .01. Finally, those taking the Capstone as an elective ( $\underline{M} = 4.85$ ) were more intrinsically motivated to volunteer in the future than were those taking the Capstone as a requirement ( $\underline{M}$  = 4.40),  $\underline{F}(1, 95) = 5.28$ ,  $\underline{p} < .03$ . Table 12 contains item and composite score means for the students taking the Capstones as an elective and as a requirement.

Discussion

The hypothesis that students who have had volunteer experience would be more willing than those with required service to volunteer for a community service activity was partially supported by the data. When including all types of volunteer service and all types of required service (but not combinations of service), there was no significant difference regarding who would volunteer. This finding may reflect the general volunteerism rate of the current sample. Regardless of prior experience, 38% of the sample was interested in volunteering. Table 8 shows that that volunteerism rate held up for those who had previously volunteered, but not for those who had served under a mandate. Because there were far more students who had had volunteer, rather than required, experience, the scale was tipped, so to speak, rendering the chi-square analysis non-significant. It should be noted that students were asked if they were interested in volunteering, but whether they actually volunteered was not measured. It could be assumed that although 38% were willing to volunteer, some percent less than that actually did volunteer. Thus, the measure of intrinsic motivation may be better tested when students actually do volunteer rather than when students only say they are willing to volunteer. For example, the questionnaire data may reflect

an above average intrinsic motivation, but the willingness to volunteer would probably be less than average, and the actual occurrence of volunteerism would be less still.

The second hypothesis was designed to ascertain whether the tendency to volunteer or not was due to the types of attributions students may have made about their service experiences. Ideally, the analysis would have included only those who had had school-based service, but due to too few students who fell into that category, all students who had had either volunteer or required service (including service outside the school context) were used. There were no significant differences between those interested in volunteering and those not interested regarding internal and external attributions. However, concerning intrinsic and extrinsic motivation to volunteer, there was a significant difference, such that those who were interested in volunteering were more intrinsically motivated than were those who were not interested in volunteering.

There were also a couple of significant findings concerning the attributions made about previous service on motivation to volunteer. The higher the internal-self attributions one was likely to make, the higher was his or her intrinsic motivation to volunteer. The higher the

external attributions one was likely to make, the higher was his or her extrinsic motivation to volunteer. Table 13 is a summary of the attribution and motivation findings.

The hypothesis regarding the Capstone sample was significant. In general, those who were enrolled in the required Capstone courses had more negative feelings about the Capstone requirement, made more external attributions about their service work, and were more extrinsically motivated to volunteer than were those enrolled in the voluntary Capstone courses.

In examining the above results, it appears that forcing students to perform community service in order to graduate may be detrimental to their intrinsic motivation to volunteer (or, at least, does not significantly enhance intrinsic motivation). However, the current study still does not answer exactly how that occurs. First, as noted above, the study, at best, can only show correlations among the attribution and motivation factors. To show that required service causes a decrease in intrinsic motivation, one must establish a baseline motivation for all participants before they are exposed to service (at the beginning of the Capstone courses, for example). What this study does show is that those who were required to serve had less intrinsic motivation than did those who had

volunteered, the opposite of the goal to foster volunteerism. Second, the findings concerning intrinsic and extrinsic motivation were more indicative of future volunteerism than were the findings concerning attributions. It may be that some students are making attributions which would lead to certain motivations, but if that were so in most or all cases, the hypothesis predicting that internal attributions would lead to volunteerism should have been significant. Instead, only intrinsic motivation led to volunteerism.

It is apparent that either students are intrinsically or extrinsically motivated because of some phenomenon aside from attributions, or that the attribution measures used in this study were not adequate. In the former case, it may be that cognitive evaluation theory could explain motivation. Cognitive evaluation theory posits that those who feel self-determined and in control of their behavior are more likely to maintain or even develop intrinsic motivation. Although a few of the items in the current questionnaire tapped into the area of control, most of the items were designed to ascertain the environment in which the service took place. Although a subtle difference, it is reasonable to ponder a rewriting of the questionnaire with a goal of capturing self-determination and control

more specifically. In examining the latter case, it appears that the attribution factors were fairly healthy in terms of reliability, and were actually somewhat better than the motivation factors. Thus, the argument that the measures were not performing well enough to yield significant results seems inadequate. However, while the attribution factors were fairly reliable, their validity should be examined. For example, in the main study, the confirmatory factor analysis extracted three attribution factors, not two. Four items were termed "internal-self" for this study and it was that factor that was significantly related to intrinsic motivation (and was inversely related to extrinsic motivation). However, the internal-other factor was not as strong as the internalself factor. In further examination of those items, the internal-other factor may be measuring the environment in which an internal attribution is likely to be made, while the internal-self factor seems to be a more direct assessment of an attribution being made. Likewise, the external factor, made up of items concerning rewards and punishments, may be measuring an environment in which one would be likely to make an external attribution, rather than measuring an external attribution directly.

In a closer examination regarding the attribution

factors, it can be seen that the hypothesis predicting that attributions would lead to volunteerism was not significant, while the hypothesis that attributions would lead to a certain motivation was significant. For example, an internal-self attribution led to intrinsic motivation and an external attribution led to extrinsic motivation. Further, as internal-self attributions led to intrinsic motivation, intrinsic motivation led to volunteerism. While the attribution may not be strong enough to predict volunteer rates directly, it appears to at least be useful in predicting motivation. Thus, although attributions may not predict volunteerism rates directly, a dismissal of attributions in the context of volunteerism would be unwise. Based on the current findings, attributions do play a role in motivation and volunteerism. However, an examination of self-determination and control, in addition to attributions, may yield more conclusive results about how one decides to volunteer or not. The above discussion sets up a path analysis that should be studied in further research. The interplay between attributions, selfdetermination, and motivation should prove fruitful. Finally, in light of the discussion above about the validity of the attribution factors, one may want to explore how the environment influences attributions

directly and how the environment may affect motivation indirectly. For example, can an inference be made from an examination of the environment, or must attributions (or cognitive evaluations) be assessed directly?

In examining the results of the Capstone hypothesis, it can be seen that those who were required to serve were more negative about required service, were more likely to make external attributions about their current service, and were more extrinsically motivated to volunteer in the future. These students were not asked to volunteer because they were already serving in the Capstones.

There were a couple of problems with the External attribution factor, however. In the main study, item 17 (mild verbal scolding) was expected to load on an Internal factor, but actually loaded quite well on the External factor along with item 19 (removal of rewards; Cronbach's alpha was .71). It could be that students were simply lumping punishments into one category because the experience they were remembering was relatively distal. In the Capstone study, items 17 and 19 did not seem to work as well together. Cronbach's alpha was only .53. Here, the students were reporting their feelings about a proximal experience and, thus, may have been better able to distinguish between types of punishments. Questionnaires

used in motivation research, then, should probably be used to assess very recent experiences rather than just any experience that can be remembered.

It could be argued that it is not the nature of the service itself (voluntary or required) but the environment in which the service takes place that determines particular attributions. Indeed, it was noted earlier that the questionnaire items were designed to ascertain the environment in which the service took place. What may be important, though, is not the objective environment, but the perceived environment. If, for example, it is known that praise helps to spur internal attributions, one could simply throw in a lot of praise in the required service settings to try to bring about internal attributions. A post hoc examination of the Capstone data, however, revealed that those in the voluntary (M = 4.49) and required ( $\underline{M} = 4.67$ ) Capstones did not differ in the amount of "niceness," "praise," "feedback," or "worthiness" they perceived from others, t(95) = .89, p > .05. Those items (13, 14, 16, and 20) were regarded as descriptive of what could happen in either type of service situation, yet they alone did not determine whether students would make internal or external attributions. In fact, the mean for those in the required Capstones was slightly higher than

for those in the voluntary Capstones. It may be that instructors of the required Capstones tried to be more positive about their students' service, but it appears that the nature of the service itself (voluntary or required) may be too salient to be overcome by a positive environment.

A word of caution is in order regarding the Capstone analyses. Due to selection bias, the significant differences between the elective and required Capstones on virtually all of the factors must be viewed accordingly. For example, those who took the Capstone as an elective should be assumed to have had a fairly high intrinsic motivation compared to those who took it to fulfill the requirement. On the other hand, it must be remembered that one of the goals of school-mandated service is to teach students to volunteer, to be responsible citizens once they leave school. In that light, the fact that students who were nearing completion of required Capstones were significantly less intrinsically motivated and significantly more extrinsically motivated to volunteer in the future should be examined further.

Although no qualitative analyses were performed, it should be noted that some students made comments to the researchers and in the margins of the questionnaires that

they were interested in volunteering only to get work experience or to get a reference for future work prospects. Future research should include in questionnaires items reflecting this fact. If students are volunteering to better their employment situations, that would certainly be reflective of extrinsic motivation.

Relatedly, it should be noted that the purpose of the current study was to determine whether required service would reduce intrinsic motivation, or heighten extrinsic motivation, to volunteer, but not to judge the academic or work-related value of school-based required service. Indeed, studies have shown that community-based learning can enhance academic performance (e.g., Markus et al., 1993). Most schools requiring community service cite enhanced learning and the attainment of work skills as goals, but they also state as a goal the promotion of "citizenship," "community-mindedness," or volunteerism. While it is important to enhance learning and work skills, the trade-off appears to be a somewhat lower intrinsic motivation (compared to elective service) to volunteer in the community. Whether schools are willing to accept this trade-off has yet to be seen, but it is hoped that schools will not simply remove the goal of the promotion of volunteerism in order to bypass the failure to meet that

goal. In fact, it is not apparent that schools are tracking whether their graduates are volunteering in the community once they leave school. Thus, the goal may be moot anyway. The goal of promoting volunteerism is a noble one, but the current study suggests that the best way to meet that goal may be to provide an environment of volunteerism which should include the offering of community service electives.

## Factor Loadings for the Capstone Section (Pilot Data)

	Fa	actors
Items	1	2
1. Capstone is good	38	.66
2. Comm. serv. is good	<b></b> 37	.64
3. Forcing is wrong	.49	16
4. Gain work skills	24	.63
5. Takes too much time	.72	02
6. Better person	22	.61
7. Won't be unique	.45	10
8. Would rather volunteer	.57	11
9. Wish volunteer would count	.25	40
10. Utilize knowledge/skills	23	.68
11. School runs my life	.64	17
12. Worried Cap won't satisfy	.69	.13
13. Others will slack off	.53	.09
14. Enrolled at PSU for Cap	.05	.28
15. Only do Cap to graduate	.51	21
16. Feel better if not required	.69	.04
17. Would do Cap anyway	12	.33

 $<sup>\</sup>underline{N} = 361, \underline{r} = -.32.$ 

Table 2 Factor Loadings for the Attribution Section (Pilot Data)

	Fa	ctors
Items	1	2
18. They were nice to me	.59	<b></b> 17
19. I was praised by others		04
20. No one paid attention	54	.05
21. Feedback from others	.70	.20
22. Others' standards (scold)	.05	.53
23. Had to meet deadlines	.41	.30
24. Told I was good person	.58	.03
25. Others' standards (punish)	.03	.67
26. Told task worthwhile	.66	.03
27. Benefits removed	03	.73
28. Not much say in work	25	.28
29. I enjoyed my service	.70	18
30. I feel I had control	.55	14
31. Stopped without reprimand	.14	30
32. I was doing special work	.71	18
33. I did not enjoy my service	41	.37

(Table continues)

### Factors

1	2
47	03
.71	17
24	.34
16	.30
	.47 .71 24

 $<sup>\</sup>underline{N} = 270, \underline{r} = -.31.$ 

Table 3 Factor Loadings for the Motivation Section (Pilot Data)

	Fac	tors
Items	1	2
38. I would enjoy helping	84	.03
39. Would make me feel good	72	.16
40. Help if nothing better	.22	.56
41. Volunteer if friends do	.16	. 64
42. Volunteer if family does	08	.46
43. Don't have time	.29	.31
44. Everyone else is doing it	.24	.28
45. School has taught me to	13	.48
46. I would feel like a loser	24	.43
47. Only vol. to get degree	.56	.33
48. Only to receive reward	.49	.35
49. Only if no one watching	.19	.51
50. Because I am helpful	68	.08
51. Only if supervised	.03	.34
52. Not if deadlines	.13	.39
53. Any circumstance	46	.01
54. Only for certain problem	.13	.06

N = 361, r = .26.

Table 4 CFA Factor Loadings for the Capstone Section (Main Data)

	Factors		
Items	Negative	Positive	
1. Capstone is good		.87	
2. Comm. serv. is good		.83	
3. Gain work skills		.77	
4. Takes too much time	.68		
5. Better person		.74	
6. Would rather volunteer	.63		
7. Utilize knowledge/skills		.79	
8. School runs my life	.76		
9. Worried Cap won't satisfy	.52		
10. Others will slack off	.46		
11. Only do Cap to graduate	.70		
12. Feel better if not required	.59		

 $<sup>\</sup>underline{N} = 434$ ,  $\underline{r} = -.80$ , Root Mean Square Residual (RMSR) = .086, Goodness-of-Fit Index (GFI) = .935, Adjusted GFI (AGFI) = .905.

Table 5 CFA Factor Loadings for the Attribution Section (Main Data)

	Factors		
Items	Internal	External	
10 mb	F 2		
13. They were nice to me	.53		
14. I was praised by others	.63		
15. No one paid attention	54		
16. Feedback from others	.58		
17. Others' standards (scold)		.69	
18. Told I was good person	.54		
19. Others' standards (punish)		.80	
20. Told task worthwhile	.65		
21. Benefits removed		.35	
22. I enjoyed my service	.84		
23. I feel I had control	.57		
24. I was doing special work	.79		
25. I was glad to help	.81		

 $<sup>\</sup>underline{N} = 318$ ,  $\underline{r} = -.32$ , RMSR = .165, GFI = .768, AGFI = .671.

Table 6 Correlation Matrix and Factor Loadings for the Attribution Section (Main Data)

		Factors	
Items	Int-Other	External	Int-Self
Internal-Other			
External	23		
Internal-Self	58	.18	a
13. They were nice to me	. 44	18	11
14. I was praised by others	.90	.04	.09
15. No one paid attention	.66	10	.03
16. Feedback from others	.69	.18	09
17. Others' standards (scold)	.09	.76	.08
18. Told I was good person	.62	.04	04
19. Others' standards (punish	)11	.74	07
20. Told task worthwhile	.59	13	13
22. I enjoyed my service	.10	10	79
23. I feel I had control	06	.04	68
24. I was doing special work	.01	.06	88
25. I was glad to help	.10	07	74
N = A3A			

 $<sup>\</sup>underline{N} = 434.$ 

Table 7 CFA Factor Loadings for the Motivation Section (Main Data)

	Fact	ors
Items	Intrinsic	Extrinsic
26. I would enjoy helping	.89	
27. Would make me feel good	.76	
28. Help if nothing better		.45
29. Volunteer if friends do		.88
30. Volunteer if family does		.87
31. School has taught me to		.51
32. I would feel like a loser		.25
33. Only vol. to get degree	62	
34. Only to receive reward	54	
35. Only if no one watching		.43
36. Because I am helpful	.62	
37. Any circumstance	.49	

Table 8 Observed and Expected Counts and Row Percents for Volunteers With Either Volunteer or Required Previous Service

	Willing to Volunteer	Not Willing to Volunteer		
Volunteer	31	54		
Experience	29.6	55.4		
	36.5%	63.5%		
Required	1	6		
Experience	2.4	4.6		
	14.3%	85.7%		

Note. Volunteer experience includes school electives. Required experience includes court mandates. Neither category includes combinations of experiences.

N = 92, p > .05.

Table 9 Item and Composite Score Means by Sample

	Sample 1		Spr.	Spr. Cap		Cap	
Items	Ā	SD	M	SD	М	<u>SD</u>	
1. Capstone is good	3.69	1.50	4.98	1.25	4.25	1,37	
-	3.68		4.59	1.46	4.64	1.29	
2. Comm. serv. is good		1.58					
3. Gain work skills	3.58	1.46	4.25	1.58	3.64	1.47	
4. Takes too much time	3.75	1.45	3.03	1.60	3.24	1.33	
5. Better person	3.58	1.43	4.12	1.42	3.67	1.60	
6. Rather volunteer	4.09	1.56	3.05	1.61	3.64	1.68	
7. Use knowledge/skills	3.61	1.26	4.46	1.45	4.04	1.42	
8. School runs my life	3.13	1.63	2.08	1.42	2.57	1.43	
9. Cap won't satisfy	4.13	1.39	3.30	1.57	3.96	1.64	
10. Others will slack	4.29	1.28	2.83	1.44	3.36	1.54	
11. Only to graduate	3.62	1.65	2.14	1.52	3.25	1.62	
12. Better if not req.	4.07	1.54	2.53	1.63	3.22	1.45	
13. They were nice to me	5.27	0.89	5.18	1.06	5.33	0.90	
14. Praised by others	4.70	1.24	4.29	1.43	4.41	1.14	
15. No one paid attn	2.27	1.31	2.17	1.23	2.17	1.09	
16. Feedback from others	3.98	1.41	4.14	1.48	4.38	1.15	
17. I was scolded	1.81	1.21	1.82	0.86	2.73	1.40	
18. Told I was good	4.32	1.36	3.95	1.55	3.99	1.42	
19. I was punished	1.49	0.91	1.91	1.03	2.33	1.25	
20. Told task worthwhile	4.98	1.11	4.45	1.34	4.57	1.32	

(Table continues)

	Sampl	le 1	Spr.	Cap	Fall	Cap
Items	Ñ	<u>SD</u>	<u>M</u>	SD	<u>M</u>	SD
21. Benefits removed	1.67	1.28	2.03	1.42	2.26	1.29
22. I enjoyed my service	5.05	1.17	4.79	1.40	4.38	1.26
23. I feel I had control	4.36	1.49	4.21	1.37	4.07	1.50
24. Work was special	4.77	1.29	4.31	1.38	4.20	1.37
25. I was glad to help	5.16	1.09	4.87	1.42	4.99	0.97
26. Would enjoy helping	5.12	1.06	5.24	0.95	5.28	0.92
27. I would feel good	5.03	1.15	4.98	1.17	5.20	1.11
28. If nothing better	2.59	1.42	2.24	1.42	2.46	1.35
29. Vol. if friends do	1.83	1.13	1.44	0.88	1.72	1.00
30. Vol. if family does	1.61	0.98	1.41	0.77	1.54	0.92
31. School taught me to	1.61	0.88	1.41	0.77	1.70	0.94
32. Feel like a loser	1.77	1.16	1.61	1.08	2.14	1.55
33. Vol. to get degree	1.87	1.28	1.44	0.99	1.67	1.07
34. To receive reward	1.56	1.06	1.32	0.90	1.54	0.80
35. If no one watching	2.04	1.28	1.56	1.10	1.83	0.97
36. Because I am helpful	4.58	1.25	4.46	1.34	4.70	1.38
37. Any circumstance	3.52	1.52	3.54	1.76	3.54	1.50
Positive Capstone	3.63	1.22	4.44	1.18	4.05	1.09
Negative Capstone	3.87	1.04	2.71	1.00	3.32	0.98
Internal-Self Attr	4.84	1.07	4.55	1.13	4.41	0.96
Internal-Other Attr	4.66	0.91	4.46	0.95	4.57	0.65
External Attribution	1.65	0.94	1.87	0.75	2.53	1.11

(Table continues)

	Sample 1		Spr. Cap		Fall Cap		
Items	<u>M</u>	SD	M	<u>SD</u>	M	SD	
Intrinsic Motivation	4.56	0.98	4.56	1.02	4.68	0.93	
Extrinsic Motivation	1.77	0.75	1.45	0.73	1.70	0.76	

Note. Items 1 through 25 were in the present tense in the Capstone questionnaire. Spring Capstones were voluntary; Fall Capstones were required.  $\underline{N}$  = 434 for Sample 1 items 1 through 12 and 26 through 37 and for all factors except Attributions;  $\underline{n}$  = 318 for Sample 1 items 13 through 25 and for the Attribution factors.  $\underline{N}$  = 59 for Spring Capstones, all items and factors;  $\underline{n} = 38$  for Fall Capstones, all items and factors.

Table 10 Regression Weights for Intrinsic Motivation

Independent Variables	<u>b</u>	<u>se b</u>	β	<u>t</u> value	<u>q</u>
Internal-Other	.08	.06	.07	1.24	.22
Internal-Self	.39	.05	.45	7.08	.0001
External	.02	.05	.02	0.33	.74
Туре	13	.88	04	0.15	.88
Int-Other x Type	28	.22	39	1.28	.20
Int-Self x Type	.22	.15	.31	1.46	.14
External x Type	.05	.15	.03	0.31	.74

Note. Type is a categorical variable describing previous service experience, where 0 = all volunteer experiences and 1 = all required experiences.

 $\underline{N} = 318$ ,  $\underline{F}(7, 310) = 18.14$ ,  $\underline{p} < .0001$ ,  $\underline{R}^2 = .29$ , Adj.  $\underline{R}^2 = .27$ .

Table 11 Regression Weights for Extrinsic Motivation

Independent Variables	<u>b</u>	<u>se b</u> β	<u>t</u> value	ā
Internal-Other	06	.0606	0.98	.33
Internal-Self	13	.0517	2.56	.01
External	.23	.05 .27	4.76	.0001
Туре	.43	.81 .16	0.53	.60
Int-Other x Type	33	.2053	1.66	.10
Int-Self x Type	.26	.14 .41	1.84	.07
External x Type	.15	.14 .13	1.07	.28

Note. Type is a categorical variable describing previous service experience, where 0 = all volunteer experiences and 1 =all required experiences.

N = 318, F(7, 310) = 11.14, p < .0001,  $R^2 = .20$ , Adj.  $R^2 = .18$ .

Table 12 Item and Composite Score Means by Reason for Taking Capstone

	As Elective		As Requirement		
Items	<u>M</u>	SD	M	SD	
1. Capstone is good	4.86	1.15	4.34	1.41	
2. Comm. serv. is good	4.86	1.33	4.42	1.41	
3. Gain work skills	4.40	1.35	3.71	1.66	
4. Takes too much time	2.72	1.50	3.43	1.43	
5. Better person	4.16	1.48	3.77	1.50	
6. Rather volunteer	3.07	1.61	3.45	1.69	
7. Use knowledge/skills	4.70	1.21	3.97	1.55	
8. School runs my life	1.93	1.16	2.55	1.58	
9. Cap doesn't satisfy	3.12	1.51	3.91	1.64	
10. Others slack off	3.12	1.53	2.97	1.47	
11. Only to graduate	1.78	1.29	3.21	1.63	
12. Better if not req.	2.38	1.57	3.14	1.54	
13. They are nice to me	5.17	1.02	5.22	1.00	
14. Praised by others	4.34	1.46	4.33	1.20	
15. No one pays attn	2.02	1.06	2.29	1.26	
16. Feedback from others	3.96	1.57	4.46	1.12	
17. I am scolded	1.90	1.01	2.40	1.27	
18. Told I am good	3.75	1.61	4.14	1.38	
19. I am punished	2.03	1.12	2.10	1.15	

(Table continues)

	As Elective		As Requirement		
Items	M	SD	М	SD	
20. Told task worthwhile	4.59	1.22	4.42	1.41	
21. Benefits removed	1.78	0.94	2.39	1.59	
22. I enjoy my service	4.92	1.26	4.41	1.39	
23. I feel I have control	4.36	1.36	3.99	1.46	
24. Work is special	4.38	1.46	4.18	1.30	
25. I am glad to help	5.16	1.23	4.73	1.25	
26. Would enjoy helping	5.40	0.93	5.14	0.93	
27. I would feel good	5.23	1.09	4.94	1.18	
28. If nothing better	1.95	1.21	2.62	1.46	
29. Vol. if friends do	1.26	0.54	1.79	1.11	
30. Vol. if family does	1.28	0.70	1.60	0.90	
31. School taught me to	1.35	0.78	1.66	0.88	
32. Feel like a loser	1.81	1.31	1.82	1.31	
33. Vol. to get degree	1.23	0.53	1.77	1.24	
34. To receive reward	1.33	1.00	1.47	0.74	
35. If no one watching	1.42	0.82	1.86	1.18	
36. Because I am helpful	4.93	1.03	4.25	1.51	
37. Any circumstance	3.86	1.77	3.29	1.53	
Positive Capstone	4.59	1.02	4.04	1.21	
Negative Capstone	2.59	0.80	3.24	1.11	
Internal-Self Attr	4.70	1.03	4.33	1.08	
Internal-Other Attr	4.46	0.97	4.53	0.73	
21. Benefits removed  22. I enjoy my service  23. I feel I have control  24. Work is special  25. I am glad to help  26. Would enjoy helping  27. I would feel good  28. If nothing better  29. Vol. if friends do  30. Vol. if family does  31. School taught me to  32. Feel like a loser  33. Vol. to get degree  34. To receive reward  35. If no one watching  36. Because I am helpful  37. Any circumstance  Positive Capstone  Negative Capstone  Internal-Self Attr	1.78 4.92 4.36 4.38 5.16 5.40 5.23 1.95 1.26 1.28 1.35 1.81 1.23 1.33 1.42 4.93 3.86 4.59 2.59 4.70	0.94 1.26 1.36 1.46 1.23 0.93 1.09 1.21 0.54 0.70 0.78 1.31 0.53 1.00 0.82 1.03 1.77 1.02 0.80 1.03	2.39 4.41 3.99 4.18 4.73 5.14 4.94 2.62 1.79 1.60 1.66 1.82 1.77 1.47 1.86 4.25 3.29 4.04 3.24 4.33	1.59 1.39 1.46 1.30 1.25 0.93 1.18 1.46 1.11 0.90 0.88 1.31 1.24 0.74 1.18 1.51 1.53 1.21 1.11 1.08	

(Table continues)

	As Elective		As Requirement		
Items	М	SD	<u>M</u>	SD	
External Attribution	1.96	0.89	2.25	1.00	
Intrinsic Motivation	4.86	0.92	4.40	1.00	
Extrinsic Motivation	1.32	0.62	1.73	0.80	

 $<sup>\</sup>underline{n}$  = 43 for Elective Capstones;  $\underline{n}$  = 54 for Required Capstones.

Table 13

Summary of Findings for Attribution and Motivation Factors

(Main Data)

	Attributions				
Motivations	Internal-Self	Internal-Other	External		
Intrinsic	Higher I-S,				
Extrinsic	Higher IM Higher I-S,		Higher Ext,		
DACITION	Lower EM		Higher EM		

Note. In addition to these significant findings, those who were willing to volunteer were significantly more intrinsically motivated than were non-volunteers.

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# Appendix A Original (Pilot) Questionnaire Please do not write your name anywhere on this survey!

### Section I.

Some colleges and universities require that their students perform community service as part of graduation requirements. Portland State University is the latest university to institute that requirement, and has labeled that requirement the "Senior Capstone." The Capstone requirement specifies that all seniors at PSU must perform 6 credit hours (180 hours) of community service in interdisciplinary groups of students. These groups will design a program to address a problem or concern in the community. Please take a moment now to think about PSU's Capstone requirement. When you are ready, read the statements below and then <u>circle</u> the number that best represents how you feel about that statement.

l. I fee	el that the C	apstone rec	ruirement is	a good idea.			
		1	2	3	4	5	
:	Not at all how	-		•	•	Ü	Very much how I feel
2. Req	uiring com	nunity servi	ce for a colle	ege degree is	s a good idea	a.	
		1	2	3	4	5	6
	Not at all how	w I feel					Very much how I feel
3. Forc	cing someo	ne to do wo	rk for no pay	is wrong.			
		]	-2	3	-4	5	6
	Not at all how	w I feel					Very much how I feel
4. The	Senior Cap	ostone at PS	U will enable	e me to gain	work skills.		
		1	2	3	-4	5	6
	Not at all how	v I feel					Very much how I feel
5. The	Senior Cap	stone work	will take too	much of my	time.		
		1	-2	3	-4	5	6
1	Not at all hov	v I feel					Very much how I feel
6. By d	loing the Co	rpstone wor	k, I will feel li	ike a better p	erson.		
		1	-2	3	-4	5	6
!	Not at all hov	v l feel					Very much how I feel
7. The	Capstone v	vork I do wo	on't be unique	e because ev	veryone else	will be d	oing similar work.
		]	-2	-3	-4	5	6
]	Not at all hov	v I feel					Very much how I feel
8. I wo	uld rather d	lo my own v	olunteer wor	k instead of	the Capstone	e require	ement.
		1	2	3	-4	5	6
1	Not at all hov	v I feel					Very much how I feel

9. I wish voluntee:	r work would	d count towar	d the Capsto	ne requiren	nent.	
Not at all ho		2	-3	4		6 Very much how I feel
10. The Capstone	e requiremen	nt will allow m	ne to utilize m	ıy knowledg	e and sk	ills.
	•	2	-3	-4	-5	-
Not at all ho	wlieel					Very much how I feel
11. The Capstone	e requiremer	nt is just amotl	her way for th	ne school to	run my l	ife.
	1	2	-3	-4	5	
Not at all l	now I feel					Very much how I feel
12. I worry that the	e Capstone	projects avai	lable won't so	atisfy my inte	erests.	
	1	2	-3	-4	5	6
Not at all ho	w I feel					Very much how I feel
13. Because the Cothers do the		ojects are do	ne in groups	, some stude	ents will	slack off and make
	]	2	3	-4	5	6
Not at all ho	w I feel					Very much how I feel
14. A major reasc	on I enrolled	at PSU was s	so that I could	d take part ir	ı a Carps	stone project.
	]	2	-3	-4	5	6
Not at all ho	w I feel					Very much how I feel
15. I would only b	e willing to d	lo a Capston	e project if m	y eligibility f	or gradı	ation depended on it.
	1	-2	3	-4	5	6
Not at all ho						Very much how I feel
16. I would feel be	etter about n	ny Capstone	service work	if I didn't ha	ve to do	it to graduate.
	]	2	-3	-4	5	6
Not at all ho						Very much how I feel
17. If the Senior C	Capstone wa	sn't required,	I would do c	Capstone p	project a	nyway.
	1	2	-3	-4	-5	6
Not at all ho						Very much how I feel

#### Section II.

Please read the instructions and descriptions on this page carefully before answering. In this section, you will indicate whether you have performed community service and, if so, under what conditions. For the purposes of this survey, <u>community service</u> is defined as: work performed by you for your community and for which you were not paid. That is, do <u>not</u> consider your regular paying job as community service. After reading all of the following descriptions, please check all the boxes that apply to you. You may need to check more than one box, depending on your experiences.

- <u>Voluntary</u> community service is defined as service you have performed of your own free will, without an external requirement. For example:
  - you took an elective course in school because it had a service component; or,
  - you help[ed] with your church group at a soup kitchen; or,
  - you work[ed] after school delivering meals to the elderly.

Do <u>not</u> consider service you performed because of a school graduation requirement or for which you are (were) paid.

- <u>School-Mandated</u> community service is defined as service you have performed because
  you were required to do so by your school in order to graduate. Do <u>not</u> consider service
  you performed that was <u>not</u> for a graduation requirement. For example:
  - you had to perform so many hours of community service (as did everyone else in your graduating class) if you wanted to graduate from high school (or middle school). You were not paid for this community service you performed.
- <u>Court-Mandated</u> community service is defined as service you have performed because you
  were ordered to do so by the justice system. Do <u>not</u> consider service you performed that
  was <u>not</u> for the purpose of fulfilling a court-ordered sentence. For example:
  - o you were ordered by the court to work so many hours of community service as restitution for a crime you committed. You were not paid for this community service.

Now consider the descriptions above and check the box or boxes below that apply to you.

	I have <u>No</u> community service experience.
	If you checked this bo <b>x</b> , please go on to Section IV on page 7.
٦	I have <u>Voluntary</u> community service experience.
	If you checked this box, please indicate the following:
	I have served voluntarily for approximately hours a week for
	weeks/months/years. (Circle the one that applies.)
	I have School-Mandated community service experience.
	If you checked this box, please indicate the following:
	I served under a school mandate for approximately hours a week for
	weeks/months/years. (Circle the one that applies.)
	I have <u>Court-Mandated</u> community service experience.
	If you checked this box, please indicate the following:
	I served under a court-ordered mandate for approximately hours a
	week for weeks/months/years (Circle the one that applies)

Now consider the experiences described on the previous page. If you checked only one box, go on to Section III on the bottom of this page.

If you checked more than one box on the previous page, please indicate on the line below which of those experiences was your most recent experience that lasted one month or more.

- Example 1: You have both Voluntary and School-Mandated experiences. You finished the School-Mandated service last year, but you have been Volunteering with your church group for the last two months at a homeless shelter. You would write "Volunteer Service" on the line below.
- Example 2: You have both Court-Mandated and Volunteer experiences. You finished your Volunteer work two years ago. Last year, the court ordered you to perform 200 hours of community service, which you just completed last month. You would write "Court-Mandated Service" on the line below.
- Example 3: You have both Voluntary and School-Mandated experience. You finished the School-Mandated service last year. Two weeks ago, you Volunteered to clean up a park. You would write "School-Mandated Service" on the line below because your most recent experience is less than one month in duration.

Most recent service experience:	
Most recent service experience.	

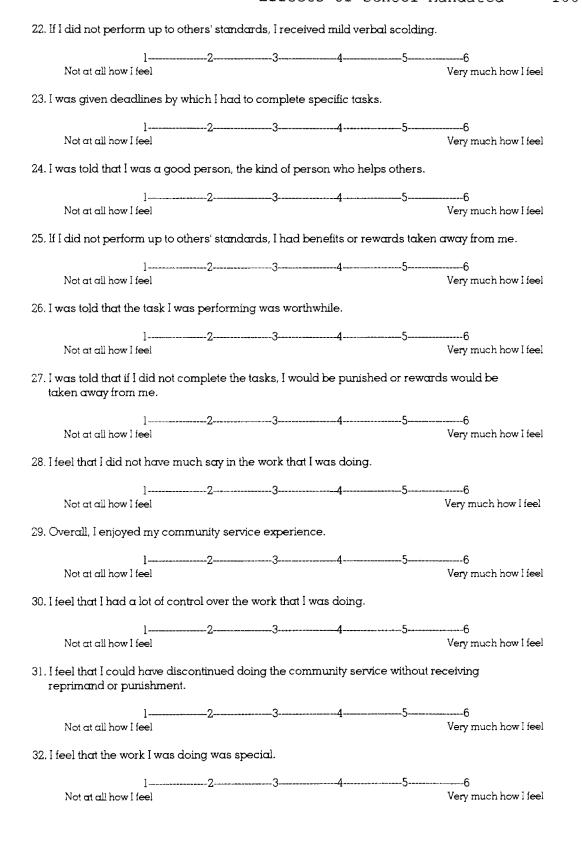
#### Section III.

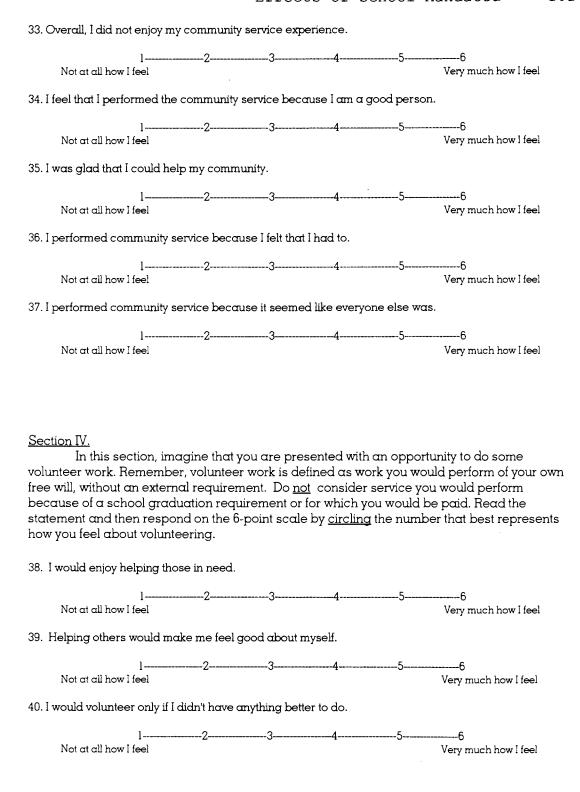
Not at all how I feel

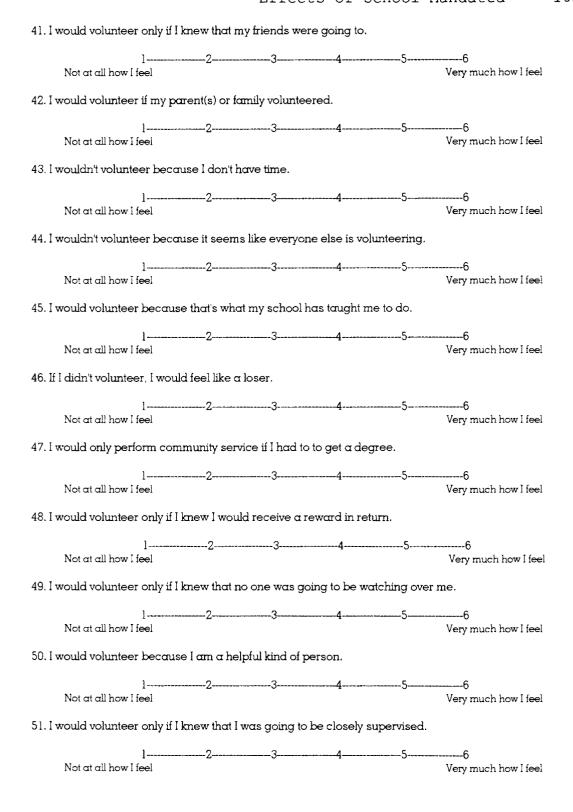
In this section, you will be asked to rate, on 6-point scales, the circumstances and feelings surrounding your community service experience. If you checked only one box in Section II on the previous page, think about that experience as you respond to the following statements. If you checked more than one box in Section II, think about the experience you wrote on the line above at the end of Section II (your most recent experience that lasted one month or more) as you respond to the following statements. <u>Circle</u> the number that best represents how you feel.

18. The	ose who overs	aw my con	nmunity sei	rvice work w	ere nice to n	ne.	
	Not at all how I f	-	2	3	4	5	6 Very much how I feel
	eceived praise		rs for the w	ork I did.			
		-	2	3	4	5	-
	Not at all how I fone paid muc		to the wor	ᆘᅥᆉ			Very much how I feel
20. NO	one paid muc				4	5	<del>6</del>
	Not at all how I f	-	2	Ū	•	Ü	Very much how I feel
21.Ire	eceived feedbo					- ,	
		]	2	3	4	5	6

Very much how I feel







52. I wouldn't vo	olunteer if I kn	ew there wo	s going to b	e time pressi	ure and de	adlines.
Not at all l		2	3	4	5	6 Very much how I feel
53. I would volu	nteer under p	oretty much	any circums	tances.		
	,	0	^	4	r	c
Not at all l	-	Z	J	4	J	Very much how I feel
54. I would volu	nteer <u>only</u> for	a project th	at reflects m	y interests in	a particul	ar social problem.
	1	2	3	4	5	6
Not at all 1	-	2	J	<u>-</u>		Very much how I feel
Section V. Your information:	answers to t	he above o	questions w	ill not be us	able witho	out the following
► Last 4	M F (	ur social s	ecurity num	nber: ur name.)		_ (For coding purposes
<ul> <li>How in How in How in Consistence</li> </ul>	many credit many hours many hours ider the cou	hours are a week do a week do rse you are at. Now rea	you taking t you spend you spend in right at	this term? _ at your reg doing volur this momen	ular payin nteer work nt. Think al	nbers? g job? ? pout your instructor and le the number that best
55. Overall, I lik	e this course.					
Not at all l	-	2	3	4	5	6 Very much how I feel
56. Overall, I lik	e the instruct	or.				
			•		_	_
Not at all l		2	3	4	5	Very much how I feel
57. I would take	e a course fro	m this instru	ictor in the fu	iture.		
	1	2	3	4	5	·6
Not at all l		<b>3</b>	J	<b>3</b>	-0	Very much how I feel
58. I would reco	ommend this	course to ot	her students			
	1	2	3	4	5	6
Not at all 1	how I feel		-	-	-	Very much how I feel

Thank you for your participation!

## Appendix B

## Volunteer Sheet (Questionnaire 1)

## Volunteer Coordination Sheet Portland State University

Name	e:
Phor	ne: (H)(W)
Grad	de in College (Freshman, Sophomore, etc.):
Мајо	or:
will	ck which type of volunteer activity you would be ling to do (within the next few weeks): (Check only <u>one</u> egory)
	Working with the elderly
	Working with children/adolescents
	Working on environmental issues
	Working with low-income families
	Working in the business community
	Other
	Not interested in volunteering at this time (within next few weeks)

#### Appendix C

List of Volunteer Opportunities

#### VOLUNTEER OPPORTUNITIES!!!

The following opportunities require varying amounts of time and energy. Some are one-time/one-weekend only, some are ongoing and require several hours a week, and some are somewhere in between! If you don't see anything on here that interests you but you still want to do some volunteer work, call **The Volunteer Center** at **222-1355** for more opportunities.

Mt. Hood Community College Neighborhood Saints Thrift Shop: Work three-hour shifts Fridays and Saturdays. Call Genny Collins, 665-4946.

**Delta Society Pet Partners:** Visit nursing homes, hospitals, schools, and other treatment facilities with a pet. Call **Barbara Tuler**, **646-1442**.

Bonnie Hays Animal Shelter: Volunteer in the shelter, adoption, and pet-therapy programs. Call Susan Field, 681-7141.

Advocates for Women in Science and Engineering: Coordinate transportation for advocacy program. Call Casey Rodhouse, 690-1627.

The Oregon Partnership's Alcohol and Drug Helpline: Help with information, referral, and crisis-intervention. Call Lloyd Duncan, 244-5211.

Investigators and Advocators needed: Help identify and resolve problems on behalf of residents of nursing homes. Call Kathy Walter, 1-800-522-2602.

**Red Cross:** Transport elderly and disabled people to doctor's visits and for errands. Call **Peggy Watters**, **284-0011**, **ext. 288**.

Volunteer opportunities can come and go on a daily basis, so call The Volunteer Center if you don't see what you're looking for!

# Appendix D Questionnaire 2 (Main Study)

Please do <u>not</u> write your name anywhere on this survey!

as part of graduation requirements. Portland State University is the latest university to institute that requirement, and has labeled that requirement the "Senior Capstone." The Capstone requirement specifies that all students at PSU who began their college career (at any college or university) in the Fall of 1994 or after must, as seniors, perform 6 credit hours (180 hours) of

Some colleges and universities require that their students perform community service

Note that there are 3 pages in this survey, with questions on front and back. Section  ${\rm I.}$ 

community service in interdisciplinary groups of students. These groups will design programs to address problems or concerns in the community. Please take a moment now to think about PSU's Capstone requirement. When you are ready, read the statements below and then circle the number that best represents how you feel about that statement. 1. I feel that the Capstone requirement is a good idea. 1-----5-----5 Verv much how I feel Not at all how I feel 2. Requiring community service for a college degree is a good idea. 1-----5------Not at all how I feel Very much how I feel 3. The Senior Capstone at PSU will enable me to gain work skills. 1------5------6 Verv much how I feel Not at all how I feel 4. The Senior Capstone work will take too much of my time. 1-----5-----5------Verv much how I feel Not at all how I feel 5. By doing the Capstone work, I will feel like a better person. 1-----5-----Not at all how I feel Verv much how I feel 6. I would rather do my own volunteer work instead of the Capstone requirement. 1-----5------Not at all how I feel Very much how I feel

7. The Capstone requirement will allow me to utilize my knowledge and skills.

Not at all how I feel

Very much how I feel

8. The Capstone requirement is just another way for the school to run my life.
l5
9. I worry that the Capstone projects available will not satisfy my interests.
16 Not at all how I feel Very much how I feel
10. Because the Capstone projects are done in groups, some students will slack off and make others do the work.
l
$11.\mathrm{I}$ would <u>only</u> be willing to do a Capstone project if my eligibility for graduation depended or it.
l56 Not at all how I feel Very much how I feel
12. I would feel better about my Capstone service work if I did not have to do it to graduate.
l56 Not at all how I feel Very much how I feel
Section IIa.  Please read the instructions and descriptions <u>carefully</u> before answering the following questions. In this section, you will indicate whether you have performed community service and, if so, under what conditions. For the purposes of this survey, <u>community service</u> is defined as: work performed by you for your community and for which you were not paid. That is, do not consider your regular paying job as community service. Please check the box(es) that correspond to the type(s) of community service you have performed. You may need to check more than one box, depending on your experience(s).
☐ I have <u>no</u> community service experience.  If you checked this box, please go on to Section IV on page 4.
I have <u>volunteered</u> (do <u>volunteer</u> ). <u>Voluntary</u> service means that you do it simply because you want to. (Do <u>not</u> include courses you have taken in school; see categories below.)  If you checked this box, please indicate the following:  I have served <u>voluntarily</u> for approximately hours a week for weeks/months/years. (Circle the one that applies.)
☐ I took an <u>elective</u> course in high school (or college) because it involved community service.  took the course because I wanted to do community service.  If you checked this box, please indicate the following:  I served <u>voluntarily in school</u> for approximately hours a week  for weeks/months/years. (Circle the one that applies.)

☐ I took a <u>required</u> course in high so community service. Required serv	ice means that yo	ou <u>had</u> to do it in o	
If you checked this box, plea: I served under a <u>sch</u> for weeks/m	<u>ool requirement</u> f	or approximately	hours a week
☐ I performed community service un because a judge (or someone in the If you checked this box, please I served under a cou week for we	ne court system) on se indicate the fol rt-ordered mando	ordered me to. lowing: ate for approximat	ely hours a
Now consider the experience Section III. Section IIb. If you checked more than one those experiences was your most rec	<u>e</u> box above (in S	ection IIa), please	
<ul> <li>□ Voluntary (not for school)</li> <li>□ Voluntary school course</li> <li>□ Required school course</li> <li>□ Court-ordered</li> </ul>			
Section III.  In this section, you will be asl feelings surrounding your community Section IIa on the previous page, thin statements. If you checked more than checked in Section IIb (your most recestatements. Circle the number that be	r service experient which about that experient one box in Section entry experience) of the contract of the con	ice. If you checked erience as you res on IIa, think about as you respond to	d only <u>one</u> box in pond to the following the experience you
13. Those who oversaw my communit	ty service work we	ere nice to me.	
l22 Not at all how I feel	3	_	6 Very much how I feel
14. I received praise from others for the	he work I did.		
l22 Not at all how I feel	3		6 Very much how I feel
15. No one paid much attention to the	work I did.		
l22 Not at all how I feel	3		6 Very much how I feel
16. I received feedback from others a	bout the progres	s I was making in :	my work.
l22 Not at all how I feel	3		6 Very much how I feel

17. If I did not perform up to	others' standa	rds, I receive	d mild verbal	scolding.
]	2	3	4	-56
Not at all how I feel	_	Ü	•	Very much how I feel
18. I was told that I was a go	od person, the	e kind of pers	on who helps	others.
]	2	3	4	-56
Not at all how I feel	_	•	-	Very much how I feel
19. If I did not perform up to	others' standa	rds, I had bei	nefits or rewa	rds taken away from me.
1	2	3	4	-56
Not at all how I feel				Very much how I feel
20. I was told that the task I v	vas performin	g was worthv	vhile.	
1	2	3	4	-56
Not at all how I feel				Very much how I feel
<ol> <li>I felt that if I did not perform be taken away from me.</li> </ol>	rm the commu	unity service,	I would be pu	nished or rewards would
1	2		_4	56
Not at all how I feel	2	Ü	•	Very much how I feel
22. Overall, I enjoyed my cor	nmunity servic	ce experience	Э.	
]	2		4	-56
Not at all how I feel			•	Very much how I feel
23. I feel that I had a lot of co	ontrol over the	work that I w	as doing.	
]	2	-3	4	56
Not at all how I feel	_	•	•	Very much how I feel
24. I feel that the work I was	doing was spe	ecial.		
	2	-3	4	-56
Not at all how I feel				Very much how I feel
25. I was glad that I could he	lp my commu	nity.		
	2	-3	4	-56
Not at all how I feel				Very much how I feel

#### Section IV.

In this section, imagine that you are presented with an opportunity to do some <u>volunteer</u> work. Remember, <u>volunteer</u> work is defined as work you would perform of your own free will, without an external requirement. Do <u>not</u> consider service you would perform because of a school graduation requirement or for which you would be paid. Read the statement and

then respond on the 6-point scale by  $\underline{\text{circling}}$  the number that best represents how you feel about  $\underline{\text{volunteering}}$ .

26. I would enjoy helping t	those in ne	ed.		
l Not at all how I fee		3	4	Very much how I feel
				very much now rieer
27. Helping others would:	make me i	eel good abou	ıt myself.	
		3	4	6
Not at all how I fee	1			Very much how I feel
28. I would volunteer only i	if I did not	have anything	better to do.	
		33	4	6
Not at all how I fee	1			Very much how I feel
29. I would volunteer only i	if I knew th	at my friends v	vere going to	
		3	4	6
Not at all how I fee	1			Very much how I feel
30. I would volunteer only i	if I knew th	at my parent(s	s) or family we	ere going to.
		3	4	6
Not at all how I fee	1			Very much how I feel
31. I would volunteer beca	use that is	what my scho	ol has taught	me to do.
		3	4	6
Not at all how I fee	1			Very much how I feel
32. If I did not volunteer, I v	would feel	like a loser.		
1	2	3	4	6
Not at all how I fee	l			Very much how I feel
33. I would only perform co	ommunity	service if I had	to to get a co	llege degree.
1	2	3	4	6
Not at all how I fee	1			Very much how I feel
34. I would volunteer only i etc.) in return.	if I knew I v	would receive	a material rev	vard (money, college credit,
1	2	3	4	6
Not at all how I fee	el .			Very much how I feel

35. I wo	uld volunteer only if I	knew that no	one was goi	ng to be watc	hing over me.
	<del>=</del>	2	3	4	56
	Not at all how I feel				Very much how I feel
36. I wo	uld volunteer becaus	se I am a help	oful kind of pe	rson.	
	1	2	3	4	56
	Not at all how I feel				Very much how I feel
37. I wo	uld volunteer under p	oretty much a	ny circumsta	nces.	
	]	2	3	4	56
	Not at all how I feel				Very much how I feel
_					
Section	<u>.V.</u> Your answers to the	above auest	ions will not b	e usable with	nout the following
informo		azovo quos.			
•	Age:				
•	Sex: M F (Cir			7777 7777	(T)
•	Last 4 digits of your purposes only. This				(For coding
	•				
•	About how many ho chores, tending to y			caring for fair	nily members? (Household
•	How many credit ho	ours are you to	aking this terr		
<b>.</b>	How many hours a How many hours a				
•	Consider the course	you are in ri	ght at this mo	ment. Think c	about your instructor and
	the course content. represents how you		statements b	elow and <u>cir</u>	<u>cle</u> the number that best
	•				
38. Ove	rall, I like this course	•			
		2	3	4	56
	Not at all how I feel				Very much how I feel
39. Ove	rall, I like the instruct	or.			
	1	2	3	4	56
	Not at all how I feel				Very much how I feel
40. I wo	ould take a course fro	m this instruc	tor in the futu	re.	
	1	2	3	4	56
	Not at all how I feel			7	Very much how I feel

41. I would recommend this course to other students.

]	]	23	34	 56	
Not at al	l how I feel			Very much how I fe	el

Thank you for your participation!

## Appendix E Capstone Questionnaire

Please do <u>not</u> write your name anywhere on this survey!

Note that there are 3 pages in this survey, with questions on front and back.

Section I.

Some colleges and universities require that their students perform community service as part of graduation requirements. Portland State University is the latest university to institute that requirement, and has labeled that requirement the "Senior Capstone." The Capstone requirement specifies that all students at PSU who began their college career (at any college or university) in the Fall of 1994 or after must, as seniors, perform 6 credit hours (180 hours) of community service in interdisciplinary groups. These groups will design programs to address problems or concerns in the community. Please take a moment now to think about PSU's Capstone requirement. When you are ready, read the statements below and then circle the number that best represents how you feel about that statement.

l. I feel t	hat the Co	apstone red	quirement is o	a good idea.			
		how I feel	-2	3	-4	-	6 :h how I feel
2. Requi:	ring comn	nunity servi	ice for a colle	ge degree is	a good idea.		
	_	how I feel	-2	3	-4	-	6 :h how I feel
3. The Se	enior Cap	stone at PS	SU enables m	e to gain wor	k skills.		
	l- Not at all		-2	-3	-4	=	6 h how I feel
4. The Se	enior Cap	stone work	takes too mi	ich of my time	<b>&gt;</b> ,		
		how I feel	-2	3	-4		6 h how I feel
5. By doi	ng the Ca	pstone wo	rk, I feel like o	ı better perso	n.		
	l- Not at all ]		-2	3	-4	-	6 h how I feel
6. I would rather do my own volunteer work instead of the Capstone requirement.							
	l- Not at all		-2	3	-4	-	6 h how I feel
7. The C	apstone re	equiremen	t allows me to	utilize my kn	owledge and	skills.	
	l- Not at all l		-2	-3	-4	-	6 h how I feel

on

8. The Capstone requireme	ent is just anotl	her way for th	e school to run	my life.
l Not at all how I fee		3	4	-56 Very much how I feel
9. There are not enough Co	rpstone projec	ts available t	o satisfy my int	erests.
l Not at all how I feel		3	4	-56 Very much how I feel
10. Because the Capstone jothers do the work.	projects are d	one in groups	, some student	s slack off and make
l Not at all how I feel	_	3	4	-56 Very much how I feel
11. I am willing to do a Cap it.	stone project ;	<u>only</u> because	my eligibility f	or graduation depends c
		3	4	
Not at all how I feel				Very much how I feel
12. I would feel better abou	t my Capstone	e service work	s if I did not hav	re to do it to graduate.
l Not at all how I feel		3	4	56 Very much how I feel
Section II.  In this section, you feelings surrounding your oproject. Think about the Cathe following statements, cistatement.	ommunity ser pstone projec	vice experient t with which y	ce in connection ou are currentl	y involved. As you read
13. Those who oversee my	community se	rvice work are	e nice to me.	
l Not at all how I feel	2	3	4	56 Very much how I feel
14. I receive praise from oth	ners for the wo	ork I do.		
l Not at all how I feel	2	3	4	56 Very much how I feel
15. No one pays much atter	ntion to the wo	rk I do.		
l Not at all how I feel	2	3	4	56 Very much how I feel

16. I receive feedback from other	hers about the	progress I a	m m <mark>ak</mark> ing in n	ny work.
l Not at all how I feel	23	4	ļ5-	6 Very much how I feel
17. If I do not perform up to oth	ners' standard	s, I receive m	ild verbal scol	ding.
Annales also has disposed for the contrate of	23		5	6
Not at all how I feel			_	Very much how I feel
18. I am told that I am a good	person, the kir	nd of person v	who helps othe	ers.
]	23	4	5-	6
Not at all how I feel				Very much how I feel
19. If I do not perform up to oth	ners' standard	s, I have bene	efits or reward	s taken away from me
1	23	4	<u></u> 5-	6
Not at all how I feel				Very much how I feel
20. I am told that the task I am	performing is	worthwhile.		
1	23		5	6
Not at all how I feel				Very much how I feel
21. I feel that if I do not perform taken away from me.	n the commun	ity service, I v	vill be punishe	ed or rewards will be
	23	4	5	6
Not at all how I feel				Very much how I feel
22. Overall, I am enjoying my o	community ser	vice experier	nce.	
1	23	4	5-	6
Not at all how I feel			•	Very much how I feel
23. I feel that I have a lot of co	ntrol over the v	vork that I am	ı doing.	
1	23	4	5-	6
Not at all how I feel				Very much how I feel
24. I feel that the work I am do	ing is special.			
]	23	4	5-	
Not at all how I feel	_	•		Very much how I feel
25. I am glad that I can help m	ny community.			
1	23	4		6
Not at all how I feel				Very much how I feel

#### Section III.

In this section, imagine that you are presented with an opportunity to do some volunteer work. Volunteer work is defined as work that you perform for your community and for which you receive no pay. Volunteer work is work performed by you because you want to do it, not because you are required to do it. Read the statement and then respond on the 6-point scale by <u>circling</u> the number that best represents how you would feel about volunteering.

	/ <u></u>		p			
26. I wo	ould enjoy helpin	g those in ne	ed.			
	,				-	
	I Not at all how I fo		3	4		b much how I feel
27. Hel	ping others woul	d make me f	eel good abo	ut myself.		
	1	2	3	4	5	6
	Not at all how I fo	eel			Very	much how I feel
28. I wo	ould volunteer onl	y if I did not l	nave anything	better to do.		
	1	2	3	4	5	6
	Not at all how I fo	eel			Very	much how I feel
29. I wo	ould volunteer onl	y if I knew th	at my friends	were going to.		
	1	2	2	4	ς	6
	Not at all how I fo					much how I feel
30. I wa	ould volunteer onl	y if I knew m	y parent(s) or	family were g	oing to.	
						•
	Not at all how I fe		3	4		b much how I feel
					•	
31. I wo	ould volunteer bed	cause that's	what my scho	ol has taught 1	me to do.	
	1	2	3	4	5	6
	Not at all how I fo	eel			Very	much how I feel
32. If I c	lid not volunteer,	I would feel	like a loser.			
	]	2	3	4	5	6
	Not at all how I fo		Ū	•	-	much how I feel
33. I wo	ould only perform	community:	service if I had	d to to get a co	llege degre	e.
	1	2	3	4	5	6
	Not at all how I fe					much how I feel
34. I wo	uld volunteer onl	y if I knew I v	vould receive	a material rev	vard in retur	n.
	]	2	3	4	5	6
	Not at all how I fe		-	-	-	much how I feel

35. I	would volunteer only if I knew that no one was going to be watching or	ør me.
	15	6
	Not at all how I feel Ve	ry much how I feel
36. I	would volunteer because I am a helpful kind of person.	
	15	
	Not at all how I feel Ve	ry much how I feel
37. I	would volunteer under pretty much any circumstances.	
	15	6
	Not at all how I feel Ve	ry much how I feel
	Your answers to the above questions will not be usable without the mation:  Age: Sex: M F (Circle one.) Level in College: Fresh Soph Junior Senior Post About how many hours a week do you spend caring for family mentation that how many credit hours are you taking this term? How many credit hours do you plan on taking next term? How many hours a week do you spend at your regular paying job?  Are you enrolled in a Capstone project in order to fulfill the gradual	-Bac 🔲 Grad 🖸 mbers?
	Yes No D	non requirement;
•	Would you be willing to take another Capstone course in the future	e? Yes 🗖 No 🗖
numi	Consider the Capstone project you are in right at this moment. This dinator/instructor and the work itself. Now read the statements below abort that best represents how you feel.	
38. C	overall, I like this Capstone project. 153	6
feel	Not at all how I feel	Very much how I
39. C	verall, I like the faculty coordinator/instructor.	6
feel	Not at all how I feel	Very much how I
40. I	would accept an opportunity to work with this instructor in the future.	c
foel	Not at all how I feel	Very much how I

41. I w	ould recommend th	is Capston	e proje <mark>c</mark> t to otl	ner students.		
	1	2	33	4	5	6
	Not at all how I feel					Very much how I
feel						

Thank you for your participation!

## Appendix F

#### Debriefing Sheet

#### Debriefing Sheet for Study on Volunteerism

The questionnaire you completed last week concerning the Senior Capstone, the type of community service work you may have had in the past, and the feelings you have about volunteering, was designed to find out whether having performed community service under a mandate decreases intrinsic motivation to subsequently volunteer. The person who came in about two weeks before that to ask you if you would be interested in volunteering was a confederate of the researcher. The confederate, however, presented you with legitimate volunteer activities and phone numbers of contact agencies. That portion of the study was designed to find out how many of you would be willing to actually volunteer. Your name (from the volunteer agency questionnaires) was matched with the last 4 digits of your social security number (from the second questionnaire) so that analyses could be made concerning the likelihood that different types of prior service would affect your willingness to subsequently volunteer.

Your name and phone number from the volunteer agency questionnaire were shredded and discarded following your completion of that questionnaire. Therefore, there is no way that your names or phone numbers could be connected to any answers you gave. The second questionnaire only asked for the last 4 digits of your social security number. Although there is no way the researcher could know your name or how you as an individual responded to the questionnaire or volunteer opportunities, the researcher does acknowledge that some deception was used in that study. Because of that deception, the researcher has complied with a Human Subjects Research Review Committee (HSRRC) request that you be given the opportunity to withdraw your data from the study prior to data analysis. If you do not object to having participated in the study, you have no further obligation and you can be confident that your name, phone number, and other identification have not been recorded. If, however, you would like to withdraw your data from the study, you must contact the researcher within one week of receipt of this notice. Please call 725-3963 or e-mail psu14419@odin.cc.pdx.edu and leave the last 4 digits of your social security number. Upon receipt of your request, the researcher will remove your data from the database.

If you have concerns or questions about this study, please contact the Chair of the Human Subjects Research Review Committee, Research and Sponsored Projects, 105 Neuberger Hall, Portland State University, 503/725-3417.