The Relationship between Perceived Transformative Class Experiences and Subsequent Prosocial Intentions

Marinda K. Harrell-Levy†

Pennsylvania State University

Jennifer L. Kerpelman

Auburn University

The present study tested a model showing how different aspects of high school courses focusing on social justice and prosocial development predicted prosocial intentions of students (N= 362) 2 to 29 years after they had completed the courses. Results indicated that students reporting more transformative class experiences (higher critical self-reflection, more charismatic forms of instruction, and relatable course content and methods) were significantly higher on prosocial intentions than students who did not. Unexpectedly, more well-integrated service learning did not directly predict higher prosocial intentions. Implications for gender and SES were explored. Overall, results suggest that certain parts of such classes can predict prosocial development.

Introduction

Transformative social justice education is perceived as vital to young people and their development, serving as a foundation for lifelong learning (Allen, Pianta, Gregory, Mikami, & Lum, 2011; Gewirtz, 2006; Gutstein, 2008). Although empirical studies have examined the experiences of teachers who have implemented transformative pedagogy (Generett & Hicks, 2004; Schuitema, Dam, & Veugelers, 2008; Taylor, 1997; Yorks & Kasl, 2006),

† Address for correspondence: Marinda K. Harrell-Levy, Penn State Brandywine, 25 Yearsley Mill Rd., Media, PA 19083; mkh23@psu.edu; 301-807-3299.
rarely has the research included individuals who received transformative social justice education during adolescence. Likewise, though there is a body of literature on social justice pedagogy (e.g. Bettez, 2011; Beyerbach & Davis, 2011; Gibson, 1999; Jackson, 2008; McLaren, 2010), including some empirical and theoretical papers about students at the secondary level (Cammarota & Romero, 2009; 2011; Ginwright & Cammarota, 2002), much of the empirical work focuses on adult learners. This is an unfortunate oversight, as adolescence is a formative period for developing a social conscience (Colby & Damon, 19950 and ideas about self as part of a larger society (Erikson, 1968). Transformative classes may be important during adolescence as they are expected to cultivate students’ sense of social responsibility, which fits well with the timing of their personal development. Thus, the overall aim of the present study is to identify which aspects of former students’ personal experience of the high school social justice class relate to prosocial intentions after the course has ended.

**Transformative Learning**

A developing body of literature has emphasized the role of pedagogical processes within secondary school classrooms (e.g. Applebaum, 2008; Gutstein, 2008; O’Neill, 2010; Thadani, Cook, Griffis, Wise, & Blakey, 2010; Yeakley, 1998). Yeakley found that positive and intimate communication within classes led students to challenge their own prejudices. This form of communication, often referred to as dialogic engagement (Mezirow, 1978), is expected to lead to heightened ability to relate to those who are different, critical thinking about personal identity, and motivation to act positively in society. Transformative learning is expected to be uniquely empowering for students (Applebaum; Freire & Faundez, 1989; Gutstein; O’Neill; Thadani, et al.), and research that speaks to the relationship between prosocial development and formal education (e.g., Hart & Fegley, 1995; Rest & Thoma, 1985) emphasizes the possibility that such instruction could facilitate an unusual commitment to care for others.
Because of the multi-dimensional nature of justice, the goals of a social justice pedagogy may differ between schools (Gewirtz, 2006). Transformative learning, however, pushes students to think critically about themselves and the world (Stanberry & Azria-Evans, 2001). Cognitive growth and identity exploration are encouraged and the teacher’s effect on both is purposeful and encompassing (Harrell-Levy & Kerpelman, 2010; Yates, 1999; Yeakley, 1998). Three key components of transformative learning are depth of the critical self-reflection, internalization of the pedagogical approach and perception of a thorough service learning experience (Harrell-Levy & Kerpelman; Howard, 1998).

**Critical self-reflection** is the process of critically analyzing underlying premises and the sources of those premises, and is an important facet of transformative learning. Gurin, Nagda, and Lopez (2004) noted that a pedagogical approach that leads to cognitive growth will be disruptive to students’ understanding of reality and therefore make them uncomfortable; these uncomfortable moments will be a byproduct of critical self-reflection in relationship to comprehending unfamiliar and discontinuous demands. Piaget (1971), and many theorists since, including Van Overwalle and Jordens (2002), described this experience as a period of disequilibrium that represents an optimal opportunity for learning.

**The pedagogy of transformative learning** includes engaging and motivational teacher characteristics, content that is personal, social and relevant, and a pedagogical style that makes students active partners in learning (Applebaum, 2008; Gutstein, 2008; O’Neill, 2010; Thadani, et al., 2010). Although the actual practices of teachers with transformative goals may vary, the goals are the essential part of this pedagogy and typically remain the same across teachers. A key aim of a class with transformative goals is lasting change on students.

**Service learning** is an intentional effort to inform students’ development (Yates & Youniss, 1999; Youniss & Yates, 1997). Service learning typically involves combining academic classroom
curriculum with a structured service component. According to Kauffman (2010) service learning is particularly relevant to informing students’ intentions for themselves and others in a class that focuses on integrating information from social sciences and humanities because it helps students link course content with real life. In addition to the three critical components of transformative learning, there may be a range of factors that can contribute to students’ intentions for contributing to the world above and beyond the social justice class, including religiosity (relationship between faith and moral development; King & Furrow, 2004) educational background (students who have progressed further in school may have had more structured opportunities to learn about moral development and relate the information back to their lives; Colby & Damon, 1995), race (Moreland & Leach, 2001), and graduation year (reflecting distance from the course experience and the time context when the course was taken).

**Transformative Goals: Prosocial Intentions**

Youth who develop a concern for the larger world community, and contributing positively to society, could be considered prosocial (Damon, Menon & Bronk, 2003; Pizzolato et al., 2011). These prosocial youth, called moral exemplars by some (e.g. Colby & Damon, 1995), tend to be concerned about how their actions and beliefs affect others. They seek to make a positive contribution to the world. Accordingly, these exemplary youth have prosocial intentions that are expected to lead to altruistic behaviors. Prosocial commitments and intentions have been of most interest to researchers concerned about moral development (Hart & Fegley, 1995). Adolescent prosocial intentions could be expressed in many ways, including expressions of empathy or beliefs about justice (Kohlberg, 1963). Such intentions are particularly important for the present study as the participants were students of classes intended to affect their perceptions of what it means to be a responsible, moral agent in society, both immediately and long-term (Applebaum, 2008; Freire & Faundez, 1989; Flanagan, 2003; Gutstein, 2008; O’Neill, 2010; Thadani et al., 2010). Adolescents might benefit from classes where they get to practice cognitive
Transformative Class Experiences and Prosocial Intentions

and emotional responses to real world situations (Barr & Higgins-S’Alessandro, 2007). What is missing from the literature is clarity regarding the role of the school context, and, in particular, elements in classes that support prosocial intentions (Lopez, Gurin, & Nagda, 1998).

Prosocial intentions may materialize in many ways, including an increased sense of responsibility for behaving in ways that promote positive outcomes, an increased ability to relate with diverse others and feel empathy for them, or, maintaining beliefs about the responsibility of individuals to impact others positively (Flanagan, Syvertsen, & Stout, 2007). By supporting diversity and rejecting dominant ideologies in the content of the course, the transformative social justice class is expected to have a uniquely powerful influence on the identity of students who, on the basis of low socioeconomic status (SES), would be considered disadvantaged (Mezirow, 1978). This is expected, in part, because of the rare opportunity the class provides to incorporate their perspectives and experiences into the learning process.

Kohlberg (1963) also recognized that there may be gender differences in this type of development, such that females will be more sensitive to messages about empathy than males, and that gender will moderate the relationship between aspects of the class and subsequent prosocial intentions. We also expect gender to moderate the associations between aspects of the class and perceived transformation (females will have stronger associations because they are more sensitive), and gender to moderate also how perceived transformation is related to prosocial intentions. Similarly, SES may also contribute to differences in prosocial intentions. Cohen (2006) suggests that lower SES youth are similar to females in that they may be more receptive to messages about morality.

Since prosocial intentions are structured around a set of qualities and specific traits (Avery, 1988; Barr & Higgins-D’Alessandro, 2007; Blasi, 1984; Blasi, 2005; Carlo, Fabes, Laible, & Kupanoff, 1999; Damon, 1990; Davis, 1980), measuring prosocial intentions
may involve looking at specific indicators of thought or behavior (e.g. empathy) as an overall assessment of prosocial development (Matlock, Gurin, and Wade-Golden, 1990; Meier, Slutske, Arndt, & Cadoret, 2008). Across these assessments of prosocial intentions, one common feature includes examining different moral qualities as an aspect of a person’s sense of self. Feelings and beliefs about oneself, others, and the world generally may help capture an individual’s prosocial development.

**Aims of the Current Study**

The goal of the present study was to explore whether high school classes with transformative goals had the potential to predict students’ prosocial intentions in a lasting way. It was predicted that perceptions of personal transformative class experiences (i.e., service learning, pedagogical approach, and course content) would be positively associated with the development of prosocial intentions, and that perceptions of personal transformation would mediate associations among perceptions of the class experience and the development of prosocial intentions. Furthermore gender and SES were expected to independently moderate associations among the predictors and the outcomes in the model. Specifically, four hypotheses were tested:

**Hypothesis 1:** There will be a direct, positive association between the perceptions of the course (critical self-reflection, pedagogical approach, service learning) and prosocial intentions.

**Hypothesis 2:** Perceptions of personal transformation will mediate the associations between perceptions of the course and prosocial intentions. Specifically, perceptions of personal transformation will be significantly related to both perceptions of the course and prosocial intentions; the direct associations between perceptions of the course and prosocial intentions will become nonsignificant when perceptions of personal transformation is added to the model.
Hypothesis 3: The relationships between course predictors and prosocial intentions and between course predictors and perceptions of personal transformation will be moderated by gender. Specifically, perceptions of the course experience will be more strongly related to perceived transformation and prosocial intentions for females than for males.

Hypothesis 4: The relationships between course predictors and prosocial intentions and between course predictors and perceptions of personal transformation will be moderated by SES. Specifically, those from a lower SES background compared to a higher SES background will have a stronger positive relationship between perceived transformative course experience and prosocial intentions. Associations between aspects of the course and perceived transformation/prosocial intentions also are expected to be stronger for those from a lower compared to a higher SES background.

Method

Sample Characteristics and Procedures

Data for the present study came from 362 former students of a mandatory high school social justice class, morality class, or ethics class (hereafter referred to as “social justice” class), all in Catholic high schools in a Northeastern area in close proximity to one another. Study participants were mostly African-American (60%) and Caucasian (30%). Forty-eight percent of the sample (n=164) was male. Fifty-seven percent of participants identified as Catholic while they were in high school, whereas the other 43% cited affiliation with another Christian denomination or religious affiliation during high school. The participants for the current sample were recruited from a diverse body of eight Catholic schools, and all schools required tuition for attendance (ranging
from $10,000 to $23,000 per school year). Classes were chosen based on their stated goals (they all had transformative goals, and the key goals aligned across classes). Curricula were approved through the Archdiocese of Washington, DC and had to align with Catholic social teaching. Specific course content (e.g. lessons on criminal justice, poverty, global stewardship, and so forth) was revealed through informal and formal interviews with staff and SJ teachers at all study schools. In survey data, participants reported on their recollection of these topics in their course. After removing outliers for each school (those who reported not recalling learning a lesson when more than 80% of school participants did recall it), it was confirmed that central course themes overlapped between study schools. Prospective participants were identified via Facebook, an online social networking site. Additionally, participating schools distributed the survey to their alumni network (e.g. through newsletter, alumni Facebook page, and emailing the link directly). Alumni study participants took the class at different points in their high school career (either junior year or senior year), and ranged in graduation year, from 1957-2010. Almost half of the participants graduated between 1993 and 2001 (43%).

Measures

Prosocial intentions. Prosocial intentions were measured as a latent construct that captured a set of personal qualities indicating whether participants had intentions to positively impact the world or others (Colby & Damon, 1995). Composites were used when the variable was based on a single scale (i.e. service learning experience, perceptions of personal transformation); latent factors were used when multiple scales were used to measure a construct (i.e. pedagogical approach; prosocial intentions). The indicators were:

Anger about Social Injustice. Assessments of anger about social injustice were completed by participants with a 3 item measure developed by Flanagan et al. (2007) using a 5-point scale (1= strongly disagree; 5= strongly
agree), which showed good internal consistency ($\alpha=.87$). The scale assessed participants’ concern over social justice issues (e.g., I get mad when I hear about people being treated unjustly). Internal consistency for the current sample was adequate ($\alpha=.70$). The mean of these items was used to create a single composite; higher scores indicated greater anger about social injustice.

**Empathy.** Empathy was assessed with two scales (which were combined to create one empathy indicator). The first was the **lack of empathy** scale developed by Meier, Slutske, Arndt, & Cadoret (2008), a three item measure on a 5-point scale (1= strongly disagree; 5= strongly agree). Internal consistency from Meir and in the present study was $\alpha=.79$. The items assess participants’ concern for others (e.g., I feel sorry for people who have things stolen or damaged.) The second scale was the **critical, relational empathy** scale developed by Matlock, Gurin, and Wade-Golden (1990), a 4-item measure on a 5-point scale (1= strongly disagree; 5= strongly agree). Internal consistency for Matlock, et al. and for the present study was good ($\alpha=.78$, $\alpha=.77$, respectively). The items assessed the degree to which students empathize with others impacted by injustice (e.g., I feel hopeful hearing how others have overcome disadvantages because of their race/gender). The seven items across the two scales were averaged to create a single composite variable. Higher scores indicated greater empathy. Internal consistency was good for the full scale ($\alpha=.80$).

**Beliefs about Individual Action and Societal Change.** This scale was from the Michigan Student Study (1990). Participants were asked to indicate how much they agreed or disagreed with statements that indicate their beliefs about their responsibility to enact social change (e.g., I have an obligation to “give back” to the community). Assessments were taken with 4 items on a 5-point scale (1 = strongly disagree strongly; 5 = strongly agree; internal
consistency for the present study was adequate, $\alpha=.70$). The items were averaged to create a composite variable. Higher scores indicated stronger beliefs about individual action and societal change.

**Critical Self-Reflection.** Critical self-reflection was assessed by a scale developed by the Michigan Student Study (1990). Internal consistency for the scale in Matlock, Gurin, and Wade-Golden (1990) as well as the present study was good; $\alpha =.84$). Participants were asked to indicate whether different types of critical self-reflection occurred during their course/program using a 6-point scale (1 = strongly disagree; 5 = strongly agree; a sixth option for ‘do not recall’ is included). A sample item is: “Examining the sources of my biases and assumptions.” These items were averaged to create a single composite variable. Higher scores indicate more critical self-reflection.

**Pedagogical Approach.** Pedagogical approach was a latent construct with three observed indicators. The first two were adapted from the Michigan Student Study (1990). The first subscale was 6 items and assessed *Teacher Personality* according to participants’ impressions of whether the teacher had character traits that were more or less transformative (e.g., enthusiastic), and is on a 5 point agreement scale (1 = strongly disagree; 5 = strongly agree). Two items were added based on pilot work to address modeling of ethical/moral behavior. The items for this scale were averaged to create a single composite variable. Higher scores indicated that the pedagogical approach had more transformative teaching elements ($\alpha=.93$). The second subscale had 11 items that assessed *Teaching Style* (e.g., intervened when some group/class members dominated discussion) with a 5 point agreement scale (1= strongly disagree; 5 = strongly agree). Two additional items were added based on pilot work to address encouragement of students to share our opinions and experiences. The items were averaged to create a single composite variable. Higher scores indicated that the pedagogical approach had more transformative teaching elements ($\alpha=.91$).
The third scale assessed *Transformative Content*. The scale was based on results from a prior pilot study, and included three items that assess participants’ perception of the learning content of the course (e.g. the materials we read and discussed were about issues I could relate to) and were on a 5 point scale (1= strongly disagree; 5= strongly agree). These items were averaged to create a single composite variable. Higher scores indicated that the pedagogical approach had more transformative teaching elements ($\alpha=.85$).

**Service Learning Experience.** This scale was adapted from Flanagan et al. (2007). Assessments of participants’ service learning experience were completed with a 5-item measure on a 3-point scale (1= Yes, 2 = No, 3= Do Not Recall). Items assessed whether the experience of service learning was thorough (i.e. I learned about possible causes of and solutions to social problems I was addressing in a service project). The “yes” responses were summed to create a composite variable. Higher scores indicated that the relationship between service and class was more integrated; the scale showed good internal consistency ($\alpha=.79$).

**Perceptions of Personal Transformation.** Assessments of personal transformation were taken using an 8-item measure created for the current study that used a 5-point scale (1= strongly disagree; 5= strongly agree). The scale assessed participants’ perceptions of the influence the class has had in their lives (e.g., I carry with me views developed in the class). All the items were averaged to create a single composite variable. Higher scores indicated that the students perceive that they have been transformed by the class. In the current study, the scale showed good internal consistency ($\alpha=.91$).

**Moderators:** *Gender* was coded 0=male, 1=female; *Socio-economic status (SES)* of students when in high school was based on parental education. Those with high SES (coded 2) had at least one parent who completed a college education. Those with low SES (coded 1) had neither parent complete a college education.
Control Variables included: school (attended St. Marks coded 1; attended other schools coded 0), since approximately two-thirds of the sample and almost all the African-American participants were from St. Marks; Catholic (Catholic coded 1; others coded 0); educational attainment (1 (did not complete high school) to 6 (received an advanced degree)); religiosity (how often participants attend religious services, 1=More than once a week, 2=Every Week, 3=Approximately two times a month, 4=Approximately once a month, 5=Less than one a month, and 6=Rarely to never); and number of years since graduation.

Results

Preliminary Analyses

Means, standard deviations and Pearson correlations among study variables are presented in Table 1.

As expected, all the study predictors were positively correlated with the indicators for the prosocial intentions construct. Additionally, the predictor variables were significantly correlated with each other. When examining the frequencies, only one of the items appeared to be skewed (i.e. skewness for teacher characteristics = -2.713). Multiple transformations were attempted and sensitivity tests were performed, but no steps taken improved the skewness. Some have indicated that skewness can be as high as 3 without serious implications for results (Bollen, 1989). Nevertheless, results should be interpreted with caution.

A measurement model was fit for the latent factors of pedagogical approach (measured with four observed indicators) and prosocial intentions (measured with three observed indicators). Results revealed that all the proposed factors loaded significantly on the latent constructs. The factor loadings of each observed variable to underlying latent variables were statistically significant \(p < .001\) and had loadings no smaller than .62 and in the anticipated direction.
Table 1. Panel A: Means, Standard Deviation, and correlations between predictors and outcomes

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>M</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>1. Perceptions of personal transformation</td>
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<td>3.96</td>
<td>.97</td>
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<tr>
<td>2. Critical Self Reflection</td>
<td>.50**</td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>4.15</td>
<td>4.15</td>
<td>.83</td>
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<tr>
<td>3. Service Learning</td>
<td>.50**</td>
<td>.22**</td>
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<td>---</td>
<td>---</td>
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<tr>
<td>4. Content</td>
<td>.54**</td>
<td>.49**</td>
<td>.33**</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>4.23</td>
<td>4.23</td>
<td>.89</td>
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<td>5. Teacher Characteristics</td>
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<td>.40**</td>
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<td>.45**</td>
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<td>---</td>
<td>4.61</td>
<td>4.61</td>
<td>.70</td>
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<td>6. Teaching Style</td>
<td>.62**</td>
<td>.41**</td>
<td>.39**</td>
<td>.45**</td>
<td>.68**</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>4.34</td>
<td>4.34</td>
<td>.74</td>
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<tr>
<td>7. Beliefs</td>
<td>.46**</td>
<td>.31**</td>
<td>.26**</td>
<td>.37**</td>
<td>.21**</td>
<td>.31**</td>
<td>---</td>
<td>---</td>
<td>4.28</td>
<td>4.28</td>
<td>.71</td>
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<tr>
<td>8. Empathy</td>
<td>.44**</td>
<td>.23**</td>
<td>.33**</td>
<td>.25**</td>
<td>.22**</td>
<td>.35**</td>
<td>.44**</td>
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<td>4.36</td>
<td>4.36</td>
<td>.54</td>
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<tr>
<td>9. Anger</td>
<td>.51**</td>
<td>.28**</td>
<td>.37**</td>
<td>.43**</td>
<td>.31**</td>
<td>.39**</td>
<td>.43**</td>
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<td>---</td>
<td>4.33</td>
<td>.72</td>
</tr>
</tbody>
</table>

Panel B: Correlations between controls/moderators and outcome measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Beliefs</th>
<th>Empathy</th>
<th>Anger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended St. Mark’s</td>
<td>-.04</td>
<td>-.19**</td>
<td>-.31**</td>
</tr>
<tr>
<td>Sex</td>
<td>.06</td>
<td>.18**</td>
<td>.20**</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td>.01</td>
<td>.06</td>
<td>.05</td>
</tr>
<tr>
<td>Years Since Graduation</td>
<td>-.02</td>
<td>.07</td>
<td>.12*</td>
</tr>
<tr>
<td>Religiosity</td>
<td>-.17**</td>
<td>-.18**</td>
<td>-.10</td>
</tr>
<tr>
<td>Catholic/Other</td>
<td>.03</td>
<td>.07</td>
<td>.12</td>
</tr>
<tr>
<td>SES</td>
<td>-.10*</td>
<td>-.09</td>
<td>-.01</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001
After fitting a measurement model, structural equation modeling (SEM) in Mplus (Muthén & Muthén, 1998-2009) was employed to test the hypothesized models of the current study; full information maximum likelihood procedure (FIML) was used to manage missing data. In all models we controlled for the effects of school, being Catholic, educational attainment, religiosity, and years since graduation on the dependent variables. Specifically, the control variables were treated like the other exogenous variables when entered into the final prediction of all models.

**Transformative Education and Prosocial Intentions**

The model for hypothesis 1 tested whether class experience factors (i.e., critical self-reflection, pedagogical approach, and service learning) predicted prosocial intentions (i.e. beliefs about individual action, anger at injustice, and empathy for others). The structural model showed good fit to the data (see Figure 1). Although the chi square was significant, CFI, RMSEA, and chi square to df ratio (2.1) indicated good fit (see Bollen, 1989). When entered simultaneously, the path from two of the class experience factors (critical self-reflection and pedagogical approach) to prosocial intentions were significant. The path from critical service learning to prosocial intentions was not significant. As students’ positive perceptions of these transformative elements of the class increased, so too did their sense of prosocial intentions. This model accounted for 44% of the variance in prosocial intentions. Consistent with our hypothesis, there was a significant and positive link between critical self-reflection and subsequent prosocial intentions and between perceptions of the pedagogical approach and subsequent prosocial intentions. In contrast and opposed to what we expected, the direct association between the level of service learning in class and prosocial intentions after high school was nonsignificant.
Hypothesis 1

![Diagram showing the fitted path model for prosocial intentions regressed on critical self-reflection, pedagogical approach, and service learning.](image)

(Goodness of Fit: \( \chi^2 (36, N=360) = 75.77^{***}; \) CFI=.94; TLI=.91; and RMSEA=.06, ns).

\* \( p < .05 \)

\** \( p < .01 \)

\*** \( p < .001 \)

Figure 1. Fitted Path Model for prosocial intentions regressed on critical self-reflection, pedagogical approach, and service learning (unstandardized coefficients (standard errors) and standardized coefficients) \((N=362)\).
Perceptions of Transformation as a Mediator

Hypothesis 2 addressed whether perceptions of personal transformation mediated the associations between the class experience factors and prosocial intentions. It was expected that the addition of perceptions of personal transformation to the model would result in the direct paths from the class factors to prosocial intentions becoming weaker or nonsignificant. The model showed good fit to the data (see Figure 2).

Mediation was tested using guidelines established by Baron and Kenny (1986). The impact of the independent variable (i.e., critical self-reflection; pedagogical approach) on the dependent variable (i.e., prosocial intentions) must be attenuated or become non-significant after including the mediator (i.e., perceptions of personal transformation) in the model. In addition to all conditions outlined by Baron and Kenny, a fourth step involved constraining the path from the predictor to the outcome to zero and using the delta chi square test with 1 degree of freedom to compare models when this path is free to be estimated. A nonsignificant delta chi square confirms full mediation.

For the hypothesized mediation models, the first of Barry and Kenny’s conditions were tested in hypothesis 1. Specifically, critical self-reflection and pedagogical approach (but not service learning) significantly predict prosocial intentions. Further analysis revealed that only pedagogical approach was significantly related to perceptions of personal transformation. And, finally, the mediator, perceptions of personal transformation, had a significant relationship with prosocial intentions. Therefore, the only path to be tested for mediation was from pedagogical approach to prosocial intentions, potentially mediated by perceptions of personal transformation.
Figure 2. Fitted Path Model for perceptions of personal transformation mediating the relationship between critical self-reflection, pedagogical approach, and service learning on prosocial intentions (standardized estimated correlations in parentheses) (N=362).
To determine mediation, first the results of the model that included the mediator (see Figure 2) were compared to the model tested in hypothesis 1 (see Figure 1). Comparison of the two models revealed that the path from pedagogical approach to prosocial intentions became nonsignificant when the mediator, *perceptions of personal transformation*, was added to the model. Furthermore, when the path from pedagogical approach to prosocial intentions was constrained to 0; and the two models were compared, the delta chi square test with 1 degree of freedom indicated a value of 2.85 which did not exceed the critical value of 3.84, confirming full mediation. Although it did not fit the criteria for testing mediation, results revealed that service learning predicted perceptions of personal transformation which, in turn, predicted prosocial intentions. The indirect effect from service learning to prosocial intentions through perceptions of personal transformation was found to be significant (B=.03**, SE=.03, $\beta$=.10**).

Taken together, the results for hypotheses1 and 2 indicated that both critical self-reflection and pedagogical approach significantly predicted perceptions of prosocial intentions and, contrary to expectation, the direct relationship between service learning and prosocial intentions was not significant. When the mediator (perceived transformation) was included in the model, the coefficient for pedagogical approach became nonsignificant, indicating that perceptions of personal transformation fully mediated the path from pedagogical approach and prosocial intentions. This model explained 59% of the variance in prosocial intentions and 56% of the variance in perceived transformation.

**Gender and SES as Moderators**

To address the third hypothesis, moderation by gender, multi group analysis was performed and a series of subsequent models were fit that compared males and females on each of the paths. The critical value was not exceeded in any of the comparisons, indicating that that there were no significantly different paths for
males and females. For the fourth and final hypothesis, multi-group analysis was performed with parent education serving as the SES moderator. Specifically, those higher in SES (n = 196) had at least one parent who completed some college education and those lower in SES (n = 142) were those whose parents had experienced no post-high school college education. Contrary to expectation, the relationship between self-reflection and prosocial intentions was stronger for participants whose parents were more educated (B=.13, SE=.06, β=.22*) than those who were less educated (B=-.05, SE=.06, β= -.08, ns). In other words, students from higher SES backgrounds showed a significant positive relationship between critical self-reflection and prosocial intentions, whereas this association was nonsignificant for participants whose parents were less educated.

**Discussion**

The primary goal of this study was to examine different dimensions of high school social justice classes with transformative goals and to assess whether these dimensions affected the prosocial development of former students of these classes. We begin our discussion by examining findings related to the classroom practices–prosocial intentions interface, followed by the study limitations and future research directions.

**The Classroom Practices–Prosocial Intentions Interface**

The present study revealed several findings concerning the classroom practices-prosocial intentions interface. The more students engaged in critical self-reflection as a part of the class and the more they perceived a transformative pedagogical approach, the higher they were on their prosocial intentions. These findings are consistent with previous research suggesting that pedagogical approaches in class relate to the overall development of pupils (Cammarota & Romero, 2009; Gutstein, 2008). However, contrary to expectations, prosocial intentions were not directly affected by how well service was integrated into the course, as suggested by prior work (Harrell-Levy & Kerpelman, 2010; Howard, 1998;
Yates, 1999). We did, however, find an indirect association; service learning predicted perceptions of transformation which in turn predicted prosocial intentions.

Although service learning was not a direct predictor of prosocial intentions, it did matter for whether students perceived their class experiences as transformative. Although it may be that service learning predicts prosocial intentions through its direct influence on perceived transformation, it is possible we failed to find a direct link between service learning and prosocial intentions because of the way service learning was measured. We assessed the presence of service learning components as opposed to the depth of the service learning experience. Finally, it is also possible that, because all study schools were parochial, schools in the study sample may have had quite similar service projects which caused the effect of service to be washed out by these similarities.

In line with expectations, the effects of the pedagogical approach on prosocial intentions occurred when students also perceived that their experience of the course was personally transformative. However, critical self-reflection and perceived transformation were not related. This path may have been nonsignificant because critical self-reflection during the time of class related to many experiences outside the class, more so than perceptions of service and the pedagogical approach.

Contrary to expectations, the results indicated that neither sex nor SES affected the direction or strength of the relationship between the class experiences and prosocial intentions or between the class experiences and perceptions of personal transformation. The one exception was that the path between critical self-reflection and prosocial intentions was significant for those high in SES but not for those low in SES. It is plausible that students who had more highly educated parents were better able to utilize classroom opportunities for critical self-reflection. Students from highly educated backgrounds may have had more personal experience with examining the sources of biases and assumptions, and
Transformative Class Experiences and Prosocial Intentions

therefore may have been more responsive to the self-reflection process than their lower SES peers.

It is somewhat surprising that no other moderated associations were found given that some research would suggest a difference between men and women, and between those high and low in SES (Avery, 1988; Kohlberg, 1983; William, 2004). With regard to gender, there is evidence to suggest that although females may show more signs of prosocial intentions in some areas (e.g. empathy), males may show more prosocial intentions in other areas (e.g. ideas about justice) (Jaffee & Hyde, 2000). These mean differences do not appear to translate into how prosocial intentions, aspects of the social justice class and perceived transformation are associated. The limited moderation by SES may be due, in part, to SES being assessed with a single item. SES is broad in scope and, thus, a multi-item measure may have better covered the construct domain. Ultimately, our results suggest the importance of transformative social justice classes for all types of students.

In sum, when students perceived that their class experience had personally transformative elements (as defined in adult learning theory), they also perceived that they were transformed, and, ultimately, were higher in prosocial intentions than students who perceived that their class experience was less transformative (Cammarota & Romero, 2009; Ginwright & James, 2002). Furthermore, by examining major processes of this course simultaneously (pedagogical approach, critical self-reflection, and integration of service learning), this study provides a comprehensive picture of the class experience-prosocial intentions interface, and, what matters most.

**Limitations and Future Research Directions**

Several limitations should be acknowledged. First, this study is limited by its cross-sectional nature, which precludes making causal inferences regarding relations among the model constructs. Longitudinal research may help elucidate how pedagogical
processes affect prosocial intentions over a long period of time. Also, because we were not able to use a prospective longitudinal design, an alternative interpretation of the results is that students with better-developed prosocial intentions before the social justice course were more receptive to the content and style of the course, and thus perceived the course as more transformative. Future studies can begin to address these issues by utilizing a prospective design and follow students before and after taking the social justice course. The second limitation concerns the generalizability of our results. Because race and school were confounded in the present study, it would be good for future studies to assess the relationship between aspects of the class and prosocial intentions with samples that are more diverse within schools. Generalizability also is limited due to using parental education as a proxy for SES. Parental education is only one index of SES. A more robust measure of SES (one that incorporates parental education, family income, and parental occupational status indices) would have increased our capacity to test SES as a moderator of the associations among prosocial intentions and the different aspects of the class. The collective culture of parochial schools differs from public schools (Stewart, 2008) and Catholic schools in particular may be more supportive generally, which could contribute to the effect of this class on prosocial intentions.

A third and final noteworthy limitation of the study is the self-report, retrospective design. Information about the class comes from participants self-reporting retrospective accounts of the class. Because the study relied on self-report, the associations among constructs may be due to shared method variance. There also are several potential problems with retrospection, such as the possibility that some people will remember more positive memories than negative or even neutral ones, the role of age as a factor in affecting memory, and inaccuracy generally. It is important to note, however, that some issues with retrospection were addressed when we controlled for the length of time since taking the course. Future research could address this limitation with more objective or independent measures of course content/style and morality. Despite these limitations, the present
Transformative Class Experiences and Prosocial Intentions

findings highlight the value of transformative efforts of teachers in schools as a way of fostering youth development. Utilizing transformative methods in secondary school classrooms may eventually affect students in a long lasting way.

Summary and Conclusions

In summary, future studies should include more diverse school types in the analyses, and have enough schools to be able to examine contextual effects – students within classrooms within schools. Moreover, future studies could include the design of a prospective study where the class components and transformative experience are measured during adolescence while students are taking the course and then follows the students into adulthood to see how the class experiences continues to predict prosocial intentions.

Ultimately, prosocial intentions are an important outcome of a transformative social justice class because it is a cited goal in the written description of such courses, and evidence suggests a relationship between prosocial intentions and caring, socially responsible moral behavior (Aquino & Freeman, 2009, Aquino et al. 2011, Colby & Damon, 1995). The present study highlights the importance of including transformative pedagogical methods in secondary school classrooms aimed at increasing students’ long term prosocial development. Understanding the mechanisms by which pedagogical factors help to buffer children from having antisocial intentions is a particularly important aim for future work on school pedagogy and human development. Having supports for positive youth development within schools may bolster the efforts of parents at home, or even supplement adolescents in areas where they may not be supported. Such efforts may help lead to healthier identities and more positive civic attitudes. Thus, it is important that we extend the scope of transformative pedagogy studies to cover adolescence, prosocial development, and other social psychological processes that may be affected by students’ experiences in such classes.
References


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