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Where Are They Now(?): Two Decades of Longitudinal Outcome Assessment Data Linking Positive Student, Graduate Student, Career and Life Trajectory Decisions to Participation in Intercollegiate Competitive Debate

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This monograph is the conclusion of an empirical, longitudinal research project reporting statistically significant differences between debate and non-debate study populations linking undergraduate debate participation with positive correlated relationships in five areas: *academic success; social responsibility; psychological adjustment; cultural tolerance; and, moral/ethical commitment*. Over the two decades, the positive associations between debate participation and post-graduation skills has been consistent. A further extension of the original research—outcomes and skills that are targeted towards more long-range benefits to self and society—is reported. The study concludes that there is strong empirical evidence to document the link between participation in forensics programs and the host institution’s achievement of its educational mission.

In his critical review of behavioral research within the field of debate participation and resulting student outcomes, Kenneth Anderson (1974) observed: “In an age of educational accountability, the forensics community is and will increasingly be called upon to tell what it seeks to do, how well it accomplishes its goals, and what other effects it has. Surprisingly, there seems little interest in such research at this time” (p. 155). Despite this observation, and the advancement of rigorous models with which to develop credible forensic research from a valid behavioral perspective from early critics (Anderson, 1974; Baird, 1950; McGlone, 1974), the vast majority of published research continues to rely on anecdotal evidence or quasi-statistical analysis most often based upon single “snap-shot in time” self-reports with dubious validity when relied upon to make comparisons over time to more generalized forensic student populations. For example, though many articles credit competitive debate with teaching critical thinking, Hill (1993), Horn & Underberg (1993), and Greenstreet (1993) all conclude that empirical evidence to support the claim is slight, at best. The impact of this lack of empirical research is advanced by Billings (2011) who laments: “[I]t is possible that the dearth of scholarly investigation in the area (forensics) hinders arguments to maintain forensic programs at a time of declining financial support for higher education” (p. 111).

In 1997, Rogers (2002, 2007) launched an ambitious cohort-based study to specifically measure student outcomes from forensic participation with direct, empirical comparisons between a debate and non-debate group over an extended period through college, graduate school, professional careers, and life-trajectory decisions. This monograph offers a continuation of those earlier studies in order to provide almost two decades of empirical performance data and outcomes. In order for the reader to place the current study in context, it is helpful to review a brief update of the applicable literature and a brief explanation of the previous two studies before attempting to interpret new data.

Review of Literature

A thorough analysis of 682 forensics books, articles, conference proceedings and convention papers was conducted by Rogers (2002, 2007) looking for consistent themes reported within the literature that supported student outcomes from participation. Several themes emerged. Probably least surprising was evidence of enhanced critical thinking skills (Beckman, 1957; Brembeck, 1949; Colbert, 1987; Cross, 1961; Gruner, Hussman & Luck, 1971; Horn & Underberg, 1993; Howell, 1943; Husman, Ware & Gruner, 1972; Jackson, 1961; Rowland, 1995; Williams, 1951; Williams et al, 2001). Forensic participation was credited with increasing public presentational skills (Colbert & Biggers, 1985; Millsap, 1998; Stenger, 1999; Williams et al, 2001); teaching public advocacy and social responsibility; (Bartenan, 1998; Brand 2000; Brownlee, 1978; Derryberry, 1998; Williams et al, 2001), and offering excellent professional training (Colbert & Biggers, 1985; Hill, 1983; Schnieder, 1984; Spangle & Knapp, 1996). It also increases knowledge, self-confidence, poise, and a wide range of skills necessary for academic success (Bartenan, 1998; Colbert & Biggers, 1985; Derryberry, 1998; Hill, 1983; Jones, 1994; Williams et al, 2001).

Pundits argue that debate teaches social responsibility and advocacy (Bartenan & Frank, 1994; Freely, 1996; Hollihan & Baaske, 1994; Jones, 1994; Rowland, 1995) and enhances a student's academic and professional abilities (Carleton, 1949; Colbert & Biggers, 1985; Derryberry, 1998; Hill, 1983; Jones, 1994; Level, 1957; Pratt, 1990; Schneider, 1984; Spangle & Knapp, 1996; Stenger, 1999; Stenger & Roth, 1998; Walker, 1971; Williams, et al 2001). In addition, researchers (Bartenan, 1998; Derryberry, 1998; Millsap, 1998) have concluded that debate teaches important leadership skills. As Bartenan, (1998) concludes: “[debate] fosters leadership skills of reflection, connectedness and advocacy. Forensics programs are valuable models of learner-centered pedagogy and underutilized resources for diversity education on the liberal arts campus” (p. 1).

A cursory review of the current literature seems to both echo and reinforce earlier research claims. Research by Kuyper (2011) identifies and supports both academic student outcomes (critical thinking, discipline knowledge and skills, communication competency, and integrity / values) and humanistic student outcomes (competition, team dynamics, and experiential education). This view neatly divides the current research into two general themes: 1) outcomes and skills that are immediately of use to the student in a practical day-to-day context; and 2) outcomes and skills that are targeted towards more long-range benefits to self and society.

First, on the immediacy of skills, Lux (2014) observes that forensic participation enhances future job skills, critical thinking, leadership, communication competency, teamwork, and an enhanced worldview and understanding of world events. Quenette, et. al. (2007) report enhanced academic success for forensic participants. Jensen and Jensen (2006) argue convincingly that participation in forensics enhances communication competency in the areas of mentoring, cultural communication, and conflict management.

Second, several researchers have begun to research and report on the value of forensics in teaching more long-range skills that create a sense of what Freeman and Rogers (2013) regard as the “whole person” and the resulting benefits to society. Morris (2011) further expands on the “whole person” effect by arguing that forensics plays a role

in teaching our students to not only be “good competitors” but “good human beings” who – through our assistance – “will be better equipped to be of service to their families, their communities, their culture and the world” (p. 1). Farmer (2014) would add a sense of identity and empowerment that gives participants the will, skills, and self-concept necessary to succeed in a wide variety of life tasks to include civic engagement and advocacy. Freeman and Rogers (2013) argue forensics engenders: “hope for more positive long-term benefits to the self and society as we educate our forensic students to [be citizens]” . . . and observe “many argue that forensics teaches social responsibility and advocacy on behalf of the less fortunate” (p. 4). They conclude with the suggestion that: “the pedagogic value of inclusive communities intentionally mentored to effectively pursue public service and social advocacy is a critical strategy for achieving our goal of teaching and reinforcing skill sets that extend beyond the competitive weekend and into the post forensic world” (p. 13-14). Grace (2011) advances these potential impacts by observing: “[the implementation of] service learning into forensic programs provides another way to show administration that students are learning outside the walls of the classroom and are connecting with the community . . . and [increases] the visibility of our teams, gains approval from the administration, and teaches students valuable life skills in the process” (p. 3-4). Briscoe (2009) perhaps sums it up best by arguing that teaching leadership through forensics participation: . . . “alongside co-curricular competition, promotes civic education and enhances the standard curriculum by helping students explore myriad topics from multiple angles and find the truth in each, fostering civic participation, advocating civic engagement, promoting authentic discussions on issues of real importance, and emphasizing the principles that are essential to a liberal democracy” (p. 49).

Though Rogers (2002, 2007) reported strong empirical evidence to support the immediate student outcomes and began to both identify and support the “whole person” concept through social advocacy and political participation, it would be interesting to see if evidence could be found that would better support real world outcomes of forensic participation as high impact, service learning opportunities now that the study cohort has been out of college for 15 years. Therefore, the following research questions are proposed:

- RQ1: What significant differences remain between debate and non-debate student populations in the four critical outcomes: social responsibility; psychological adjustment; cultural tolerance; and moral/ethical commitment?*
- RQ2: After almost two decades in the work force, how do the debate and non-debate groups differ in terms of demonstrating long term, positive outcomes in their professional lives?*
- RQ3: How does the data support the statement that participation in debate reinforces high-impact service learning opportunities, which result in significant differences between debate and non-debate participants in terms of long-term benefits to society?*

In order to understand the current study and place it in context, it is important to understand both the history and structure of the original studies.

Study 1

In 1997, 28 directors of forensics (DOFs) were contacted and asked to participate in assembling a cohort of debate and non-debate students for a comprehensive, longitudinal study. “The traditional difficulty in interpreting this type of research is the question of whether differences are effects or causes. Do they result from the debate experience (debate enhances critical thinking), or do they merely predict who debates (critical thinkers like to debate)?” (Rogers, 2002, p. 8). In order to address this concern, 760 first year students were identified and biographical data collected. In order to make the two groups as homogeneous as possible, and thus, isolate debate participation as independent a variable as possible, data were collated and manipulated keeping in mind the original parameters of the inclusion criteria. Based on the intake survey, comparison groups of debaters and non-debaters were constructed based on the goal of minimizing all demographic, academic, extracurricular, and social differences between the two groups. Of the original pool, 100 debate and 100 non-debate students were selected for participation in the four-year study. The comparison of the study groups is reported in Table 1 (p. 24).

Next a survey instrument was constructed by identifying 56 positive outcomes through a thorough analysis of the literature. Babbie (1992) suggests using focus groups to narrow the themes (for a full discussion see Rogers, 2002). Five themes emerged: (a) academic success; (b) social responsibility; (c) psychological adjustment; (d) cultural tolerance; and (e) moral/ethical commitment. The focus-group members submitted questions that they felt would measure each of these themes. An 84-item, Likert-scale instrument was developed. Surveys were collected at the conclusion of year one and a principle components factor analysis followed. Factors with an Eigenvalue of greater than 1.0 were retained as an independent factor by the MINEIGEN program. After the Eigenvalues were derived, the five-factor solution was confirmed by using orthogonal factor analysis with varimax rotation and then subjecting those factors to ordinary least squares confirmatory factor analysis as described in the work of Hunter and Cohen (1969). As a result, the survey instrument was validated.

The data set was divided into two groups: debate and non-debate. Once divided the scores in each of the five critical outcome areas were averaged and compared using paired *t*-tests, which is similar to a one-sample *t*-test on differences ($H_0: d = 0$ v $H_a = 0$). The higher the number of comparisons made, the greater the risk of a Type 1 error. To protect the integrity of the process, Bonferroni’s approach to multiple comparisons was used (.05 divided by 2 times the number of comparisons (154) = $\text{Prob} > |T| = .0002$). As a result, any comparison where $p < .0002$ was considered statistically significant. SPSS was used to analyze and manipulate the data set. Those results are reported in Table 2 (p. 25).

Data were collected from the debate and non-debate group at the conclusion of each of the four years (1998-2001). An analysis was performed looking for statistical differences between the groups. At the close of the four-year study, the conclusions for this study population were clear: in almost every case, in almost every area examined, participation in debate had significant positive outcomes. Even in those areas where no significant differences were found, those results were not necessarily negative. Participation in debate was not shown to significantly impact debaters’ ability to graduate

on time, stick with their major, maintain significant long-term interpersonal relationships, respect the truth, or become involved in cross-cultural relationships or activities. To the contrary, students engaged in debate participation seem to have adjusted to the social and interpersonal aspects of college life without significant exception when compared to their non-debate peers. It could be inferred that the stereotype of the maladjusted, debate nerd pining away at the extreme edge of college life was unfounded. Debaters were often better adjusted than their non-debate peers with lower rates of depression, anxiety, and feelings of being overwhelmed under pressure in addition to higher feelings of self-confidence in both their social and academic abilities.

The positive outcomes of debate participation are overwhelming for the study group, and include greater political and social awareness and participation; an increased awareness of and tolerance for intercultural differences; increased involvement in professional internships, acceptance to graduate programs, job offers at graduation; a deeper understanding and respect for ethics and the proper evaluation of evidence; and, stronger, healthier personality profiles. Debate participation, in this case, was significantly correlated with positive outcomes.

Study 2

The second study continued to collect data from the debate and non-debate cohorts at the conclusion of each of the first four years after graduation (2002-2005). Non-graduates were eliminated from both groups and natural attrition brought the *N* down from 200 to 119 who continued to participate (debate = 68; non-debate = 50).

Four of the critical outcomes remained relevant for all respondents: (a) social responsibility; (b) cultural understanding and tolerance; (d) moral and ethical issues; and, (e) psychological multipliers. Therefore, all respondents' data were included, as before, in those comparisons. However, the critical outcome of (c) academic success was only relevant for those respondents who had continued their academic careers into graduate and professional schools. Therefore, only those respondents who continued their academic careers were compared under critical outcome (c) academic success (*N* = 66 successfully completed a graduate degree by May 2005: debate=46; non-debate=20).

As in Study 1, the responses of each group for each of the critical outcomes were examined using Pearson correlations. The resulting analysis was significant. Though Study 1 reported significant differences in all five critical measures for the debate group when compared to the non-debate group, it also reported no statistical differences between groups in a few key areas. Study 2 found that four years later, most of these areas had demonstrated a significant change. There were statistically significant differences in the debate group's post-graduation experiences. The debate group reported an increased propensity to engage in cross-cultural relationships and to hold membership in cross-cultural organizations, to matriculate on time through graduate and professional programs, and to maintain long-term relationships. Debate respondents were also less likely to distort the truth or to believe in situational ethics. Therefore, Study 2 concluded that, again, in almost every case, in almost every area, forensic participation during the subject population's undergraduate experiences had led to sustained, significant positive life outcomes beyond graduation.

In addition to replicating the study looking for validation of the five critical areas, Study 2 added an additional research question focused on measuring differences in performance in their career paths and/or post-graduate education. The comparative results between the debate and non-debate cohorts are reported in Table 3 (p. 25).

The data suggests that, as was concluded in Study 1, participation in forensics during the study population's undergraduate experience is strongly correlated with increased positive outcomes; in this specific case, beyond graduation. During the additional four years of study, the debate group maintained every positive academic, social, and behavioral edge reported during the initial study period.

Additionally, there does seem to be at least some evidence that participation in forensics during a student's undergraduate experience leads to differences in performance on the job. Debate respondents reported more positive evaluations by superiors, slight increases in the rate of pay raises and promotions, and the ability to move voluntarily from one job to another. Also, those with debate experience tended to be involuntarily separated from a job less. While these findings needed further research and support, it seemed safe to conclude that at least for this study's subjects undergraduate debate participation had led to increased professional benefits during the four-year period following graduation.

Current Study

A decade-and-a-half has passed since the study cohort graduated from college, and a decade since data were collected outlining the results of their professional and career choices. In an attempt to collect current data for comparisons measuring long-term, life outcomes from their debate participation, study cohort participants were contacted. Natural attrition (invalid contact information, loss of interest, and sadly, in six cases untimely deaths) has resulted in an overall *N* of 86 participants (debate = 49; non-debate = 37) willing to continue with their participation.

Data from the 86 surveys were entered and partitioned into debate and non-debate groupings. As the survey instrument was previously validated, the statistical analysis of the data was replicated using paired *t*-tests: the identical approach used in Study 1 and Study 2. Again, to protect the integrity of the process against Type 1 error, Bonferroni's approach to multiple comparisons was used (.05 divided by 2 times the number of comparisons (154) = Prob > |*T*| = .0002). As a result, any comparison where $p < .0002$ was considered statistically significant. SPSS was used to analyze and manipulate the data set.

Results & Discussion

Research Question #1

Four of the original five critical outcomes were examined for statistically significant differences between the debate and non-debate cohorts. The critical outcome academic success was dropped due to its current irrelevance to the study population and their outcomes. The results are reported in Table 4 (p. 26).

Table 4 does not report correlated relationships, but simply significant differences in the way the subject groups responded to the statements measuring the four critical

outcome areas. The obvious differences in perception are interesting. Once again, significant differences between the groups were confirmed. For ease of interpretation by the reader each of the four critical areas is reported separately. For exact definitions of the critical outcomes and the intent of the subareas, outcomes and skills that each cluster of questions targeted refer to Rogers (2002).

The first critical area examined was *social responsibility*. As in the previous studies, the debate group maintained significant positive differences in all four of the measures. Debaters were much more likely to vote, to participate in social advocacy, and to volunteer to serve in social programs. Non-debaters slightly closed the gap between the two groups in these three areas, but not significantly so. Debaters widened the significance gap in the area of their propensity to volunteer for political campaigns and movements; but again, not significantly so. In this case, what is of note is that even after another ten years had passed, debaters continued to be significantly more engaged in the area of social responsibility than their non-debate peers. Those results are reported in Table 5 (p. 26).

The second critical outcome the authors addressed was *cultural tolerance and understanding*. The debate group not only maintained significantly higher scores in all three measurement areas, but continued the trend reported by Rogers (2012) further widening the gap between themselves and their non-debate peers. Participants with debate experience were significantly more likely to maintain cross-cultural relationships, maintain active membership in cross-cultural organizations, and to reject classical definitions based upon social norming reflecting a significantly deeper appreciation and commitment to cultural understanding and tolerance of differences. Those results are reported in Table 6 (p. 26).

Psychological multipliers was the third outcome analyzed. The debate group maintained its significant dominance in exhibiting positive outlooks and behaviors that assist in coping with the everyday challenges of life. Both groups reported increases in their rates of feelings of depression or anxiety. However, those with debate participation in their backgrounds reported significantly lower-rate increases than their non-debate peers. Some of these feelings could be attributed to the changes within the lives of both study groups. With an average age of 39, life has become more complex with spouses, children, mortgages, and careers. The debate group members were significantly more likely to express feelings of confidence in their communication skills and their ability to maintain long-term relationships than their non-debate peers. Three areas of growth, where the debate group continued to widen the gap between themselves and their non-debate peers, were in expressing feelings of confidence and maintaining a positive outlook, maintaining flexibility (seeing things from a number of perspectives), and confidence in their ability to communicate effectively. Those relationship are reported in Table 7 (p. 27).

The final critical outcome examined was *Moral / Ethical*. Again, the debate group maintained significant differences in each of the four subscales. Both the debate and non-debate groups reported slight increases in their belief in using situational ethics, though debaters remained significantly less likely to do so. Debaters widened the gap by reporting themselves as being significantly less likely to distort the truth than their non-debate peers. Non-debaters slightly narrowed the gap on their debate peers in the area of ignoring conflicting evidence, though again, debaters were significantly less likely to do

so. Both groups were less likely to maintain a belief in the just society tradition when compared to previous outcomes; however, debaters remained significantly more likely to maintain their belief. Table 8 (p. 27) highlights the differences between groups.

In summary, Tables 5 through 8 report significant positive differences in each of the four critical outcomes measured. Thus, Research Question 1, what significant differences remain between debate and non-debate student populations in four critical outcomes: social responsibility; psychological adjustment; cultural tolerance; and moral/ethical commitment(?) can be addressed. For the past 18 years, the data confirms that the positive outcomes of debate participation are significant and persistent for the study group. They include: greater political and social awareness; a stronger commitment to, belief in and willingness to take an active part in the process of socio-political change; an increased awareness of and tolerance for intercultural differences; a deeper understanding and respect for a personal code of ethics and the proper evaluation of argument and evidence; and stronger behavioral coping mechanisms which resulted in healthier personality profiles.

Research Question #2

More than a decade has passed since the cohort groups were first asked to provide insight into their career and professional choices. Though the debate group had initially reported a more positive foundation as reported in Table 3 (p. 25) above, would they continue to demonstrate more measurable positive outcomes as compared to their non-debate peers in their professional life? As in Study 2, respondents were asked to complete the same survey with slightly different wording. Where the original survey asked for information related to “how many times since graduation ...,” the newer version asked for the same information, but with the wording “how many times within the last ten years.” The differences were interesting and reported in Table 9 (p. 28).

The differences reported in Table 9 would seem to reflect that those who had participated in debate continued to benefit from measurable positive outcomes in their professional careers as compared to their non-debate peers, thus answering research question number 2. Respondents from the debate cohort reported a significant increase in their ability to make voluntary employment moves, increased promotion rates, an increase in the frequency of pay raises, and a higher overall sense of happiness with their career choices as compared to their non-debate peers. Both groups reported an increase in involuntary employment changes, with the debate group experiencing approximately one involuntary change in the last ten years as compared to slightly over three involuntary changes for their non-debate peers. Employer/supervisor evaluation comments were similar to those made a decade ago, though debaters added “project outcomes” and “leadership” as consistent comments in the positive notations while their non-debate peers added “work product” and “teamwork” to their evaluation comments. It is interesting to note that further investigation of this phenomena might lend insight into the current types of positions and work that each group is performing. Those with former debate participation seem to be leading projects while their non-debate peers are producing work products as members of teams.

In summary of the area of *professional choices*, for those study participants with debate participation in their undergraduate experience, the conclusions from the data seem clear: over the past decade, the debate cohort has further widened the gap between

themselves and their non-debate peers in terms of positive outcomes and professional opportunities in terms of better pay increases, a greater ability to make voluntary job changes, higher promotions rates, and greater happiness and satisfaction with their career choices.

Research Question #3

How does the data support the statement that participation in debate reinforces high-impact service learning opportunities, which result in significant differences between debate and non-debate participants in terms of long-term benefits to society? In their systematic literature review, Robinson and Clemens (2014) conclude that numerous sources (Berman, 2006; Britt, 2012; National Service-Learning Clearinghouse, 2011; Levesque-Bristol, Knapp, & Fisher, 2010; Walker, 2011) lend credibility to the observation that there is a strong case to be made for the link between service-learning and forensics because it offers students a structured and academically rigorous way to engage in community betterment. While there is no question that debate is a high-impact educational experience or that there is an increasing trend among forensic coaches and professionals to incorporate service-learning into their pedagogic approach to forensic participation (see Briscoe, 2009; Farmer, 2014; Freeman & Rogers, 2013; Grace, 2011; Morris, 2011), the question remains: is there empirical evidence that debate participation fosters lessons that lead to long-term benefits to self and society as a whole? We would argue that this longitudinal study lays a foundation for tentative support and warrants further analysis.

For the past 18 years, the data confirms that the positive outcomes associated with debate participation are significant and persistent for the study group when compared to their non-debate peers, which include: (a) a greater political and social awareness; (b) a deeper and broader world view; (c) a stronger commitment to, belief in, and willingness to take an active part in the process of socio-political change; and, (d) an increased awareness of and tolerance for intercultural differences. These attitudes and behaviors were reflected through their increased propensity to: attend political and social meetings; to vote even in minor, local elections; become involved in socio-political issues and causes by volunteering their time and donating resources to political and social advocacy campaigns; seek and maintain membership in cross-cultural relationships and organizations; and a deeper understanding and commitment to social issues and the complexities of diverse opinions. The debate group also demonstrated a deeper understanding and respect for a personal code of ethics than their non-debate peers as they reported less dishonesty in their dealings with others on a personal and professional level, less belief and support for situational ethics, and a significantly stronger belief in working towards a more just world. These outcomes are specifically linked through empirical, longitudinal data over an 18-year period directly to participation in intercollegiate, competitive debate. Members of the non-debate control group were significantly behind their debate peers in almost every category at every data collection point in the study from year one through year 18.

Limitations

As with any research of this nature, relying on self-report data when comparing two populations may lead to some limitations. For example, the tendency towards a self-serving bias might lead one to expect the subjects to be more forgiving of their personal distortions of the truth; and thus, report higher levels of honesty than are true. Similarly, the subjects may be tempted by the self-report nature of the survey to inflate both their commitment to and the hours contributed towards social and political advocacy. This is somewhat mitigated by the anonymity of the research. However, in both cases, even if the researchers assume some degree of self-serving bias from the debate and non-debate groups, it is interesting to note that there remains a significant difference between the groups that maintains consistency over almost two decades of research. For the two groups, their perceptions and self-reported behaviors and attitudes remain profoundly different.

Additionally, it should be noted that the two groups may represent a population of high achievers for members of both groups. The selection criteria for inclusion in the debate and non-debate study populations conducted in Study 1 was quite rigorous. Participants were selected from among 760 applicants. An intake survey was constructed with the “goal of minimizing all demographic, academic, extracurricular and social differences between the two groups . . . attempted to address any significant differences between the two groups of student participants which addressed demographics, high school academic, extracurricular and social backgrounds” (Rogers, 2002, p. 7). One-hundred participants were selected to represent each group. Rogers (2002) advised caution regarding the potential bias of the directors of forensics who were responsible for selecting and nominating potential study participants. That same caution is advanced here when making more generalized comparisons to other collegiate populations. The students originally selected for inclusion represented high achievers. Both groups continued to be high achievers when compared to their peers. Forty-six of the original 100 debaters and 40 of the original 100 non-debaters completed a graduate degree or advanced professional education. This is high when compared to the general population. In their U.S. Census Bureau publication, Ryan and Bauman (2016) reported approximately 12% of the U.S. population held graduate degrees. They noted: “educational attainment [varies] by age, sex, race and Hispanic origin, nativity, and disability status” (p.1). Given that the survey participants were selected in 1998, when the demographics of debate participants reflected a more significant bias towards white males, further caution is advised when making comparisons and assumptions for current populations of either debate or non-debate students which would reflect more diverse debate and student populations. Further research, therefore, is needed that would bring this type of longitudinal study into more contemporary focus.

Conclusion

This study reports two decades of empirical research that provides significant, correlated relationships between debate participation and positive long-term outcomes for both the individual and society. In an age where administrators find themselves forced to make programmatic decisions due to dwindling financial resources and commitments from state and federal legislative bodies, strong empirical evidence is absolutely critical to informing their decision making. As we advance the argument to maintain and expand

forensics programs, we must be able to articulate the strong demonstrable link between participation in forensics and the satisfaction of the institution's educational mission. We have an obligation to inform them of the critical link between their primary purpose for existence and what we teach and achieve through competition. Participation on speech and debate teams offers an opportunity to teach not only discipline-specific skill sets within the curriculum, but to uniquely extend education beyond the walls of the classroom in high-impact learning experiences that teach and foster a life-long commitment to the understanding of the self, others who may reflect diverse backgrounds and opinions, and our role as citizens through social responsibility and advocacy. The impacts to the self and society are potentially world changing.

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Tables

Table 1

Study Group Comparisons

Category	Debate (n = 100)	Non-Debate (n = 100)
Gender		
Male	63	60
Female	37	40
Ethnicity		
White	71	70
Black	9	13
Asian	12	10
Hispanic	7	5
Other	1	2
High School		
Public	75	73
Private	25	27
ACT	23.6	24.1
SAT	1126	1120
GPA	3.14	3.21
Income	\$63, 587	\$69,117
Major		
Liberal Arts	28	37
Science	17	22
Business	11	24
Pre-Professional	34	17
Hours Pursued	17	18
Employment		
Part-time	41	53
>Part-time	7	11
Scholarship/Financial Aid		
Partial	47	53
Half	71	73
Full	88	80

Notes: ¹Average yearly household income; ²Pre-Law, Criminal Justice, Pre-Med; ³Reported as total numbers: read as 47 received at least partial scholarships or financial aid, 71 received at least half-time (of which those 47 would be included); 88 received full-time financial assistance (of which the 71 would be included).

Table 2

Response Comparisons for Statistical Significance, 1997

Critical Outcomes	Debate (n = 100) Comparison, p value	Non-Debate (n = 100) Comparison, p value
Factor 1: Academic success	+1.675, 0.0001	+0.997, 0.0001
Factor 2: Social responsibility	+1.315, 0.0001	+0.436, 0.0001
Factor 3: Psychological adjustment	+1.876, 0.0001	+0.195, 0.0001
Factor 4: Cultural tolerance/underst.	+0.963, 0.0001	+0.651, 0.0001
Factor 5: Moral/ethical issues	+0.539, 0.0001	+0.139, 0.0001

Notes: All values represent means. Positive values equal positive relationships.

Table 3

Career and Professional Choices

Question	Debate (n = 100)	Non-Debate (n = 100)
Did you have a job offer in your field after graduation?	75%, 51/68	55%, 28/51
How many times since graduation have you:		
Changed employment voluntarily?	2.2	1.7
Changed employment involuntarily?	0.5	1.3
Been promoted?	2.3	1.8
Experienced an increase in pay?	2.6	2.1
Have you been evaluated by a superior in your job?	92%, yes	94%, yes
Was the evaluation positive?	73%, yes	61%, yes
According to the evaluations, what factor(s) contributed most to a positive evaluation?	Communication skills Ability to think and analyze	Work product Social
Was the evaluation negative?	25%	40%
According to the evaluations, what factor(s) contributed most to a negative evaluation?	Social Deadlines	Social Poor work product Communication skills
Overall, how would you rate your happiness with your career choice?	7.6	6.1

Notes: Social, in the negative sense, meant that the respondent had some difficulty getting along with a co-worker or superior. Social in the non-debate positive sense meant that the respondent was praised for being a team-player or for getting along well with co-workers. Happiness was rated on a scale from 1 to 10 with 1 being low and 10 being high.

Table 4

Response Comparisons for Statistical Significance, 2005 and Current Study

Critical Outcomes	Debate (<i>n</i> = 100)	Non-Debate (<i>n</i> = 100)
	(Comparison value 2005) Current study, <i>p</i> value	(Comparison value 2005) Current study, <i>p</i> value
Factor 2: Social responsibility	(+1.517)+1.697, 0.0001	(+1.231)+0.991, 0.0001
Factor 3: Psychological adjustment	(+0.911)+2.004, 0.0001	(+0.391)+0.983, 0.0001
Factor 4: Cultural tolerance/underst.	(+1.445)+1.817, 0.0001	(+0.513)+0.583, 0.0001
Factor 5: Moral/ethical issues	(+1.190)+1.583, 0.0001	(+0.489)+0.397, 0.0001

Notes: All values represent means. Positive values equal positive relationships.

Table 5

*18-year Consolidated Comparison between Debate and Non-Debate Groups:
Social Responsibility*

Critical Outcome	Study 1		Study 2		Current Study	
	Undergrad 1998–2001		Grad + Beyond 2002–5			
	Debate	Non-Debate	Debate	Non-Debate	Debate	Non-Debate
Propensity to vote	+0.617	+0.113	+0.760	+0.121	+0.918	+0.541
Propensity towards social volunteerism	+0.237	+0.198	+0.311	+0.175	+0.487	+0.271
Propensity towards political volunteerism	+0.818	+0.101	+0.762	+0.079	+0.801	+0.141
Propensity for participation in social activism	+0.837	+0.459	+0.812	+0.215	+0.832	+0.310

Table 6

*18-year Consolidated Comparison between Debate and Non-Debate Groups:
Cultural Tolerance and Understanding*

Critical Outcome	Study 1		Study 2		Current Study	
	Undergrad 1998–2001		Grad + Beyond 2002–5			
	Debate	Non-Debate	Debate	Non-Debate	Debate	Non-Debate
Enrollment in cross-cultural coursework	+0.259	+0.193	+0.357	+0.226	NA	NA
Maintain cross-cultural relationships	No significant difference		+0.259	+0.131	+0.417	+0.205
Involvement in cross-cultural organizations	No significant difference		+0.352	+0.210	+0.687	+0.236
Reject classical definition of social norming	+0.817	+0.391	+0.739	+0.219	+0.894	+0.310

Table 7

*18-year Consolidated Comparison between Debate and Non-Debate Groups:
Psychological Multipliers*

Critical Outcome	Study 1 Undergrad 1998–2001		Study 2 Grad + Beyond 2002– 5		Current Study	
	Debate	Non- Debate	Debate	Non- Debate	Debate	Non- Debate
Propensity for depression/anxiety	+0.097	+0.413	+0.141	+0.488	+0.114	+0.316
Feeling overwhelmed under pressure	+0.011	+0.211	+0.107	+0.310	+0.252	+0.513
Feelings of self-confidence/positive outlook	+0.799	+0.700	+0.691	+0.544	+0.699	+0.378
Confidence in communication skills	+0.873	+0.417	+0.889	+0.579	+0.981	+0.501
Maintain long-term relationships	No significant difference		+0.496	+0.276	+0.512	+0.331
Propensity for flexibility	+0.537	+0.336	+0.504	+0.417	+0.612	+0.500

Table 8

*18-year Consolidated Comparison between Debate and Non-Debate Groups:
Moral/Ethical Outcomes*

Critical Outcome	Study 1 Undergrad 1998–2001		Study 2 Grad + Beyond 2002– 5		Current Study	
	Debate	Non- Debate	Debate	Non- Debate	Debate	Non- Debate
Propensity to distort the truth	No significant difference		+0.100	+0.236	+0.071	+0.317
Belief in situational ethics	No significant difference		+0.317	+0.439	+0.338	+0.501
Propensity to ignore conflicting evidence	+0.113	+0.817	+0.217	+0.781	+0.286	+0.681
Belief in the just society tradition	+0.870	+0.596	+0.787	+0.459	+0.661	+0.217

Table 9
Consolidated Comparison of Career and Professional Choices

Question	2005 Data		2015 Data	
	Debate	Non-Debate	Debate	Non-Debate
Did you have a job offer in your field after graduation?	75%, 51/68	55%, 28/51	N/A	N/A
How many times since graduation have you:				
Changed employment voluntarily?	2.2	1.7	3.7	2.1
Changed employment involuntarily?	0.5	1.3	1.1	3.0
Been promoted?	2.3	1.8	4.2	2.5
Experienced an increase in pay?	2.6	2.1	4.6	3.7
Have you been evaluated by a superior in your job?	92%, yes	94%, yes	100%, yes	100%, yes
Was the evaluation positive?	73%, yes	61%, yes	78%	65%
According to the evaluations, what factor(s) contributed most to a positive evaluation?	Communication skills Ability to think and analyze	Work product Social	Work product Project outcome Leadership Communication	Work product Teamwork
Was the evaluation negative?	25%	40%	22%	35%
According to the evaluations, what factor(s) contributed most to a negative evaluation?	Social Deadlines	Social Poor work product Communication skills	Social Work product	Social Work product Communication skills
Overall, how would you rate your happiness with your career choice?	7.6	6.1	8.5	6.7

Notes: Social, in the negative sense, meant that the respondent had some difficulty getting along with a co-worker or superior. Social in the non-debate positive sense meant that the respondent was praised for being a team-player or for getting along well with co-workers. Happiness was rated on a scale from 1 to 10 with 1 being low and 10 being high.