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Double Majoring at Elite Liberal Arts Colleges: Fuel to the High-Pressure Fire?

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Undergraduates at elite liberal arts colleges are experiencing anxiety and depression at ever-increasing rates. Striving for academic excellence, the proportion of students at these institutions who elect to double major is also growing. While some students may articulate rational academic or professional reasons for double majoring, many students may choose this path without a full awareness of the additional stress and demands double majoring can place on their well-being. This paper presents results about the motivations for, and effects of, double majoring. The data come from a larger multi-methods study that investigated how and why students at Grinnell College choose their major(s). The paper shows that while there are, indeed, academic and professional motivations for double majoring, it is also common for students to be motivated to double major to acquire social capital among their peers. Social capital accrued to students who were seen to be hard-working, doing as much academic work as possible, and sleeping little. Participants described wanting to double major because it was perceived as possible to do at Grinnell, and because they “may as well,” once they had acquired a certain number of credits in a given department. Double majors reflected that their education was either broad, superficially broad, or narrow, depending on their perspective and context, as well as their particular combination of majors. Those who did not double major, although in the majority at Grinnell, often felt inferior because of this distinction. A minority of participants chose not to double major so that they had the freedom to take classes all around Grinnell’s three divisions without having to fulfill requirements of two majors. One participant noted that double majoring would negatively affect her mental health. The paper closes with suggestions on limiting the ease with which students can double major in order to protect and enhance student well-being.

Introduction

Highly selective liberal arts colleges seek to recruit high achieving students who are academically driven. These students are used to performing at the top of their peer group, and work hard to do so. Many liberal arts colleges are in rural or semi-rural locations, having a campus setting rather than being scattered throughout a city. This combination of high performing students in a relatively isolated setting creates a community that is extremely focused on academic performance. The cultures that arise in such institutions often prioritize academic performance as a marker of identity, belonging, and social capital.

When students who have been at the top of their peer group throughout their K-12 schooling come together with other, equally able students, it is not uncommon for some to encounter culture shock. No longer are they the top student in their class; no longer is academic work relatively easy. The assumptions upon which their identities have often been founded are being questioned and shaken. Their expectation that their past achievement would continue with relative ease in college often does not become reality.

In the midst of this maelstrom of academic doubt, identity work, and potential emergence of mental health concerns, some students choose to challenge the very circumstances—academic work and workload in a culture of high achievement—that may have contributed to it: they choose to add a second major. Perhaps they believe that it will allow them to approach their post-graduate life with greater confidence; perhaps it will lead them to demonstrate their belonging at their institution by managing to do twice what is expected; perhaps they can hold onto their identity as a high achiever by developing competence in two different academic disciplines. Regardless of the motivation, the demands placed upon double majors are great. Two majors means twice the number of advanced courses, more prescribed courses and fewer opportunities

to take ‘interest’ or ‘easy’ courses. Recent years have seen a dramatic increase in double majoring at elite colleges and universities majors (Pitt & Tepper, 2012). Between 2001 and 2017 elite liberal arts colleges have seen a 33 percent increase in completions with a double major, from 18 percent to approximately 24 percent (NCES, 2018). In the same period, double majors at Grinnell College have grown from 12 percent to 28 percent of graduates, reaching 31 percent in 2018.

A common experience resulting from these circumstances, whether a student pursues one or two majors, is for students to find that they are facing challenging work, their peers are outperforming them, and they begin to doubt whether they should have been admitted to the institution. At best they experience imposter syndrome, at worst these feelings can lead to severe depression and anxiety. The emergence of imposter syndrome-related symptoms are a known predictor of later development of depression and anxiety (Thompson, Davis, & Davidson, 1998).

In the college-going population, mental illness is increasing. In the past decade, the number of students entering college reporting mental health concerns, specifically anxiety and depression, has climbed dramatically; a recent national survey of students indicates that there has been a ten to fifteen percent increase in students reporting ever being diagnosed with depression since 2000 (American College Health Association, 2015). Students with mental illness, specifically depression and anxiety, are more likely to drop out of school and have a lower grade point average than their peers (Eisenberg, Golberstein, and Hunt, 2009).

At small, elite, liberal arts colleges, the outcome of anxiety and depression may be unsurprising given that these communities often act as pressure-cookers for stress and prioritize academic performance. The pervasive nature of pressure to succeed within the culture of such institutions can create a miasma of stress that blankets the campus and that differentially affects

students, depending on their personal outlooks and approaches to life. Within this context, students compete with themselves as much as with each other to outperform and create what they perceive as the optimal future possible and their best current self, or at least the appearance thereof for the sake of their peers. Double majoring may be one obvious way to create such an impression of success, both as a student and in preparation for one's future.

A common perception about double majors is that it will lead to increased earnings in the future. The economic argument for double majoring, however, is unstable for students at liberal arts colleges. Hemelt (2010) found no economic premium return to double majors who graduated from a liberal arts college, compared to single majors. He found a small (to the order of 3%) economic impact at other types of institution, suggesting that there is foundation for the presumption that two majors will be better for one's economic future. However, at liberal arts colleges, where there are the highest levels of double majors, little to no economic impact is seen. Rossi and Hersch (2008) found a similarly minimal (less than 3%) economic return to double majoring, in general. Instead, they noted that future salaries increase dependent on the disciplines of the major, with engineering and business majors—not commonly earned at a liberal arts college—affecting future salary more than being a single or double major.

The recent rise in double majors at liberal arts colleges, together with the increase in mental illness but the limited utilitarian, economic rationale for double majoring, made us wonder what underlies this growing phenomenon, particularly at Grinnell College. As part of a larger multi-methods study into how Grinnell College students choose their major, we therefore investigated double majoring at one highly selective liberal arts college. This paper presents this part of the larger study's findings, focusing on the motivations for double majoring and its associated effects on student life and experience.

Methods

In February of 2018, all active, degree seeking second, third, and fourth year Grinnell College students were invited to participate in an online survey about how they chose their majors. Data from the survey allowed us to recognize areas that warranted deeper understanding, and which populations of students would best be able to help us understand these experiences. In total, 46.3 percent of invited students responded to the survey. From their responses, we determined that we needed to examine more fully students from five specific, sometimes overlapping, groups:

1. Students who reported being unhappy with their major choice, not belonging in their major, or having no faculty relationships that they considered strong.
2. Lower income students, defined as those with a household income in the bottom quartile of their cohort.
3. First generation college students
4. Students in a minority within their major. These included racial and ethnic minorities, men in languages, and international students in the humanities.
5. Double majors who reported being happy with their major choice

Focusing on students whose responses placed them in one or more of these groups, we invited 85 fourth-year students to participate in an individual interview around major choice. During interviews, we engaged in snowball sampling (Merriam, 2009), asking participants if they knew of anyone whom they thought had an interesting story or set of experiences around major choice, or who would fit into one of the interest groups bulleted above. Near the end of recruitment, we determined that there were few international students in the participant pool, so we invited an additional six international student respondents in their third year to participate.

Data were collected through semi-structured interviews, held in person on campus. Semi-structured interviews allow for a more conversational style, with the interviewee taking the lead and retaining the power to direct the conversation as they feel is appropriate. The interviewer ensures that all topics are covered, following the lead of the interviewee for the order of the questions so that conversations may flow naturally. Pseudonyms were assigned after each interview and interviews were transcribed verbatim.

The data were analyzed using NVivo 12 (QSR International). Coding began deductively, based on the interview questions. In the course of coding, themes were added inductively as they emerged and clarified. Transcripts were coded multiple times to ensure all new themes were coded, with analytical memoing and writing forming the early analytical stages. Disconfirming data were sought to arrive at a more deeply nuanced understanding of particular student experiences.

Participants

Fifty-two students responded to our email invitation, with 41 agreeing to participate. Snowball sampling yielded one more participant. One of the six invited third-year international students also participated, making a total of 43 participants in this study. Almost half of the participants, 21 students, were double majors, representing a broad range of disciplines and combinations. Others of the remaining 22 students who majored in one subject would have preferred to double major, but did not for a variety of reasons (discussed below).

The interviews lasted between 32 and 92 minutes, averaging 55 minutes each, for a total of almost 40 hours of interview data. The dataset comprised 382,808 words—between *Anna Karenina* and *Gone with the Wind* in length.

Results

This section provides detail and demonstrative quotes of a number of findings pertaining to double majoring. However, before we present the motivations for, and effects on student experience, of double majoring, it is first important to understand a perceived majors hierarchy that participants described: *“All of the majors are evaluated according to their utility within the larger world.”* This hierarchy was an underlying assumption in much of the discussions about major choice, particularly double majors, even though it was only mentioned directly by a few students. Like any cultural artefact, underlying assumptions may not be visible, questioned, or discussed by those living in the culture (Schein, 1985). Nevertheless, these assumptions guide the perceptions, sensemaking, and lived realities of the individuals in a given culture.

Majors Hierarchy and Perceived Earning Potential

Some participants discussed a hierarchy of majors in terms of the social capital that the major bestows on its students. These students described social capital as arising from majoring in subjects that are directly applicable to a career, especially jobs that typically pay well. The more a major was perceived as leading to related employment directly after college, the higher the associated social capital. There were particular majors in this category. Computer science was the most commonly mentioned, but others were usually in the STEM fields (science, technology, engineering, and mathematics) as well as economics. One student commented, *“The mathematics/computer science double major pretty much takes the cake.”*

Within the perceived majors’ hierarchy, humanities majors were frequently at the bottom: *“People do sort of consider humanities and social sciences easier classes and not as prestigious.”* Numerous participants demonstrated a wide lack of awareness of the potential careers available to humanities majors. Some students reported feeling so concerned for their job

prospects as a result of their humanities major choice that they sought additional coursework or opportunities to assuage their concerns. Others had acknowledged those concerns at the time of declaring their major but had not let them impede their choice. There was a common narrative of students with a science and humanities double major being comforted about their career prospects by their science major. Perhaps reflecting their underlying angst about one of their majors being in the humanities, they appeared to feel the need to profess widely that they would still be employable due to their science major.

Motivations for Adding a Major

Participants provided multiple distinct reasons for double majoring that can broadly be categorized as for their academic and professional improvement, or for social reasons. The first category includes students believing that double majoring will improve their career prospects, or students wanting to study a particular field or topic that was a combination of two different majors, or prepare for a career that needed distinct knowledge and skills from two particular disciplines. The social category includes students believing that double majoring will enhance their social capital on campus, doubling just because they could, and finishing off a second major so that they would have something to show for their work in a second field.

Academic and Professional Interests. Some participants believed that having two majors would enhance their career prospects. There was a perception that being well-rounded—which they interpreted as majoring in two different divisions—would make them appear more competitive for any number of opportunities in the future: “*[I felt some pressure to double major] because it adds another thing to your [medical school] application that you also majored in Spanish.*” There was also the sense that having two majors would provide participants with

distinct qualifications for a particular job or to work in a specific sector, as well as improve their ability to master content and skills once they were in a career.

There were some distinct academic benefits that stemmed from the unique nexus of two particular majors. The academic interests of a few students focused on this academic ‘sweet-spot’ that was the combination of knowledge in their two major fields: *“For me, sometimes more important than the major was the double, the combination it would create. Like, peanut butter and jelly, or something!”* They found that the sum of the parts of two majors was substantially more rewarding than earning either of the majors alone. For example, one student was specifically interested in history of a particular country; he needed the language major and a history major to dig deeply into his interests. Other double majors found that they could pursue specific career paths that required the combination of knowledge gained from both majors because they were uniquely positioned with specialist knowledge, skills, and interests to fill these jobs. Two examples include a computer science/philosophy double major who is going to work in artificial intelligence, and a classics/computer science double major who plans to study natural language processing.

A few participants who were double majoring without the motivation of tying together specific interests or preparing for particular careers displayed some cognitive flexibility in making two seemingly disparate subjects relate to each other in a creative but persuasive manner. They were able to articulate a rationale for and appreciation of their unique paths: *“[My two majors] relate a lot, on all these different factors. There’s all sorts of cross-cultural psychology, and psychology of diverse populations. And this is giving me a new perspective to bring into various psych talks.”* Thus, even if they had not chosen to double major for a particular academic

or professional reason, they were able to emerge with clear understanding of the benefits of their particular combination of disciplines.

Social Motivators. Social capital was a clear motivator for many double majors in this study: *“It was not for me necessarily that I needed to double-major, but it was for me to know that other people would see.”* Participants conveyed a very clear narrative that those who were seen as working hard and as being smart accrued social capital on campus. These qualities of an industrious high achiever were described as being admired on campus, and it was important to participants that their efforts were noticed and then rewarded by the accompanying peer admiration and respect: *“Double majoring helps build up this image of myself: ‘I’m double majoring. I can work really hard. And I can deal with all the stress.’”* Being seen as working hard also justified their identity as a “true Grinnellian,” increasing their sense of belonging on campus. One student noted, *“I wanted two majors. It added to me justifying my intelligence, as a second year.”*

Since double majoring brought with it some social cache, so having one major often led to a sense of inferiority: *“I do sometimes feel a little bit underachieving when I say I’m just a philosophy major.”* Students completing one major were perceived as taking the easy route because they were only obligated to pass one set of advanced courses and seminars, and were free to fill up their schedules with introductory and 200-level courses. One student who chose not to double major commented, *“People who double major do have a certain, I don’t know, positive quality. Endurance, or [it’s] like they do seem very proud of having double majored. And I don’t feel proud for having a single major.”*

Combining this social capital theme with the majors hierarchy described earlier led to a situation where participants who double majored with one major in the arts or languages were

very clear that the language or art was their ‘side major.’ Languages were very commonly paired with another major; there was also an underlying assumption that studio art, theatre, or music would also not be a serious student’s only major: *“It’s just a general attitude [toward] theatre, languages, and ... poli sci. Where ... people tend to expect you to double more.”*

Grinnell has an open curriculum, with only one required course for all students. Beyond that, each major requires eight courses, with some room for electives within those 32 credits. Therefore, each student with a single major has 23 classes outside the major that they can choose from around the curriculum. There is an institutional expectation that these classes will be in all three divisions (humanities, social studies, and sciences); there are limits on the number of credits that can be earned in any single department. Thus, there is significant latitude for students to design their own curriculum, which may include fitting in a second major. Because of the flexibility afforded Grinnell students, a number of participants reported feeling pressure to double major just because it is perceived to be easy to do: *“Underneath it all, there’s some push to do two of a thing because we can.”* It is also normalized through marketing materials and the wide acceptance of double majors by both faculty and students: *“They advertise [the possibility of double majoring] so much, you feel so compelled to feel like, ‘Well, if this is the one thing they advertise, I should do it.’”* With so many Grinnell students self-identifying as high achievers, it is understood as a natural and obvious choice to double major just because it is logistically possible: *“There is a sense of, “Well you have all this room in your schedule, why are you not doing a double-major?”*

Another common set of circumstances that ended up with a student double majoring, even without originally intending to do so occurred when students continued taking classes in a department (other than their major) because they enjoyed the discipline. At some point they then

realized that they were close to completing the major requirements: *“Eventually, as I just kept taking more and more classes, I [felt], “I’m very far along in the major, so not finishing it to get that recognition of the work I’ve done felt kind of stupid.”* Having earned the majority of credits for a major, many participants decided that they “may as well” complete it, even if this was not their original plan. Doing so often entailed taking one or two courses they would otherwise have not taken instead of courses they would have preferred: *“The fact that I’ve declared may mean that I will take a class that I wouldn’t normally choose, just because it’s the only one that fits with my schedule. I’ve got this far, I might as well finish it.”* It was common for participants to feel that, since they had completed a substantial amount of work focused in a particular discipline, it would feel good to have a second major on their diploma to show for their efforts in this area. They felt that without actually completing the second major, all the other work they had done in that field would not be recognized: *“I kind of want to show all the time that I’ve put into Spanish through coming out with a major. The further I got along, I was just kind of like, ‘Okay, well, I’m this far already, in the major; I need to finish it.’”*

The participants described above, whose motivation to double major was more socially-driven, appeared to have no distinct academic or professional rationale for completing two majors. It is the well-being of such students that is of greatest concern when we consider the potential for additional stress brought about by the increasing prevalence and social pressure to double major.

Other Motivations. A minority of students described specific benefits that motivated them to add a major. These benefits included access to seminars or advanced classes, a greater likelihood of getting into specific classes, the ability to do research over the summer, or to really feel part of that major’s community. Essentially, beyond the logistical access provided by

declaring a major, there was some social validation to be gained from formally becoming part of the department: *“Something I didn’t really think about, but looking back is nice, is being a part of the German department as a community, where we do things together sometimes. There [are] German events, and I’ve just felt more connected to the department as a major.”*

Effect of Double Majoring

Participants who double majored described several effects of having done so. These pertained to students’ holistic view off their education regarding its breadth or narrowness, cognitive burden of working deeply in two disciplines, and logistical challenges to completing two majors.

There were opposing views presented with equal frequency and weight as to whether having two majors in different divisions provided one with a narrow or broad education. The narrowness argument presented by some participants was because they found that they did not have enough room in their schedules to take as wide a variety of courses as they would have liked. Instead, they had to take pre-determined courses to complete their majors: *“A double major goes against the whole idea of the liberal arts, because you’re not pursuing the breadth. You’re specializing in these two areas from the outset, which is very limiting in scope.”* Despite the fact that they had multiple credits in different divisions (e.g., a science and a humanities field), these students recognized that their credits in either division were almost all in the same discipline, giving them narrowness within the division.

A minority of participants were pleased at the narrowness afforded them by double majoring. By the time they got into the latter half of their studies, they felt that they had identified their academic interests and now enjoyed being able to focus on only these areas: *“The*

thought of having two disciplines that I was pretty much entirely focused on was very appealing to me.”

The breadth argument was commonly put forward by participants whose majors were in two different divisions. They could point to deep knowledge in two very different disciplines, as well as pointing out the breadth of knowledge they had gained around their subject: *“Double majoring in such different disciplines definitely helped me get a wide range of classes and disciplines. So I think that really helped me get a well-rounded education here.”* Absent from participants’ discussion of breadth was consideration that their credits in any given division were often mostly in one field—their majors—thus making questionable their claims of true breadth.

A few participants, both double and single majors, reported some particular challenges of completing two majors, in addition to shouldering the heavier workload of completing two sets of advanced classes and seminars. One participant with two non-complementary majors expressed having experienced difficulty “code switching” between the modes of thought necessary for his two different majors. He reported it required some time and could be mildly cognitively disorienting at first, with some detrimental effects on his psyche. This cognitive burden was notably absent from the narratives of students who could articulate how their two majors led them to distinct knowledge and skills that was only available with this combination.

Logistical challenges occurred when students had completed all but one or two courses in their second major and then determined that they would be unable to complete it due to scheduling conflicts. In such cases, it was most common for them to complete the major that appeared to lead them more obviously into employment or to command a higher salary once employed.

Participants who had spent substantial time early in their college career completing major requirements found that towards the end they still had some credits to earn to be eligible to graduate. However, they were unable to take courses in a variety of departments because they had not taken the introductory or prerequisite courses for the classes they would have liked to have taken. Where most students completed these introductory courses in their first or second year, these students had focused on their major requirements instead. Therefore, although they would have liked to take 200-level courses to round out their education, they could not, and they often felt like they did not want to take a 100-level course as a fourth year.

The Decision Not to Double Major

Twenty-two participants in this study had one major. While each student had their own reason for their choice, broadly speaking the aggregate rationales were either an intentional choice by the student or a result of logistical challenges.

Participants who were intent on taking courses in a wide variety of departments were often happy not to double major because they wanted to allow themselves the full breadth possible. They often recounted choosing to come to Grinnell specifically for its open curriculum, and having always planned on taking full advantage of this curricular structure: *“I just prefer the flexibility with having one major.”* Another noted, *“To me, the major itself was not too important. I think the point of me coming to a liberal arts college is to take many courses in many departments. Not to actually know professionally what you’re going to do. So that wasn’t a really big thing to me, the double major.”* One participant said that in her first year, an older student advised her against double majoring not for reasons of breadth, but for depth. That older student had felt that by double majoring, she had not been able to get as much depth as she would have liked in either of her majors.

A few participants elected to earn only one major because they were involved in a variety of groups and activities on campus that either precluded the time investment to take multiple upper-level courses at the same time or that fulfilled a need to enjoy diverse interests. Wanting to keep a subject as something that was fun, such as language learning because it is enjoyable, or reading as a hobby, motivated some students not to major in a discipline in which they had a strong interest.

One student made the important point that double majoring would have been stressful and anxiety-provoking; she wanted to avoid any obvious challenges to her mental health, and thus decided not to double major: *“I’m a very high anxiety person. ... [Double majoring] seemed to me like a great way to have constant panic attacks. And so I was, like, “Probably not!” I figured my mental health was probably better.”* Such self-awareness was not articulated during many other interviews, although some participants recognized the stress caused by being in two seminars or other advanced courses concurrently.

Logistical challenges to completion left a minority of students unhappy that they were unable to double major. One participant found that after switching their major, even relatively early on, they would not have been able to complete two majors. One could argue that this is not explicitly a decision not to double major, except that the student was aware of the limitation on double majoring as she made her choice to change major. In several cases when logistical challenges arose, faculty were able to move required seminars around so that students would be able to complete both their majors, but this only occurred in smaller departments.

Studying off campus was a notable concern for students considering how to fit in all the requirements for their majors. Numerous participants wishing to double major and study abroad found that fitting in all their major courses was challenging and sometimes impossible:

“When I was trying to plan things out, I also wanted to study abroad. The classes just wouldn’t fit, and a lot of them required taking two classes at a time for [one major]. And then I just couldn’t fit that with [my other major]; since the [two] departments [are not] as big, for example, as [other departments], there’s only one section. And sometimes it alters every other year, so it was really restrictive in that sense.”

Studying abroad and completing two majors, when possible, often left students taking almost exclusively their major classes in at least one of the three semesters in their final two years: *“I took two really intense semesters to be able to fit in that study abroad semester. So that was a struggle, living with it, afterwards.”*

Discussion

In this study of students’ motivations and considerations about major choice, half the participants double majored. From these data, we were able to examine the factors that led students to complete two majors and the associated effects this had on their well-being. While a minority had a strong academic explanation and rationale for their combination of majors, many participants appeared to double major for reasons not explicitly related to academics or professional aspirations. The economic imperative, which the literature has shown to be unfounded for liberal arts students, was articulated by some as a motivating factor for double majoring.

Troubling in this time of growing rates of anxiety and depression in the college-going population is the social capital motivator. Participants described the need to double major to accrue social capital; double majoring makes students look good to their peers because they will be perceived to be working hard, sleeping little, and fully engaging in the competitive culture of

stress that prevails at many elite liberal arts colleges. Driven to succeed academically from an early age, these students ended up pursuing the ultimate academic feat with the compulsion yet to make it look easy—a narrative that appears increasingly common around the United States (cf. Deresiewicz, 2014).

For many students, double majoring provides few noticeable gains beyond what may be attained by simply taking a number of courses in a second subject of interest, without the imperative to complete the major. The difference between this and a second major may be just one or two courses, suggesting that students can pursue their interests to some depth without being required to take some courses that may be less appealing to them. The gains in social capital and belonging, as well as the ease—almost expectation—that intelligent students double major, at many colleges therefore are influential motivators.

The expectation and ease of double majoring thus appears to be a systemic flaw. Participants in this study discussed how the college marketed itself as an institution where completing a double major is logistically easy and encouraged. Grinnell is not alone in this approach. Prospective students, priding themselves on their academic achievement of having been accepted to an elite liberal arts college, therefore are easily persuaded that double majoring is a laudable endeavor. Thus the culture of double majoring becomes entrenched.

Double majors excel at allowing students with specific academic interests that remain unmet by focusing on one discipline to pursue their interests in an integrated manner. This is particularly useful for students whose career goals—including completing a graduate degree—necessitate credentials in the two disciplines rather than just coursework. Double majoring to pursue a combination of interests appeared substantially less stressful to participants because

they enjoyed the advanced coursework in both majors and were intrinsically motivated to complete the work.

The question of how to encourage breadth in studies is often discussed at colleges with few or no general education requirements. Double majoring, however, may not be the answer that many perceive it to be. Even students recognized the superficiality of the breadth narrative to double majoring, when all a student's credits within a division are in the same department. Instead, these findings lead us to the more difficult question of how to encourage true breadth that is motivated by curiosity that transcends disciplinary boundaries. Other scholars have investigated this imperative more extensively; an important contribution from this study is to emphasize that double majors may not fulfill this breadth, especially when motivated by credentialing rather than the acquisition of new knowledge and skills.

We therefore propose that a reduction in the proportion of double majors at elite liberal arts colleges would, over time, reduce the level of stress felt by students on campus. Lowered stress may also, we hypothesize, reduce the prevalence of anxiety and depression at these institutions. The miasma of stress that blankets some of these campuses might slowly begin to dissipate, perhaps allowing students the space to wonder about their (single) majors more in-depth, or about the many ways in which other classes in the various divisions might pique their interest.

We encourage institutions to consider systemic changes that they could make to present barriers to double majoring for the purposes of enhancing student well-being. These barriers need not be great; they should merely be sufficient to deter students who "might as well" double major, or to make students think twice about doing so just because double majoring is possible.

Conclusion

This study elucidated the motivations of double majoring for students at an elite liberal arts college. These reasons included: to enhance their career prospects; to appear intelligent or well-rounded; because it was possible to do so; because they had completed a number of classes in the department and wanted to have something to show for their work; and because they were genuinely interested in the material and the unique understanding of a particular topic that they would gain by having in-depth knowledge in two particular fields. Double majoring added to their workload because it entailed two sets of advanced classes, thus increasing the academic pressure students felt.

With these factors now understood, further research could include a quantitative survey to determine how widespread each of these various motivations is among students who double major. Practically, institutions should now consider whether the academic benefits of double majoring outweigh the potential for mental health challenges that might arise from increased academic stress. If appropriate, some systemic changes to the mechanics of double majoring may be warranted at some elite liberal arts colleges.

References

- American College Health Association. 2015. *American College Health Association - National College Health Assessment II: Reference Group Executive Summary Spring 2015*. Hanover, MD.
- Deresiewicz, W. 2014. *Excellent Sheep: The Miseducation of the American Elite and the Way to a Meaningful Life*. New York, NY, US: Free Press.
- Eisenberg, D., Golberstein, E., and Hunt, J.B. 2009. Mental Health and Academic Success in College. *B. E. Journals in Economic Analysis & Policy: Contributions in Economic Analysis & Policy*. 9, 1–35. <https://doi.org/10.2202/1935-1682.2191>
- Hemelt S. W. 2010. “The College Double Major and Subsequent Earnings.” *Education Economics*, 18, no. 2, 167-189, DOI: 10.1080/09645290802469931
- Merriam, S. (2009). *Qualitative Research: A Guide to Design and Implementation*. San Francisco, CA: Jossey-Bass.
- National Center for Education Statistics (NCES). 2018. *Integrated Postsecondary Education Data System*. Retrieved from <https://nces.ed.gov/ipeds/use-the-data>.
- Pitt, R. N., Tepper, S. A. 2012. *Double Majors: Influences, Identities, and Impacts* (Report). New York, NY: Teagle Foundation.
- Rossi, A. F., & Hersch, J. (2008). “Double your major, double your return?” *Economics of Education Review*, 27, no. 4, 375-386. DOI: 10.1016/j.econedurev.2007.03.001
- Schein, E. H. 1985. *Organizational culture and leadership*. San Francisco: Jossey-Bass Publishers.
- Thompson, T., Davis, H., and Davidson, J. 1998. “Attributional and affective responses of impostors to academic success and failure outcomes.” *Personality and Individual Differences* 25, no. 2, 381-396.