Taking a Time-Out: A Quantitative Study of the Influence of the "Gap-Year" on Academic Success

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There is becoming an increasing trend for young adults to take a period of time "off," that is, pursuing an entity away from their studies, before entering an undergraduate institution. Whether it be to work to save money for their education, to travel to expand their horizons, or to simply take time to solidify their academic and career desires, more and more individuals are choosing this route. Particularly in the United Kingdom and Australia, the trend is growing with increased force, and the literature reflects this growth. Several research studies, further outlined in the subsequent literature review, have been conducted with British and Australian student participants, but there seems to be a gap in the research where students in the United States are concerned. Are U.S. students partaking in this "gap-year" phenomenon to the same extent as their international peers? Are their results from taking this time off the same as those from other countries? Research is needed to further develop a set of answers to these two questions.

The majority of the current literature available suggests that there are various benefits to taking a year off in between secondary education and postsecondary education. However, some studies, including one conducted in Australia in 2003, show the converse effect, that there can be academic consequences to taking too much time off. It is important to get to the root of whether or not a gap year can indeed be beneficial, as we continue to grow our base of knowledge on college student development and make recommendations for student's future. If research continues to find that taking time off before diving into a college degree program serves a positive purpose, the conversation behind the importance of such a break will need to also continue to grow. Likewise, if more research develops illustrating potential negative effects,

educators can encourage their students to continue directly on to pursue a higher degree, as is the prominent trajectory in today's society.

This investigation serves as a continuation of the development of a body of knowledge involving students attending colleges in the United States who have decided, for one reason or another, to take an amount of time away from an educational institution before pursuing an advanced degree. It will take a closer look at whether or not this time away negatively or positively contributes to academic success, or has no affect at all. It will also provide a quantitative basis to add to the many qualitative studies already conducted in the field.

I. Literature Review

While traditionally, students enter a college or university setting directly after high school, "this pathway has become increasingly diversified, as there are a growing number of individuals who instead take a gap-year" (Parker, Thoemmes, Duineveld & Salmela-Aro, 2015, p. 323). As King (2011) notes, while it is difficult to determine just when exactly the gap year emerged as a phenomenon, most literature points to it beginning sometime around the 1960's. A gap year itself is defined as "a period of time which an individual takes 'out' of formal education, training or the workforce," and may include "structured activities, such as part-time work and volunteering, or unstructured activities such as leisure" (Martin, 2010, p. 561). While taking a gap year began as an "exclusive, class-bound phenomenon" for primarily "middle class, white" individuals, evidence indicates that today "people from less privileged backgrounds are choosing to work during a gap year" (King, 2011, p.342), showing the variance of reasons and activities being carried out during this specified time. Despite whatever avenue a student chooses to pursue on his/her gap year, many of the same outcomes apply. Many gap year experiences are

"used by young people to undertake forms of identity work" (King, 2011, p. 342), and to become more well-suited for the university life.

As previously mentioned, the traditional path for young adults is to enter into an institution of higher learning directly following secondary education. However, there has been a sudden rise in students participating in the gap year phenomenon, particularly in the United Kingdom and Australia, with estimates suggesting that "up to 250,000 young people take a Gap Year each year in the UK" (King, 2011, p. 342). Similarly, in Australia, "recent estimates have indicated that the growth in 1-year university deferments has grown from 4% in 1974 to 11% in 2004, with a forecast for even greater growth over the next few years" (Martin, 2010, p. 561). While students are drawn to the gap year for a number of reasons, "most feel that there is something lacking in their lives" (O'Shea, 2011, p. 565), which surely contributes to the growing numbers pursuing this path. With percentages increasing so rapidly, more research is needed now than ever to better understand this phenomenon.

Many of the qualitative studies that make up much of the literature on this topic share that students "described a learning process from the gap year that continued well into their university education," with improvements in self-confidence and self-efficacy (O'Shea, 2011, p. 568). While students themselves are feeling the effects of this time off, faculty and staff, too, are finding that students returning from this gap year seem "more mature, more self-reliant and independent than non-gap-year students" (Birch & Miller, 2007, p. 329). As noted, however, "these studies only discuss the perceived benefits of taking a gap-year, and are mainly based on interviews with a small number of students" (Miller, 2007, p. 330). Currently, there are limited number of studies that "compare the academic outcomes of students who take a gap-year with those for students who do not" (Miller, 2007, p. 330), and for the studies that have been

conducted, the findings have been mixed. Additional information on how a gap-year influences academic performance will "have the potential to assist pedagogy and guidance in the high school years on post school intentions and decision making" (Martin, 2010, p. 561).

In one qualitative 2015 study conducted in Finland and Australia, it was found that "direct university entrants have significantly higher initial levels of commitment and invest more in their major and career goals" (Parker, Thoemmes, Duineveld & Salmela-Aro, 2015, p. 323) than their gap-year peers. However, these results were self-reported, and the Australian study conversely found that there was no significant difference in degree completion for gap-year vs. non-gap-year students (Parker et al., 2015, p. 323). To dig deeper into research conducted with Australian students, an earlier, 2007 study showed that "taking a one-year break between high school and university has a positive impact on academic outcomes at the university" (Birch & Miller, 2007 p. 342). This research is particularly substantial because it is one of the few current quantitative studies that has been conducted on the topic, with data drawn from student record files at the University of Western Australia. A sample of 2,228 participants from a 2003 cohort of students was taken, with 1,723 entering directly into college and 505 choosing to defer enrollment (Parker et al., 2015). Several items, including "university enrollment, degree drop-out/withdrawal, and degree completion" (Parker et al., 2015, p. 328) were measured for each student. With this information, this study found that "students who take a gap year have marks 2.3% greater than those who do not," and that taking a gap year has a "large impact on marks of low-achieving students than on high-achieving students" (Birch & Miller, 2007, p. 342). In other words, the gap year seems to be most beneficial and have the most positive outcomes for those who struggled academically in secondary school.

Another diverse Australian-based study included 338 undergraduate students from two Australian universities. Interview questions were asked to gauge student's interpretation of their gap year experience, and statistical analysis was run to interpret these results. This study found that taking a gap year "does not adversely affect academic motivation at university"; in fact, "students who participated in a gap year reflected a more adaptive profile of motivation" (Martin, 2010, p. 571). This could have real implications for how we address students who have motivational difficulties in secondary school associated with their academic performance, and how they are guided into pursuing an advanced degree. This study, however, looked only at how gap year participation impacted motivation, rather than direct impacts on academic success.

Several studies regarding gap years were also conducted in the United Kingdom, a country in which the gap year phenomenon has also taken a stronghold. A 2011 study looked specifically at the volunteer-tourism path that students choose to take while entering into a gap year. One qualitative study involving semi-structured interviews of 29 returned volunteers, now students, in their first year of college, was conducted. These volunteers "nearly universally commented on the profound, often life-altering impact they felt their gap year had on their lives and personalities" (O'Shea, 2011, p. 572). Other additional comments that students made in regard to their time off spent volunteering included that they felt more self-confident, more culturally aware, more capable of making sound decisions, more willing to become involved on campus, and more invested in their academic studies (O'Shea, 2011). Perhaps the most telling outcome of this study, however, was students understanding that by taking a gap year, they were making a conscious choice to return to college, "instead of simply the natural trajectory along an academic treadmill" (O'Shea, 2011, p. 572). In other words, the year off reaffirmed their desire to attend college, rather than feeling forced into this decision because they were not sure what

else to do. Taking a year off before pursuing higher education enabled them to choose whether higher education was even something they were interested in, or if they were only participating because society told them to do so.

Lastly, another 2011 study was conducted in the U.K. including 23 undergraduate participants who had taken a gap year between high school and college sometime within the past five years. These students comprised a mix of social class and ethnicity, and were divided almost equally between having worked during their gap year and having travelled. The results of this study were much the same to other qualitative studies on the subject matter in that students "linked gaining confidence, maturity and independence" (King, 2011, p. 569) to their experience. The primary takeaway that these students held was that their gap year would make them more marketable in the future when looking for jobs, "distinguishing them from others seeking graduate employment," (King, 2011, p. 570) because of the skills they had learned, and their ability to claim that they held more substance than just a college degree. However, one major setback in this study was that "nothing is known about the young people who did not commence university study after having a gap year" (King, 2011, p. 573), and their thoughts on the matter. Those who did not decide to pursue an advanced degree after this time off may not have had a similar, positive experience.

Ultimately, research on the topic of the gap year is primarily qualitative, and has warranted mixed results. Much of the current research involves student interviews after they have taken their gap year, and then decided to enter into a university. It has seemingly not been explored what happens to those who took a gap year, only to pursue another avenue other than attending college. Furthermore, only one of the above experiments looks at the direct link between taking a gap year, and academic success in measurable terms, such as grades, drop-out

rates, class withdrawal rates, etc. More research is therefore needed to better define the line between positive and negative results of a gap year, and specifically apply it to academics.

II. Problem Statement

Today, little is known about the academic consequences of taking a year off of study following secondary education and before postsecondary education. If this gap in the research is not addressed, recommendations will continue to be made for students looking to pursue a college degree based solely on qualitative responses from interviews and questionnaires. In this study, the impact of taking a gap year on academic performance during the first year of life at a university will be directly measured, using quantitative empirical evidence gathered from university resources. Instead of detailing their experiences in qualitative means, students will be qualitatively reporting evidence that supports their academic success at the university.

III. Research Question

Is there a difference in freshman year academic success, including GPA and graduation rates, between students who elect to take a gap-year and those who do not?

IV. Hypotheses

Hypothesis: From the current research available on the subject area, I hypothesize that there will be a strong positive relationship between those students who have taken a gap-year and academic success rates, including GPA and graduation rates.

Null: There will be no difference in academic success, including GPA and graduation rates, of those students who have taken a gap-year in comparison to those who have not.

V. Study Design

This investigation of whether there is a difference in freshman year academic success between students who take a gap-year and those who do not will employ a nonexperimental,

causal-comparative design. This study design was chosen because the study will reflect a "natural" experiment, "in the sense that something occurs different for one group of participants compared with other" (McMillan, 2016, p.223). In this particular study, this differentiating factor would be the presence or lack of a gap year before starting postsecondary education. Using a causal-comparative design, even though there will be no direct manipulation of variables, "it is possible to monitor what occurs and measure outcomes that compare the groups" (McMillan, 2016, p.223). By splitting the student population into those who have taken a gap-year and those who have not, we can compare academic success and make assumptions on gap-year effectiveness. We will not be manipulating a particular variable, rather observing a potential cause and effect relationship. In this way, causal-comparative studies differ from experiments.

While a causal-comparative study is the best way to quantitatively measure the academic success of students who have or have not taken a gap-year, "the obvious weakness of a causal-comparative study is lack of control" (McMillan, 2016, p. 224). As researchers using a causal-comparative design, we will not be able to regulate or manipulate any of the independent variables; in other words, I will not be assigning certain populations of students to a gap-year or not, but rather allowing them to make the decision, and then looking back reflectively. This study will look more closely at two variables, with the independent variable in this case being whether or not a gap-year was taken, and the dependent variable being academic success once enrolled at the university.

Our specific definition of a gap-year for the purposes of this study will be a break of at least one year in between high school studies and enrollment in a university for undergraduate-level studies. This gap-year must be taken before the student's freshman year of college; in other words, we are not looking to study students who have enrolled, taken a leave of absence, and

returned to the university to complete their studies. However, a student may have used their gap-year to participate in any activity, whether it be for work, travel, or other reasons. This definition will be provided for students participating in this study, and will work to eliminate as much sampling bias as possible.

Defining our dependent variable will be just as important. In this study, our dependent variable is "academic success"; we will attempt to define academic success by including GPA, any dropped/withdrawn/failed classes, classes that were retaken to achieve a better grade, and graduation rates (by following our participants until their date of graduation). By specifying these factors, this study will level the playing field and provide sound quantitative data to add to the existing qualitative literature that has been completed on the gap-year phenomenon.

VI. Population

The population of this study includes all undergraduate freshman students. The demographics of this population are varied, including a wide range of ages, academic pursuits, and potential time spent away from academia and use of gap-year. This study's sample will be comprised of a complete sample of first-year, "freshman" students. These students can identify as having taken a gap-year or not having taken a gap-year in the year prior, as we will be comparing the academic success of the two groups. These students will all currently attend Auburn University, a large, research university in the Southeast. The hope for this study is to draw on a broad range of students with a broad range of experiences to collect data on how a gap-year potentially effects collegiate academic success.

The sampling method for this study will be non-random, convenience sampling. We will be reaching out to all first-year students at Auburn University via email, because these individuals are accessible and available (McMillan, 2016). More specifically, this will be a

criterion sample, or one in which participants are selected on the basis of identified characteristics (McMillian, 2016), i.e. being freshman, first-year students. However, participation will be voluntary and students can choose not to take part in the study. For accurate representation, according to our text, "as population size increases, the percentage needed for the sample decreases" (McMillan, 2016, p. 134). In the case of this study, we are aiming for a total of 200 participants.

Qualifications for the study are that the student be a current freshman at Auburn University. Students who have taken a gap-year and report doing so may have used their gap-year to participate in any form of activity. The benefits of participation will include being entered in a random drawing for a chance to win a $150 Visa gift card. Information on these students will be kept confidential and will not be shared with any outside parties.

VII. Method and Population

Participant data will be collected from freshman students at Auburn University. An email will be sent out to the entire freshman population, outlining the purpose of the study, and asking students to participate by self-reporting demographics and academic information via a survey. The sampling method for this study will be convenience sampling. More specifically, this will be a criterion sample, or one in which participants are selected on the basis of identified characteristics (McMillian, 2016), i.e. the "gap-year." This selection will include all students, regardless of gender, age, socioeconomic status or how time was spent during said gap year. Unfortunately, the "nature of a convenience sample may bias results" (McMillian, 2016, p. 123). Also, since students will ultimately have the decision to participate in the study or not, this could pose a potential sampling bias. However, this bias can be reduced by explaining what the survey is being used for- to explore a possible relationship between taking a gap-year and academic

success. We will also ensure students that their answers will be kept confidential, and any self-reports of grades or other personal information will not have any negative consequences on them and their academic career. Students will agree to participation in the study by signing an electronic waiver, and then completing the survey, as will be detailed in the instructions. The hope for this study is to draw on a broad range of students with a broad range of experiences to collect data on how the use of a gap-year potentially affects collegiate academic success.

One extraneous variable that might come into play with this research is that, by only sampling one class of students (current freshmen), one-time, is that we may not receive an accurate representation of the full range of activities students participate in during a gap-year, based on generational trends. To reduce this particular bias, this study can be continued for years to come, using new incoming classes with fresh groups of students and different experiences. Students in the initial study may also be followed longitudinally to measure their academic success through the years of their college career, to get a more accurate representation outside of the freshman year. However, only sampling freshman will also produce positive results, as more elements and factors come into play that divide the sample population as further academic classes (sophomore, junior, senior) are added.

Because we are sampling the full population, regardless of how time was spent during said gap-year, this may cause some bias in the data and how it reflects on student academic success. For example, students who have taken time to travel vs. enter the workforce during a gap-year may perform better on unit examinations and hold higher GPAs, but we will not be stratifying this data out. We are looking to uncover generalizations about the gap-year as a whole. To reduce this bias, we can collect further data by adding a question to the survey that asks why the student took a gap-year and keep track of it for future research studies to come.

This information will be helpful to have, as we are looking to create a quantitative basis for future research involving gap-year students.

VIII. Data Sources and Data Collection

Data for this study will be obtained from a survey sent via email to the entire freshman population at Auburn University. This email will outline in specific detail that the questions enclosed with be collected with complete confidentiality, used solely for the purposes of this study, and that students may respond truthfully without any fear of retribution. There will be minimal risk associated with taking this survey. This email will also clearly explain that the purpose of this study is to further understand the possible impact of gap-year participation with academic success.

Once a student has agreed to participate in the survey and clicked on the link within the body of the email, they will be directed to the first survey questions. The defining factor of this survey is whether or not students identify as having taken a gap-year or not having taken a gap-year, in the year immediately preceding their first year of college. Therefore, the first question the survey will ask will be whether or not the student has in fact taken a gap year. Regardless of how a student responds to this question, they will then be directed to fill out further demographic information. However, for our records, the answer to this first question will sort our responses for later data analysis and comparison between these two groups of people.

The survey will then ask pertinent demographic information, such as gender, age, family socioeconomic status, and how time was spent during said gap-year (for example, time off to travel, work, etc.), if this last quality applies. For students who have selected that they did not take a gap year, any specific question relating to gap-year activities will not appear on their survey; rather, it will be stratified out using the skip logic feature on our survey design software.

After demographic data is collected, the survey instrument will continue to ask students ask students more in-depth questions about their academic experience. Several examples of questions that will be asked include:

1. How was your time spent during your gap year? (For gap-year students only)
    a. Traveling
    b. Working
    c. Volunteering
    d. Other (please specify)
2. On a scale of 1-10, please rank your gap-year experience on how prepared you feel it made you for your collegiate experience, with one being very little preparation and ten being complete preparation. (For gap-year students only)
3. What is your current GPA?
    a. 4.0
    b. 3.9 – 3.0
    c. 2.9 – 2.0
    d. < 2.0
4. About how many hours do you spend on homework, studying and other academic-related activities per night?
    a. 0-2 hours
    b. 3-5 hours
    c. 5-7 hours
    d. 7+ hours
5. Have you ever withdrawn from a class due to academic-based reasons?

a. Yes

b. No

c. Unsure

6. Of the semesters you have currently been enrolled at Auburn, have you ever been placed on the Dean's list?

a. Yes

b. No

c. Unsure

A self-reported survey instrument is the most appropriate instrument for the purpose of this study, due to the nature of the data we are hoping to collect. While administrative offices collect a wide variety of demographic information on incoming students, gap-year participation is not one of these items. Therefore, we must target the entire freshman population in order to accumulate this specific data about gap-year participation, since it is not already collected. While we are asking students to self-report, we can be fairly certain that our information will be accurate. An online survey also allows for complete confidentiality, which is important since we are collecting sensitive student data.

In terms of remaining in align with ethical obligations to our population, we have ensured students participating in this survey that they are at minimal risk by participating. This study aligns with the principle of "respect for persons" in this way. Also, because our study is not asking participants to participate in any experimental procedures, but rather reflect on their past actions, they are protected in this way; we will not be manipulating any specific variable in this study. The study also works to "recognize the social responsibility to contribute to the public good through research activities" (McMillan, 2016, p. 31). The results of our study will help

inform future research and future practitioners in determining best practices in terms of whether future generations of students should be encouraged to participate in a gap-year.

IX. Data Analysis

For accurate results, our survey will need to be tested for both reliability and validity. Validity, or "the judgement of the appropriateness and dependability," (McMillan, 2016, p. 156) can be checked through various methods. The first test of validity includes read by and critiqued by an institutional review board (IRB). An IRB "reviews research before it begins to ensure that the study procedures, requirement materials, informed consent and assent documents meet the federal ethical requirements" (McMillan, 2016, p. 42). This board, made up of a diverse group of individuals, is the ideal way of ensuring a study meets all of the necessary requirements. Validity can also be tested via pilot testing, and a readability test, which both help to ensure that those taking our survey understand what is asked of them. Lastly, by having our study reviewed by individuals both familiar and unfamiliar with the topic, we cover each aspect of validity.

Likewise, the reliability of our survey should also be tested. The most accurate way of achieving reliability would be to administer several pilot tests, and check that the same results are wielded each time. Replication of findings is the best way to test for instrument reliability.

Internal validity is defined as "the extent to which the intervention produced the observed effect" (McMillan, 2016, p. 240). In terms of potential threats to internal validity that might appear through the course of our study, there are several. Students feeling hesitant to self-report their grades, especially poor grades, could influence the accuracy of results. Some students may also put two and two together and guess the purpose of the study, which may sway their responses based on what they think we would like to hear. A number of other factors impacting a student's academic success while at college could also pose threats to internal validity. For

example, a student who excelled academically while in high school may have also taken a gap year. Then, when enrolling in college, that same individual may have excelled similarly in his/her classes. This poses the question of just how much the role of the gap-year played in this academic success, or if it were rather the student's intellectual ability that carried through. These outside factors could negatively impact what we are trying to measure, which is the relationship between gap-year participation and academic success. Finally, however, the use of a survey allows for minimal researcher error; since each student will be receiving the same questions, written in the same way, in the same order, there will be no bias in terms of how the questions were asked, etc. in playing a role in how a student answered.

A one-way analysis of variance (ANOVA) statistical test will be run to assess the outcome data in this study. The ANOVA test "compares group means to determine the probability of being wrong in rejecting the null hypothesis" (McMillan, 2016, p. 289). In such the case of this study, the two means of comparison will be the mean academic scores of students who have opted as having taken a gap-year, compared with those who have not. This test is the most appropriate for the data at hand because, "ANOVA compares two or more different group means" (McMillan, 2016, p. 289). To run this test, all data from all students having completed the survey will be collected and used to determine significance. For results indicating statistical significance, the alpha significance level, or p-value, must be less than or equal to 0.5 (McMillan, 2016). This level "indicates how often the results would be obtained because of chance" (McMillan, 2016, p. 281). In other words, any significance level greater than 0.5 would be much too high to be accepted as good research. In order to conclude that academic achievement is significantly impacted by the decision to take, or not to take, a gap-year, the alpha significance level of 0.5 is desirable.

As a result of conducting this study, we hope to find that there is a substantial relationship, whether positive or negative, into whether a student's decision to take a gap-year impacts their overall academic success while at college. This information will provide the field of higher education, and secondary education with that, insight on best practice for its students. If it is found that students perform at greater levels after taking a year off from school, the idea of may also be tailored to a specific student; for example, a student who has struggled academically may choose to take a gap-year if it might better prepare them for the rigor of collegiate-level academia. This research could completely transform the trajectory of which we currently send students on, directly from high school into college. It could provide further alternative options for those who feel they do not fit easily into this generic mold.

X. Limitations and Future Research

There are many strengths to the design of this study that we have presented. The study seeks to provide quantitative representation to a topic that has been primarily explored qualitatively before. It includes all students of a particular population, whether or not they had participated in a gap-year, whereas previous studies look only at those who have. This provides a basis for comparison that can inspire future research on the topic. In studying the entire population, it also provides a wide demographic of individuals from which conclusions can be drawn.

While a wide demographic of students will be used for this study, one of the barriers to this is that the population only stretches as wide as those students who attend Auburn University. The diversity of the Auburn campus, or lack thereof, will therefore be drawn into the data, whether we would like it to be or not. Furthermore, at the time, this study only draws upon self-reported academic information from these students first year at college; it does not look into the

academic records following a student through sophomore, junior, and senior years, up until graduation. Lastly, asking students to self-report is always a risk in that they might not have the time or desire to participate in the study. Without their feedback, our study cannot move forward. To improve the study in this way, an incentive could be offered for future participants.

There are a myriad of ways this study could be used to inspire future research. The one seemingly obvious addition to the study would be to follow the course of each student's academic career, until graduation. Graduation rates can be used as a strong indicator of overall academic success, and whether or not that has dropped off or grown stronger over the years for our participants. Since academic success is the ultimate end result of this study, it would be important to draw more in-depth data through compiling four years-worth of data, versus one. The study should also be replicated with other incoming freshman classes, on varying college campuses, with different general demographic populations. It should be continued every year for many years, in order to catch any generational trends that may also be impacting results. For example, researchers may find that gap-year participation decreases as time goes on, and this could have implications for generalizations being made on the subject.

Future research might also look into stratifying data on how student gap-years are spent, and what each different path means for academic success. If students are showing increased academic success after working for a year, as opposed to having traveled for a year, this should be noted as recommendations continue to be made for future students. On a similar note, further studies should look into whether there are other perks and/or consequences that come with taking a gap-year, outside of academic success. Categories could range anywhere from maturity levels, to socialization ability, to independence. Academic success rates of gap-year participation is just the stepping stone for research of this kind.

More in-depth research on the gap-year experience, and its influence on student's collegiate experience, is needed to better the future of higher education. Two questions currently exist that need to be answered based on sound research results. These questions are: should students take a gap-year before entering into a university, and I so, what should students be doing during this time off? To make the best recommendations possible, a larger and more robust wealth of data is undoubtedly needed.

References

Birch, E. R. & Miller, P. W. (2007). The characteristics of 'gap-year' students and their tertiary academic outcomes. *The Economic Record, 83*(262), 329-344.

King, A. (2011). Minding the gap? Young people's accounts of taking a gap year as a form of identity work in higher education. *Journal of Youth Studies*, *14*(3), 341-357.

Martin, A. J. (2010). Should students have a gap year? Motivation and performance factors relevant to time out after completing school. *Journal of Educational Psychology, 102*(3), 561-576.

McMillan, J. H. (2016). *Fundamentals of educational research*. Seventh Edition. Boston: Pearson.

O'Shea, J. (2011). Delaying the academy: A gap year education. *Teaching in Higher Education*, *16*(5), 565-577.

Parker, P. D., Thoemmes, F., Duineveld, J. J., & Katariina, S. (2015). I wish I had (not) taken a gap-year? The psychological and attainment outcomes of different post-school pathways.