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A PROTOCOL FOR AN INTERVENTION TO INCREASE RETENTION IN HIGHER EDUCATION

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ABSTRACT

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Kimberly Ann Alexander

Background: Between 40 and 60 percent of high school students are chronically academically disengaged and large differences in post-secondary educational attainment and completion across race/gender and socioeconomic groups reflect highly uneven academic preparation in the K-12 years. As such, there is a need to examine students' motivation to learn, both at the high school and post-secondary level to address the multitude of negative student outcomes associated with academic disengagement. This study examines students' motivation to learn by 1) evaluating models of motivation that include the impact of both executive function and self-efficacy on motivation and to examine the extent to which these variables can predict retention; 2) evaluating an evidence-based intervention to strengthen self-efficacy and executive functioning ability; and 3) presenting a valid and reliable mechanism to assess academic disengagement that may be collected during students' first year at university.

Methods: Using a cluster randomized trial design, this study evaluates the effectiveness of an evidence-based intervention to strengthen self-efficacy and executive functioning ability vs control among freshman students at risk for academic disengagement enrolled in a four-year degree at a university. Participants in the intervention group receive a total of 9 Executive Function Coaching Program and 12 Rational Emotive Behavioral

Coaching Program weekly sessions. We hypothesize that 1) students in the intervention group will have a greater retention rate than those in the control group at the end of their freshman year; 2) the intervention is positively related to retention and G.P.A. by the mediating effects that executive function and self-efficacy abilities have on motivation; and 3) the causal relationship between the intervention and retention and G.P.A. is temporally mediated by the executive function, self-efficacy, and motivation variables. As a part of this protocol, internal reliability data is provided on the outcome measures proposed for this study.

Discussion: Findings from this study will provide policy makers, educational institution administrators, and other stakeholders needed information to recommend scalable and cost-effective policy and practice with respect to academic disengagement and risk reduction and remediation to help alleviate the chronic disengagement and uneven academic preparation across race/gender and socioeconomic groups.

Keywords: academic disengagement, motivation, self-efficacy, executive functioning, retention, coaching, rational emotive behavior coaching, mechanisms of change

DEDICATION

For mom, dad, and mama.

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INTRODUCTION

Student engagement in learning is thought to be a critical factor for academic success. Indeed, academic disengagement leads to many negative outcomes such as school dropout, academic failure, and internalizing and externalizing problems in students at all levels of education (Alexander, Entwisle, & Kabbani, 2001; Ansary & Luthar, 2009; Di Giunta, et al., 2013). Thus, within the last 15 years, the National Research Council and the Institute of Medicine have established committees to examine and address students' motivation to learn, both at the high school and post-secondary level (Institute of Medicine, 2004; National Research Council, 2015).

Among the many findings, these committees have identified that between 40 and 60 percent of high school students are chronically disengaged (Crotty, 2013; Institute of Medicine, 2004) and large differences in post-secondary educational attainment and completion across race/gender and socioeconomic groups reflect highly uneven academic preparation in the K-12 years (Bound, Lovenheim, & Turner, 2010; Holzer & Lerman, 2015, National Research Council, 2015).

There is growing literature that evaluates programs and practices designed to improve completion rates for young adults in high school as well as college (National Research Council, 2015). For example, St. John's University, currently the second-largest Catholic university in the U.S., with nearly 12,000 full-time undergraduates and ranked among the 25 most diverse universities in the U.S. has established a number of mentoring and experiential learning programs to retain first-generation college students who may experience challenges with maintaining engagement in academic and social college activities (Sharpe, Hutchinson, & Bonazzi, 2018). These programs have demonstrated

efficacy in retaining students over time with student retention from first to second year showing an increase of by 4 percent for St. John's University—and by 6 percent for their Tobin College of Business (Sharpe et al., 2018).

Although student engagement in learning has been extensively investigated as a factor linked to learning, retention, and academic success in higher education (Chipchase, et al., 2017; Krause and Armitage, 2014; Trowler, 2010) less attention is given to the concept of disengagement. Thus, Chipchase et al. (2017) suggested that understanding the risks factors associated with student disengagement from learning provides opportunities for targeted remediation. This can inform policy makers, stakeholders, and treatment/educational providers to offer the appropriate supports to address the specific factors influencing academic disengagement.

The primary goal of the research described here is to evaluate models of motivation that include the impact of both executive function and self-efficacy on motivation and ultimately to examine the extent to which these variables can predict retention among first-year college students and secondarily their academic performance. In this research, data collected from participants' self-ratings of their level of academic motivation, their beliefs about their self-regulatory skills, and their beliefs of their ability to execute academic tasks and learning skills will be used to determine models that best predict freshman retention and grade point average (G.P.A.).

In the process of evaluating models of motivation, a secondary objective of this research is to propose an evidence-based intervention to strengthen self-efficacy and executive functioning ability. The proposed study seeks to demonstrate change over time

on the self-efficacy and executive functioning constructs that will be associated with an increase in academic motivation, freshman retention and G.P.A.

The third objective of this research is to present a valid and reliable mechanism to assess academic disengagement that may be collected during students' first year at university. These measures serve as content- and context- specific screening tools to inform the intervention used to address underlying factors influencing academic disengagement that relate to students who encounter academic challenges. These measures may also be used as progress monitoring tools to assess individual student progression in the intervention program.

There is research support for many different interventions that address various aspects of self-efficacy and executive functioning ability (Calvert, 2017; Diamond & Ling, 2016; Steenbergen-Hu, Olszewski-Kubilius). For example, Diamond & Ling (2016) found that the studies in their review incorporated a variety of activities (i.e. computerized training, games, aerobics, resistance training, martial arts, yoga, mindfulness, theater, and certain school curricula) that have at least one peer-reviewed published report on their efficacy in improving executive functions. However, the application of such interventions in academic settings is insufficient particularly when cognitive training or physical activity training interventions such as computerized training, aerobics, or mindfulness activities are expected to transfer to untrained cognitive skills such as time managing, goal setting, self-monitoring etc. (Diamond & Ling, 2016). The application of interventions is also negatively impacted due to other factors including, financial barriers in obtaining funding, educators and administrators access to data on evidence-based interventions, and progress monitoring measures to adequately

track a student's growth in constructs that predict retention and G.P.A. As a result, colleges develop taskforces to address increasing dropout rates with the focus often placed on tackling students' financial barriers and need for social support (University Leadership Council, 2012). Although these are barriers that definitely pose a threat to academic achievement on the post-secondary level, these are by far not the only barriers that should be addressed. Thus, we argue there is value in addressing cognitive and behavioral constructs that can hinder academic performance and propose theoretical and empirical support for this as well as their practical application in an intervention.

Literature Review

Academic Disengagement

Historically, disengaged students were characterized as resenting course demands, and being impatient and bored with intellectual pursuits due to a character fault inherent in disengaged students (Trout, 1997). In the 2000s, research began to identify the complex nature of academic engagement, rejecting the stance that it is a type of stable trait within students (Hockings, et al., 2008). In 2017, Chipchase et al. noted that they were unable to identify specific definitions of disengagement in their literature review conceptualizing and measuring student disengagement in higher education, as disengagement has been generally described as ranging from a character fault to alienation and non-engagement. Their synthesis of the literature conceptualized disengagement "as a multi-faceted, complex yet fluid state that has a combination of behavioural, emotional and cognitive domains influenced by intrinsic (psychological factors, low motivation, inadequate preparation for higher education, and unmet or unrealistic expectations) or extrinsic (competing demands, institutional structure and

processes, teaching quality and online teaching and learning)" (Chipchase et al., 2017, p. 31). This definition, albeit comprehensive, lacks a level of specificity to inform remediation. Furthermore, findings from their study suggested that there is a lack of valid and reliable mechanisms for identifying students at risk of disengagement used by higher education institutes (Chipchase et al., 2017). Together, this presents an important problem in the development of prevention and intervention programs for minimizing risk and addressing student disengagement. That is, to develop targeted interventions to address student disengagement there needs to be valid and reliable mechanisms for identifying students at risk of disengagement informed by a definition of disengagement that speaks to the particular risk and factors being addressed.

In determining predictive models to assess the likelihood that incoming students will return the following year (retention), typically, variables such as high school G.P.A., SAT scores, and national ranking of the student's high school are included (University Leadership Council, 2012). Retention teams then typically group academically at-risk students into three categories: 1) Students who encounter academic challenges; 2) Students who do not engage socially in the campus community; 3) Students who encounter financial challenges (University Leadership Council, 2012). DeBerard, Spielmans, and Julka (2004) found that several health and psychosocial variables (e.g., smoking, drinking, health-related quality of life, social support, and maladaptive coping strategies) are not significantly related to retention, whereas, retention is modestly related to low freshman year academic achievement and low high school G.P.A.. Therefore, measurable indicators of student disengagement that could be collected during the first year at university include academic performance that may be captured by G.P.A. as well

as factors in behavioral and cognitive domains which can be captured by self-report measures (Chipchase et al., 2017). Using a combination of G.P.A. and self-report measures (i.e., a learning needs assessment) as screening tools can provide the potential to offer interventions addressing the identified underlying indicators and factors influencing the student's disengagement that relate to students who encounter academic challenges.

For factors influencing the student's disengagement in behavioral and cognitive domains, previous research has identified that beliefs a student has about learning drive their academic motivation, which directs their efforts toward educational goals (Eccles, 1983; Hensley, 2014; Schommer, 1994). Although this seems likely, the phrase "beliefs about learning" is vague as it encompasses a great variety of perceptual concepts such as self-efficacy and self-regulatory skills. For example, Carver & Scheier (1998) suggested that self-regulation operates as a feedback loop in which motivation and effort is self-regulated as is self-reflection, performance evaluation, self-control, and self-monitoring. The feedback obtained from these self-regulated iterative phases attenuate or strengthen the effort determined necessary moving forward in a given task. Additionally, Zimmerman (2000) found that students with high self-efficacy were more likely to use self-regulating processes such as goal-setting, self-evaluation, and self-monitoring. Although there is extensive research and literature on self-efficacy and self-regulatory skills as they relate to motivation, far less is known about how they combine to impact motivation and contribute to academic performance.

Motivation

Defining what motivates an individual toward goal attainment has foundations in various theoretical models such as operant theory (Skinner, 1953) and learning theory (Hull, 1943). As operant theory identifies that reinforcers motivate behaviors, learning theory recognizes the functionality of intrinsic drives in motivating behavior (Ryan & Deci, 2000). Deci & Ryan (1985) proposed the Self-Determination Theory (SDT; Deci & Ryan, 1985) in which they differentiate between the orientation of motivation i.e. intrinsic versus extrinsic motivation, based on the different reasons that produce goal-directed behavior (Ryan & Deci, 2000).

Individuals driven by intrinsic motivation engage in goal-directed behavior because the activity is inherently pleasurable, interesting, or personally meaningful (Conti, 2000; D'lima, Winsler, & Kitsantas, 2014; Klinger, 2006; Ryan & Deci, 2000). Previous literature has established the importance of intrinsic motivation for academic success. Specifically, various studies have identified the positive significant relationship intrinsic motivation has with lecture engagement, SAT scores, mastery goals, academic performance, and meaningful cognitive engagement (Church, Elliot, & Gable, 2001; Conti, 2000; D'lima et al., 2014).

Alternately, individuals motivated extrinsically engage in goal-directed behaviors to obtain a reward or to avoid punishment (Adelman & Taylor, 1990; Ball, 1984; Beck, 1978; Deci, 1975; Dev, 1997; Wiersma, 1992; Woolfolk, 1990). Thus, the extrinsically motivated student is primarily focused on performance outcomes (e.g., money for grades, praise or criticism from a parent or teacher, losing a scholarship for poor grades; D'lima et al., 2014; Klinger, 2006; Ryan & Deci, 2000). Although there is much evidence to

suggest the negative implications extrinsic motivation has on cognitive engagement (Walker, Greene, & Mansell, 2006) and autonomy in college students (Conti, 2000), there is also some data to support the positive correlation extrinsic motivation has with academic achievement (Conti, 2000).

In a longitudinal study examining the motivational orientations of elementary school children on academic achievement over time, Corpus and Wormington (2014) suggested that academic achievement due to extrinsic motivation in elementary-aged students may be due to the teacher-student relationship fostered at this educational level (Eccles & Wigfield, 2000; Midgley, Anderman, & Hicks, 1995). However, the effectiveness of this form of extrinsic motivation can worsen when students get older and their relationship with teachers shift (Eccles & Wigfield, 2000; Midgley et al., 1995). Yet, it is arguably unrealistic to assume that children must be intrinsically motivated to attain academic achievement when it is developmentally improbable that children and adolescents have an idealistic long-term goal determined or find self-fulfilling pleasure in all academic tasks, some of which may be considered mundane though essential to gaining skill and automaticity. Thus, although it may be true that intrinsically motivated students at all ages fare better in academic contexts, it would be inaccurate to suggest that extrinsically motivated students will be plagued with underachievement. Instead, the question of most interest might be, regardless of motivational orientation, is it to be assumed that the student has the self-regulatory capacity to use their motivation depending on the level of motivation? To answer this question, the present study looks to identify the role self-regulation, as defined by executive function skills, plays in eliciting

goal-directed behavior given a level of motivation and holding constant the orientation of motivation (i.e. intrinsic versus extrinsic).

Executive Function

Depending on the focus of research and study, there is considerable variability in the definition of executive functions and the constructs that comprise it. Barkley (2012) suggests executive functions can be defined as "those self-directed actions needed to choose goals and to create, enact, and sustain actions toward those goals" (p. 60). Although there are a vast amount of skills and processes identified to comprise executive functions, educators typically focus on those that support the metacognitive guidance of learning (Garner, 2009). A commonality in these descriptions of executive functions is the self-regulation component necessary for the attainment of a goal. For college students, assuming the goal for enrollment is academic achievement, the self-directed actions needed for the purposes of learning and achievement are proposed to include planning, organizational skills, and impulse control. These abilities among all others that comprise executive functions are postulated to have rapid development during the early years of childhood (Clements, Sarama, & Germeroth, 2016; Zelazo & Carlson, 2012). However, studies have identified that although executive functions are strongly genetically derived, improvement can be developed with the use of educational interventions (Clements, et al., 2016).

Planning. Planning is an essential characteristic of academic achievement particularly when learning becomes an independent, self-guided task. For students, the ability to plan allows them to set and maintain goals to prioritize learning tasks and eventually identify and follow a course of study. This ability to "internally represent the

relation between current or planned behaviors and future outcomes" also accounts for limitations on time and resources (Garner, 2009, p. 407). Therefore, strong skill and implementation in the area of planning is argued to be a crucial factor in a student's ability to obtain academic achievement. Executive dysfunction in this area will likely lead to impairment in goal directed behavior as clearly defined steps or the prioritizing of them have yet to be identified.

Organization. The ability to organize is, comparatively, as essential to independent learning and academic achievement as planning. This construct of executive functions, at both the micro and macro level of ability allows for a student to control attention, their use of working memory, and recognize and sort cognitive knowledge structures (micro level) while prioritizing tasks, managing time, and keeping track of tangible learning materials (macro level) (Garner, 2009). Given the complexity of the organization construct, it is argued that executive dysfunction in this area can take many forms for a student said to have "poor organizational skills". As a result, not only will goal directed behavior towards academic achievement be impaired, but because the particular level of impairment (micro vs. macro) is likely unknown to that student, attempts to strengthen organizational skills may not address the student's level of weakness.

Impulse Control. Impulse control is the ability to control behavioral responses through the inhibition of internal and/or environmental demands, for the gain of future accomplishments (Garner, 2009; Spinella & Miley, 2003). For students, poor impulse control correlates with poor academic achievement (Garner, 2009; Spinella & Miley, 2003; Zentall, 2005). For example, students faced with an inability to delay impulses

struggle to postpone more engaging and gratifying activities for academic responsibilities they may find mundane. Procrastination can often be the byproduct of such a weakness. Consequently, this lack of impulse control can greatly impact goal directed behavior, particularly for long-term academic achievement goals through seeking proximate pleasure and rewards with little immediate consideration for the consequent learning goal delays and/or obstacles induced.

Self-Efficacy

Self-efficacy can be defined as the belief people have in their ability to perform a specific task or attain a goal (Bandura, 1986, 1997; Prat-Sala & Redford, 2010). One's own belief in their ability can presumably have an impactful effect on goal-directed behavior. Typically, the belief an individual has in their abilities will likely increase their willingness to perform behaviors associated with their perceived self-efficacy. High levels of self-efficacy are also shown to be associated with effort regulation and study-time management (Clayton, Blumberg, & Auld, 2010; D'Lima, et al., 2014). However, self-efficacy's association with goal-directed behavior presents with an important caveat; the assumption that one possesses the self-regulatory capacity to engage in effort regulation i.e. executive functions. In the academic setting, not having an adequate executive functioning ability will likely result in a student not being able to progress toward attaining an academic goal no matter how capable they may believe themselves to be of the goal because they are unable to manage the behaviors necessary for goal attainment i.e. planning, organization, impulse control. Additionally, a student may not

be aware of their self-regulatory capacity, whether or not their techniques need adjustment, or if they maybe lacking skills altogether.

Research has also identified academic self-efficacy as a stronger predictor of college academic performance than high school G.P.A and demographic variables (D'Lima, et al., 2014; Zajacova, Lynch & Espenshade, 2005). As such, multiple researchers have identified the close relationship self-efficacy has with motivation (Boggiano, Main, & Katz, 1988; McGeown, et al., 2014; Walker, et al., 2006). McGeown, et al. (2014) suggested that self-efficacy maybe associated with different aspects of motivation, such that self-efficacy predicted both intrinsic and extrinsic academic motivation, but higher levels of self-efficacy were associated with increased intrinsic motivation and decreased extrinsic motivation. These findings could suggest that the more a student believes in their academic ability, the more they are motivated to engage in learning material for their interest or curiosity to learn and are subsequently less interested in or perhaps, less fixated on, obtaining the external rewards associate with mastering the academic material i.e. high G.P.A., recognition etc.

Present Study

The purpose of this study is to evaluate models of motivation that include the impact of both executive function and self-efficacy on motivation and ultimately to examine the extent to which these variables can predict retention among first-year college students and academic performance (G.P.A.). These models will be examined through the lens of an intervention program to increase retention rates in students who are at greater risk of dropping out due to weaknesses in cognitive and behavioral abilities that students need to be successful academically. These students are initially identified by a marginally

low high school G.P.A. Most central to this study is our hypothesis that students in the intervention group receiving the program will have a greater overall retention rate than those in the control group at the end of their freshman year. The increase in retention rate and G.P.A. will be positively correlated to changes in self-report measures of executive function, self-efficacy, and motivation.

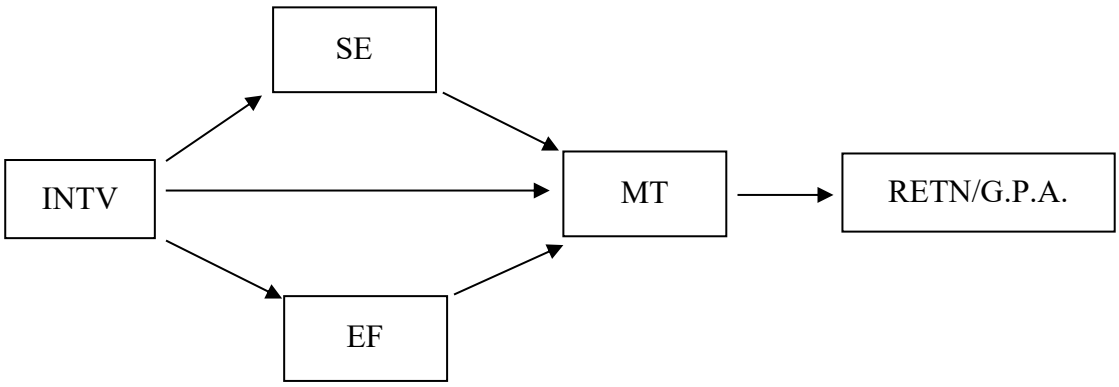
As a related aim, the cognitive and behavioral variables addressed by the intervention program will also be used to inform definitions of academic disengagement. It is hypothesized that the intervention proposed in this protocol is positively related to retention and G.P.A. by the mediating effects that executive function and self-efficacy abilities have on motivation (see Figure 1). To enhance our ability to understand the causal direction of these variables, the measures will be administered to the control and intervention group, longitudinally, at three time points. We also hypothesize a focused longitudinal mediation model in which the causal relationship between the intervention and retention and G.P.A. is temporally mediated by the executive function, self-efficacy, and motivation variables. In particular, it was predicted that the intervention at Time 1 would predict an increase in self-efficacy and executive functioning ability at Time 2, and, in turn, elevated abilities would predict increased motivation at Time 3 and Retention and G.P.A. at Time 4 (see Figure 2). All variables in this model are endogenous variables except the intervention.

The sample used for the study will be undergraduate students enrolled in a four-year degree program in a university, identified to be at-risk of academic disengagement. Using this sample will not only increase the external validity of our findings but the intervention associated with the university sample should lead to change in these

variables over time. This will provide us with a powerful basis to better understand how change in one variable will result in change in other variables. Ultimately, evaluating the outcome of these predictive models will help to enhance and inform the definition of disengagement proposed by Chipchase et al. (2017) “a complex construct that is a multi-dimensional fluid state, with behavioural, emotional and cognitive domains and is influenced by both intrinsic and extrinsic factors,” (Chipchase et al., 2017, p. 40).

Figure 1

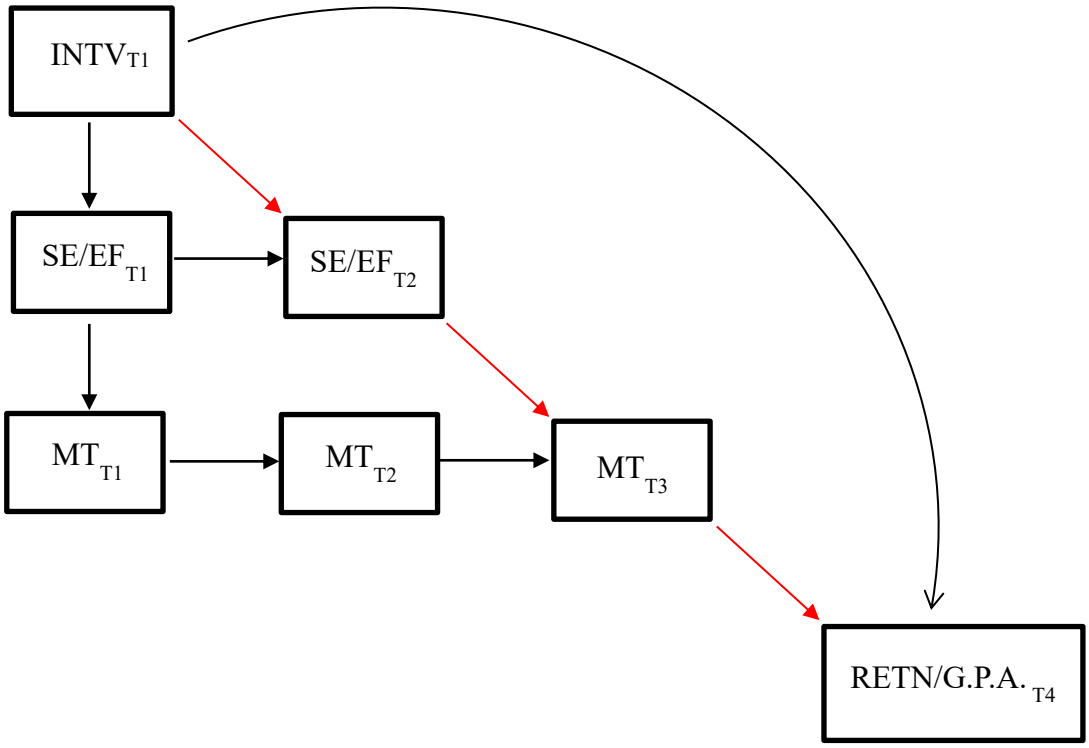
Mediation Model



Note. The intervention is positively related to retention (RETN) and G.P.A. by the mediating effects that executive function (EF) and self-efficacy (SE) abilities have on motivation (MT).

Figure 2

Focused Longitudinal Mediation Model.



Note. It is predicted that the causal relationship between the intervention (INTV) and retention (RETN) and G.P.A. is temporally mediated by the executive function (EF), self-efficacy (SE), and motivation (MT) variables.

METHODS

Study Design

The proposed research will use a cluster randomized trial design, in which individual participants will be nested within universities and all students at one university will either be in the treatment or control condition. Thus, the unit of randomization will be the university which will be randomly assigned to either and intervention group or a control group in a 1:1 ratio. The reason for using a cluster randomized design rather than a simple randomized design in which the unit of randomization is the participant is to avoid compromising the group assignments. If students were assigned to the treatment and control conditions in the same university it would be impossible to avoid carryover between the groups and blinding participants to their assigned condition would also not be possible.

Data Dependency in Clustered Randomized Designs

Although the cluster randomized design is used to avoid threats to a study's internal validity, it does so at a cost. The main cost is that the clustering of students violates the assumption of statistical independence. Students within the same university may be more similar on the outcome variables than students from different universities. The consequence of this dependency in the data is that the error term used in statistical tests will be underestimated if the dependency is not accounted for and this will increase Type I statistical inference errors. The degree to which the data are dependent can be estimated by the intra-cluster correlation which is the ratio of the variance between clusters (universities) to the sum of the between cluster variance and the within cluster variance. If all the variance is between universities then the data within universities is

completely dependent and the ICC is 1.0. If most of the variance is within universities then dependency is reduced, and the ICC can approach 0.

The ICC this indicates how much we should be concerned about the dependency and is used in the calculation of the Variance Inflation Factor (VIF) which indicates how much the simple variance across all participants must be increased (inflated) to adjust for the dependency and create an unbiased estimate of the error term. The VIF depends on the ICC and the number of clusters (universities) in the trial.

Statistical Power and Sample Size

The data dependency in clustered designs also makes the estimation of statistical power and sample size determination more complex. In addition to considering the Type I error rate (alpha), the desired power (1 – beta), and the standardized effect size (e.g. Cohen's d) for estimating sample size must also consider the ICC and the number of clusters. Ultimately, the sample size requires knowing the number of universities that will be randomized and the average number of students that will participate in each university. The total number of participants is this the number of universities x the average number of students per university.

In estimating these numbers, we assumed a moderate effect size of d = .30 as the difference in retention rates between treatment and control universities and an ICC of .15. The moderate effect size is consistent with previous literature that evaluated interventions to increase academic engagement, GPA, and/or retention (Prevatt & Yelland, 2015). The ICC is generally consistent with across university comparisons of a variety of variables. Based on these assumptions we will need to recruit an average of 30 students from 52 universities (26 treatment and 26 control) or a total of 1560 total participants. We have

generally been conservative in these estimates. If the effect size is larger and/or the ICC is smaller then we will achieve more than 80% power. Of course, if the effect size is smaller and the ICC is larger, then our power will drop below .80.

Study Setting

Participating universities will be selected from areas that are geographically distant from one another across the United States. Inclusion criteria will include a Freshman Retention Rate of less than 75% and a graduate program in clinical, school, or counseling psychology. The universities will be contacted via the Student Affairs department or the department most affiliate with extracurricular student programming. Recruitment will consist of a video conference meeting with the principal investigator to introduce the study, what involvement looks like, and the potential cost to consider.

University recruitment and randomization

Eligible universities will be randomized to the intervention or control group. The sequence of randomization is generated by the principal investigator and kept in sealed opaque envelopes away from the study sites in accordance with CONSORT guidelines (Campbell, Elbourne, and Altman, 2004). Universities will be informed of their randomization group by email once recruitment is complete.

Universities that will be administering the intervention must also be able to secure a psychology graduate student who will be trained to administer the intervention. In addition to the training, the graduate student will receive a stipend.

As the nature of this intervention makes it impossible to blind the student participants, psychology interns, and project coordinators to the group assignment, all participants in this study will be kept blind to the most salient outcomes of this study i.e.

retention rates between groups, G.P.A. between student participants, and scores on measures of perceived use of executive function skills, perceived self-efficacy, and perceived motivation. Student participants in the intervention group and the control group will electronically complete and submit all measures via a Qualtrics link provided during group meetings with the project coordinator.

Psychology Intern recruitment and training

Psychology interns selected for this study are students enrolled in a graduate-level Ph.D. or Psy.D. program in Clinical, Counseling, and/or School Psychology with one year of practicum training in psychological intervention using cognitive behavioral therapy interventions. Training procedures are provided as a multiple-day didactic web course before the start of the project. To maintain the standardization of the training, certified REBT supervisors will conduct training and maintain their role as project coordinators. Psychology interns will receive training on the study protocol and scheduling and procedures for administering measures at multiple time points. They are also trained in Rational Emotive Behavioral Theory and Therapy and how this therapeutic modality is applied via a coaching paradigm. Psychology interns are also instructed on how to implement the multi-step executive functioning intervention based on principles and techniques adapted from Dawson & Guare's (2012) *Coaching Students with Executive Skills Deficits*, Fried & Mullin's (2017) *Adult Executive Functioning Workbook* and Wong's (2012) *Essential Study Skills*.

Project coordinator recruitment and training

Project coordinators selected for this study must be licensed or licensed-eligible School, Counseling, or Clinical Psychologists. They will receive training from the

principal investigator on proper procedures for recruiting and screening psychology interns and student participants. They will also be provided with information of study objectives and procedures for data collection. Project coordinators will be responsible for obtaining informed consent from all student participants and psychology interns, training and supervising psychology interns on procedures specific to the group they are monitoring i.e. intervention group or control group and, scheduling, administering, and proctoring student participants completing outcome measures electronically. Project coordinator will be required to schedule monthly meetings via video conference calling to review progress with principal investigator. Project coordinators will be incentivized by receiving a monetary stipend and post-doctoral hours.

Project coordinators responsible for overseeing student participants and psychology interns in the intervention group must be certified REBT supervisors. They will participate in an orientation meeting with the principal investigator in which they will be introduced to the self-efficacy and executive function interventions. They will be responsible for training psychology interns on both interventions. Project coordinators overseeing the intervention group will also schedule weekly supervision with psychology interns implementing the interventions to evaluate treatment fidelity by reviewing student participant compliance with intervention procedures and psychology interns' implementation of interventions.

Project coordinators responsible for overseeing the control group are not required to be certified REBT supervisors but must be at a minimum experienced in research practices and have obtained a master's degree in a psychology-related field. As they will not be overseeing the implementation of interventions among the control group, they will

primarily serve to monitor data collection and student participants continued involvement in the project.

Student participant recruitment

Potentially eligible student participants are identified by the university's Student Affairs department or the department most affiliated with extracurricular student programming. Each university will attempt to recruit student participants who meet the following eligibility criteria: enrolled in a four-year degree at a university; freshmen status; adults age 18 years and older; former high school grade average of between 75 - 85 or equivalent to a C or D; not eligible for disability support services pertaining to educational programming, accommodations or modifications; and able to provide informed consent.

After eligible student participants are identified, the project coordinator will screen all student participants for availability to comply with the control group or intervention group meeting schedule. Student participants will be excluded if they have personal or academic commitments that overlap with the meeting schedule. Student participants are notified of acceptance into the study via email notification from the project coordinator. The goal is to have an average of 30 students participate at each university.

Description of the Intervention

Intervention group (IG)

Rationale. The intervention used for this study is developed by synthesizing research and theory on executive functioning and Rational Emotive Behavioral Theory. Specific practices and techniques are resourced from executive skills deficits coaching,

study skills coaching, and evidence-based practices in Rational Emotive Behavior Therapy (REBT).

Executive Function Coaching. The challenge in identifying an evidence-based executive function coaching program (EFC) is the variability in interventions in the literature and the lack of empirical data to support it (Prevatt & Yelland, 2015). In reviewing the literature on interventions, programs, and approaches for improving executive functions, Diamond & Ling (2016) found that the studies in their review incorporated a variety of activities (i.e. computerized training, games, aerobics, resistance training, martial arts, yoga, mindfulness, theater, and certain school curricula) that have at least one peer-reviewed published report on their efficacy in improving executive functions. This variability is not surprising when examining the literature on conceptualizing executive functions. Barkley (2012) summarized a list of contemporary theories of executive functions to demonstrate the varying range of inconsistencies and problems that ultimately show there is a need for further theory-building.

Under the guidance of Barkley's (2012) definition of executive functions in the above literature review, the program used for this study will address the planning, organization, and impulse control constructs by implementing interventions to address academic context- and content-specific behavioral weaknesses. These interventions are guided by various principles and techniques adapted from Dawson & Guare's (2012) *Coaching Students with Executive Skills Deficits*, Fried & Mullin's (2017) *Adult Executive Functioning Workbook* and Wong's (2012) *Essential Study Skills,* as well as, from literature on outcomes of academic-based coaching interventions by Bellman, Burgstahler, & Hinke (2015), Goudreau & Knight (2018), Parker & Boutelle (2009),

Parker, Hoffman, Sawilowsky, & Rolands (2013), Prevatt, Lampropoulos, Bowles, & Garrett (2011), Prevatt & Yelland (2015), and Swartz, Prevatt, & Proctor (2005). Adaptations are made where necessary to accommodate academic demands of a college setting.

In terms of session sequence, under a coaching model, a typical initial session involves the coach working with the student to write a plan that includes goals and objectives, followed by multiple coaching sessions used to evaluate progress and create new plans (Dawson & Guare, 2012). In this process, students may be asked to identify what goals they would like to achieve or complete inventories to help them determine their needs. However, this can present two problems 1) extensive variability in the topics discussed and procedures practiced between student participants within intervention groups can impact the integrity of the data collected to determine models of motivation and evaluate the efficacy of the intervention and 2) self-determining what are important goals and/or areas of need assumes that the student participant has an adequate executive functioning ability (planning, metacognition i.e. self-monitoring) to draw such distinctions which may not be the case. Therefore, this protocol proposes a standardized group intervention in which session discussions are predetermined and coaches collaborate with student participants on the application of the strategy given student participants current course demands (i.e. papers, projects, exams, lectures).

Program Modules. The proposed curriculum spans nine weeks in which student participants will meet with the psychology intern for weekly two-hour group sessions. The first hour is conducted in a didactic format beginning with a review of the material and between session assignment (BSA) from the previous session and follows with

introducing new material and BSA. The second hour will be spent engaging in a group discussion about barriers in following through with the material, developing an individualized sense of how the material applies to each student's academic responsibilities, how students can incorporate old material where possible, and goal set and plan for the upcoming week. The nine sessions used for the EFC program are presented in Table 1, along with descriptions of what each session entails. Refer to Appendix B.1 – B.9 for the nine-session manual used for the EFC program.

Table 1

Executive Function Coaching Program Sessions and Descriptions

Week	Session	Description
1	Orientation	Introduction to study, program participation and modules.
2	Time Management	Developing a sense of time and timing self. Learning the fundamental to building a daily schedule.
3	Goal Setting	Distinguishing between types of goals (i.e. long-term, short-term, interim goals) and creating goal plan.
4	Self-Monitoring	Strengthening the ability to self-monitor efforts and identify techniques to self-monitor.
5	Note-Taking	Learn and practice different note-taking techniques.
6	Work Completion	Creating a plan and schedule to complete various types of assignments (i.e. long-term projects, essays, reading).
7	Test Taking – Objective Test Questions	Learn and practice techniques to answer true-false, multiple-choice, and matching questions.
8	Test Taking – Recall Test Questions	Learn and practice techniques to answer fill-in-the-blanks, listing, definition, and short-answer questions.
9	Test Taking – Essay Test Questions	Learn and practice techniques to develop a thesis statement for a multi-paragraph essay.

Note. Refer to Appendix B for manual and visuals

Rational Emotive Behavior Therapy. Albert Ellis, the founder of Rational Therapy, developed in 1957 (later becoming known as Rational Emotive Behavioral

Therapy (REBT) in 1994), distinguishes between disturbed, dysfunctional, unhealthy, and maladaptive negative emotions and non-disturbed, functional, healthy, adaptive, and possibly motivating negative emotions (DiGiuseppe, Doyle, Dryden, & Backx, 2013). REBT proposes an ABC model to addressing emotional disturbance in which one experiences an activating event (A), maintains irrational/rational beliefs about the event (B), that will result in an emotional consequence (C) (DiGiuseppe, et al., 2013). For occasions in which one maintains irrational Bs about an event, one will experience disturbed emotions (C) such as depression, anxiety, and/or anger (DiGiuseppe, et al., 2013). As REBT argues that cognition is the most important proximal determinant of human emotion, it is proposed that irrational beliefs lead to dysfunctional emotions, whereas, rational beliefs lead to functional emotions (DiGiuseppe, et al., 2013).

To date, REBT has gained empirical support as an effective treatment for both adults and children over a wide range of psychopathology. A recent systematic review and meta-analysis examining the efficacy of REBT over the last 50 years indicated that REBT interventions are effective for a variety of conditions regardless of clinical status, age, and individual versus group delivery format (David, et al., 2017). As such, researchers are now considering how REBT can be applied under a coaching model. In Dryden's (2011) book, *Dealing with clients' emotional problems in life coaching: A rational-emotive and cognitive behaviour therapy (RECBT) approach,* he establishes why REBT is well suited for life coaching but is different from therapy. Main points include that REBT is an active-directive approach, present-centered and future-focused without neglecting the value of discussing the past and encourages the development of specific skills used to identify and deal with emotional problems (Dryden, 2011). While these

points are more characteristic of a rational emotive behavioral approach than therapy versus coaching, Dryden (2011) also specifies that a fundamental goal as a life coach (different to that of a therapist) is to help a client identify, pursue, and achieve personal objectives as opposed to working on emotional problems. While emotional problems present obstacles to pursuing personal goals, if the frequency, intensity, and/or duration of such emotional problems are in excess, then seeking a psychotherapist for clinical treatment would be more appropriate (Dryden, 2011).

As an academic coaching model, this study proposes an integration of academic content relevant to academic self-efficacy into Rational Emotive Behavioral Coaching (REBC). For example, research has examined how REBT can address procrastination, a highly common academic problem among college students (Neenan, 2008), as well as, academic burnout (Ezenwaji, et al., 2019), and psychological flexibility (Sutcliffe, Sedley, Hunt, and Macaskill, 2019). As such, the goal for integrating academic content relevant to academic self-efficacy is to identify and challenge irrational beliefs that relate to procrastination, academic burnout, and psychological inflexibility. REBC will serve to help students develop the skills to identify and challenge these irrational beliefs, as well as, recognize what situations may trigger these irrational beliefs such as test taking, note taking, essay writing, or studying.

Program Modules. The proposed curriculum spans twelve weeks in which student participants will meet with the psychology intern for weekly two-hour group sessions. The first hour is conducted in a didactic format beginning with a review of the material and BSA from the previous session and follows with introducing new material and BSA. The second hour will be spent engaging in a group discussion about barriers in

following through with the material, developing an individualized sense of how the material applies to each student's academic responsibilities, how students can incorporate old material where possible, and goal set and plan for the upcoming week. The twelve sessions used for the REBC program are presented in Table 2, along with descriptions of what each session entail. Refer to Appendix C.1 – C.9 for the twelve-session manual used for the REBC program.

Table 2

Rational Emotive Behavioral Coaching Program Sessions and Descriptions

Week	Session	Description
1	Orientation	Introduction to program modules, how emotions, cognitions, and behaviors are related, and types of irrational beliefs.
2	Awfulizing and Low Frustration Tolerance	Developing understanding and ability to identify one's awfulizing and low frustration tolerance beliefs.
3	Depreciation Beliefs	Developing understanding and ability to identify one's depreciating beliefs.
4	Academic Burnout	Identifying symptoms of academic burnout and related irrational beliefs.
5	Procrastination	Identifying symptoms of procrastination and related irrational beliefs.
6	Creating a Problem List and Goal Setting	Creating a problem list and identifying adaptive preferred goal.
7	Learning the A, B, C Approach	Learn and practice A, B, C technique to identify irrational beliefs and emotional and behavioral consequence.
8	Questioning Beliefs	Learn and practice techniques to dispute/challenge irrational beliefs.
9	Questioning Beliefs	Learn and practice techniques to dispute/challenge irrational beliefs.
10	Questioning Beliefs	Learn and practice techniques to dispute/challenge irrational beliefs.
11	Goal Evaluation	Develop ability to self-evaluate if irrational beliefs have been replaced with the rational alternative beliefs/functional statement and evaluate goal attainment.
12	Goal Evaluation	Develop ability to self-evaluate if irrational beliefs have been replaced with the rational alternative beliefs/functional statement and evaluate goal attainment.

Note. Refer to Appendix C for manual and visuals

Control group (CG)

Student participants randomized to the control group will receive education services provided to the general student body. They will be required to meet with the

project coordinator during the first and last month of their Fall and Spring semester of their Freshman year to complete study assessments using a web-based application. Project coordinators will refrain from communication with student participants. If student participants seek academic advising from project coordinators, project coordinators will direct student participants to campus advisement services for the general student body.

Outcomes Assessments

Retention

Freshman retention will refer to the fall-to-fall retention rate and will be obtained the following academic year after student participants complete their Freshman year.

Academic achievement

Student G.P.A. will be obtained with student permission from university records for the Fall and Spring semester of their Freshman year.

Self-report measures

The internal structure of all instruments was examined using Exploratory Factor Analysis (EFA) using version 26 of SPSS. A series of Principal Axis Factoring (PAF) analyses were conducted to examine the internal factor structure of the College Motivation and Attitudes Scale (CMAS), Barkley Deficits in Executive Functioning Scale—Short Form (BDEFS), and Self-Efficacy for Learning Form—Adapted (SELF-A).

Description of the sample. The participants were university-based samples consisting of 175 (average age = 21.03 ± 4.21, range = 18 - 60) students attending one of three universities in New York, New York. The sample was composed of 139 female and 36 male students. The sample size was adequate in terms of the stipulation that sample size should be 5 or 10 times the number of items in the scale (Hair, Black, Babin and

Anderson, 2010). Since there are 20 – 23 items on each scale in this analysis, it was estimated that data should be collected from at least 115 students for the EFA portion of this protocol.

Motivation. The College Motivation and Attitudes Scale (CMAS) is a 20-item self-report scale adapted from the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich, Smith, Garcia, & McKeachie, 1993) and the Motivation and Engagement Scale (MES; Martin, 2009). Specific items were selected from both scales to best represent the data sought for the present study. In a 2011 meta-analysis on the MSLQ, Credé and Phillips identified potentially problematic items that included ten items with conditional-content characteristics and eight items with ideal-point characteristics that they suggested may explain some of the low validities reported in their meta-analytic review. Thus, careful consideration was made to avoid selecting conditional-content and ideal-point items of the MSLQ for the present study. Participants are asked to rate how true each academic experience is of them on a six-point likert scale from "Not At All True of Me" to "Very True of Me". The CMAS scale identifies the individual's perceived level of motivation for engaging in studying activities, homework activities, and class involvement including attendance. In addition, instead of placing attention on classifying a student as intrinsically or extrinsically motivated, this measure focuses on the identification of motivation for and attitudes about college courses, assignment completion, study habits, and class attendance.

Factor Structure of CMAS. For the CMAS, we first examined the Kaiser–Meyer–Olkin (KMO) index to verify the sampling adequacy for the PAF analysis, with KMO =.88. A unidimensional model in which all items were specified to load on a single

factor is proposed a priori. This model implies support for the derivation of a single total score for each measure. The primary criteria that we used to assess for essential unidimentionality was Lord's (1980) criteria that the ratio of the first eigenvalue to the second eigenvalue is >4. An initial analysis was run to obtain eigenvalues for each factor in the data. Four factors had eigenvalues >1, accounting for 61.20% of the total variance. Visual inspection of the scree plot, however, revealed a substantial difference in the size of the first versus the second eigenvalue. Indeed, the ratio of the first eigenvalue = 7.630 to the second eigenvalue = 1.721 is 4.43, which meets Lord's criteria that the items can be treated as unidimensional.

The internal reliability of the items was assessed by calculating Cronbach's alpha and corrected total item correlations. For the CMAS, the Cronbach's alpha = .902, suggests the items are internally consistent which is also consistent with a unidimensional scale. The corrected total item correlations for all items in the CMAS measure demonstrate large correlations between each item and the total score for the measure which is also consistent with a unidimensional scale.

Executive Function. The Barkley Deficits in Executive Functioning Scale—Short Form (BDEFS; Barkley, 2011, 2012) is a 20-item self-report scale measuring executive functioning problems in daily life. Participants are asked to rate the frequency in which they experienced each problem over the past four months on a four-point scale from "Never or Rarely" to "Very Often". However, for the purposes of the current study, the scale was adapted to incorporate a six-point scale and participants will be asked to consider their present functioning. The scale identifies the individual's perceived difficulties with self-regulatory behavior in the areas of self-management of time

(procrastination/poor planning), self-organization/problem solving, self-restraint or inhibition (impulsivity), self-motivation (low/inconsistent effort and work quality), and self-activation/concentration**.** These five subscales each contain four items, which are those that loaded most strongly on each factor from the BDEFS Long Form.

Factor Structure of BDEFS. For the BDEFS, we first examined the Kaiser–Meyer–Olkin (KMO) index to verify the sampling adequacy for the PAF analysis, with KMO =.92. A unidimensional model in which all items were specified to load on a single factor is proposed a priori. This model implies support for the derivation of a single total score for each measure. The primary criteria that we used to assess for essential unidimentionality was Lord's (1980) criteria that the ratio of the first eigenvalue to the second eigenvalue is >4. An initial analysis was run to obtain eigenvalues for each factor in the data. Four factors had eigenvalues >1, accounting for 69.51% of the total variance. Visual inspection of the scree plot, however, revealed a substantial difference in the size of the first versus the second eigenvalue. Indeed, the ratio of the first eigenvalue = 9.126 to the second eigenvalue = 2.028 is 4.5, which meets Lord's criteria that the items can be treated as unidimensional.

The internal reliability of the items was assessed by calculating Cronbach's alpha and corrected total item correlations. For the BDEFS, the Cronbach's alpha = .936, suggests the items are internally consistent which is also consistent with a unidimensional scale. The corrected total item correlations for all items in the BDEFS measure demonstrate large correlations between each item and the total score for the measure which is also consistent with a unidimensional scale.

Self-Efficacy. The Self-Efficacy for Learning Form—Adapted (SELF-A) is a 23-item self-report scale adapted from the 57-item SELF Long Form (Zimmerman & Kitsantas, 2007). The SELF-A measures self-efficacy beliefs regarding the use of self-regulatory processes in various areas of academic functioning. Participants are asked to rate how capable they believe their ability to be on a five-point likert scale from "Definitely Cannot Do It" to "Definitely Can Do It". The scale identifies the individual's perceived level of self-efficacy in the areas of studying, test preparation, and note-taking.

Factor Structure of SELF-A. For the SELF-A, we first examined the Kaiser–Meyer–Olkin (KMO) index to verify the sampling adequacy for the PAF analysis, with KMO =.92. A unidimensional model in which all items were specified to load on a single factor is proposed a priori. This model implies support for the derivation of a single total score for each measure. The primary criteria that we used to assess for essential unidimentionality was Lord's (1980) criteria that the ratio of the first eigenvalue to the second eigenvalue is >4. An initial analysis was run to obtain eigenvalues for each factor in the data. Four factors had eigenvalues >1, accounting for 57.83% of the total variance. Visual inspection of the scree plot, however, revealed a substantial difference in the size of the first versus the second eigenvalue. Indeed, the ratio of the first eigenvalue = 9.065 to the second eigenvalue = 1.350 is 6.71, which meets Lord's criteria that the items can be treated as unidimensional.

The internal reliability of the items was assessed by calculating Cronbach's alpha and corrected total item correlations. For the SELF-A, the Cronbach's alpha = .932, suggests the items are internally consistent which is also consistent with a unidimensional scale. The corrected total item correlations for all items in the SELF-A measure

demonstrate large correlations between each item and the total score for the measure which is also consistent with a unidimensional scale.

Table 3

Evaluation of Internal Structure by Exploratory Factor Analysis (EFA) using Principal Axis Factoring (PAF)

Measures of internal structure	CMAS	BDEFS	SELF-A
Kaiser–Meyer–Olkin (KMO) index	.88	.92	.92
Ratio of the first eigenvalue to second eigenvalue	4.43	4.5	6.71
Cronbach's alpha	.902	.936	.932
Corrected total item correlations	Large correlations between each item and the total score for the measure	Large correlations between each item and the total score for the measure	Large correlations between each item and the total score for the measure

Procedure

After student participants complete informed consent forms and the university's institutional review board approves the research, student participants will electronically complete and submit all measures for this study via a Qualtrics link provided during group meetings at three periods throughout their Freshman year. The measures are taken at T1 (during the first month of the Fall semester), at T2 (during the first month of the Spring semester), and at T3 (during the last month of the Spring semester). The Project coordinators will proctor student participants in both the control group and intervention groups.

ANALYSES

Analysis of Primary Aim

We hypothesize that students in the intervention group will have a greater retention rate than those in the control group at the end of their freshman year. The mean retention across all participants in the intervention will be compared to all participants in control group. This analysis will be accomplished with a logistic regression. This most basic analysis can be conceptualized as a 2x2 chi square where group membership is treatment versus control and retention is “yes” versus “no”. However, to account for the clustering in the data, we will use a generalized linear model in which we will regress the retention values onto group membership. This can be thought of a logistic regression, but it will be conducted as a generalized linear model to account for the clustering.

Analysis of Secondary Aim

Mechanisms of Change

For the secondary aim of this study we hypothesize that 1) The intervention is positively related to retention and G.P.A. by the mediating effects that executive function and self-efficacy abilities have on motivation; 2) The causal relationship between the intervention and retention and G.P.A. is temporally mediated by the executive function, self-efficacy, and motivation variables. The basic relations among the variables will be assessed by correlations and regression analysis. To assess the synergistic effect of executive function and self-efficacy, we will use hierarchal regression to assess the partial product (interaction term) of these variables’ relation to motivation. However, to account for the cluster, a mixed effects regression analysis will be used.

To assess the mediation model, we will use the boot strapping method as described by Preacher & Hayes (2004) using the PROCESS macro available in SPSS. Given that the study is longitudinal we anticipate that we will have missing data for some participants at some time points. To reduce the bias that results from eliminating participants who have missing data we will use methods that will allow us to keep participants with missing data in the data set. These methods include maximum likelihood imputation of missing values and full information maximum likelihood (FIML) analytic methods such as mixed effects regression models. The longitudinal design will allow us to include variables from different time points which will provide a much stronger basis for inferring causal relations among the variables.

DISCUSSION

Despite increasing numbers of programs and practices proposed to improve completion rates for young adults in high school and college, the needs and challenges of young adults typically do not receive a great deal of systematic attention in policy and research (National Research Council, 2015). In fact, large percentages of high school students are chronically disengaged while sizable differences in post-secondary educational attainment and completion across race/gender and socioeconomic groups reflect highly uneven academic preparation in the K-12 years (Bound et al., 2010; Holzer & Lerman, 2015; Institute of Medicine, 2004; National Research Council, 2015). Apparent is that while student engagement in learning has been extensively investigated as a factor linked to learning, retention, and academic success in higher education (Chipchase, et al., 2017; Krause and Armitage, 2016; Trowler, 2016) less attention is given to the concept of disengagement.

This protocol presents a detailed program to investigate multiple avenues of academic disengagement in young adults (ages 18 – 26). As a primary objective of this protocol, models of motivation are examined to explain the impact of both executive function and self-efficacy on motivation and ultimately the extent to which these variables can predict retention among first-year college students and academic performance. A secondary objective is to propose an evidence-based intervention to strengthen self-efficacy and executive functioning ability and evaluate its efficacy. Lastly, as a third objective, internally consistent measures are presented as mechanisms to assess academic disengagement that may be collected during students' first year at university. This protocol may serve as a platform to further establish the reliability and

validity of these measures as they will be completed by participants at three time points across their freshman year.

If successful, it is expected that students in the intervention group receiving the program will have a greater overall retention rate and G.P.A. than those in the control group at the end of their freshman year. This increase in retention rate and G.P.A. for the intervention group will be positively correlated to changes in self-report measures of executive function, self-efficacy, and motivation. These measures, collected at three timepoints will allow for it to be determined if perceived use of executive function skills and perceived self-efficacy can predict perceived motivation both additively and interactively as well as how the relationship between perceived use of executive function skills and perceived self-efficacy with G.P.A. is mediated by their impact on perceived motivation. It is also predicted that the direction of these variables will be related to the time engaged in the intervention program which will be informed by data collected at multiple time points during the intervention.

As the internal structure of the self-report measures to be used for this study were examined as a part of a preliminary analysis for this protocol using Exploratory Factor Analysis (EFA), it has been determined that items on each measure, respectively, are internally consistent. Consistent with a unidimensional model, each measure (CMAS, BDEFS, and SELF-A) demonstrated large correlations between each item on its measure, large Cronbach's alphas of >.9, and ratios of the first eigenvalue to the second eigenvalue of >4. Together, data suggest that a single total score can be derived from each measure. Adding to these findings, this protocol allows for future analyses to be conducted to determine the reliability and validity of the measures. For example, test-retest reliability

may be evaluated using data collected from the control group as they will be completing each measure during the same timepoints as the intervention group.

LIMITATIONS

To execute this protocol at the proposed scale, presents with some limitations given the large scale of the study. Extensive measures have been taken to provide a comprehensive package to evaluate the multiple aims of this study. However, these specific intervention modules have not been explored previously in literature. Prior to implementation, they can be piloted with a small university-based sample or used in a case study. This will allow for analyses to be conducted on how well the modules translate into practical use by service provider and participant. It may also be beneficial to obtain feedback from experts in the field on how well the modules address executive functioning and REBT- based coaching.

Another consideration worth examining are the potential costs involved to execute this protocol on the proposed scale. It is advised that through grant funding, project coordinators may be provided with compensation, while participating universities provide psychology interns implementing the modules, compensation in the form of a graduate assistantship whereby a small stipend and/or tuition reimbursement is offered. In addition, as this protocol is an ideal version of how the interventions will be carried out and evaluated, budget restrains must be considered when thinking of how this program may be practically applied in educational settings. For some educational settings, this may consist of shortening the duration of the program or implementing select modules, a decision that may be made on individual basis given the institution's resources.

CONCLUSION

Findings from this study, if successful, will be important for multiple reasons. First, this study protocol addresses a gap in the literature by evaluating implementation of a program to address academically at-risk students who encounter academic challenges that ultimately contribute to low academic performance and low retention rates in post-secondary institutions. While researchers have looked at the use of many different interventions that address various aspects of self-efficacy and executive functioning ability, the practical applicability of such interventions in academic settings such as post-secondary institutions are insufficient (Diamond and Ling, 2016; Steenbergen-Hu et al., 2017). In place of interventions that do not adequately transfer to untrained cognitive skills such as time managing, goal setting, self-monitoring etc. (Diamond and Ling, 2016), the intervention detailed in this protocol directly trains cognitive and behavioral skills within the context of academic tasks. This enhances the applicability of the cognitive and behavioral skills that have been shown to be related to student disengagement.

Relatedly, if successful, findings from this study will also inform definitions of student disengagement by providing a mechanism of change model. By collecting data, over time, on changes in cognitive and behavioral abilities in the areas of self-efficacy, executive functioning ability, and academic motivation, we will be able to enhance and operationalize the definition of disengagement proposed by Chipchase et al. (2017) in their literature review and conceptualization of student disengagement in higher education. They defined disengagement as “a complex construct that is a multi-dimensional fluid state, with behavioural, emotional and cognitive domains and is

influenced by both intrinsic and extrinsic factors (Chipchase et al., 2017, p. 40). Whereas, they suggest the design of disengagement prevention and intervention programs should be informed by this definition and by best practice principles (Chipchase et al., 2017), we believe that this protocol can take disengagement prevention and intervention programs a step further by operationalizing this definition with a mechanism of change model, modular intervention, and valid and reliable assessment tools for, overall, targeted remediation. The National Research Council (2015) recommends that state government, with support from the U.S. Department of Education, should experiment with and evaluate a range of interventions that improve graduation rates in high schools and colleges and promote the adoption by colleges of health and social supports that appear to encourage academic success among young adult enrollees. Thus, individualizing the identification of student disengagement will allow for focus to be placed on interventions to meet the needs of students yielding improved outcomes, as opposed to the current general programs offered by higher education providers (Chipchase et al., 2017).

Lastly, we propose that a successful outcome of this protocol should inform future directions that examine the applicability of this protocol in the high school population. We postulate that this would look like a downward extension of the intervention to high school seniors as they fall within the age range that the current program would be applied to. This program may also inform curriculum development for high school seniors as either an extracurricular program or program integrated into curriculum to support high school seniors' transition into postsecondary education (i.e., 13th year/Gap year curriculum programming). Ultimately, we believe findings from this study will provide policy makers, educational institution administrators, and other stakeholders needed

information to recommend scalable and cost-effective policy and practice with respect to academic disengagement and risk reduction and remediation to help alleviate the chronic disengagement and uneven academic preparation across race/gender and socioeconomic groups.

Appendix A.1

College Motivation and Attitudes Scale

The following questions ask about your motivation for and attitudes about college courses.

There are no right or wrong answers. Just make sure that your answers show what you really think about yourself. When answering the questions, if you want to change your answer, just cross it out and circle the answer that you prefer. If you are not sure which answer to circle, just circle that one closest to what you think. For the purposes of the survey, it is best that you do not leave any questions unanswered.

Use the scale below to answer the questions. If you think the statement is very true of you, circle 6; if a statement is not at all true of you, circle 1. If the statement is more or less true of you, find the number between 1 and 6 that best describes you. Thank you for your participation.

1	2	3	4	5	6
Not at all true of me	Rarely true of me	Sometimes true of me	Frequently true of me	Usually true of me	Very true of me

1. If I can't understand my coursework at first, I keep going over it until I do.

   1 2 3 4 5 6

2. When I study, I usually study in places where I can concentrate.

   1 2 3 4 5 6

3. Sometimes I don't try hard at assignments.

   1 2 3 4 5 6

4. Each week I'm trying less and less.

   1 2 3 4 5 6

5. If an assignment is difficult, I keep working at it trying to figure it out.

   1 2 3 4 5 6

6. When I become confused about something, I'm reading I go back and try to figure it out.

1 2 3 4 5 6

7. I try to think through a topic I'm studying.

1 2 3 4 5 6

8. When studying, I try to determine which concepts I don't understand well.

1 2 3 4 5 6

9. I attend class regularly.

1 2 3 4 5 6

10. I work hard to do well on an assignment even if I don't like the assignment.

1 2 3 4 5 6

11. Even when coursework is uninteresting, I manage to keep working until I finish.

1 2 3 4 5 6

12. When in class, I try to take notes on concepts I think are important.

1 2 3 4 5 6

13. Even when coursework is difficult, I manage to keep working until I finish.

1 2 3 4 5 6

14. When I can't understand course material, I ask another student for help.

1 2 3 4 5 6

15. I seek help to clarify course concepts I don't understand well.

1 2 3 4 5 6

16. When in class, I manage to pay attention even if I find the lecture uninteresting.

1 2 3 4 5 6

17. I try hard to do well in college.

1 2 3 4 5 6

18. I rarely find time to review my notes.

1 2 3 4 5 6

19. When the coursework is difficult, I give up or only study the easy parts.

1 2 3 4 5 6

20. I follow up on material I didn't understand when reviewed in class.

1 2 3 4 5 6

Appendix A.2

Barkley Deficits in Executive Functioning Scale—Short Form

How often do you experience each of these problems? Please circle the number under each item that best describes your behavior using the scale below to answer the questions.

There are no right or wrong answers. Just make sure that your answers show what you really think about yourself. When answering the questions, if you want to change your answer, just cross it out and circle the answer that you prefer. If you are not sure which answer to circle, just circle that one closest to what you think. For the purposes of the survey, it is best that you do not leave any questions unanswered.

Thank you for your participation.

1	2	3	4	5	6
Never	Rarely	Sometimes	Frequently	Usually	Always

1. Procrastinate or put off doing things until the last minute.

   1 2 3 4 5 6

2. Can't seem to hold in mind things I need to remember to do.

   1 2 3 4 5 6

3. Not motivated to prepare in advance for things I know I am supposed to do.

   1 2 3 4 5 6

4. Have trouble doing what I tell myself to do.

   1 2 3 4 5 6

5. Having trouble learning new or complex activities as well as others.

   1 2 3 4 5 6

6. Having difficulty explaining things in their proper order or sequence.

   1 2 3 4 5 6

7. Unable to "think on my feet" or respond as effectively as others to unexpected events.

1 2 3 4 5 6

8. I don't seem to process information as quickly or as accurately as others.

1 2 3 4 5 6

9. Unable to inhibit my reactions or responses to events or others.

1 2 3 4 5 6

10. Make impulsive comments to others.

1 2 3 4 5 6

11. Likely to do things without considering the consequences for doing them.

1 2 3 4 5 6

12. Fail to consider past relevant events or passed personal experiences before responding to situations (I act without thinking).

1 2 3 4 5 6

13. Do not put as much effort into my work as I should or than others are able to do.

1 2 3 4 5 6

14. Others tell me I am lazy or unmotivated.

1 2 3 4 5 6

15. Inconsistent in the quality or quantity of my work performance.

1 2 3 4 5 6

16. Unable to work as well as others without supervision or frequent instruction.

1 2 3 4 5 6

17. Have trouble calming myself down once I am emotionally upset.

1 2 3 4 5 6

18. Cannot seem to regain emotional control and become more reasonable once I am emotional.

1 2 3 4 5 6

19. Cannot seem to distract myself away from whatever it is upsetting me emotionally to help calm me down. I can't refocus my mind to a more positive framework.

1 2 3 4 5 6

20. I remain emotional or upset longer than others.

1 2 3 4 5 6

Appendix A.3

Self-Efficacy for Learning Form (SELF) – Abridged

Please circle the number under each item that best describes you using the scale below to answer the questions.

There are no right or wrong answers. Just make sure that your answers show what you really think about yourself. When answering the questions, if you want to change your answer, just cross it out and circle the answer that you prefer. If you are not sure which answer to circle, just circle that one closest to what you think. For the purposes of the survey, it is best that you do not leave any questions unanswered.

Thank you for your participation.

1	2	3	4	5
Definitely Cannot Do It	Probably Cannot Do It	Maybe Can Do It	Probably Can Do It	Definitely Can Do It

1. When you have trouble remembering complex definitions from a textbook, can you redefine them so that you will recall them?

   1 2 3 4 5

2. When your teacher gives a rambling disorganized lecture, can you reorganize and rewrite your notes?

   1 2 3 4 5

3. When you find your homework assignments vary greatly in length each day, can you adjust your time schedule to complete them?

   1 2 3 4 5

4. When you notice that you are getting behind in your homework during the week, can you catch up during the next weekend?

   1 2 3 4 5

5. When you have missed several classes, can you make up the work within a week?

1 2 3 4 5

6. When problems with friends and peers conflict with schoolwork, can you keep up with your assignments?

1 2 3 4 5

7. When a teacher's lecture is over your head, can you find a way to get the information clarified before the next class meeting?

1 2 3 4 5

8. When your teacher's lecture is very complex, can you write an effective summary of your original notes?

1 2 3 4 5

9. When you feel moody or restless during studying, can you focus your attention well enough to finish your assigned work?

1 2 3 4 5

10. When you are trying to understand a new topic, can you associate new concepts with old ones sufficiently well to remember them?

1 2 3 4 5

11. When a lecture is especially boring, can you motivate yourself to keep good notes?

1 2 3 4 5

12. When you have time available between classes, can you motivate yourself to use it for studying?

1 2 3 4 5

13. When you had trouble understanding your instructor's lecture, can you clarify the confusion by comparing notes with a classmate?

1 2 3 4 5

14. When you feel anxious during an exam and have trouble controlling information, can you relax and concentrate well enough to remember it?

1 2 3 4 5

15. When you have trouble recalling an abstract concept, can you think of a good example that will help you remember it on a test?

1 2 3 4 5

16. When you are taking a course covering a huge amount of material, can you condense your notes down to just the essential facts?

1 2 3 4 5

17. When you find yourself getting increasingly behind in a new course, can you increase your study time sufficiently to catch up?

1 2 3 4 5

18. When you are struggling to remember technical details of a concept for a test, can you find a way to associate them together that will ensure recall?

1 2 3 4 5

19. When your teacher lectures so rapidly you can't write everything down, can you record all the important points in your notes?

1 2 3 4 5

20. When you discover that your homework assignments for the semester are much longer than expected, can you change your other priorities to have enough time for studying?

1 2 3 4 5

21. When you think you did poorly on a test you just finished, can you go back to your notes and locate all the information you had forgotten?

1 2 3 4 5

22. When other students from your class emphasize parts of the teacher's lecture that you excluded from your notes, can you correct this omission?

1 2 3 4 5

23. When you have trouble studying your class notes because they are incomplete or confusing, can you revise and rewrite them clearly after every lecture?

1 2 3 4 5

Appendix B.1

Week 1

Orientation

Thank you for your willing participation in the *Motivated!* Program.

What does participation in this study entail?

Your participation will include weekly two-hour meetings across 12 weeks in the semester, periodic completion of self-evaluations questionnaires, and consent to access your academic records solely to obtain your G.P.A.

A schedule is provided in the syllabus that will specify what topics will be covered and when self-evaluations will be conducted. It is important for you to understand that the self-evaluations are NOT tests. That is, they have no impact on your academic standing and access to campus resources and funding. Your coach will not be provided access to your evaluations nor your G.P.A. The coach's sole responsibility is to provide the information listed in the syllabus and facilitate discussion.

What level/rate of contact will you have with the Coach, Project Coordinator (PC), and Principal Investigator (PI)?

Your coach will provide the information listed in the syllabus and facilitate group meeting discussions. You will speak to your coach when having trouble implementing the strategies, techniques, resources, and between session assignments. This communication will be only conducted during weekly meetings. Access to communication with your coach will not be provided outside of the weekly meetings.

Your PC will serve as the point person for questions or concerns about your participation in the *Motivated!* Program. You are provided with their contact information for this purpose. If problems arise with your ability to attend a meeting or continue in the program, you will email the PC.

During self-evaluations, your coach will not be present. Instead, your PC will administer the self-evaluations. Your submission will be done electronically on an iPad or desktop. You have been assigned an id number to maintain your confidentiality thereby ensuring that the PC is blind to your self-evaluations.

The PI is tasked with collecting electronically submitted confidential self-evaluations. While you will not have in person contact with the PI, you are provided with the PI's contact information to report issues or concerns with the coach or PC. Additionally, the Institutional Review Board contact information is provided to you as a resource to contact if you have not reached the level of resolve that you seek.

What are Executive Functions?

Barkley (2012) suggests executive functions can be defined as "those self-directed actions needed to choose goals and to create, enact, and sustain actions toward those goals." What this means practically-speaking is that there are a number of skills that you acquire over time from birth that assist you in being able to work and live optimally. Those skills are how you decide to execute many things from what you choose to wear or eat to what direction you choose to walk, drive or commute to how you go about completing work, academically, professionally, or leisurely. Essentially, your EF skills apply to every, entire aspect of your life and is integral in how you have and will progress in life.

What is the Motivated! Program?

The Motivated! Program is established to assist you in further developing your EF skills as they pertain to your academic work and goals. Emphasis is placed on "further developing" because you should not mistakenly assume that you do not have EF skills. Rather, everyone has EF skills because without them we would not survive! You, like everyone else, have developed EF skills based on an amalgamation of various elements of biology and of learning history. The *Motivated!* Program serves to refine these skills by providing, evidence-based strategies for you to add to your EF skills repertoire to help you perform optimally in college.

In addition to further developing your EF skills, the *Motivated!* Program also looks to introduce you to the current research on common self-inflicted barriers to academic performance and ways to help yourself push through them. From procrastination to academic burnout, researchers have examined the hidden expectations and emotions related to these problems that can unintentionally and unknowingly get in the way of your academic goals. Your coach will introduce these to you, and you will learn how to recognize when these unhelpful thoughts are at play and also how to challenge them.

Syllabus

The list below provides a week by week glance of the topics discussed.

Executive Function Coaching Program Sessions and Descriptions

Week	Session	Description
1	Orientation	Introduction to study, program participation and modules.
2	Time Management	Developing a sense of time and timing self. Learning the fundamentals to building a daily schedule.
3	Goal Setting	Distinguishing between types of goals (i.e. long-term, short-term, interim goals) and creating goal plan.
4	Self-Monitoring	Strengthening the ability to self-monitor efforts and identify techniques to self-monitor.
5	Note-Taking	Learn and practice different note-taking techniques.
6	Work Completion	Creating a plan and schedule to complete various types of assignments (i.e. long-term projects, essays, reading).
7	Test Taking – Objective Test Questions	Learn and practice techniques to answer true-false, multiple-choice, and matching questions.
8	Test Taking – Recall Test Questions	Learn and practice techniques to answer fill-in-the-blanks, listing, definition, and short-answer questions.
9	Test Taking – Essay Test Questions	Learn and practice techniques to develop a thesis statement for a multi-paragraph essay.

Rational Emotive Behavioral Coaching Program Sessions and Descriptions

Week	Session	Description
1	Orientation	Introduction to program modules, how emotions, cognitions, and behaviors are related, and types of irrational beliefs.
2	Awfulizing and Low Frustration Tolerance	Developing understanding and ability to identify one's awfulizing and low frustration tolerance beliefs.
3	Depreciation Beliefs	Developing understanding and ability to identify one's depreciating beliefs.
4	Academic Burnout	Identifying symptoms of academic burnout and related irrational beliefs.
5	Procrastination	Identifying symptoms of procrastination and related irrational beliefs.
6	Creating a Problem List and Goal Setting	Creating a problem list and identifying an adaptive preferred goal.
7	Learning the A, B, C Approach	Learn and practice A, B, C technique to identify irrational beliefs and emotional and behavioral consequence.
8	Questioning Beliefs	Learn and practice techniques to dispute/challenge irrational beliefs.
9	Questioning Beliefs	Learn and practice techniques to dispute/challenge irrational beliefs.
10	Questioning Beliefs	Learn and practice techniques to dispute/challenge irrational beliefs.
11	Goal Evaluation	Developing ability to self-evaluate if irrational beliefs have been replaced with the rational alternative beliefs/functional statement and evaluate goal attainment.
12	Goal Evaluation	Developing ability to self-evaluate if irrational beliefs have been replaced with the rational alternative beliefs/functional statement and evaluate goal attainment.

What is the format of weekly sessions?

Student participants will meet with the coach for two weekly two-hour group sessions. During the first hour, the coach will review the previous week's material, questions/self-reflections on the previous week's between session assignment (BSA) and cover new material and the new BSA. The second hour will be spent engaging in a group discussion about barriers in following through with implementing the material, developing an individualized sense of how the material applies to each student's current academic responsibilities, how students can incorporate old material where possible, share with the group individual experiences and ideas on how to make the strategy work and individually goal set with an action plan for the upcoming week.

BSA's are action tasks developed collaboratively with the student to ensure the student's implementation of the skills. BSA's can be thought of as "homework" that serves to facilitate your change process by helping you to gain awareness into your helpful and unhelpful thought and behavioral patterns. On the surface level BSA's seem to operate as a tool to practice the skills introduced in weekly sessions. However, through practicing the skills and guided self-reflecting and self-evaluating the applicability of these skills, you will enhance your ability to self-monitor and self-regulate; critical aspects of executive functioning.

Getting Started

Supplemental campus-based resources

Aside from the skills that will be introduced to you throughout the semester, there are various campus-based resources that you will likely need to access that are not specifically "taught" in this program. These include:

Writing Center – assistance with grammar/vocabulary/proof-reading/text organization
Library Resources/Workshops/Tutorials – assistance with using research databases, identifying data/literary sources
Listing of Cross-campus Study Lounges

Communicating with Faculty

Another important campus-based resource is your access to faculty. In this program, your coach will be unable to provide content-related assistance but will help facilitate your ability to determine when you may want to seek support from faculty. This is done by demonstrating ways to draft an email to faculty, developing a personalized system to organize your semester's faculty office hours, and developing the practice of identifying specific questions to ask faculty (Knowing what you don't know, so you can ask).

Appendix B.2

Week 2

Time Management

In learning to refine "self-directed actions needed to choose goals and to create, enact, and sustain actions toward those goals" as Barkley described, you want to know what you are actually refining. That is, what do you have going on in your life right now on a daily, weekly, and monthly basis and how much time does it typically take? From there you can begin to gauge how your time is being spent and in what areas would you like to see something different.

Perhaps your goals are a bit different now, but you realize that much of your time is spent doing activities that have nothing to do with these new goals. Thus, refinement is needed. Especially because our goals evolve.

We emphasize *refinement* because, you do in fact harbor the ability to manage time. If when looking at the time you have said to yourself that it's time to get X done, then you are "managing" time. To take this ability a step further, you will refine how you estimate how much time you have of a task, how to allocate it, and how to stay within time limits/deadlines.

Sense of Time and Timing Yourself

Anticipating and measuring the time you need for basic activities can help you to gauge how you use time.

Exercise 1

- Estimate how long it will take you to write a five-sentence paragraph describing a favorite memory. Write down the estimate.
- Using a stopwatch, begin writing without looking at the elapsed time until you are done.

- Estimate how long you would take to take one complete deep inhalation.
- Using a stopwatch, begin inhaling without looking at the elapsed time until you are done.

Did you overestimate or underestimate? Either can be problematic for differing reasons when trying to complete tasks. Underestimation could mean that you are not leaving enough time to get the task done, whereas, overestimation could mean that you are giving

yourself too much time which will delay the completion of other tasks, extend how long it takes to complete a task, and leave brackets of useful time unaccounted for.

Activities of Your Day

What does your schedule look like? How much time do you estimate you spend on each of the activities?

Exercise 2

- Think back to yesterday. List all the activities that you engaged in from the time you woke to the time you woke the next day.
- Determine the number of minutes and/or hours spent in each activity.

- On the chart provided, block out the activities that you engaged in across the day for each day of the week. Remember to account for sleep, self-care, leisure, socializing, routines, classes, transition time, free time etc.

Questions to ask yourself after completing your schedule:

- *What are your thoughts on how each day was spent?*
- *What are tasks you wanted to complete or could have fit in but did not?*
- *What would you change about how any day was spent?*
- *Are there any days that you have more time to spare than others?*
- *How much time are you giving yourself to complete academic tasks?*
- *How confident do you feel about replicating a day like this if you are satisfied with how you spent your time?*

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am							
8 am							
9 am							
10 am							
11 am							
12 pm							
1 pm							
2 pm							
3 pm							
4 pm							
5 pm							
6 pm							
7 pm							
8 pm							
9 pm							
10 pm							
11 pm							

To Do Lists: Determining Which One is Right for You!

We often hear people say something is on their "To Do" list. What we don't know is what type of "To Do" list they're referring to. Why does the type matter? The type is a way to determine how tasks are organized and prioritized for that person as well as the scale at which one measures their completion. That is, at a minimum, you are moving through your life making a mental list of goals/tasks that you want to complete. The problem is, you will likely end up forgetting something as demands become greater or you will attempt to complete tasks that are either too cumbersome to complete all at once (resulting in burnout) or you spend much of your time doing tasks that are easier, simpler, or just preferred and larger scale tasks somehow fall through the cracks.

Thus, writing down your "To Do" list makes sense. But… *how* you write it down matters for many of the same reasons mentioned. You may not be able to forget any one item, but you may still find yourself completing tasks in an order that still can be inefficient.

The categories discussed below are by no means the only ways to categorize your To Do list but serve as models to help you refine your own preferred style and technique. Additionally, the categories listed can be layered for more specificity. As well as, it is advised that deadlines/due dates and estimated time needed should be considered.

Daily Tasks, Weekly Tasks, Monthly Tasks – making a detailed list of daily, weekly, and monthly tasks

High, Medium, Low Priority Tasks – making a detailed list of tasks, divided by priority in terms of deadline or importance in value

Semester Tasks vs Academic Year Tasks – dividing the tasks that you have listed into items that need to be accomplished within the semester versus the academic year

Exercise 3

- On the chart provided, think about the upcoming week and list all the activities, classes, assignments due, and appointments/meetings that you have scheduled.
- Indicate if they are considered a daily, weekly, or monthly task in the second column.
- Indicate if they are considered a high, medium, or low priority in the third column.

Task Type i.e. Activities, Classes, Assignments Due, Appointments/Meetings	Daily, Weekly, Monthly	High, Medium, Low Priority

Planners: How to Use a Planner

When selecting a planner, it is important to consider the level of detail you would like to include about any of the tasks you make note of and if you prefer to record items on paper or electronically. At a minimum, important details to include are estimated time needed, due dates, meeting times and locations. There are many planner apps available that provide a host of features and visual aids to organize tasks in ways that may suit one person over another. Similar to writing down your "To Do" list, when selecting a planner app, it is all about *how* you would like the task information displayed.

In order to determine how you would like task information displayed, you need to identify what information you need to display.

What needs to get recoded in a planner?	All tasks, including important project notes
	Due dates for projects, homework, exams, papers etc.
	Presentation dates
	Outside activities (clubs, work, entertainment)
	Appointments
	Meeting with professors, group members, supervisors, friends, family

Exercise 4

- Consider the list of activities, classes, assignments due, and appointments/meetings that you have scheduled. Transpose the information on the monthly calendar provided. Denote meeting times and locations if applicable.

- Take the information you have for one week and complete the weekly planner provided.
- Denote if the item is considered a high, medium, or low priority
- Denote estimated time needed, due dates, meeting times and locations

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Between Session Assignment (BSA)

Develop a system that works for your needs and questions to ask yourself.

Pick a day in the upcoming week and use a daily planner to draft how you will spend this day.

- Step 1: Write down all the tasks you need to complete.
- Step 2: Prioritize the tasks.
    - What is due tomorrow? What is due sooner?
    - Which tasks are the hardest? Which are the easiest? Make sure to do the harder ones first and save easier ones for later.
- Step 3: Estimate the time it will take for each task
    - How many items do you have to complete?
    - How long does this type of project usually take?
- Step 4: Look at the clock and plan when you are going to start and end each task and when you will take breaks.
    - Estimate when you will be done.
- Step 5: When you have past that day, look at your daily schedule to see how much time you set aside for the portion of work and tasks you did.
    - Did you estimate that you will have enough time to finish each task?

Appendix B.3

Week 3

Goal Setting

The goal for this module is to help you refine your "academic GPS". Based on the destination information you provide, you will design a step-by-step plan to reach that location. The caveat here is that the specificity of the destination you provide determines how that step-by-step plan will form and where exactly you end up.

Take a look at the example provided of a fictitious town. Locations/destinations and the GPS directions that correspond to them are listed in each column. Each destination is intended to guide the person to the same location. Essentially, the overall "goal" is the same, but the specificity of the "goal" differs.

For this example, the goal is to arrive at Trinidad Mass Island Railroad Station. It is located in Trinidad, New Lake on the corner of Caps Avenue and Tree Boulevard with the exact address being, 93 Tree Boulevard, Trinidad, New Lake.

Exercise 1

- What are some things you notice about the variations in the directions based on the destination provided?
- Are the directions all the same? When do they differentiate?
- What do you think is the reason for the differentiation?

Directions to the same destination with different levels of location specificity.		
Trinidad MIRR Station, 93 Tree Blvd, Trinidad, NL	**Caps Ave and Tree Blvd**	**Trinidad, NL**
Start out going north on Kim's University toward Sharp Turnpike. **Then 0.08 miles** Turn right onto Sharp Turnpike (Gate access required). **Then 0.23 miles** Take the 2nd right onto Play Pkwy. **Then 0.43 miles** Play Pkwy becomes Home St. **Then 0.64 miles** Turn left onto 180th St. **Then 0.04 miles** Take the 1st right onto Lowside Ave. **Then 0.19 miles** Take the 2nd left onto Trader Blvd. **Then 0.29 miles** Turn right onto Trinidad Ave. **Then 0.61 miles** Turn left onto 158th St. **Then 0.14 miles** Take the 2nd right onto 99th Ave. **Then 0.20 miles** Take the 1st right onto Tree Blvd. **Then 0.03 miles** Trinidad MIRR Station, 93 Tree Blvd, Trinidad, NL, 93 Tree Blvd.	Start out going north on Kim's University toward Sharp Turnpike. **Then 0.08 miles** Turn right onto Sharp Turnpike (Gate access required). **Then 0.23 miles** Take the 2nd right onto Play Pkwy. **Then 0.43 miles** Play Pkwy becomes Home St. **Then 0.64 miles** Turn left onto 180th St. **Then 0.04 miles** Take the 1st right onto Lowside Ave/NY-25. **Then 0.94 miles** Turn left onto Tree Blvd. **Then 0.38 miles** Caps Ave & Tree Blvd, Caps Ave & Tree Blvd.	Start out going north on Kim's University toward Sharp Turnpike. **Then 0.08 miles** Turn right onto Sharp Turnpike (Gate access required). **Then 0.23 miles** Take the 2nd right onto Play Pkwy. **Then 0.43 miles** Play Pkwy becomes Home St. **Then 0.64 miles** Turn left onto 179th St. **Then 0.04 miles** Take the 1st right onto Lowside Ave/NY-25. **Then 0.19 miles** Take the 2nd left onto Trader Blvd. **Then 0.60 miles** Turn right onto North Rd. **Then 1.11 miles** Trinidad, Kings County, NL, US, Welcome to Trinidad, NL.

In order to build a list of steps and procedures to reach a goal, the specificity of the goal is *as important as* simply having a goal. How do you get yourself to act on this principle in a practical and meaningful BUT NOT cumbersome and overwhelming way?

Depending on how you spend your time, you may find that much of the activities you engage in fall into the category of what is called *context-dependent sustained attention.* This DOES NOT mean you do not make goals and plans. But rather, you often spend time engaging in activities and sustaining your attention on activities that are in the *here and now* and/or ONLY are of particular interest to you at any given time.

What this means is that you will end up struggling to appropriately give the time and attention to tasks you find **undesirable** (i.e. busy work) **or of no immediate reward/pleasure or penalty/punishment.** The essential question is, *how do you develop the willingness and discipline to complete a task that may or may not feel valuable or significant in the moment it should be done for the benefit of the greater goal?*

Goal-directed persistence	Context-dependent sustained attention
Ability to set a goal	Under the control of the immediate environment.
Ability to develop a plan to achieve the goal	Little difficulty sustaining attention to tasks that are novel.
Ability to keep the goal in mind over the length of time required to fully implement the plan	Little difficulty sustaining attention to tasks that are intrinsically interesting.
Ability to sustain attention long enough to achieve the goal	Little difficulty sustaining attention to tasks when extrinsic consequences (rewards and penalties/punishments) are applied.
Developed future orientation perspective	Little difficulty sustaining attention to tasks when subject is of particular interest or instructional style is engaging and entertaining.

Exercise 2

- Discuss how these statements and ideas may make it difficult to develop goal-directed persistence.
- Discuss how these statements and ideas may make it easier to engage in context-dependent sustained attention.

1. *"Why worry about picking a major now? I have two years to figure that out."*
2. *"That 20-page paper isn't due till the end of the semester, so I don't need to worry about that now."*

The Academic GPS

The following guide provided will help you to begin developing a goal list and action plans with the appropriate specificity needed to land you where you want to go.

Step 1: Defining the long-term goal.

What do you see yourself doing after you finish college?
What is one thing you would like to get out of college? out of this school year?

Step 2: Pick a single item from that list and indicate things you need to do and see occur in order to know you have acquired that item.

You are looking to begin developing the route to the destination. Because this is considered a long-term goal, a high level of specificity in the goal is not necessarily crucial but rather, whatever you indicate is the goal will bring about a host of steps and considerations that best correspond to the goal.

For example, while the goal to graduate with a Bachelor's Degree is very similar to the goal to graduate with a Bachelor's Degree in Chemistry, there are important differences to consider because your route will vary in terms of course selections, program requirements, and deadlines. That is, while you will be taking classes and maintaining good academic standing for both goals, if your goal is to acquire a Bachelor's Degree, you will need to add "selecting a major" to your "To Do" list because your college may hold the requirement that you specify a major by a certain date. If you consider this further, you will then need to also create a plan on how you will make a decision on what major you will declare.

When thinking about this example, it should not be concluded that one goal is better than the other. Rather, it is to say that you create goals using the understanding you have of yourself, desires, intents and knowledge at the time. You build your Academic GPS from wherever your "starting point" (i.e. the understanding you have of yourself, desires, intents and knowledge) is at the time.

As such, it is important to work on one goal at a time. It is equally important to not become stuck in picking the "right" goal. How might this be true?

Step 3: Identifying obstacles to achieve the long-term goal.

What are some of the potential obstacles that might get in the way of you achieving your goal? What are some ways to overcome them?

Examples of Potential Obstacles and Solutions

Potential Obstacles	Potential Solutions
Choosing to do more interesting/fun activities	Give myself 20 minutes after every 2-hour work block
Leaving assignments/studying to the last minute	Schedule review/homework time during a point in the day that I am always in my dorm/room
Being late to or missing class	Set three alarms 10 minutes apart before each class
Forgetting to submit assignments	Set alarms on two frequently used devices to remind me of deadlines two days before, one day before and same day the assignment is due.

Step 4: Developing Short-Term Goals

Now that you have a general sense of where you are trying to go, the things you need to do to get there, and the potential obstacles in the way as well as solutions, you will soon realize that a lot of the hard work in goal setting is all done!

Interestingly, many of the solutions that you created for those potential obstacles can be used as short-term goals! Consider short-term goals the directions or steps in your Academic GPS. They are goals that are closer at hand than the big long-term goal. They also are more specific and measurable which will help you to better monitor your progress.

For example, if one goal is "Schedule review/homework time during a point in the day that I am always in my dorm." You might measure this by noting on a planner the day you accomplished this task. Then you can tally the days and maintain a running log of your weekly frequency of "Review/Homework" time.

It is important to note that in detailing your short-term goals, you are not limited to only the solutions you created for the potential obstacles in the way of your long-term goal. You may need to include additional short-term goals, for example, "Earn grades of 80 or better on all biology quizzes and tests."

When developing your list of short-term goals, an important question to ask yourself is, "If I achieve this short-term goal, how will it help me get closer to my long-term goal?"

Exercise 3

- Using steps 1 – 4 and the Self-Coaching Form as a guide, develop a plan for the following scenario with at least three potential obstacles, solutions, and short-term goals.
    - *In order to graduate with a B.S in Psychology, you have to take Calculus. Math has never been your strength and you are scheduled to take Calculus during your first semester of your Freshman year. In high school your parents hired a tutor to help you in pre-algebra, but things are different now. You know you can't afford a tutor and you believe studying alone won't cut it.*
        - Share your ideas with your group members. Discuss the similarities and differences between your plan and theirs. Is any single plan "wrong"? "right"?
- Using steps 1 – 4 and the Self-Coaching Form, identify a long-term goal of your own and develop a plan with at least three potential obstacles, solutions, and short-term goals.

Self-Coaching Form

LONG-TERM GOAL

What do you see yourself doing after you finish college?

_____

_____

_____

What is one thing you would like to get out of college? out of this school year?

_____

_____

_____

Subject	Upcoming Exams and Date Due	Upcoming Short Assignments and Date Due	Long-term Assignments and Date Due

WEEKLY PLAN – Consider homework, studying, and work to be done on long term projects

What are you going to do?	When?	Completed?	How did you do?
		Yes No	**1 2 3 4**
		Yes No	**1 2 3 4**
		Yes No	**1 2 3 4**
		Yes No	**1 2 3 4**
		Yes No	**1 2 3 4**
		Yes No	**1 2 3 4**

Use this scale to evaluate: 1 – Not well; 2 – Average; 3 – Very Well; 4 – Excellent

Other things to remember to get done for this week (Check off when done)

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____
6. _____ _____

Notes:

_____

_____

Step 5: Enhancing the Likelihood of Success

There are a host of key ideas to incorporate in your goal setting to maximize the likelihood of success. Consider these concepts as a way to troubleshoot your plan when you reach a *detour, need fuel*, or *get lost.*

1. If your goal is to improve your performance in some way, begin with getting a rough estimate of your current performance (baseline level). That way you know where you started from and can better see how much you have improved.
2. As this may be a new practice to incorporate in your day, you should try writing down your plan and keep it somewhere visually accessible. Stick it on your desk, mirror, fridge, TV, or even make it your screensaver or background on your phone and/or computer!
3. Specify the class the long-term and/or short-term goals pertain to. Keep a copy of the plan with your notes for that class.
4. Make sure you have at least 2 strategies or more to tackle a goal. You always got to have a plan B!
5. Create a success criterion for your goal. If your goal is to get to class on time, is that 80% of the time? 90%? 100%? **It doesn't have to be all or nothing.** Start with a percentage that seems achievable given your baseline level. Then slowly increase the percentage from baseline until you can get to 90 – 100%. Remember, you're human; slips happen; there's no realistic reason to expect that you'll ALWAYS be at 100% of any goal, ALWAYS.
6. Determine how long you will need to meet your success criterion before you increase the percentage. For example, do you need to meet the goal 80% of the time for (2 weeks, 4 weeks, or 6 weeks) before you increase the criterion to 90%?
7. Track your progress using Self-Coaching Form. You will likely have multiple small goals to keep track of. You want to create a system that helps you monitor your rate of progress for each goal as they may vary.
8. Give yourself a pep talk! Think of things you can say to yourself to stay focused on your goal, ignore distractions, and resist the temptation to cut corners. What's your mantra?
9. Take a look at where you are studying or doing your work. Think about where is the best place and time for you to study, distractions that might get in the way that you can minimize/eliminate, preferred lighting, desk space, ideal amount of background noise, amount of people you can share space with and maintain your focus.
10. Pick a reward that you can commit to working for. Something you can look forward to after you have completed a task or met your success criterion.

When picking rewards, it can be as simple as watching a show or movie after you have completed a task or met your success criterion. The reward may even be something larger that you can work toward over time. You can consider coordinating with family if expenses are involved or coordinate with a good friend that will keep your reward for when you have met your goal. This is a great time to be creative and consider things you are truly willing to work for.

It is key to remember that you do not want your plan or your rewards so complicated that you never get to experience them. **You are not punishing yourself until you have met your goal. INSTEAD, you are rewarding yourself as you make small steps toward your long-term goal.**

Another way to think of it is to imagine that you were using your GPS to get to a destination and after each turn you make, your GPS said, "Great job! You're almost at your destination! Just a little bit more; You got this!" You might find it silly at first but maybe it was entertaining enough to keep you committed to getting to your destination. You can think of your rewards in the same way, as just a bit of extra motivation to keep you moving toward your long-term goal.

Step 6: Review the Plan

After you have drafted your plan, REVIEW it. Think about if the plan is too rigid, too vague, too complicated. Think about what you might say to yourself if you don't meet your success criterion in your first attempt. It's never helpful to get down on yourself if you don't meet a goal. Instead, you want to go back to the drawing board and troubleshoot using some of the suggestions in Step 5.

As you continue implementing your plan, you will periodically review different parts of the plan and your progress. The REAP acronym (Dawson & Guare, 2012) can help to structure this for you.

- **Review** – review the tasks you planned to do and indicate if they were completed
- **Evaluate** – evaluate how well you accomplished the task
- **Anticipate** – anticipate work that you need to do in the near future
- **Plan** – plan what you will complete before your next review

Review the Plan	Action Steps
Review	• Refer to the Self-Coaching Form previously filled out. • Indicate if each item was completed
Evaluate	• Rate how well each task was completed using the 4-point rating scale on the form
Anticipate	• Identify work due in the near future • On a new Self-Coaching Form, complete the "Long-Term Goals" section by transferring relevant information from the previous Self-Coaching Form
Plan	• Complete the "Weekly Plan" section with information on what will be done by the end of the week.

Between Session Assignment (BSA)

Implement the plan that you created using the completed Self-Coaching Form in Exercise 3. Review that plan by the end of the week to assess how well you completed it and determine if there are any modifications you would make that would better encourage your work completion.

Appendix B.4

Week 4

Self-Monitoring

Throughout this program, you are developing familiarity with concepts that lead to a greater awareness of who you are as a student and areas you would like to refine. As you increase in your self-awareness, this module serves to help develop your ability to self-monitor your efforts. As such, within this program, terms like "self-awareness", "progress monitoring", and "self-monitoring" often relate to two major points: observation/measurement of behavior and self-initiated/guided actions.

Self-monitoring is defined as the process of observing one's own actions and recording the presence or absence of a specified behavior (Mace, Belfiore, & Hutchinson, 2001). You are engaging in some form of self-monitoring when you attempt to keep track of whether or not you have completed a task/skill/behavior, are in the process of completing a task/skill/behavior or have gotten off track with a targeted task/skill/behavior.

As with the overall skill of executive functioning, it should not be mistaken that you do not have the ability to self-monitor. Rather, the steps in this module will help you refine your self-monitoring skills and offer ways to troubleshoot areas of weakness or lagging ability. As you become more proficient over time, you will find that intensive adherence to the procedures will fade but you will find yourself enacting the core principles more readily.

Step 1: Pick a task/skill/behavior to self-monitor.

Selecting a task/skill/behavior to self-monitor can be as specific as, *not using social media during study times* or *reading 10 pages of a textbook each day.* You may choose to monitor the occurrence OR non-occurrence of a behavior. In terms of this program, whatever you select, should reflect what you specified in your weekly plan on the Self-Coaching Form. Essentially, these steps can be used to monitor any behavior that is measurable. However, you should be applying these steps to those behaviors that are tied to your goals for the purposes of academic executive functioning.

Step 2: Decide how you would like to measure or keep track of whether or not you have completed a task/skill/behavior.

After you have selected a task/skill/behavior to self-monitor, decide if you want to monitor the behavior by taking a tally of the frequency of the occurrence or non-occurrence of the behavior or by tracking the length of time engaged in the behavior.

Step 3: Determine the schedule of check points and create a visual aid to record.

You will want to determine when the monitoring or checkpoint will occur. For example, if you are keeping track of a goal to read 10 pages of a textbook per day, you will need to monitor this goal on a daily basis, likely at the end of the day. Whereas, if your goal is to decrease the time you spend getting out of bed to go to class, then you will be timing yourself during each instance you are in bed prior to class.

When beginning to track your behaviors in this fashion, you may find that this system can become complicated or just cumbersome. You may think that you are spending a lot of time observing yourself. You may even feel frustrated with making use of your precious attention in this way because you rather spend time focusing on other "more pressing" issues. But remember you are looking to develop a more accurate idea of your behaviors and skills and train yourself to make personal adjustments when YOU REALIZE that you "accurately" need to.

As we have seen in prior modules, when attempting to gauge our abilities, such as how long it takes for us to complete a task or how often we scroll through social media while studying, we often have skewed estimations; we either underestimate or overestimate. Tracking your behaviors more concretely initially will help to fine tune or recalibrate your self-awareness.

Self-monitoring does not necessarily require that monitoring data be written down. However, creating a written/electronic record of self-monitoring data will allow you to collect data over time to look for trends of improvement and monitor when and why there are setbacks. Initially, relying heavily on your recall can result in inaccurate estimations that you are attempting to recalibrate. Use the Behavior Tracking Chart to list the goals that you will be tracking for the week that correspond to the Weekly Plan on your Self-Coaching Form.

Exercise 1

- Refer to the Self-Coaching Form that you used during the previous week.
    - Thinking back to the previous week, recall the frequency or duration of each instance you engaged in each goal.
        - How easy or difficult is it for you to provide an estimate?

Step 4 Decide on a monitoring cue.

It may be necessary during the first couple weeks to prepare a monitoring cue to alert you to self-monitor. This can be as simple as using a timer that is set to ring during each planned checkpoint or placing bright post-it notes to alert your attention to a checkpoint period.

Step 5 Implement and evaluate results.

With your Academic GPS in place, you are set to put your gears in drive. Implement your plan and evaluate the results periodically. A weekly review would be a great starting point if you are tracking weekly goals. If there are goals that you are monitoring within a shorter timeframe, such as, hourly, you may need to review your progress on a daily basis as it could become overwhelming to conduct a weekly review of frequency or duration data (tallies or timing) that is done on an hourly basis, each day.

Exercise 2

- Using a Self-Coaching Form and a Behavior Tracking Chart, create a plan for the upcoming week.
    - Using steps 1 – 4, determine if each goal is measurable in terms of frequency or duration of time. Then select a method of monitoring, a schedule of check points, and a monitoring cue of your preference.

Between Session Assignment (BSA)

Implement the plan that you created using the completed Self-Coaching Form and Behavior Tracking Chart. Review that plan by the end of the week to assess how well you completed it and determine if there are any modifications you would make that would better encourage your work completion.

Behavior Tracking Chart

Tally the frequency of the goal (task/skill/behavior) or track the length of time engaged in the goal (task/skill/behavior).

Goals	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Monitoring Cue(s): _____

Appendix B.5

Week 5

Note-Taking

Time spent in class can sometimes be unintentionally overlooked. You may attend class thinking that being present is enough to absorb the lecture. Or, you may already be familiar with the lecture material and believe that you will be able to remember everything you heard.

Regardless of the reason, at a minimum, taking notes is a skill that will help strengthen your recall of facts and allow you to hold more information in mind when attempting to draw conclusions and connections week to week.

In this module, you will become familiar with various note-taking techniques to help refine the ways in which you already take notes. However, as with all skills, you first want to think about your current abilities, strengths, as well as, areas for growth. When thinking about the courses you are taking or have taken, what are some cues from your professors and lecture slides that signal what might be important?

Some cues include:

- Direct statements by the professor such as, “This is an important point”
- Writing on the board
- Changes in the professor’s tone of voice
- Pauses by the professor
- Pointing or other gestures
- Repeated terms or phrases
- Terms such as “In conclusion”, “to sum things up,” etc.
- Ideas or concepts referenced in the reading or in previous lectures
- Terms in larger font, bold, italics, underlined, or highlighted in slides or notes

Being aware of some common cues during lectures is one of the first steps to note-taking.

Next, consider that you will be faced with a variety of professors in college who will demonstrate different ways to conduct a lecture. Whatever the teaching “style”, your ability to adapt is key here. Below are some variations in teaching and ways you can adapt to the lecture style.

The professor may…	You might want to try….
Professor takes lecture from the textbook and reads, verbatim, from lecture slides in class.	Taking your textbook or lecture slides to class and mark what is read and add in any additional facts or questions
Professor rarely covers information from the textbook and usually introduces new information in class.	Taking notes on the new material that is presented and follow up on the source of the new information that is not in the textbook
Professor talks very fast. Words or sentences run together.	Relying on using abbreviations, listing major points, putting statements into your own words, and leave space to fill in information that you missed
Professor talks very slowly and in a monotone voice.	Listening carefully for the main point
Professor rarely asks if students have questions.	Denoting notes with question marks (?) when your need clarification
Professor is always asking questions, checking for understanding and wanting students to talk.	Skimming material and readings before class
Professor is always using a joke or personal experience for an example	Waiting till the joke/story is done and take notes on the punch lines and/or the "moral of the story" that pertains to the main point.

Adapted from St. Mary's College of Maryland (n.d.)

Exercise 1

- Think about the professors you have this semester.
  - Do they all teach the same way?
  - Do their styles fit into one or more of these categories?
  - Are there any other teaching "styles" you would add?
  - How would you adjust the way you take notes?

While keeping these considerations in mind, think about how you might refine the way you take notes in class. The following techniques that will be introduced will help you to find a way to take notes that works for you by taking a closer look at various styles and adjusting them to your likeliness.

Outline Method

The outline method is a highly common style of notetaking. You organize information in short bullets that form a skeleton of the lecture material.

How to use this method:

- Major topic and points of the lecture will be placed farthest to the left of the page.
- Subtopics and more specific points are added using an indent to the right.
- Each supporting fact or note is placed below the subtopic, using another indent.

Pros	Cons
• Reduces time to review notes • Shows relationship between points • Works well when taking notes on a computer so you can add/edit information earlier in the outline • Great for slower paced lectures	• Must put more thought in how the information is organized (logical order, sequential order) • If handwritten, it will be difficult to add points in earlier, especially major headers • Challenging when lecture moves quickly

Example of the Outline Method

1) **Main Topic 1**
    a) *Subtopic 1 or Key Concept 1*
        i) Important/Relevant Fact/Example
        ii) Important/Relevant Fact/Example
        iii) Important/Relevant Fact/Example
        iv) Important/Relevant Fact/Example
        v) Etc.
    b) *Subtopic 2 or Key Concept 2*
        i) Important/Relevant Fact/Example
        ii) Important/Relevant Fact/Example
        iii) Important/Relevant Fact/Example
        iv) Important/Relevant Fact/Example
        v) Etc.
2) **Main Topic 2**
    a) *Subtopic 1 or Key Concept 1*
        i) Important/Relevant Fact/Example
        ii) Important/Relevant Fact/Example
        iii) Important/Relevant Fact/Example
        iv) Important/Relevant Fact/Example
        v) Etc.
    b) *Subtopic 2 or Key Concept 2*
        i) Important/Relevant Fact/Example
        ii) Important/Relevant Fact/Example
        iii) Important/Relevant Fact/Example
        iv) Important/Relevant Fact/Example
        v) Etc.

Cornell Method

The Cornell method is a 5-step process to taking notes designed to be highly accurate and detailed. The 5-step process, known as the *5 R's of Cornell,* include: Record, Reduce, Recite, Reflect, and Review.

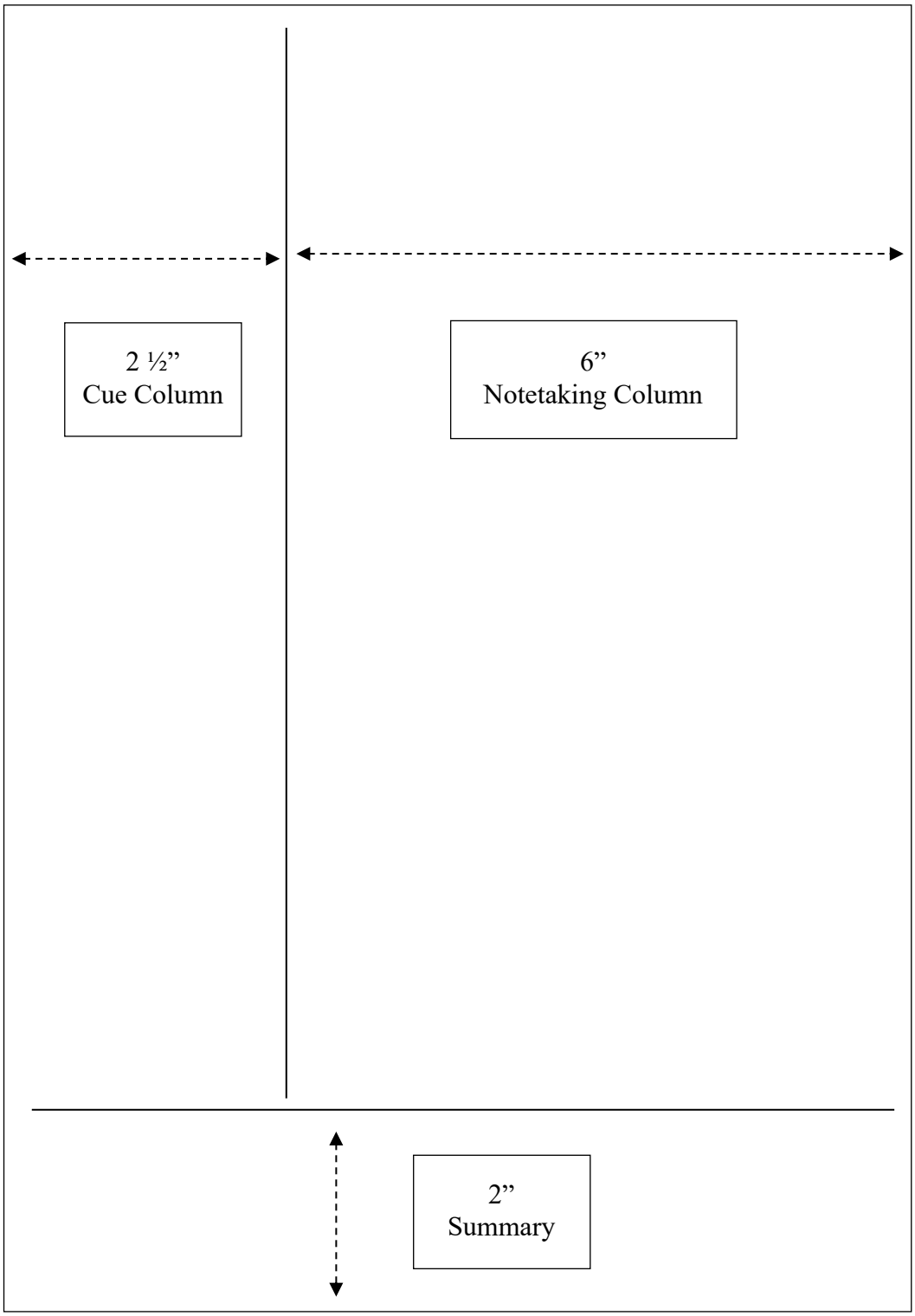
How to use this method (adapted from Wong, L. (2014). Essential Study Skills. Cengage Learning. Kindle Edition):

- Preparing to Take Notes
  - Draw a 2 ½ inch vertical margin down the left side of your notebook paper and stop 2 inches from the bottom. Then draw a 2-inch horizontal margin from the bottom of the paper.
  - Only make columns on the front side of your notebook paper as you will not be taking notes on the back of these pages.
  - Use the bottom section to summarize the notes on that page.
  - Use the back of each page to summarize points when you do the fourth step, Reflect.
  - Label pages with the course name, chapter number, and date. For all the following pages, just write the chapter number and the page number of your notes.
- Record
  - Take notes in the right column using the Outline Method
- Reduce
  - Condense notes into the recall column, the left column on your page. Note headings, key words, and study questions.
    - Copy headings from the right column into the left column and underline them. The headings should appear directly across from the headings in your notes.
    - Reread your notes to see if they seem vague or incomplete
    - Create study questions under the headings in your recall column
    - Define key words to remind yourself to recite the definition of the word.
    - Do not write too much to clutter the recall column with too much information. Do not write answers to your study questions, definitions, or completed lists of information. You want to challenge yourself in the next step to see if you can recall the information from memory.
- Recite
  - Using information in the recall column to explain information out loud in your own words without referring to detailed notes.
- Reflect
  - Identify study tools and rehearsal strategies that work for you to build your comprehension. This will vary greatly between students. Some ideas to consider are:

        - Take time to think about the relationships among details and the importance of the information you are studying.
        - Look only at the information in the recall columns and write a summary using full sentences and paragraphs to summarize the main ideas and important details.
    - Write on the back of your notes to make lists of information, study questions, diagrams/charts, or questions to ask your instructor.
    - To reinforce your learning create study tools that you can use throughout the term: index card notes, visual mappings, charts, or mnemonics.
- <u>Review</u>
    - Engage in immediate and ongoing review of your notes.
        - Immediate review is the process of rehearsing information before you end a learning task. Use immediate review with your notes after you finish the reflect step.
        - Ongoing review is the process of practicing previously learned information days and even weeks after the initial learning occurred. Ongoing review keeps information active and accessible in your memory system.

Pros	Cons
• A quicker way to take, organize and review notes • Summarizes all the information in a systematic manner • Helps to absorb information in a shorter time	• Pages need to be prepared before a lecture • Requires some time summarizing the key concepts

Example of the Cornell Method



Many of the ideas and concepts introduced for taking notes during lectures also apply when taking notes from written material. Practice your note-taking style using your textbook to build proficiency in notetaking for when you are listening to a lecture in class.

Separate from taking notes, highlighting information in textbooks is another highly common practice and study tool. The term "annotating" refers to the process of highlighting, underlining, and making marginal notes.

When annotating it is important to remember:

1. After you carefully read a paragraph, go back through the paragraph to search for the main idea, important supporting details, terminology, and definitions.
2. Highlight the topic sentence completely. Completely highlight the topic sentence with the main idea. This is the only sentence in a paragraph that should be completely highlighted.
3. Be selective about supporting details. Only highlight key words or important short phrases to avoid over-marking.
4. Circle terminology that appears in special print. Highlight key words that define the term.
5. Avoid over-highlighting as it defeats the purpose of highlighting, which is to reduce or condense the amount of information in paragraphs and chapters to study and review. Limit highlighting in paragraphs to no more than one-third of the paragraph.
6. Highlight examples sparingly.
7. Be selective. Do not mark words such as *to, and, with, also,* and *in addition* because they are not key memory trigger words. Also, you do not need to mark a key word or a topic that appears multiple times.

Between Session Assignment (BSA)

Review and annotate the current module using the strategies listed above.

Appendix B.6

Week 6

Work Completion

When you first receive your course syllabus, it can feel overwhelming to see the amount of work you will need to complete for the class. From weekly assignments to long term projects, you are given a breakdown of what the upcoming months will look like for that semester. Students can sometimes experience a sense of frustration and anxiety at the moment they receive their syllabus, but the irony is that, in terms of planning and scheduling, half the work is already done! This module will help you to use the timeline presented in your syllabi to develop a system to schedule time to complete weekly assignments and breakdown long term projects into manageable parts.

Like in most other modules, you will work toward refining a system that works for you. This can look very different from how your friends develop their own system. And as with all executive functioning skills, you can always make changes if you find that you have not quite hit the mark you were aiming for. As you think more carefully about your work completion, you are embarking on integrating skills from multiple executive functioning domains. You will enlist techniques from what you learned about time management, self-monitoring, and setting goals to refine your current system. You will also use these areas to troubleshoot problems that may arise in your planning.

Managing the Syllabi

1) After the first week or two in your semester, when you have received all of your syllabi, spread them out or open all the digital copies and transpose all assignment due dates onto a monthly calendar and indicate if the assignment is a long-term project/paper (LTP) or a weekly assignment (W).
    - Color coding based on course can be a great tool to keep track of which assignments correspond to each course.

2) Prioritize assignments based on importance or urgency. Defining importance or urgency can vary from person to person.
    - Do you define importance or urgency based on due date, how much time the assignment will take, how much you know about the subject?
    - Do you tend to prioritize assignments that can be completed quickly, leaving the larger assignments for last?

ABC Method to Prioritize Tasks

1) List all the tasks that you want to achieve within a specific time period.
2) Use the letter "A" to label your highest-priority tasks—the most important or the most urgent tasks on your list to complete.
3) Use the letter "B" to label the tasks of medium importance and less urgency to complete.
4) Use the letter "C" to label the tasks of lowest importance and urgency – the ones you wish to complete but only after the high-priority A and B tasks are achieved.
5) Return to the "A" list to prioritize these tasks. Identify the order in which you plan to complete these tasks.
6) Continue prioritizing your "B" and "C" tasks.

Wong, L. (2015)

Exercise 1

- Using a monthly calendar, transpose all assignment due dates for one of your syllabi for the months in the semester and indicate if the assignment is a long-term project/paper (LTP) or a weekly assignment (W).
- Using the ABC method to prioritize tasks, denote each assignment with an A, B, or C. Consider using a pencil so you can continue making adjustments as you add more assignments from other syllabi.
- Within each priority group, sort assignments in the order you would like to complete them. Denote this as A.1, A.2; B.1, B.2; C.1, C.2 etc.

Weekly Assignments (W)

Now that you have a monthly calendar of all upcoming assignments, you will want to take a closer look at when you will specifically complete these tasks on a weekly and daily basis. This means you need to determine how much time each task will take whether they are weekly assignments or long-term projects. We will first plan for weekly assignments by creating a weekly schedule.

Weekly Schedule

When creating a weekly schedule, you want to plan for all seven days of the week. Based on your workload and other commitments you may not complete assignments every day, but you will likely be scheduling time in to complete other academically related tasks such as reading or studying. These and other fixed activities can be more concretely accounted for in your daily schedule.

In terms of weekly assignments:

1) Estimate the amount of time you think you will need for each assignment.
2) Consider dividing the amount of time you will spend working on each assignment that you estimate being greater than two hours. For example, if your think an assignment will take 3 hours, plan to spend two 1.5 hours blocks during the week to complete the assignment.
3) On a weekly schedule, specify the task on the day that you will complete it with the amount of estimated time in parentheses.

Exercise 2

- Using the information from Exercise 1, specify how much time you think you will need for each weekly assignment.
- Use the weekly schedule to note these assignments and the amount of estimated time.

Daily Schedule

When creating a daily schedule, you want to use an hourly schedule for that day from 12:00 a.m. to 11:59 p.m. On this schedule, you will block out chunks of time that you allot for the activities in your day as well as your weekly assignments. You will need to include the fixed blocks of time you have allotted for sleep, class, leisure, extracurriculars, assignments and studying. This will vary day-to-day and some aspects may even vary week-to-week such as employment schedules.

Creating a Daily Schedule

1. Write in all your fixed activities i.e. sleep, class, employment
2. Write in your fixed study blocks for that day and specify the class.
    a. If the day includes a flexible study block, add that in as well.
3. Add the blocks of time for weekly assignments
4. Schedule leisure activity and/or social time with family and/or friends

Adapted from Wong, L. (2015)

Exercise 3

- Think back to the BSA for the Time Management module in which you created a daily planner for upcoming assignments for that week.
- Using the information from Exercise 1 and 2, complete a similar daily planner for the next two days in your week including weekly assignments.

Long Term Projects/Papers (LTP)

Now that you have a monthly schedule of all assignments and you have created a frame for weekly assignments, you can begin to incorporate long-term projects and term papers into your weekly and daily schedules.

In the past, whether you have begun LTPs too close to the due date because you were unsure of how to begin and avoided the task all together or you assumed that the LTP would not take much time and ended up neglecting other study times and classes in order to meet the deadline, planning to work on LTPs by breaking down the assignment into manageable parts much earlier in the semester will help to relieve some of the stress you may have experienced.

Setting Goals for a Long-Term Project

1. Break the assignment into specific tasks by determining the individual tasks involved for the entire project and list them.
2. Estimate the number of hours you think you will need to complete each task and write the estimates next to each task.
3. Double the estimated time needed for each task to avoid running short on time and to counteract underestimating the time you will need. This is your safety net to deal with any unforeseen problems. Planning too much time for a project is always better than running out of time to finish a project or having not enough time to produce quality work.
4. Plan target dates and times to complete each step and record them on your calendar and/or your weekly schedule. Adjust your calendars/schedules if you finish a task earlier than planned.
5. Begin immediately so you don't waste time or add stress by procrastinating.

Adapted from Wong, L. (2015)

For LTPs that allow you the flexibility of selecting a topic, you want to allot time to brainstorm and research potential ideas. Using the Long-Term Project Planning Sheet write down possible topics and what you do and do not like about each choice.

Long-Term Project Planning Sheet

Step 1: Select a Topic

Possible Topics	Pros about this choice?	Cons about this choice?
1.		
2.		
3.		
4.		
5.		
Final Topic Choice:		

When making the final selection, consider a topic that is neither too broad nor too narrow and the level of difficulty involved in tracking down resources/references.

After a final topic is selected, decide what materials/resources/references will be needed and where and when you will get them.

Step 2: Identify Necessary Materials

Material/Resources/References Needed	Where to access them?	When will they be retrieved?
1.		
2.		
3.		
4.		
5.		

Now that you know what you will need to complete the project, list the steps you will need to do to complete the project and create a timeline for when each step will be done. Think about how involved each step is and how much time you will need for the step. Your work blocks for your LTP should then be transferred over to your monthly and weekly schedule.

When planning to complete papers, you can break down your steps by making an outline of the paper and listing what section of the paper you will work on per step and how many pages you would like to write for that section. Ex. Introduction (2 paragraphs or 1 page)

Step 3: Identify Project Tasks and Due Dates

Project Tasks/Steps (List steps in order)	When?	Done
1.		Yes No
2.		Yes No
3.		Yes No
4.		Yes No
5.		Yes No
6.		Yes No
7.		Yes No
8.		Yes No
9.		Yes No
10.		Yes No

Between Session Assignment (BSA)

1) Select an LTP for one of your classes and complete the Long-Term Project Planning Sheet.
2) Transfer the work blocks onto the monthly and weekly planner you created in Exercise 1 and 2.
3) Review the daily schedule you completed in Exercise 3, input a work block for the LTP. If you do not see an available block of time, create a daily schedule for the remaining days of your week and input the block of time for your LTP.

Appendix B.7

Week 7

Test Taking – Objective (Excerpt from Wong, L. (2015). Essential Study Skills. Cengage Learning.)

The fact of the matter is that you have undoubtedly been taking tests since you have been in school. Whether you were studying for Geometry, AP History, or the SAT, you have gained a considerable amount of practice in test-taking and developing your test-preparation and test-taking style.

Think about a test that you remember doing really well in. Was it a multiple-choice exam? Short answer? Essay? Did you know what the test format was going to be beforehand? What are some of the studying techniques you used that you think helped you to do so well?

Understanding the different types of test questions that can be on a test and how to answer them can help to refine the way you go about studying for them. For the test-taking modules you will look at different types of test questions, strategies that can help you prepare for them and answer them during a test and think about how you can apply this to the types of tests that occur in your courses.

Objective Test Questions

Objective or recognition questions require you to recognize whether information is correct or incorrect and identify the correct answer. These include:

- True/False
- Multiple Choice
- Matching

True-False Questions

True-false questions are usually one-sentence statements. Often times we tend to read and respond to them too quickly without paying enough attention to key words in the true-false statement.

Key elements or words in true-false questions to pay attention to:

- Items in a series
- Smaller words known as "modifiers" that ask you to tell what degree or frequency something occurs
- Definition and relationship clues
- Negative words that affect overall meaning of the statement

Strategies for True-False Questions

1. Understand How to Read and Respond to True-False Questions

   - **Pay attention to every word in the statement.** If you tend to misread questions, point to each word as you read and circle the key words.
   - **Be sure you completely understand the statement** by rereading, if necessary. Try translating difficult words into more informal words or create a visual picture of the information.
   - **Be objective when you answer by not** interpreting the question according to what you do or how you feel. Answer according to the information presented by the textbook author or your instructor in class.
   - **Do not add** notes, comments, or clarifications to the **question.** Frequently, the only information that the instructor will look at is the T or the F answer.
   - **Make a strong distinction between the way you write a T and an F** as unclear letters are usually marked as incorrect.
   - **Mark a statement as TRUE only when the statement is completely true**. If any part of a statement is inaccurate or false, you must mark the entire statement as FALSE.

2. Carefully Check Each Item in a Series of Items

   - A true-false question is TRUE only when the entire statement is true.
   - If one item in a series of items is false, the entire statement becomes a FALSE statement.
   - Items in a series are separated by commas, so use the commas as signals to check each item carefully.

3. Understand and Identify Modifiers

   - There is a huge difference between saying that something *always* happens and saying that something *sometimes, often*, or *rarely* happens.
   - Ask yourself: *Is this accurate? Does this happen or occur all the time without any exceptions?* If "yes," then the statement is TRUE. If "no," then the statement is FALSE.
   - In-between modifiers allow for more flexibility or exceptions because they indicate that situations or conditions do not occur 100 percent of the time.

- Ask yourself: *Is this accurate? Does this happen or occur this frequently or to this degree?*

Learn to Recognize Modifiers

100 percent positive	In-Between	100 percent negative
all, every, only, always, absolutely, everyone, everybody, best	Some most, a few sometimes, often, usually, may, seldom, frequently, some, few, most average, better	None, never, no one, nobody, worst, least, fewest
Absolute phrases: is/are, definitely, with certainty	Non-absolute phrases: perhaps, possibly, maybe, tend to	

4. Watch for Definition Clues

- Word phrases such as *defined as, are/is, states that, referred to as, is/are called, is an example of, also known as, means, which is/are, involves, measures, suggests that* may be working as clues for definitions.
- Underline the terminology word and ask yourself: *What is the definition I learned for this word?*
- Compare your definition to the definition that appears in the statement. If your definition matches the test question definition, answer TRUE.
- If there is a discrepancy, analyze the test question definition because it may be saying the same thing but using different words. If your definition and the definition in the statement are not the same, answer FALSE.

5. Look for Relationship Clues

- Relationship clues are words that signal that the question is testing your understanding of the relationship between two subjects.
- Relationships often show cause and effect—one item causes another item to occur.
- Relationships may also show other patterns such as chronological, process, comparison-contrast, and whole-and-parts.
- Ask yourself: *What do I know about how these two subjects are related to each other?*
- Compare your relationship idea with the relationship presented in the question.
- If the relationship in the statement is logical, answer TRUE. If there is a discrepancy, analyze the accuracy and logic and if faulty, answer FALSE.

6. Watch for the Use of Negatives

- Negatives are words or prefixes in words that carry the meaning of "no" or "not."
- Negatives affect the meaning of the sentence; if you ignore or miss them, the meaning of the sentence is the opposite of the correct meaning.
- Negatives can cause some confusion in understanding or interpreting a statement accurately. If a question with a negative word or prefix confuses you, use the **Negative Cover-Up Technique**:
    - Cover up the negative and reread the statement without the negative.
    - If the sentence has two negatives, cover up only one negative.
    - If the statement without the negative makes a true statement, the answer to the original question will be the opposite: FALSE.
    - If the statement with the negative removed is a false statement, the answer to the original question will be the opposite: TRUE.

Multiple-Choice Questions

When answering multiple-choice questions, pay attention to the following parts of the question: The stem – beginning of the question; The options – choices of answers; and The distractors – options that are not the correct answer

Strategies for Multiple-Choice Questions

1. Use the Three-Step Approach for Answering Multiple-Choice Questions

    - **Step One: Finish the Stem in Your Mind**
        - Read the stem carefully and, without looking at the options, quickly finish the stem in your mind. This step puts you in retrieval mode and into a long-term memory schema related to the statement.
        - Then glance down to see if any of the options are similar to what you had in mind.
    - **Step Two: Create True-False Statements**
        - Create a true-false statement by reading the stem with each option in the list of options.
    - **Step Three: Identify the Distractors and Select the Answers**
        - Cross off the distractors
        - Examine the remaining statements and select the best answer from those options.

2. Understand How to Read and Respond to Multiple-Choice Questions

    - **Read the directions carefully.** Unless indicated otherwise, select only one answer. Realize, however, that some directions may state that you should mark all the correct answers.
    - **Read all of the options**

- **Choose the *best* answer.** One or more of the answers may be correct, but only the most inclusive (with the broadest information), most accurate, or most complete is the best answer.
- **Select "All of the Above"** only when every option is accurate and forms a true statement when combined with the stem. If any one option forms a false statement, you cannot select "All of the above" as your answer.
- **Use the four levels of response.** If you do not immediately know the answer, search your memory and cross off distractors. If you cannot confidently select an answer, look through the test for assistance. And as a last resort, take an educated guess.

3. Carefully Examine "Not" or Exclusion Questions

    - Exclusion questions asks you which of the options is not true or does not belong in the same category as the other options.
    - Read each option as a true-false statement by itself. Examine the statement(s) marked false because it will reflect what is not true or what does not belong in a given category. One of these statements will be the correct answer.

Matching Questions

Matching questions consist of two columns of information used to form a paired association. The left column often consists of key words or terminology. The right column contains definitions, descriptions, events, examples, or other factual information that matches with the items in the left column. The following are examples of paired associations you may find on matching tests:

- Words and their definitions
- Dates and events
- Problems and their solutions
- People and what they did
- Terms and their function or purpose
- Causes and effects

Strategies for Matching Questions

1. Examine the Matching Format Carefully

    - Usually you can use each item on the right only once. If you can use an item on the right more than once, the directions usually indicate this.

2. Work Systematically

    - Use a systematic approach for matching items on the two lists. If you incorrectly match an item on the right with an item on the left, the result will be two or more incorrect answers rather than one.

- Read through the list with the shortest entries to familiarize yourself with the topics and the kinds of paired associations in the matching test. If the items in each column are about equal length, read the left column.
- Start with *a*, the first item at the top of the right column. Scan the items in the left column to find a match.
- Once you see a definite match, write the letter on the line and cross off the letter you used so you do not reuse it. Crossing off used letters also helps avoid confusion.
- Do not make a match unless you are confident that the item on the right matches the item on the left. When in doubt, leave the item unmatched and move to the next letter in the column to look for its match.
- After you have matched as many items as possible, look through other parts of the test for related information that may help you match up the remaining items.

3. Look for Word Clues and Grammar Clues

- Word clues (helper words) can help you find correct matches. For example, if you see a word such as *system, technique, process,* or *rule* in the right column, narrow your focus by searching for choices in the left column that deal specifically with a system, technique, process, or rule.
- Grammar clues can help you find correct matches. If an item in the right column is a plural, the match in the left column will also refer to a plural. Similarly, singular items in the right column are matched with singular items in the left column.

Group Discussion

Each student should annotate and highlight their copy of the Test Taking – Objective module. Students will share in group what they thought key points were per section. Coach will facilitate discussion.

Between Session Assignment (BSA)

Review and annotate the four levels of response to answer test questions.

Four Levels of Response to Answer Test Questions

Do you move through tests by reading questions, answering them with certainty or hesitancy, and then moving on to the next question? Many students use this approach of plowing through tests—question after question—feeling confident about some answers and doubtful about others. Using the following four levels of response to answer test questions provides you with a structured, step-by-step process that leads to more correct answers and more self-confidence in your ability to perform well on tests.

Immediate response – Read the question carefully. If you immediately know the answer, write the answer with confidence and move to the next question.

Delayed response – If you do not immediately know the answer, reread the question carefully, and then conduct a memory search. Recall what you do know about the topic; try to trigger an association that will link you to the answer. If you cannot answer with certainty, leave the answer space empty. Place a check mark next to the question and return to it after you have answered as many questions as possible on the remainder of the test.

Assisted response – Return to the unanswered questions and identify one or two key words in the question. Scan through the other parts of the test for these key words and for other clues or associations that may help trigger recall of information to help you select an answer.

Educated guess – Take an educated guess to select an answer if all else fails. This practice involves using logic and thinking skills to decide on the most reasonable answer. However, realize that this is a last-resort strategy that may increase your odds for selecting the correct answer, but it does not guarantee that all answers will be correct.

Appendix B.8

Week 8

Test Taking – Recall (Excerpt from Wong, L. (2015). Essential Study Skills. Cengage Learning.)

Recall Test Questions

Recall questions are questions that require you to conduct memory searches to retrieve (recall) information from your memory to respond with an answer. Unlike objective test questions, recall questions do not provide you with direct clues or answers to recognize as accurate or not. Recall questions require higher levels of thinking and processing information.

By using effective study strategies that include creating associations that link two or more items in memory, you will be able to recall correct answers for the following kinds of questions:

- Fill-in-the-blanks to complete sentences
- List items or steps in a process
- Define specific terminology
- Write a short paragraph or short answer

Terminology for Recall Tests

Closed questions – questions that require specific answers; sometimes the answers must appear in a specific order, such as giving the steps of a process or other times the answers are limited to course-specific concepts, topics, or details that may appear in any order.

Open-ended questions – Open-ended questions are questions that have many possible answers. A variety of answers may be correct if they reflect course content, show logical connections to course material, or reflect understanding of concepts, topics, or details.

Direction words – Direction words are words in test questions that signal a specific kind of answer that is required. *List, define, discuss, tell, describe, explain why*, and *when* are a few examples of direction words.

Fill-in-the-Blanks Questions

Fill-in-the-blanks questions are questions in the form of sentences that have one or more missing words. The words used to complete the statement, usually are key terms that appear in your textbook, course materials, or lectures.

In most cases, fill-in-the-blanks questions are closed questions, which means you must use specific words rather than a variety of possible words for a correct answer.

Strategies for Fill-in-the-Blanks Questions

1. Understand How to Read and Respond to Fill-in-the-Blanks Questions

    - **Identify the kind of word needed for each blank space.** Based on the position of the word in the sentence, you often can recognize that the missing word is a noun (naming an object, concept, step, process, or person) or a verb stating some type of action.
    - **Conduct memory searches for answers.** Use key words in the statement to trigger associations. Ask yourself the following kinds of questions: *What do we call … Who was…? Where did I learn this? What is this related to?*
    - **Form complete sentences.** When you read the completed sentence with the filled-in words, the sentence must make sense and be grammatically correct.

2. Modify the Four Levels of Response to Provide Answers

    - **Write the correct word for a blank if you immediately know the answer.**
    - **Use delayed response.** Conduct a memory search. Try to recall an association to help you recall the term. If you cannot recall the correct word to fill in the blank, leave the question unanswered. Place a check mark next to the question. Return to it later.
    - **Use assisted response to fill in the blanks.** If you cannot recall the necessary word, identify other key words in the statement, skim through the rest of the test to look for those key words. Try inserting a possible word into the statement, then read the statement, remembering that the completed sentence must be grammatically correct, make sense, and be logical.
    - **Write a substitute word, a synonym, or even a phrase to complete the sentence.** A synonym is a word with a similar meaning. Even though a substitute word, a synonym, or a short phrase is not the exact answer for the fill-in-the blank statement, you may receive partial points for your effort.

Listing Questions

Listing questions are recall questions that ask for a specific list of ideas, items, or steps that belong together in a specific category. Unless the directions say otherwise, answers on listing questions are words or phrases, not complete sentences.

Strategies for Listing Questions

1. Identify Questions as Closed or Open-Ended Questions

    - Closed questions are questions that require specific answers. Some closed questions, such as questions about the steps used in a specific process, require that you list the items in their proper order.
    - Open-ended questions are questions that have a variety of possible answers.
        - To answer open-ended questions, you can list a variety of answers as long as the items in your answers relate to or belong in the category of the question.
        - Often answers to open-ended questions were not studied as a specific list of information. Therefore, you must pull together information that relates to the question. For this reason, students who rely on rote memory often find open-ended questions challenging.

2. Understand How to Read and Respond to Listing Questions
    - **Underline the key words in the question.** This helps you focus on what kind of information you need to include in your answer.
    - **Pay attention to the number of items required in your answer.** If the question asks you to "List five kinds of …," number your answer one to five. Begin listing the five different answers. If the question does not indicate how many items to include in your list, list as many items as possible. Avoid duplicating or restating items.
    - **Identify the question as a closed or an open-ended question.**
    - **Use words or phrases for your answers.** Unless the directions say differently, you do not need to answer by using complete sentences.

3. Modify the Four Levels of Response to Provide Answers
    - **Write immediate responses to develop your list.** List as many items as possible to answer the question.
    - **Use delayed response.** Conduct memory searches for answers. Use the key words you underlined in the question to trigger associations and answers to expand your list. Ask yourself questions: *What else belongs here? What other things are related to the answers I already listed?* Place a check mark next to the list if you were not able to complete it.
    - **Use assisted response.** Return to the listing questions that are not complete. Use other parts of the test to locate items to complete your list.
    - **Write a substitute word, synonym, or phrase to complete the list.** An empty space brings only one result: no points for your answer—so attempt to

complete the list. Avoid restating an item already listed as duplicate answers will not receive points.

Definition Questions

Definition questions are recall questions that ask you to define and expand upon a word or terminology. For definition questions, a one-sentence answer that simply provides a formal definition of a term often is insufficient and does not earn you the maximum points for the question.

Strategies for Definition Questions

1. Understand How to Read and Respond to Definition Questions

   - **Read the question carefully; underline the word you need to define.**
   - **Use paired associations.** When you studied the term, you paired it with the definition. Say the word to yourself; conduct a memory search for the definition. Try to recall hearing yourself reciting or reading the definition on your flashcard or vocabulary sheet. Try to visualize the information in your notes.
   - **Include three or more sentences in your answer.** Simply defining the term is usually insufficient and results in an underdeveloped answer. By using the category-definition-expanded detail format, you demonstrate greater understanding of the meaning of the term.
   - **Use assisted response.** If you are not able to define the word after conducting a memory search, place a check mark next to the question, and move to another question. Later, use other parts of the test for clues you can use to complete your answer.

2. Practice Writing Definitions with Three Levels of Information

   A. **Name the category associated with the term.** To identify the category, ask yourself: *In what group or category of information does this belong? In what chapter (topic) did this appear? What is the "big picture" word or schema for this word*?
   B. **Give the formal definition.** Give the course-specific definition you learned from your textbook or from class lectures.
   C. **Expand the definition with one more detail**.
      a. Add one more fact
      b. Give a synonym
      c. Give an antonym, a contrast, or a negation
      d. Give a comparison or an analogy
      e. Define the structure of the word
      f. Give the etymology
      g. Give an application

Short-Answer Questions

Short-answer questions are recall questions that require a short paragraph for an answer. After carefully reading the question, you must conduct memory searches to locate or recall relevant information in long-term memory to answer the question. Unlike listing questions, your answer will consist of five or more sentences written in paragraph form. Writing information in lists instead of full sentences usually does not earn you full points.

Strategies for Short-Answer Questions

1. Understand How to Read and Respond to Short-Answer Questions

    - **Read the question carefully to determine if the question is closed or open-ended.** Doing this directs your memory searches for the kind of information needed to answer the question. Are you looking for specific details that perhaps were a part of a list or set of steps, or are you searching for a variety of possible answers related to the topic?
    - **Underline key words in the question.** Key words focus your attention on the subject or topics that must appear in your answer. As you work on developing your answer, check back to the underlined key words to check that you are focusing on the topic and including important details. This also helps you avoid wandering off course with nonessential information.
    - **In your response, include key words that appear in the question.**
    - **Use correct grammar, punctuation, and spelling and answer in paragraph for**m. If time permits, proofread to correct grammar, punctuation, and spelling errors.
    - **Use assisted response if necessary.** Scan through other parts of the test to identify additional details to include or to strengthen your answer.

2. Pay Attention to and Circle Direction Words

    - **Direction Words for Short-Answer Questions and What Is Required**
        - *Discuss/Tell* – Tell about a particular topic.
        - *Identify/What are?* – Identify specific points. (This is similar to a listing except that you are required to answer in full sentences.)
        - *Describe* – Give more specific details or descriptions than are required by "discuss."
        - *Explain/Why?* – Give reasons. Answer the question "Why?"
        - *Explain how/How?* – Describe a process or a set of steps. Give the steps in chronological (time sequence) order.
        - *When?* – Describe a time or a specific condition needed for something to happen, occur, or be used.

3. Create a Short List of Key Ideas

- **Conduct a memory search.** Use your memory search to identify appropriate details related to the key words and the direction word in the question.
- **Create a short list of ideas to use as a guide to write your answer.** This helps you save valuable test time as your answer stays focused and you avoid wandering off the topic. If for some reason you run out of time to write a paragraph answer, turn in your list of ideas for possibly partial points for your answer.
- **Refer to your list of ideas to write your answer.** Develop the list into full sentences and a well-planned paragraph.

4. Start Your Paragraph with a Strong, Focused Opening Sentence

- Begin your answer with a sentence that is direct and to the point. Do not beat around the bush or save your best information for last. The first sentence of your answer should clearly state the main idea of your answer and include the key words from the question.
- The first sentence, when well written, lets your instructor know right away that you are familiar with the subject, your answer is "on target," and you are responding appropriately to the direction word and providing the required kind of information.
- Your opening sentence may indicate the number of items that you will discuss or even possibly list the series of items you will explain further.
- Examples of Opening Sentences
    - Question: Why is recitation important in the learning process?
        - **Weak** – Recitation is important because it helps a person learn better.
        - **Strong** – Recitation, one of the Twelve Principles of Memory, is important in the learning process for three reasons.
        - **Strong** – Recitation is important in the learning process because it involves the auditory channel, feedback, and practice expressing ideas.

5. Expand Your Answer with Details

- Support your opening sentence by expanding into a paragraph with details.
- For a strong answer, use course-related terminology or examples used in class or in your textbook.
- Do not include unrelated information or attempt to write too much or to write an essay.

Group Discussion

Each student should annotate and highlight their copy of the Test Taking – Recall module. Students will share in group what they thought key points were per section. Coach will facilitate discussion.

Between Session Assignment (BSA)

Review annotations and notes from the Test Taking – Objective and Test Taking – Recall modules.

Appendix B.9

Week 9

Test Taking – Essay (Excerpt from Wong, L. (2015). Essential Study Skills. Cengage Learning.)

Essay Test Questions

Essay questions require an organized composition that develops several main ideas that are related to one thesis sentence. The thesis sentence directly states the main point of the entire essay.

Answering essay questions is demanding because it requires you to know information thoroughly, to be able to pull the information from your memory, and to know how to integrate facts to show relationships. The way you express the information and the relationships you show need to follow a logical line of thinking and include sufficient details to develop an effective essay answer. Essays also require a sound grasp of writing skills (grammar, syntax, and spelling) and a well-developed, expressive vocabulary.

Strategies for Essay Questions

1. Understand How to Read and Respond to Essay Questions

    - **Budget your time carefully.** Allow sufficient time to answer all questions or to at least write some information for each question. If you run short on time, turn in your outline or organizational plan to show the main points you intended to discuss.
    - **Weigh the value of different questions.** If one question is worth more points, take more time to develop that answer or to return to that answer later and add more information to strengthen your answer.
    - **Carefully select which questions to answer when you have a choice.** Examine the questions carefully. Do not automatically choose the questions that looks the shortest or the easiest. They are usually more general and more difficult to answer than longer questions that tend to be more specific. Also, select the questions that contain the topics that you are most familiar with and topics for which you can recall specific and sufficient supporting details.
    - **Begin with the most familiar question.** Developing an answer for the most familiar question first tends to boost your confidence level and puts you in the "essay writing mode."
    - **Use complete sentences to express your ideas.** Short phrases, charts, or lists of information are not appropriate for an essay. Include supporting details so your essay will not be underdeveloped.
    - **Include facts** such as names, dates, events, and statistics; include definitions, examples, or appropriate applications of the information you are presenting.

Do not make the mistake of assuming that information is obvious or that your instructor knows what you are thinking or clearly sees the connection.

- **Include quotations for details.** For some courses, you may want to memorize important quotations that appear in your textbook and that you predict you may be able to use to develop an essay test answer. Remember to place quotation marks around the quoted material and cite the source.
- **Use key words in the question** and course-specific terminology in your answers as much as possible.

2. Understand the Questions and the Direction Words

- Read each question carefully and identify the question as a closed- or an open-ended question.
- Underline key words in the question as a reminder to include these key words in your introductory paragraph and to emphasize these words throughout your essay.
- Be sure you understand the direction word as it signals the type of response required. Circle the direction word to maintain a focus on the direction of your answer.

3. Write a Strong, Focused Thesis Sentence

- A thesis sentence is a strong, focused sentence that states the main point of an entire essay. The thesis sentence for an essay test answer usually appears as the first sentence on your paper.
- Clearly state the topic of the essay. Include key words that are a part of the question. If you wish, you may indicate the number of points you plan to develop.
- Show that you understand the direction word and plan to focus your answer in the direction indicated by the direction word.
- Your thesis statement serves as a guide for developing the rest of your essay. It suggests the basic outline of main ideas to develop with important supporting details.
- Your thesis statement serves as an immediate indicator for your instructor that you understand the question and know the answer.
- Because of the significance of the thesis statement, take time to create a strong, direct, confident opening sentence.

4. Develop an Organizational Plan

- After you have developed a strong thesis statement, take the time to develop an organizational plan.
- Your organizational plan provides an overview of the main ideas you plan to include in your essay. Once you conceptualize and develop your plan, you will be able to write your response faster and avoid wandering off course or becoming confused about the next point to write in your answer.

- Your organizational plan becomes your step-by-step outline that guides the writing process.
- Your plan may be an outline, a visual mapping, a hierarchy, or a basic list of main ideas.

5. Use the Five-Paragraph Format

   - For many essay test questions, the five-paragraph essay is an effective format to use to write your essay answers.
   - The five-paragraph essay format consists of an introductory paragraph, three paragraphs in the body of the essay to develop three separate main ideas, and a concluding paragraph.
   - If you have more than three main ideas to develop, you can expand this format by adding additional paragraphs to the body of the essay.

6. Create a Pre-Writing Chart to Guide Your Writing

   - Many students waste too much precious test-taking time trying to "get started" on an essay. A systematic approach helps you gather your thoughts and move into action. Use the following steps to organize yourself and your thoughts before writing the actual essay.
     - Circle the direction word. Underline key words in the question to use in your essay answer.
     - Use this information to write a strong thesis sentence that will appear in the introductory paragraph. Quickly sketch a chart with five rows. Write the thesis statement in the first box of your chart.
     - In the second, third, and fourth rows, write the topic that you will develop for each paragraph.
     - Under each topic, which will become the main idea for the paragraph, briefly list the details you plan to use to develop the topic or main idea.
     - After you write the essay, plan to summarize it in a short concluding paragraph (last row).
     - If you run out of time on the test and are not able to complete your essay answer, turn in your organizational plan or notes showing the above information. You may receive partial points for your work.

7. Strengthen and Revise if You Have Time

   - Writing effective essays involves understanding and using effective vocabulary, writing, and spelling skills. Following are revisions you can make in your essays if you have time available during the testing period. If you do not have time to revise, familiarize yourself with the following writing tips so you can strive to implement them the next time you face an essay test.
     - Replace slang or informal language with formal language or course terminology.

- Reword to avoid using the word *you*. Replace the word *you* with the word it represents, the specific noun, such as students.
- Replace vague pronouns such as *it* with the name of the specific item.
- Reword sentences to avoid weak "sentence starters" such as *There is …, There are …, Here is …,* or *Here are …*
- Use sentence variety in your essay: simple, compound, complex, and compound-complex sentences. Knowing how to combine short sentences into compound, complex, or compound-complex sentences is an economical way to develop ideas. Using effective sentence variety results in an essay that is interesting to read and understand.

Group Discussion

Each student should annotate and highlight their copy of the Test Taking – Essay module. Students will share in group what they thought key points were per section. Coach will facilitate discussion.

Between Session Assignment (BSA)

The structure of essays involves key concepts that you will also encounter in composition classes. Review and annotate terminology for essay test questions.

Terminology for Essay Test Questions

Thesis statement – A thesis statement is a strong, focused sentence that states the main point of an entire essay. The thesis statement often appears as the first sentence of the essay, but it may appear other places in the introductory paragraph.

Direction words – Direction words are words in test questions that signal a specific kind of answer that is required. *List, define, discuss, tell, describe, explain why,* and *when* are a few examples of direction words.

Organizational plan – An organizational plan is an outline, a hierarchy, a visual mapping, or a list of main ideas the writer intends to use in an essay to develop the thesis of the essay.

Five-paragraph format – The five-paragraph essay format consists of an introductory paragraph, three paragraphs in the body of the essay to develop three separate main ideas, and a concluding paragraph.

Main idea – A main idea is the most important point in a paragraph that the writer wishes to make about a topic. Each paragraph has only one main idea. The main idea supports or helps develop the thesis statement.

Supporting details – Supporting details are facts, examples, or definitions that are related to the subject of a paragraph. A paragraph has adequate development when sufficient details appear in the paragraph to support the main idea.

Appendix C.1

Week 1

What is Rational Emotive Behavioral Coaching?

As you begin to refine "self-directed actions needed to choose goals and to create, enact, and sustain actions toward those goals" as Barkley described, you may be surprised to realize that there are occasions in which you have all the planning, organizing, time management, studying techniques at your disposal but for some reason you still are not meeting your goals.

- Perhaps you may get yourself to sit at the computer, but you can't think of anything to write and the issue has very little to do with the level of detail in your outline and very much to deal with every idea seeming not good enough.

- Perhaps everyone says your professor gives hard tests. You're close to having a perfect G.P.A. so you can't let this class mess up your grade. So, you spend time taking great notes and studying days in advance for your test. But when you took the test, you "completely blanked" and ended up not doing so well.

- Perhaps you are a person that needs to keep busy with different academic and extracurricular activities and clubs but it's now mid-semester, midterms just ended, and you did well, but now, when in class you cannot seem to pay attention. You find that your mind wanders or you're often thinking about the next item on your "To-Do" list.

In all of the scenarios, there are hidden expectations that can make achieving a goal challenging or even impossible. Part of maintaining your commitment to accomplish your goals, is tackling the expectations and emotions related to them, that can unintentionally and unknowingly get in the way. To do this, we will look at problematic thoughts and emotions that underlie goal achievement.

Specifically, Dr. Albert Ellis proposed a theory called Rational Emotive Behavioral Theory which posits four irrational beliefs that correspond to emotional problems.

Irrational beliefs are evaluative ideas with the following characteristics:

1. Rigid or extreme
2. Inconsistent with reality
3. Illogical
4. Leads to dysfunctional consequences and unmet goals.

The four types of irrational beliefs include **Demands, Awfulizing, Low Frustration Tolerance,** and **Depreciation**. Holding these beliefs often lead to a range of problematic emotions including anxiety, depression, and anger.

On the other hand, rational beliefs are:

1. Flexible or non-extreme
2. Consistent with reality
3. Logical
4. Leads to functional consequences and achievement

Demand versus Preference

While creating goals helps us feel motivated, when we turn these goals into demands… things we *must, should, ought to, have to, need to unconditionally* accomplish, we hold an irrational belief.

Demands can be placed on:

- Oneself, e.g. "I must do well."
- Others, e.g. "You must pass me."
- World/Life, e.g. "Life must be fair."

To counteract demandingness, we can change the demanding attitude that we hold to a preferring attitude. Preferences are flexible ideas that people hold about how they would like things to be without demanding that they have to be that way.

Preferences can be placed on:

- Oneself, e.g. "I want to do well, but I don't have to do so."
- Others, e.g. "I want you to pass me, but unfortunately you don't have to do so."
- World/Life, e.g. "I want life to be fair, but unfortunately it doesn't have to be the way I want it to be."

Common Demand Words	Common Preference Words
• Must, Should • Ought to, Have to, Need to, Supposed to • Always, Every • Never, None • No way, Not at all	• Wish, Desire • Prefer, Would like • Choose • Aspire • Intend

Exercise 1

- Write a "P" by every preference and a "D" by every demand below.

1. __D___ I must never feel uncomfortable.
2. __P___ I would like to buy new clothes.
3. __P___ It would be great if she could pick up the tab.
4. __D___ He must control his temper.

5. __D___ You should love me because I love you.
6. __D___ I should know what I'm going to do with my life by now.
7. __P___ I would like to pass this test.
8. __P___ It would be nice to be appreciated.
9. __D___ I must never fail.
10. __P___ I hope to get all my work done this week.

Group Discussion

Generate a list of your current preferences and demands about your courses. What are some expectations you place on yourself? How do you feel when you think about those expectations?

Between Session Assignment (BSA)

- Continue the group discussion activity between session by tracking the number of demands you make in a day to help increase your awareness of the demanding language you use. Is it more or less than what you expected?

Appendix C.2

Week 2

Awfulizing and Low Frustration Tolerance

During the previous week you learned how to distinguish between demands and preferences. As we continue identifying different types of irrational beliefs, you will come to see how impactful language can be on how you think about your goals as well as the stressful moments in your life that may relate to them.

Awfulizing versus Anti-Awfulizing

Holding an awfulizing belief is when you take a situation that is very bad, and you tell yourself that it is awful or terrible and exacerbate the impact of the situation thereby making things worse than they already are.

This way of thinking stems from the demand that things must not be as bad as they are. For example:

- "I must do well *and it's terrible if I don't*"
- "You must treat me well *and it awful when you don't*"
- "Life must be fair *and it's the end of the world when it's not*"

Awfulizing beliefs are extreme in the sense that the person believes at the time one or more of the following:

1. Nothing could be worse;
2. The event in question is worse than 100% bad;
3. No good could possibly come from this bad event.

Awfulizing involves a downward comparison of suffering. The assumption being that everyone else's lives look easier and your circumstance appears to be the worst possible circumstance in existence.

To counteract awfulizing, we can change the belief by making upwards comparisons of our suffering. You will recognize how much worse your life could be and how fortunate you really are. This is done by creating non-extreme ideas that are derivatives from the preferences (not demands) we have created when our preferences aren't met.

For example (the preference is in red; the anti-awfulizing belief is italicized):

- "I want to do well but I don't have to do so*, it's bad if I don't do well but not terrible"*
- "I want you to treat me well but unfortunately you don't have to do so*, when you don't treat me well it's really unfortunate but not awful."*
- "I want life to be fair but unfortunately it doesn't have to be the way I want it to be*, if life is unfair that's very bad, but not the end of the world"*

Exercise 1

- List 10 non-awful and potentially beneficial aspects of a situation that brought about negative emotions.

Group Discussion

- Think about a recent negative event in your life related to your academic obligations. Share with your group how you thought and felt at the time. As each person shares, list the awfulizing language they use.
- After the person is done sharing take a moment to reword the statements to anti-awfulizing thoughts.
- Afterward, the group facilitator will ask each person, "As bad as this is, could you think of any ways that it could be worse?

Low Frustration Tolerance (LFT) versus High Frustration Tolerance (HFT)

Low frustration tolerance stems from the demand that things must not be as frustrating or uncomfortable as they are. For LFT, Albert Ellis coined the term the "I-Can't-Stand-It-itis." A person believes at the time one or both of the following:

1. I will die or disintegrate if the frustration or discomfort continues to exist;
2. I will lose the capacity to experience happiness if the frustration or discomfort continues to exist.

For example:

- "I must do well, *and I can't deal with it if I don't.*"
- "You must treat me well *and it's intolerable when you don't.*"
- "Life must be fair, *and I can't stand it when it's not."*

To counteract LFT, it would help to realize that a key ingredient for success in most life endeavors is perseverance. To fulfill your dreams and have the things you really want in life, you "must" keep pushing, persisting, and working at your goals in a Non-musterbatory way. This can be accomplished by gaining high frustration tolerance (HFT).

When you have HFT, you are able to persevere despite the discomfort of frustration. You are able to remind yourself of the long-term benefits if you stick it out until you reach your end goal. An HFT belief is then non-extreme because the person believes one or more of the following:

1. Will struggle if the frustration or discomfort continues to exist, but I will neither die nor disintegrate;
2. I will not lose the capacity to experience happiness if the frustration or discomfort continues to exist, although this capacity will be temporarily diminished;
3. The frustration or discomfort is worth tolerating.

For example (the preference is in red; the HFT belief is italicized):

- "I want to do well but I don't have to do so*, when I don't do well it is difficult to bear but I can bear it and it's worth bearing."*
- "I want you to treat me well but unfortunately you don't have to do so*. When you don't treat me well it's really hard to tolerate but I can tolerate it and it's worth it to me to do so."*
- "I want life to be fair but unfortunately it doesn't have to be the way I want it to be*, if life is unfair that's hard to stand but I can stand it and it is in my best interests to do so."*

Exercise 2

- Come up with three phrases that will help you to tolerate feeling uncomfortable, worried, or impatient when dealing with a daily hassle.
- Develop a quick one-liner that you can say to yourself to help you persist through obstacles. Try looking up quotes and memes online for inspiration.

Group Discussion

- Think about some of the academic tasks and course you have the most difficulty with.
- Identify and share with your group one of the LFT thoughts you have about the task or course.
- Share what are some of the benefits if you become proficient at **tolerating the inevitable frustration.** Ask for support from your group members to help lengthen your list.
- Afterward, the group facilitator will ask each person, "What are some of the benefits that you will reap when you really persevere and hang in there?

Between Session Assignment (BSA)

- Similar to the previous BSA, track the frequency of awfulizing and low frustration tolerance statements you make in a day to help increase your awareness of the language you use. Is it more or less than what you expected?

Appendix C.3

Week 3

Depreciation Beliefs

Rounding out the different types of irrational beliefs is our propensity to engage in depreciating ourselves, others, or the world and life circumstances. Depreciation beliefs are extreme ideas that people hold when their demands are not met.

This way of thinking often forms as an overarching label you place on yourself, others or the world and life. For example:

- "I must do well *and I'm a failure if I don't*"
- "You must treat me well *and you are a bad person if you don't*"
- "Life must be fair, *and the world is bad if it's not*"

Depreciation beliefs are extreme in the sense that the person believes at the time one or more of the following:

1. A person can legitimately be given a single global rating that defines their essence and one's worth is dependent upon conditions that change (i.e. my worth goes up when I do well and goes down when I don't do well)
2. The world can legitimately be given a single global rating that defines its essential nature and value of the world varies according to what happens within it (i.e. my value of the world goes up when something fair occurs and goes down when something unfair happens)
3. You can legitimately rate a person based on the basis of his or her discrete aspects
4. You can legitimately rate the world based on the basis of its discrete aspects

Unfortunately, depreciation beliefs often come to mind effortlessly. If you are not vigilant, you might find a habit of using depreciating language. Terms such as, "failure," "loser," "idiot," "jerk" are examples of depreciating words. In addition, depreciation can come in the form of language which segregates groups of people and implies that one group is inferior due to their grouping (i.e. "Drivers who don't use their indicator are idiots.")

To counteract depreciation, we can develop acceptance for oneself, others and the world. Acceptance are non-extreme ideas that people hold when their preferences are not met. For example (the preference is in red; the acceptance belief is italicized):

- "I want to do well but I don't have to do so*, when I don't do well, I am not a failure, I am a fallible human being who is not doing well on this occasion."*
- "I want you to treat me well but unfortunately you don't have to do so*, when you don't treat me well you are not a bad person, rather a fallible human being who is treating me poorly"*
- "I want life to be fair but unfortunately it doesn't have to be the way I want it to be*, if life is unfair it is only unfair in this respect and doesn't prove that the world*

is a rotten place. The world is a complex place where many good, bad, and neutral things happen."

These examples are all non-extreme in the sense that the person believes one or more of the following:

1. A person cannot legitimately be given a single global rating that defines their essence and one's worth is not dependent upon conditions that change (i.e. my worth stays the same whether or not I do well)
2. The world cannot legitimately be given a single global rating that defines its essential nature and the value of the world does not vary according to what happens within it (i.e. the value of the world stays the same whether fairness exist at any given time or not)
3. It makes sense to rate discrete aspects of a person and of the world, but it does not make sense to rate a person or the world on the basis of these discrete aspects

Exercise 1

- List 5 unhealthy labels you have called somebody else and 5 you have called yourself.
- For each label, think about something that might be true that would negate the label. For example, if you picked "idiot" for a person, a reason this label might not be true is that this person is very capable in other areas of life.

<u>Group Discussion</u>

- Think about a recent negative event in your life related to your academic obligations. Note some of the depreciating beliefs you had about yourself, others i.e. professors, or the world/life.
- Share with your group how you thought and felt at the time. As each person shares, think about something that might be true that would negate the label.
- Afterward, the group facilitator will discuss the difference in negating the label versus the person's experience, and healthy negative emotions about it.

Between Session Assignment (BSA)

- Similar to the previous BSA, track the frequency of depreciating statements you make in a day to help increase your awareness of the language you use. Is it more or less than what you expected?

Appendix C.4

Week 4

Academic Burnout

During the course of this program, you will be introduced to techniques to help you to tackle these very common irrational beliefs as they come up when taking classes and completing course work. The tricky thing about irrational beliefs is that we often do not think of them as irrational in the moment that they emerge. In fact, they feel quite rational. So rational that you may find yourself responding to these beliefs in a way that feels completely reasonable but if you take a closer look, you will find that you end up drifting further away from your goals.

Statements like, “I have no clue what I’m going to write about for that paper, I’ll just figure it out later,” may seem benign but for some students, avoidance may be underlying this deferment of the assignment.

As these situations can be very subtle, we will first spend a moment thinking about some highly common academic problems and how and when they may present for you.

Academic Burnout

Student burnout refers to a psychological syndrome which occurs in the form of an exhaustion state due to coursework demand, a cynical and detached attitude toward the college degree, and a feeling of low efficacy and academic achievement.

Signs of Physical and Emotional Exhaustion:

- **Chronic fatigue.** In the early stages, you may feel a lack of energy and feel tired most days. In the latter stages, you feel physically and emotionally exhausted, drained, and depleted, and you may feel a sense of dread about what lies ahead on any given day.
- **Insomnia.** In the early stages, you may have trouble falling asleep or staying asleep one or two nights a week. In the latter stages, insomnia may turn into a persistent, nightly ordeal; as exhausted as you are, you can't sleep.
- **Forgetfulness/impaired concentration and attention.** Lack of focus and mild forgetfulness are early signs. Later, the problems may get to the point where you can't get your work done and everything begins to pile up.
- **Physical symptoms.** Physical symptoms may include chest pain, heart palpitations, shortness of breath, gastrointestinal pain, dizziness, fainting, and/or headaches (all of which should be medically assessed).
- **Increased illness.** Because your body is depleted, your immune system becomes weakened, making you more vulnerable to infections, colds, flus, and other immune-related medical problems.

- **Loss of appetite.** In the early stages, you may not feel hungry and may skip a few meals. In the latter stages, you may lose your appetite altogether and begin to lose a significant amount of weight.
- **Anxiety.** Early on, you may experience mild symptoms of tension, worry, and edginess. As you move closer to burnout, the anxiety may become so serious that it interferes with your ability to work productively and may cause problems in your personal life.
- **Depression.** In the early stages, you may feel mildly sad and occasionally hopeless, and you may experience feelings of guilt and worthlessness as a result. At its worst, you may feel trapped and severely depressed and think the world would be better off without you. (If your depression is to this point, you should seek professional help immediately.)
- **Anger.** At first, this may present as interpersonal tension and irritability. In the latter stages, this may turn into angry outbursts and serious arguments at home and on campus. (If anger gets to the point where it turns to thoughts or acts of violence toward family, friends, classmates, professors, coworkers, etc., seek immediate professional assistance.)

Signs of Cynicism and Detachment:

- **Loss of enjoyment.** At first, loss of enjoyment may seem very mild, such as not wanting to go to class or being eager to leave. Without intervention, loss of enjoyment may extend to all areas of your life, including the time you spend with family and friends. For courses, you may try to avoid projects and figure out ways to escape work altogether.
- **Pessimism.** At first, this may present itself as negative self-talk and/or moving from a glass-half-full to a glass-half-empty attitude. At its worst, this may move beyond how you feel about yourself and extend to trust issues with family, friends, classmates, professors etc. and a feeling that you can't count on anyone.
- **Isolation.** In the early stages, this may seem like mild resistance to socializing (i.e., not wanting to go out to lunch; closing your door occasionally to keep others out). In the latter stages, you may become angry when someone speaks to you, or you may come in early or leave late to avoid interactions.
- **Detachment.** Detachment is a general sense of feeling disconnected from others or from your environment. It can take the form of the behaviors described above and result in removing yourself emotionally and physically from your class and other responsibilities. You may call in sick often, stop returning calls and emails, or regularly come in late.

Signs of Ineffectiveness and Lack of Accomplishment:

- **Feelings of apathy and hopelessness.** This is similar to what is described about depression and pessimism. It presents as a general sense that nothing is going right or nothing matters. As the symptoms worsen, these feelings may become immobilizing, making it seem like "what's the point?"

- **Increased irritability.** Irritability often stems from feeling ineffective, unimportant, useless, and an increasing sense that you're not able to do things as efficiently or effectively as you once did. In the early stages, this can interfere in personal and professional relationships. At its worst, it can destroy relationships and careers.
- **Lack of productivity and poor performance.** Despite long hours, chronic stress prevents you from being as productive as you once were, which often results in incomplete projects and an ever-growing to-do list. At times, it seems that as hard as you try, you can't climb out from under the pile.

Exercise 1

- Think about signs of academic burnout and identify some irrational beliefs that may be related. What are some demands, labels, awfulizing and LFT beliefs and expectations?
- Are there any that relate to your own experiences in school? How have you managed them?

Group Discussion

- Think about a recent negative event in your life related to your academic obligations. What negative emotions were you experiencing?
- Refer back to the irrational beliefs you identified about yourself, others, and/or the world/life during previous weeks. What are some patterns you see in how you experience and cope with negative emotions toward academic responsibilities?

Between Session Assignment (BSA)

- Continue the group discussion activity by identifying another negative event in your life related to your academic obligations and answer the discussion questions.

Appendix C.5

Week 5

Procrastination

In addition to academic burnout, another highly common academic problem students face is that of procrastination. What you will find in these discussions about prevalent problems is that procrastination is a highly prevalent issue that people experience regardless of role, age, and academic or professional status.

Steel (2007) found in his research that between 80% and 95% of students procrastinate, of which 50% did so consistently and problematically.

Generally, the research shows that procrastination is associated with an intolerance of unpleasant internal experiences that include fearing failure, negative evaluation and an intolerance for frustration. These unpleasant experiences can all be understood as a manifestation of being inflexible… essentially maintaining rigid demands we place on ourselves.

Researchers have identified three key areas in which people tend to procrastinate:

1. Personal maintenance in which one puts off healthcare, personal cleanliness, housework, finances, personal administration and upkeep of property.

2. Self-development in which one puts off managing job and social opportunities, personal interests, educational advancement, and finding partners.

3. Honoring commitments to others in which one hopes that earlier promises made will be forgotten by others because what was promised now seems burdensome to undertake.

While we focus on procrastination in the area of educational advancement, it is worth reflecting on how your personal tendencies to procrastinate may or may not be reflected in other non-academic areas of your life.

Sapadin & Maguire (1996) have identified six main procrastination styles:

1. **The Perfectionist**: You're overly concerned with not meeting high expectations; you work so hard you never finish (or, sometimes, never start). You might be reluctant to start or finish a task in case it proves to be less than perfect and therefore you are seen to fail in your own and/or others' eyes.

2. **The Dreamer**: You're great at planning and scheming but frustrated by the practical reality of sitting down to do hard work. You may find that you want life to go smoothly and you avoid difficult challenges.

3. **The Worrier**: "What ifs" get in the way. You avoid making decisions, resist change, and are fearful about the unfamiliar. You may hold little confidence in your ability to make decisions or tolerate discomfort.

4. **The Crisis-Maker**: You enjoy the last-minute adrenaline rush and tell yourself you work best under pressure. You have a low threshold for boredom in life. Leaving things until the last minute often means that they don't get done on time or opportunities are missed.

5. **The Defier**: You rebel against external deadlines and expectations. You become resistant and argumentative towards others' instructions or suggestions because this means you are being told what to do or other people are trying to control you. You might be overt about this, or you might exhibit a more passive-aggressive kind of defiance. A form of passive-aggressiveness defiance might be saying 'yes' to others' request when the you really mean 'no' because you are not prepared to take on the responsibility of doing it within the allotted time.

6. **The Overdoer**: There's too much on your plate because you can't say no or set appropriate boundaries or prioritize responsibilities. As a result, there's never enough time to do it all leading to some work not being done or done poorly or finished late.

Exercise 1

- In thinking about the procrastination styles, identify some irrational beliefs that may be related. What are some demands, labels, awfulizing and LFT beliefs and expectations?
- Which relate to your own experiences in school? How have you managed them?

Group Discussion

- Think about a recent academic assignment/task that you have delayed working on or on that brings you the most recognizable discomfort. What do you say to yourself when you think about this assignment? What emotions do you experience when you say these things to yourself? Would you consider these thoughts helpful/hurtful?

Between Session Assignment (BSA)

- Using the thoughts about assignments that you identified in group, determine which types of beliefs you are holding about the assignment: Demands, Awfulizing, LFT, or Depreciation

Appendix C.6

Week 6

Creating a Problem List and Goal Setting

Creating a Problem List

Last week, you may realize that the descriptions of common signs of academic burnout, are problems that sometimes manifest in ways that may not always be acutely intense or even clear to you at first. You may simply attribute it to having an "off day" or not sleeping well. The key here is that when these problems become chronic in the frequency that they come up, the duration that you are upset, or the intensity in which you are upset it becomes essential to look at how you are coping. Furthermore, these are problems that can be addressed at all levels of severity and may require additional professional help for more severe cases.

In terms of working with less severe problems let's begin by creating a problem list – a list of problems you want to tackle. To create this list:

1. Think of the situations in which you experience the problem
    a. For example, "I am taking speech class with required presentations and speaking in public is difficult for me."
2. Identify what about the situation is a problem for you (consider the theme). You may have already expressed it in the first step.
    a. For example, "speaking in public is difficult for me"
3. Identify an unhealthy emotion you experience when you are in the situation
    a. For example, "Anxiety"
4. Identify behaviors that are related to the problem
    a. For example, "to deal with my anxiety, I overprepare my material."
    b. For example, "to deal with my anxiety, I keep pushing back working on my presentation."

When taken together, the problems would sound like, *"I am taking speech class with required presentations and speaking in public is difficult for me. I feel anxious and cope with my anxiety by [overpreparing] or [pushing back working on my presentation].*

Exercise 1

- For each example, identify the situation, theme, unhealthy negative emotion, and behavior.
    - "Whenever I am stuck in a traffic jam and blocked from achieving my goals, I feel unhealthily angry, and shout obscenities."
    - "Whenever my mother criticizes me, I think that I have done something wrong and feel guilty. I then beg for her forgiveness."

- "When I begin to feel anxious, I think that I am beginning to lose control and become more anxious. Then, I do whatever I can to gain an immediate sense of control."

Goal Setting

You want to set realistic goals with respect to each of the problems you choose to tackle. This can be done by considering the following:

1. Keep the type of situation the same
2. Keep the theme the same
3. Change your unhealthy negative emotion to a healthy negative emotion. This is important because it helps you deal with negative situations in a healthy but realistic way.
4. Change your unhelpful behavior to a more helpful one. This is also important in that it helps you make a decision as to what behaviors would be more helpful for you to engage in when faced with negative situations.

Exercise 2

- Make a list of 2 – 3 problems related to your academic abilities and course requirements. Consider what you know about signs of academic burnout and procrastination.
- Use the problem list guidelines to guide how the statement is phrased.
- For each problem, create a corresponding goal following the goal setting guidelines.

<u>Group Discussion</u>

- Think about a recent negative event in your life related to your academic obligations. What negative emotions were you experiencing? Refer back to the irrational beliefs you identified about yourself, others i.e. professors, or the world/life during previous weeks. What are some patterns you see in how you experience and cope with negative emotions?
- For this problem discuss a goal you would like to set for yourself to manage it and problems like it.

Between Session Assignment (BSA)

- Continue the group discussion activity by reviewing the problems that you listed and the corresponding goals.

Appendix C.7

Week 7

Learning the *A, B, C* Approach

By this point you have spent a considerable amount of time self-reflecting on how you experience and process some of your most challenging academic moments. While you have gained increased awareness of what your struggles are (and hopefully also your strengths), you may still be asking yourself, "What next?" As in, after you have identified the problems and the goals, how do you begin working toward these goals?

For this module, we will be introducing and practicing the steps you can take to begin addressing these problems and work toward your goals.

- 1st – Select a specific example of one of your problems to work on.
    - This may be a current, recent, typical, or vivid example or even a possible future example.

- 2nd – Describe the situation
    - Be factual about the situation and describe it objectively.

- 3rd – Identify the emotional and behavioral consequence (C)
    - Describe how you felt and/or acted (or felt like and/or acted like) in that situation.
    - You may find that you experience a variety of negative emotions. However, which is the major/most unhealthy negative emotion… the one that is either most problematic for you to deal with or the one that keeps you from accomplishing the goal or completing the task.

- 4th – Identify the critical activating event (A)
    - Identify the aspect of the situation that you were most disturbed about.

- 5th – Identify your irrational beliefs (iBs) about your (A)

- 6th – Identify the rational alternative (rBs) to your irrational beliefs (iBs)

- 7th – Set your emotional and behavioral goal
    - Ask yourself, *"What would be a healthy way to feel and behave when faced with the problem."* Choose an emotion that is a healthy negative emotional alternative to the unhealthy negative emotion that you previously identified.
    - Also choose a healthy behavior that is constructive as an alternative to the behavioral consequence that you previously listed.

- 8th – List your belief goal
    - Of the rational alternative beliefs that you previously listed, which would help you achieve your emotional and behavioral goals?

Example

1. Situation: *I received an email to see my boss at the end of the workday.*
2. C (Consequence)
    a. Emotional: *Anxiety*
    b. Behavioral: *I felt like running away.*
3. Critical A (Activating Event): *My boss will criticize my work.*
4. B (Beliefs) (*note steps 5 and 6 have been condensed for this example)
    a. Demand → Preference
        i. *My boss must not criticize my work → I don't want my boss to criticize my work but I'm not immune from such criticism.*
    b. Awfulizing → Anti-awfulizing
        i. *It would truly be awful if my boss criticized my work → If my boss criticized my work, it would be bad but certainly not awful.*
    c. LFT → HFT
        i. *I couldn't bear it if my boss criticized my work → It would be hard for me to bear if my boss criticized my work but I could bear it and it would be worth bearing because it would help me to overcome my oversensitivity to criticism.*
    d. Depreciation → Acceptance
        i. *If my boss criticized my work, it would prove that I was a stupid person. → If my boss criticized my work, it would not prove that I was a stupid person. It would prove that I was a fallible human being whose work may not have been good enough on that occasion.*
5. Emotional and Behavioral Goal
    a. Emotional goal: Concern
    b. Behavioral goal: I would feel like attending the meeting with my boss to face the music if he wants to criticize my work.
6. Belief goal: I don't want my boss to criticize my work, but I am not immune from such criticism. His criticism would not make me a stupid person. It would prove that I was a fallible human being whose work may not have been good enough on that occasion.

Group Discussion

- Using the problem list that you created in the previous module, choose one and follow steps 1 – 8. You may want to use the problems you discussed during the previous meeting.
- Group leader will facilitate the discussion by encouraging each participant to share each step and offer validation, feedback, etc.

Between Session Assignment (BSA)

- Continue the group discussion activity by completing steps 1 – 8 for another problem on your problem list.

Appendix C.8

Weeks 8 - 10

Questioning Beliefs

For this module and groups sessions going forward, coaches will phase out of step-by-step guides and employ disputation strategies taught in training. The discussion below serves as guidance on introducing some fundamental disputation strategies. Coaches will build upon this during group sessions and collaborate with students in planning their BSA.

Fundamentally, there are three questions you want to ask yourself when questioning your beliefs.

1. Is it true/false?
2. Is it logical/illogical?
3. Is it helpful/unhelpful?

This is done for both your irrational beliefs and your rational alternatives to pit these beliefs against one another to help you understand why your unhealthy beliefs are unhealthy and why your healthy beliefs are healthy.

There are a variety of questions that you can use to evaluate your beliefs. Some include:

- Is what I believe helping me to reach my goal? Is it serving me? Is it serving others? Is there a cost or toll to maintain my belief?
- Which of the following beliefs leads to largely good results and which leads to largely poor results and why?
- What evidence is there for the idea that I believe? How good is this evidence? What evidence is there against this belief?
- Does it have to follow that because a particular event happened that my idea is the only logical explanation/conclusion? Does it have to follow that because I think something, it must be true? Or because I want for something to be different than it is, does that mean that it HAS to be the way I want it to be?

Another strategy that can help you understand why your unhealthy beliefs are unhealthy and why your healthy beliefs are healthy, is to list the things about the problematic situation that you can change and the things that you cannot.

- How do you feel when you focus on the things outside of your control?
- How do you feel when you focus on the things inside your control?

Also, assess your commitment to changing your belief by asking a question such as:

- Which belief do you want to strengthen, and which do you want to weaken and why?

As you answer these questions, you will develop an understanding of why your unhealthy beliefs are unhealthy and why your healthy beliefs are healthy. This is called **intellectual insight** because while you understand this point, you do not yet have deep conviction in it that this insight will influence/impact your feelings and behavior. Thus, through practice in strengthening your conviction in your rational belief and weaken your conviction in your irrational belief, you will develop an emotional insight which has a great impact on your feelings and behavior.

As Dryden (2011) says, intellectual insight into your irrational and rational beliefs will help you 'talk the talk', but when you have emotional insight into these beliefs, you can 'walk the talk'.

The following activities are meant to be introduced to group members to be practiced as routine between session assignments and reviewed in session. Coaches will introduce the activities using a self-disclosed example they have prepared and approved in supervision.

Activity 1 (excerpt from Dryden (2011))

Instructions on how to teach your client to complete a written attack-response form

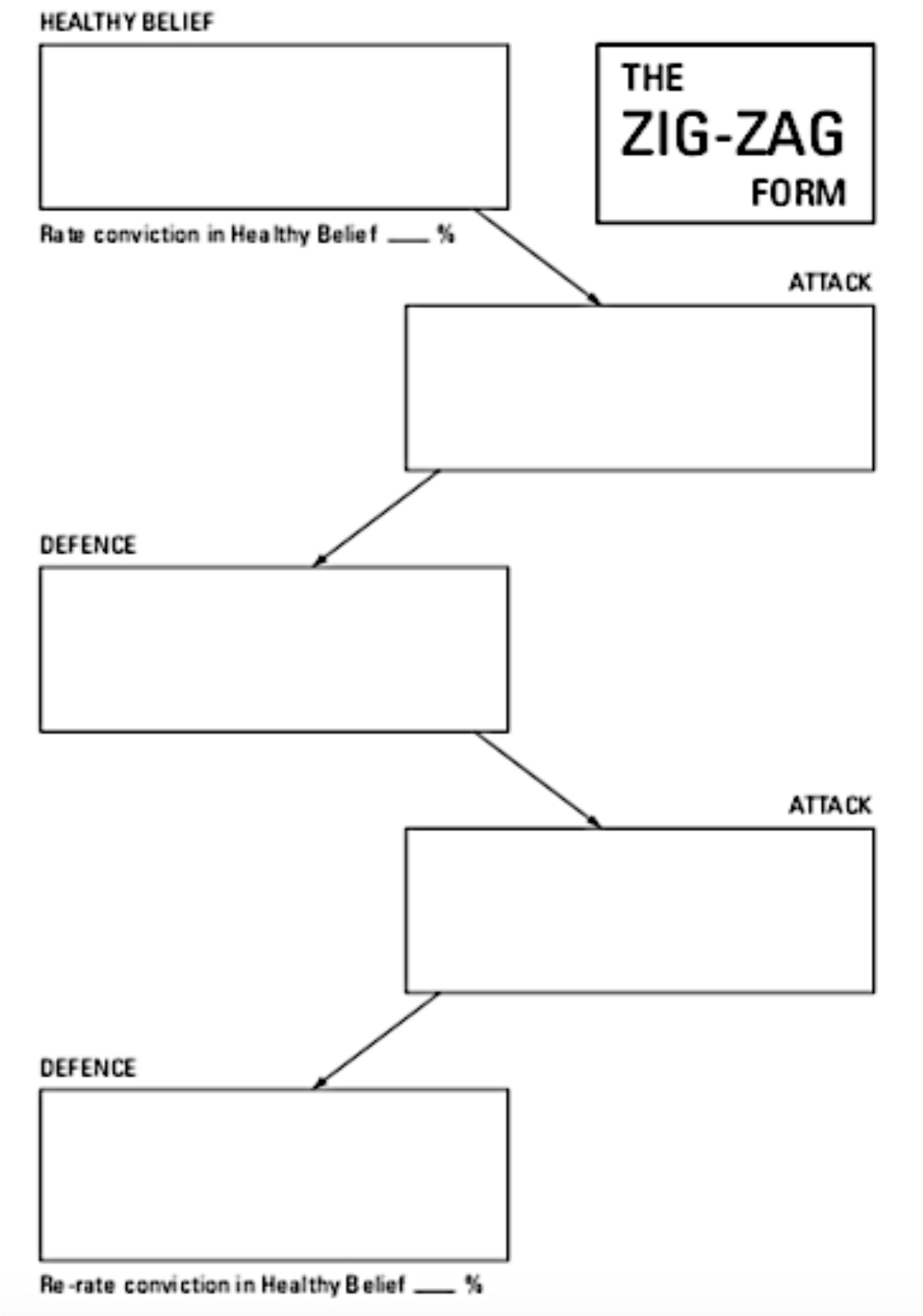
1. Ask student to write down her specific rational belief on a piece of paper.
2. Ask her to rate her present level of conviction in this belief on a 100%-point scale with 0% = no conviction and 100% = total conviction (i.e. student really believes this in her gut and it markedly influences her feelings and behavior). Ask her to write down this rating under her belief.
3. Ask student to write down an attack on this rational belief. Her attack may take the form of a doubt, reservation or objection to this rational belief. It should also contain an explicit irrational belief (e.g. demand, awfulizing belief, discomfort tolerance belief or depreciation belief). Suggest that she make this attack as genuinely as she can. The more it reflects what she believes, the better.
4. Then tell the student to respond to this attack as fully as she can. It is really important that she responds to each element of the attack. In particular, make sure that she responds to irrational belief statements and also to distorted or unrealistic inferences framed in the form of a doubt, reservation or objection to the rational belief. Encourage her to do so as persuasively as possible and to write down her response.
5. Tell the student to continue in this vein until she has answered all of her attacks and cannot think of anymore. Make sure throughout this process that she keeps the focus on the rational belief that she is trying to strengthen.

   If the student finds this exercise difficult, suggest that she makes it easier by making her attacks gentle at first. Then, when she finds that she can respond to these attacks quite easily, suggest that she begins to make the attacks more biting. Ask her to work in this way until she is making really strong attacks. Suggest that when she makes an attack, she does so as if she really wants to believe it. And

when she responds, urge her to really throw herself into it with the intention of demolishing the attack and of strengthening her conviction in her rational belief.

Remind the student that the purpose of this exercise is to strengthen her conviction in her rational belief, so it is important that she stops only when she has answered all of her attacks. If she makes an attack that she cannot respond to, suggest that she seek support from her coach.

6. When the student has answered all of her attacks, ask her to re-rate her level of conviction in her rational belief using the 0%–100% scale as before. If the student has succeeded at responding persuasively to her attacks, then this rating will have gone up. If it has not increased or it has only done so a little, discuss this with her so that you can both discover what is preventing an increase in rational belief conviction.



Willson & Branch, 2006

Activity 2 – excerpted from Dryden (2011)

Rational-emotive imagery (REI) is an imagery method designed to help the student to practice changing his specific irrational belief to its rational equivalent while simultaneously imagining what he is most disturbed about in the specific situation in question. Help the student to understand that this method will help him to strengthen his conviction in his new rational beliefs.

Encourage the student to practice REI several times a day and encourage him to aim for 30 minutes of daily practice.

<u>Instructions for using Albert Ellis's version of Rational-emotive imagery (REI) (Ellis & Maultsby, 1974).</u>

1. Ask the student to take a situation in which he disturbed himself and then ask him to identify the aspect of the situation he was most disturbed about.
2. Ask the student to close his eyes and imagine the situation as vividly as possible and to focus on the adversity at 'A'.
3. Encourage the student to allow himself to experience fully the UNE that he felt at the time while still focusing intently on the 'A'. Ensure that the student's UNE is one of the following: anxiety, depression, shame, guilt, hurt, unhealthy anger, unhealthy jealousy, unhealthy envy.
4. Ask the student to really experience this disturbed emotion for a moment or two and then ask him to change his emotional response to an HNE, while all the time focusing intently on the adversity at 'A'. Ask him not to change the intensity of the emotion, just the emotion itself. Thus, if his original UNE was anxiety, encourage him to change this to concern; if it was depression, have him change it to sadness. Ask him to change shame to disappointment, guilt to remorse, hurt to sorrow, unhealthy anger to healthy anger, unhealthy jealousy to healthy jealousy and unhealthy envy to healthy envy. Again, ask him to change the UNE to its healthy equivalent, but to keep the level of intensity of the new emotion as strong as the old emotion. Suggest that he keep experiencing this new emotion for about 5 minutes, all the time focusing on the adversity at 'A'. If he goes back to the old UNE, ask him to bring the new HNE back.
5. At the end of 5 minutes, ask the student how he changed his emotion.
6. Make sure that the student changed his emotional response by changing his specific irrational belief to its healthy alternative. If he did not do so (if, for example, he changed his emotion by changing the 'A' to make it less negative or neutral or by holding an indifference belief about the 'A'), suggest that he does the exercise again and keep doing this until he has changed his emotion only by changing his specific unhealthy belief to its healthy alternative.

REBT REI Self-Help Form

1. Identify a specific situation in which you disturbed yourself.

2. Close your eyes and vividly imagine the situation and focus on the aspect of the situation that you were most disturbed about (i.e. the critical A).

3. Allow yourself to really experience the unhealthy negative emotion (UNE) that you felt at the time while still focusing intently on the critical A. Ensure that your unhealthy negative emotion is one of the following: anxiety, depression, shame, guilt, hurt, unhealthy anger, unhealthy jealousy, unhealthy envy.

4. Really experience concern disturbed emotion for a moment or two and then change your emotional response to a healthy negative emotion, all the time focusing intently on the critical A within the chosen situation. Do not change the intensity of the emotion, just the emotion. Thus, if your original unhealthy negative emotion was anxiety change this to concern; if it was depression change it to sadness, hurt to sorrow, unhealthy anger to healthy anger, unhealthy jealousy to healthy jealousy, and unhealthy envy to healthy envy. Again, change the unhealthy negative emotion to its healthy alternative but keep the level of intensity of the new emotion equivalent to the old emotion. Keep experiencing this new emotion for about five minutes, all the time focusing on the critical A. If you go back to the old unhealthy negative emotion, bring the new healthy negative emotion back.

5. At the end of five minutes ask yourself how you changed your emotion.

6. Make sure you changed your emotional response by changing your specific unhealthy belief to its healthy alternative. If you did not do so (if, for example, you changed your emotion by changing the critical A to make it a less negative or neutral or by holding an indifference belief about the critical A), do the exercise again and keep doing this until you have changed your emotion only by changing your specific unhealthy belief to its healthy alternative.

Dryden, 2001

Appendix C.9

Weeks 11 and 12

Goal Evaluation

For the last two modules in this program, coaches will help students evaluate the outcome of the work they have done on themselves and how they can maintain their gains.

As with any goal, you want to spend some time self-evaluating how you are doing along the way. Learning and practicing these new skills is only as good as the positive, adaptive, healthy outcomes you create over time. You are in fact becoming your own coach.

First, ask yourself…

- Have I achieved my goals?
- If so, how can I generalize it to other experiences in my life?
- If, not, what do I need to do to achieve it?
- How might I stop myself from doing what I need to do to achieve my goal?
- What can I do to overcome these obstacles?

When answering these questions, think about the difference between the terms, "knowing" and "believing". That is, you may "know" what is the more helpful way to think that will help you achieve your goals, but you may/may not "feel" *that way yet* (as in, you don't feel the helpful emotion, positive or negative, that aligns with the helpful/rational beliefs).

If face with this issue of "knowing" and not "believing" consider asking yourself questions like:

- Do I need to learn new skills?
- Are there any other issues that I need to consider about this problem?
- Have I relapsed and am I continuing to disturb myself on this issue?

Excerpted from Ellis (2002) *Overcoming Resistance*

People have considerable will power when they practice the following:

1. They definitely *decide* to change their thinking, feeling, and behaving from self-defeating to self-helping ways.
2. They strongly *determine* to implement their decisions to change.
3. They gather information on possible ways of changing. They figure out this information themselves, model themselves after others who have changed, or

read/hear about methods of changing, and otherwise inform themselves regarding some of the most helpful techniques for doing so.

4. They take their decision to change, their determination to change, and their information gathered on changing and act on them—without persistent action over a period of time, they have *will* but no *will power*. *Will* largely consists of deciding, determining, and finding information about changing, but this kind of will is fairly powerless without concerted and consistent acting in the direction of change.
5. After people have actually begun to make changes, *will power* consists of continuing this process by again strongly resolving to change, getting information favoring change, and ACTING on it.
6. This process of having *will* and *will power*, never really stops, since maintaining change is often just as difficult as achieving it in the first place, and requires, continual, steady work and practice.

All in all, what this means is that:

A. As a human, you have a tendency to backslide and experience lapses in your progress
B. Maintenance requires work: Persistence
C. You need to be willing to learn from your past experiences
D. You need to be willing, accepting, and prepared to acquire new skills

Group Discussion

- Each participant should practice answering these questions for themselves using a problem they have worked on throughout the program.
- Group leader will facilitate the discussion by encouraging each participant to share and offer validation, feedback, etc.

Between Session Assignment (BSA)

- Continue the group discussion activity between session by planning/implementing one of the new skills identified during the group discussion for a goal that has not been entirely attained.
- Create your own motivational speech.
    - What's your new philosophy?
    - Visualize yourself holding this new philosophy strongly and what you would be doing and feeling.
    - How does this "you" differ from the "you" who held the old way of thinking?

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