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From College Student to Change Agent: A Triadic Model of Self-Efficacy, Attribution, and Appraisal

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Beyond their newfound emancipation and opportunities for self-discovery, college students in the young adult stage of development are expected to achieve balance between their autonomous new world and the impending pressures of postgraduation life. The college student must not only reconcile issues related to identity formation, goal pursuits, and career exploration, but is expected to begin the process of identifying and developing the skills required to address salient social themes. How students establish competency beliefs, negotiate controllability over future outcomes, and appraise challenges have deep implications in their capacity to discover their social change "voice." The following discussion proposes a triadic framework that highlights the inextricable connections between self-efficacy, attribution, and appraisal as they relate to the capacity of college students to effect social change. As future leaders, role models, and visionaries preparing to transition into an increasingly complex world, an exigent need exists to create opportunities for (a) enhancing the self-efficacy beliefs that underpin the capacity to transform perceptions, (b) formulating attributions that foster perceived controllability over objectives, and (c) promoting appraisals that induce the motivation to approach challenges. Perspectives discussed in this paper have implications for students, parents, educators, and administrators to consider best practices for cultivating self-efficacy, attribution, and appraisal abilities that will facilitate future social change agency long after the college years.

Keywords: *affective, appraisal, attribution, biopsychosocial, cognitive, college, emotional, environment, health, physical, self-efficacy, social change, stress, student, well-being*

Introduction

The young adult period of development represents a complex series of biopsychosocial transitions. With perceptual, affective, and contextual stimuli converging with a cascade of neurochemical events (Andersen, 2003), such intersections are transformative and have profound implications for shaping one's worldview. In general, young adulthood represents a period of good physical health (Zastrow & Kirst-Ashman, 2009) when ongoing opportunities for identity formation, intimacy, and commitment are salient (Erikson, 1975). Young adulthood is also the period during which one develops an enhanced awareness of his/her life goals and establishes a viable plan to navigate goal pursuits (Zastrow & Kirst-Ashman, 2009). Personality development enters a robust phase (Sanford, 1956), during which time adolescent ideology is overtaken by the ethical and moral sensibility required for survival as an adult (Erikson, 1975).

Given the influence of environment on young adult development, it can be argued that nowhere are the aforementioned transitions more evident than in the college milieu. Beyond autonomy, self-exploration, and parental emancipation (Arkoff et al., 2006), the college experience establishes a

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template for future orientation, career directionality, and social awareness (Kuo, Hagie, & Miller, 2004)—an embryonic period for exploring the ideals that have enduring ideological value to the student. Through self-exploration and social learning, the student can begin to identify resonant social issues and determine how he or she can transform thought process to alter social systems for the benefit of the greater good; however, the student may have yet to cultivate the competence and mastery skill sets, sense of controllability, or adaptive perceptions required to effect change. Here, Antonovsky's (1998) concept of coherence applies, given the growth process that allows students to see "the world as comprehensible, manageable, and meaningful"… and to "facilitate the selection of appropriate and situationally efficacious resources and behaviors" (p. 12).

On the developmental continuum, it can be assumed that college students find themselves in a challenging, if not precarious, position. Here, the student must successfully integrate a barrage of social psychological input (e.g., interpersonal dynamics, inner conflict, emergent feelings) derived from his or her world of newness, wonder, and enlightenment. Simultaneously, an implicit expectation suggests that the student begins to consider how he or she might be able to transform the perceptions that induce positive social change. With career indecision (Ng & Feldman, 2009), career–marriage balance (Barnett, Gareis, James, & Steele, 2003), identity formation (Faye & Sharpe, 2008), economic burden (Weise, 2012), skill competency development (Wood, 2004), and the psychosocial transition between academic and vocational settings (Yang & Gysbers, 2007) cited as salient challenges for graduating students, a fundamental assumption suggests that they, at some juncture, must abandon the more carefree lifestyles of their youth and cross the threshold into accountability, emergent adulthood, and social responsibility.

The notion of graduation reflects a seemingly dichotomous reality for college students: a celebratory rite of passage that is counterbalanced by the gravity of decisional conflict, identity uncertainty, and financial duress—sobering realities for young adults preparing for real-world entry. It is here that the competency beliefs, realistic outcome expectancies, and adaptive appraisals of the challenges that mediate progress toward a greater good prove to be invaluable assets. Failure to take a proactive approach to instilling self-efficacy beliefs, realistic attribution perceptions, and adaptive appraisals could potentially impede the ability of students to (a) undertake objectives with attitudes of competence and mastery, (b) internalize locus of control over future outcomes, and (c) formulate appraisals that promote the approach—not avoidance—of perceived challenges. As the student walks across the graduation platform, the aforementioned characteristics not only play a significant role in his or her ability to effect social change, but to adapt, evolve, and thrive in an increasingly complex world.

The following discussion highlights the alignment of (a) self-efficacy theory (SET; Bandura, 1997), (b) attribution theory (ATT; Weiner, 1986; 1992), and (c) cognitive appraisal theory (CAT; Smith & Lazarus, 1993) and their relevance to mastery/competency beliefs, locus of control, and coping potential, respectively, in young adult college students. In addition, a discussion on the interconnectivity of self-efficacy, attribution, and appraisal will be combined with a brief literature review that serves to highlight the psychosocial relevance of the variables of interest to young adult-aged college students.

Further, a summary of questions draws attention to the emergent self-efficacy, attribution, and appraisal needs of college students in the 21st century. Given the potential of these constructs to promote social change, a subsequent discussion underscores the importance of cultivating the self-efficacy, attribution, and appraisal skills that support future leadership and service roles.

Finally, discussions on concluding perspectives and potential future directions will serve to inspire parents, educators, administrators, and students to discover, explore, and promote the values that drive social change efforts beyond the walls of academia.

Theoretical Framework

The following section highlights the triadic framework characterized by SET, ATT, and CAT as these theories correspond to self-efficacy, attribution, and appraisal in social change skill development. Historical backdrops provide a bridge to contemporary applications for each theory. Figure 1 delineates the psychosocial attributes that underpin each theory and the critical role of perception in the development of each construct.

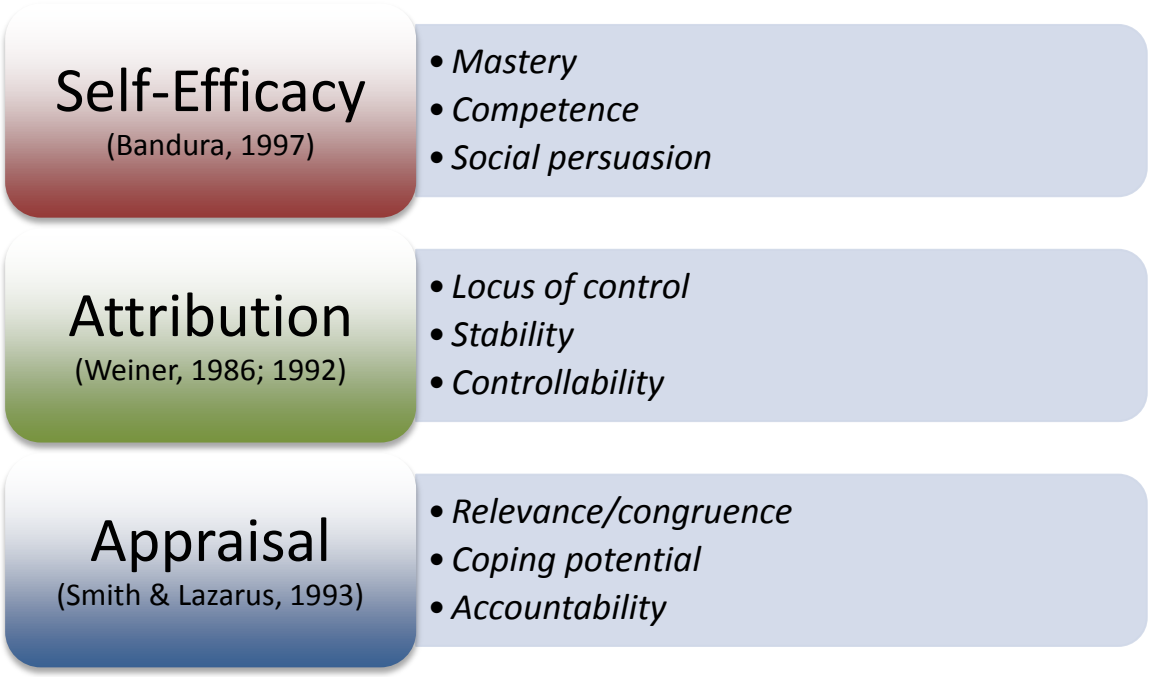

Figure 1: *The Perceptual Drivers of Self-Efficacy, Attribution, and Appraisal*

Self-Efficacy Theory

Bandura (1997) discussed self-efficacy as the perceived capacity to carry out specific actions in an effort to accomplish specific objectives. A core component of social cognitive theory (Bandura, 1986), self-efficacy is essential to the belief systems that underpin the perceived capacity to manage the myriad challenges associated with the change process (Bandura, 1986; 1997). Bandura (1997) cited experience, modeling, physiological events, and social persuasion as having the greatest mediating influence on self-efficacy beliefs—the latter of which is presumed to have a profound influence on the ability to alter the thought processes that underpin social change effort.

Self-efficacy is central to the approach-avoidance paradigm, with high self-efficacy beliefs corresponding to approach, not avoidant, behavior (Bandura, 1977). Similarly, highly self-efficacious people tend to demonstrate a greater persistence toward task completion than individuals who possesses low self-efficacy (Schunk, 1990). In addition, perceptions of mastery and competence are

central to the adoption of self-efficacy beliefs (Bandura, 1977)—presumably impacting on the extent to which one exerts effort toward change objectives.

As a theoretical foundation of contemporary behavior research, the SET underscores the transformation of intention into action (Gutiérrez-Doña, Lippke, Renner, Kwon, & Schwarzer, 2009), and has been aligned with self-determination theory (Sweet, Fortier, Strachan, & Blanchard, 2012), rational choice theory (Ogilvie & Stewart, 2010), and the theory of planned behavior (Williams, Povey, & White, 2008) to explain motivation, conduct, and intentions, respectively.

Attribution Theory

Advancing the work of Heider (1958), Weiner (1986; 1992) observed how initial affective responses to perceived failure or success could dramatically influence the extent to which people exert effort to attain future objectives (Weiner, 1986; 1992). Linkages were observed between attributions that resulted from (a) prior successes and (b) a future tendency to engage in the behaviors that were believed to have catalyzed such successes (Weiner, 1986; 1992). According to Weiner (1986; 1992), people engage in a constant exploration of a justifiable rationale for causal attributions to their behavior.

Weiner (1986; 1992) postulated three explanations for how and why people attribute achievement outcomes, each of which has significant social change applications: stability, locus of control, and controllability. First, future expectancies are often predicated upon whether the stability of a social issue (i.e., the extent to which circumstances can be altered) is perceived to change over time (Weiner, 1986; 1992). Second, individuals perceive their controllability over an issue as being driven by internal (i.e., knowledge, skills) or external (i.e., people, environment) factors (Rotter, 1954; 1966; Weiner, 1986; 1992). Finally, the extent to which individuals perceive control over an issue often determines whether they choose to avoid or approach the issue (Weiner, 1986; 1992)—a presumably critical motivational determinant of social change efforts.

With social psychological research revealing the impact of affective (Campbell & Sedikides, 1999), motivational (Shepperd, Malone, & Sweeny, 2008), and sociocultural factors (Hooghiemstra, 2008) on causal explanations for behavior, ATT has been widely applied to research on workplace discrimination (Chan, McMahon, Cheing, Rosenthal, & Bezyak, 2005), professionalism (Drach-Zahavy & Somech, 2006), clinical judgment (Murray & Thomson, 2009), and the development of strategies for organizational success (Oghojafor, Olayemi, Oluwatula, & Okonji, 2012).

Cognitive Appraisal Theory

Advancing the early appraisal research of Arnold (1960), Lazarus and Folkman (1984) observed that evaluations of situations and events elicit subsequent emotional responses. Clear patterns were eventually identified between specific appraisals (i.e., antecedent) and emotional response patterns (i.e., consequence), allowing for the analysis, prediction, and mediation of responses to challenging situations (Lazarus & Folkman, 1984). Such advances represented a critical bridge between appraisal, emotion, and stress perception—findings that have profound implications for how individuals reconcile perceptions related to challenge and adversity,] and the beliefs that underpin barriers to self-efficacy.

Smith and Lazarus (1993) went on to establish a two-phase structural model that linked appraisal antecedents to psychological consequences—a framework that has relevant social change implications. During primary appraisal, individuals assess the extent to which a social change issue is both relevant to global well-being and is congruent with the objectives of the greater good (Smith

& Lazarus, 1993). During secondary appraisal, individuals assess the importance of (a) accountability (i.e., who/what is responsible for the issue), (b) coping potential (i.e., whether to alter perceptions or contextual factors associated with the issue), and (c) future expectancy (i.e., perceived likelihood of whether the issue will ever change) as they consider resource options (Smith & Lazarus, 1993).

Lazarus (1991) was parsimonious in his overarching view on the two phases of the appraisal process, positing the idea that "one operates automatically without awareness or volitional control, and another that is conscious, deliberate, and volitional" (p. 169, para. 1). The cognitive-appraisal theory is a well-documented theoretical position that has been widely applied to various aspects of perception research, including research on work stress (Lowe & Bennett, 2003), consumer behavior (Watson & Spence, 2007), and factors related to change readiness (Walinga, 2008)—all of which highlight the applicability of the cognitive-appraisal theory model to social change objectives.

Self-Efficacy, Attribution, and Appraisal: An Interconnected Triad

The following section includes a brief review of the extant literature on self-efficacy, attribution and appraisal in college students; however, it should be noted that the following review does not reflect an exhaustive account of the evidence base that supports the relationships between college students and the variables of interest. In addition, this section details the conceptual linkages contained within the structure of the proposed framework—underscoring the relevance of factors related to control, expectancies, and accountability (see Figure 2).

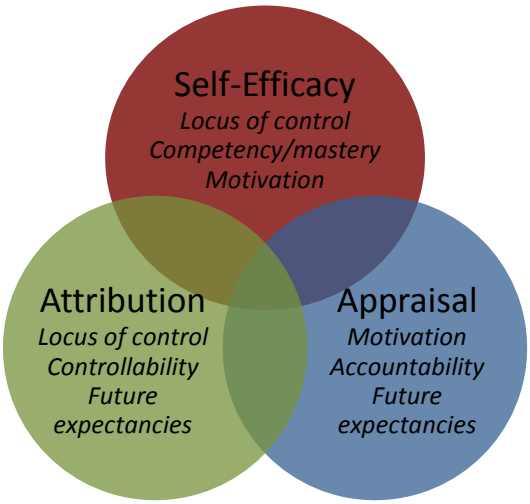

Figure 2: *The Overlapping Construct Characteristics of Self-Efficacy, Attribution, and Appraisal*

Self-Efficacy

As with attribution, self-efficacy is significantly associated with how individuals attribute general outcomes (Bandura, 1977; Judge, Erez, Bono, & Thoresen, 2002). Individuals who are low in self-efficacy tend to internalize locus of control over outcomes (i.e., attribute negative outcomes to character flaws), whereas individuals who are high in self-efficacy tend to externalize their rationale

for outcomes (i.e., attribute negative outcomes to environmental factors; Bandura, 1977; Judge et al., 2002). Further, locus of control has been observed to mediate self-efficacy beliefs, the expenditure of effort toward goal attainment, and the motivation to endure the goal attainment process (Bandura, 1997).

Early self-efficacy research on college student performance conducted by Schunk (1982; 1983) revealed that when a teacher informed students that their performance was due to their talent or intelligence, they experienced dramatically greater perceived self-efficacy than peers who received other forms of attributional feedback. Such feedback was observed to bolster perceived competency, internalized locus of control, and goal orientation by validating student attributions of success or failure (Schunk, 1982)—important considerations for students who rely on extrinsic stimuli as a motivational driver of goal pursuits.

In addition, the impact of perceived contribution on the success/failure attribution paradigm is salient in the college setting. Research conducted by Yoau-Chau and Hsin-hua (2009) showed that students who internalized feelings of personal reward for their contribution to group success reported higher levels of self-efficacy, and subsequently demonstrated higher technical proficiencies and a greater likelihood of establishing more challenging goals than students with lower self-efficacy. Here, the tendency of individuals to look beyond the self and contribute to the betterment of the group has implications for social responsibility—a significant, if not critical, component of social change.

For college students, evidence reveals self-efficacy as being linked to the appraisals that promote confidence. In a study that assessed the self-efficacy beliefs of students regarding their capacity for engagement in intense physical activity, results revealed significant relationships between confidence and adaptive personal attributes (e.g., persistence, diligence, willingness to explore), and enhanced levels of self-efficacy in those students who believed that such characteristics contributed to successful performance (Wise, 2009). Finally, self-efficacy has been negatively correlated to procrastination (Haycock, McCarthy, & Skay, 1998) and positively correlated to motivation (Chowdhury & Shahabuddin, 2007) in college academic performance—the latter of which aligns with findings reported by Peggy, Sullivan, and Guerra (2007) who observed self-efficacy and mastery goals to be significantly correlated to achievement orientation.

Attribution

As with self-efficacy, evidence shows that positive feedback can have an internalizing effect on how individuals perceive locus of control over outcomes. When given positive feedback about their performance, Luo, Bippus, and Dunbar (2005) observed students to generate similar attributions regarding themselves and their colleagues versus students who demonstrated poor performance, received negative feedback, and attributed outcomes to external phenomena. Similarly, findings reported by Mottet, Martin, and Myers (2004) suggested that instructors could positively reinforce student engagement by maintaining interactions that promote student feelings of inclusion, appreciation, and communication openness—all of which reflect the prosocial ideals of community, interrelatedness, and positive regard.

Locus of control has been associated with self-efficacy, as Ha (2010) observed significant linkages between exercise self-efficacy and health locus of control in undergraduates. Similarly, Roddenberry and Renk (2010) observed linkages between perception and stress management, with evidence revealing the tendency of individuals to (a) attribute stress to external factors and (b) experience decreased self-efficacy beliefs about their potential to mediate psychosocial stress. With regard to

social change objectives, an emergent view suggests that the development of competency beliefs and adversity resilience is elemental to social change abilities.

Given the implications of environment on human development, evidence reveals social observation to play a distinct role in the priming of college student attributions. In a bimodal study that evaluated the effectiveness of attribution change techniques, freshman students were exposed to video testimonies by seniors highlighting their strategies for progressive performance enhancements from the outset to the end of freshman year, resulting in an 18% increase in passing grades during year-end exams versus the nonintervention control (Van Overwalle & DeMetsenaere, 2011). Given evidence of lower self-efficacy and challenge motivation in upper classmen versus freshmen (Lynch, 2008), an emergent need exists for adaptive role models to indoctrinate social change ideologies during the formative stages of the college experience.

Appraisal

Given appraisal as a fundamental driver of self-efficacy beliefs (Bandura, 1977), individuals with low self-efficacy might perceive greater challenge in their objectives than individuals with high self-efficacy, often resulting in barriers to organizational and logistical abilities and, thus, significantly heightened stress perceptions (Bandura, 1997). By contrast, highly self-efficacious individuals tend to possess an enhanced capacity for planning and organization, are more inclined to experience eustress versus distress, and are highly motivated by the challenge factor (Bandura, 1997; Selye, 1956; 1974). Given the presumed causal linkage between adaptive self-efficacy beliefs (i.e., "I believe that *I can* effect change") and adaptive appraisals of future outcome expectancies (i.e., "Because I believe that *I can* effect change, I expect that *I will* effect change"), beliefs are assumed to bridge the gap between one's intention to act (i.e., "*I aspire to* effect change") and the implementation of social change behaviors (i.e., "*I am* effecting change").

Beyond the influence of biochemical factors (see hypothalamic-pituitary-adrenal axis, Selye, 1974), current evidence reveals linkages between personality traits and threat-specific appraisals that have predictive utility for the adoption of coping techniques (Smith & Dust, 2006). In addition, Brougham, Zail, Mendoza, and Miller (2009) observed higher general stress levels and a more frequent application of emotion-focused coping strategies than problem-focused strategies across gender in college students (Brougham et al., 2009). Here, the tendency for students to adopt an emotion-altering approach to resolving conflict has implications in emotional regulation—a potential mediator of the barrier self-efficacy perceptions that impact social change efforts.

Current research on stress coping patterns in college students reveals significant correlations between neuroticism, avoidance coping, and maladaptive emotion-focused coping approaches (Boyes & French, 2011)—a finding that provides strong support for the proposed linkages between neuroticism, depression, and anxiety in college students (Matsushita et al., 2010; Roberts et al., 2011). Further, Rice and Van Arsdale (2010) observed maladaptive perfectionists to exhibit dramatically higher levels of perceived stress and coping through alcohol consumption compared to adaptive perfectionists. Here, the stress responses and behavioral choices of college students are presumed to have social change implications, specifically with regard to (a) the extent to which stress response mediates the choice to approach or avoid challenges, (b) how maladaptive coping responses (e.g., stress-induced alcohol consumption) mediate the capacity to be transformative, and (c) the extent to which college cultural norms (e.g., social acceptability of excess alcohol consumption) mediate social change motivations in students.

Self-Efficacy, Attribution, and Appraisal: Implications for Social Change

The proposed model (Figure 3) has profound implications for students as future agents of social change. The outcomes indicated below in orange were derived from the student leadership model established by Grande and Srinivas (2001).

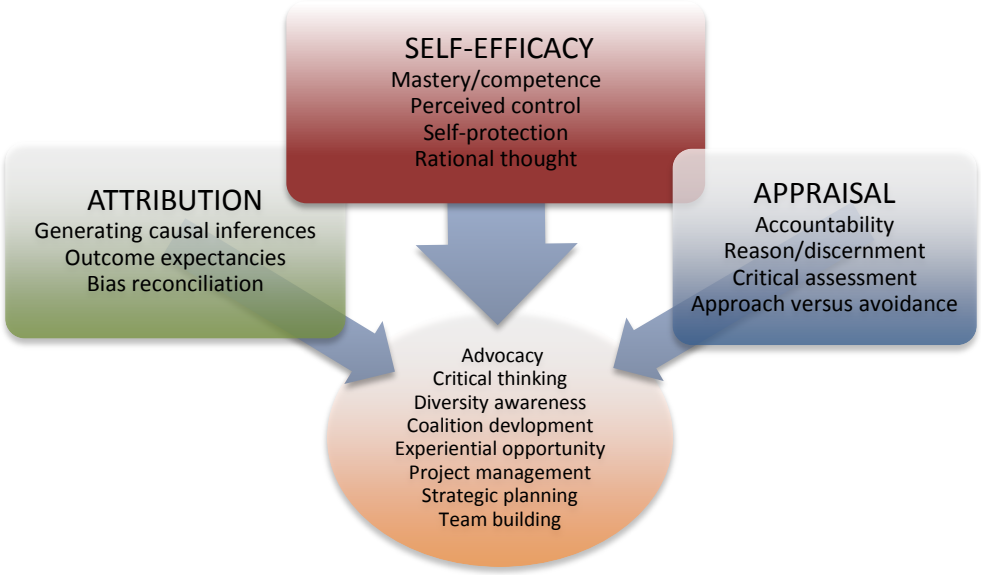

Figure 3: *Potential Outcomes Resulting From the Combined Impact of Enhanced Self-Efficacy, Attribution, and Appraisal Abilities That Promote Leadership and Social Change Orientation*

Self-Efficacy

Given the well-documented positive association between self-efficacy locus of control and effort toward goal attainment (Bandura, 1997), students who experience perceived control are presumably more apt to (a) exert greater effort toward inducing change and (b) are more motivated to endure the inherent challenges of the change process (Bandura, 1997). A willingness to endure the inherent challenges of the change process is especially critical in situations in which the change process is ongoing, is managed by divergent attitudes or conflicting perceptions, and perhaps contains multiple transitions or stages. Similarly, Bandura (1997) observed productivity, self-protective behavior, and rational thought to promote self-esteem and self-concept—attributes that presumably foster the strategic planning, risk analysis, and negotiation qualities required to undertake social change initiatives (Grande & Srinivas, 2001). Here, self-efficacy would reinforce the internalized locus of control that promotes competency, mastery, and innovation—serving to enhance performance in confidence-driven leadership and service roles.

For college students, campus-wide opportunities to bolster self-efficacy have implications for social change—from attempts to become economically self-sufficient (Heckman & Grable, 2011) to proactive measures taken in sexual behavior precautions (Tung, Cook, & Lu, 2011). As a result of their

exposure to messages about the importance of self-responsibility, students become increasingly accountable for their own behavior and well-being. As students experience enhanced perceptions of accountability for their actions, they may develop self-efficacy for educating others as to the value of

self-responsibility, revealing a viable impact at the social level. Here, the development of self-efficacy beliefs reflects a reciprocal feedback loop: Knowledge that has been acquired and internalized will later be disseminated by future scholars, educators, and leaders through efforts to effect social change.

Attribution

Weiner's (1986; 1992) emphasis on stability, locus of control, and controllability highlights the relevance of attribution to future agents of social change. Given enhancements in their capacity to evaluate the stability of social change objectives, students can gradually begin to conceptualize how dynamic objectives (e.g., local community action initiatives) are more apt to change with greater frequency over time, whereas stable objectives yield less dramatic changes over time (e.g., world poverty). As with self-efficacy beliefs, enhancements in accountability and self-responsibility result in an internalized locus of control (Weiner, 1986; 1992), motivating students to undertake a more active role in the change process. When students feel that they have control over the change process, not attributing outcomes to others, luck, fate, or chance (White et al., 2011)—the seeds of empowerment are sown.

Further, the capacity of individuals to reconcile their internally held biases has implications for their ability to effect positive social change. Given the need for social change agents to acknowledge the critical roles of people and environments in effecting outcomes, students must be trained to self-monitor their tendencies to attribute (a) dispositional or situational factors to outcomes (Heider, 1958), (b) contextual factors to their own behavior and trait factors to the behavior of others (Jones & Nisbett, 1971), and (c) successful outcomes to internal factors and unsuccessful outcomes to external factors (Kelley, 1971). By maintaining an ongoing awareness of internally held biases, change agents may be more inclined to employ reason and discernment when promoting advocacy, fostering team building skills, and facilitating coalition development initiatives (Grande & Srinivas, 2001).

Appraisal

The worldview embraced by college students is arguably the most critical mediator of their capacity to effect social change, and is presumed to play a significant role in their passion for undertaking specific change objectives. With 4 years of student life actively shaping their phenomenological lens, students must not only identify socially important change objectives, but must also determine the relevance and congruence (Smith & Lazarus, 1993) of the objectives to social justice and welfare, and the extent to which such objectives have generalizability to the greater populace. In addition, students must learn to assess for accountability (Smith & Lazarus, 1993); the formulation and implementation of an appropriate action plan is largely contingent on the ability of students to accurately identify who or what is responsible for the issue. Similarly, students must learn to critically evaluate the cognitive, affective, and ecological factors of social issues that could impact people at both the micro and macro levels (e.g., current healthcare issue in America). Finally, student expectancies of social change outcomes—whether change will ever actually occur (Smith & Lazarus, 1993)—not only impact their perceived self-efficacy for transforming systems, processes, and relationships, but also for the motivation that drives their continued change efforts.

The relationship between self-efficacy, attribution, and appraisal reflects a linear—if not cyclical—sequential progression. By first mastering the skills that induce perceived competence (i.e., self-efficacy), future agents of social change may subsequently perceive greater controllability (i.e., attribution) and formulate evaluations (i.e., appraisal) that promote the approach—not avoidance—of change objectives. This process would involve a cumulative and interactive exploration of available coping resources, coping potential, and accountability factors (Rovira, Edo, & Fernandez- Castro, 2010; Smith & Lazarus, 1993); however, it is not simply the ability of students to appraise challenge, but their capacity to openly embrace challenge as an inevitable aspect of the change process that reflects an uncertain but critically important undertaking for future agents of social change (see Figure 4).

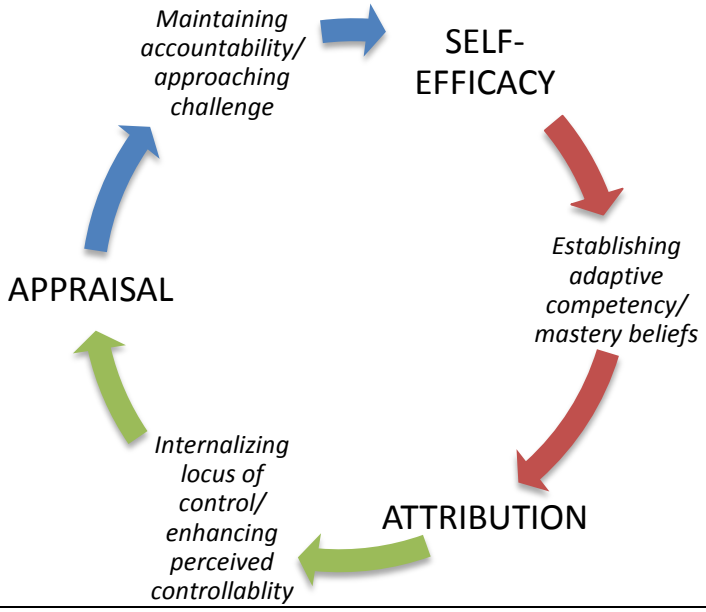

Figure 4: *The Proposed Exchange Between Self-Efficacy, Attribution, and Appraisal*

Self-Efficacy, Attribution, and Appraisal: Critical Discussion Points

Given the presumed impact of self-efficacy, attribution, and appraisal on the skills that underpin social change abilities, Figure 5 includes a list of proposed questions and potential discussion points for parents, educators, institution administrators, and students.

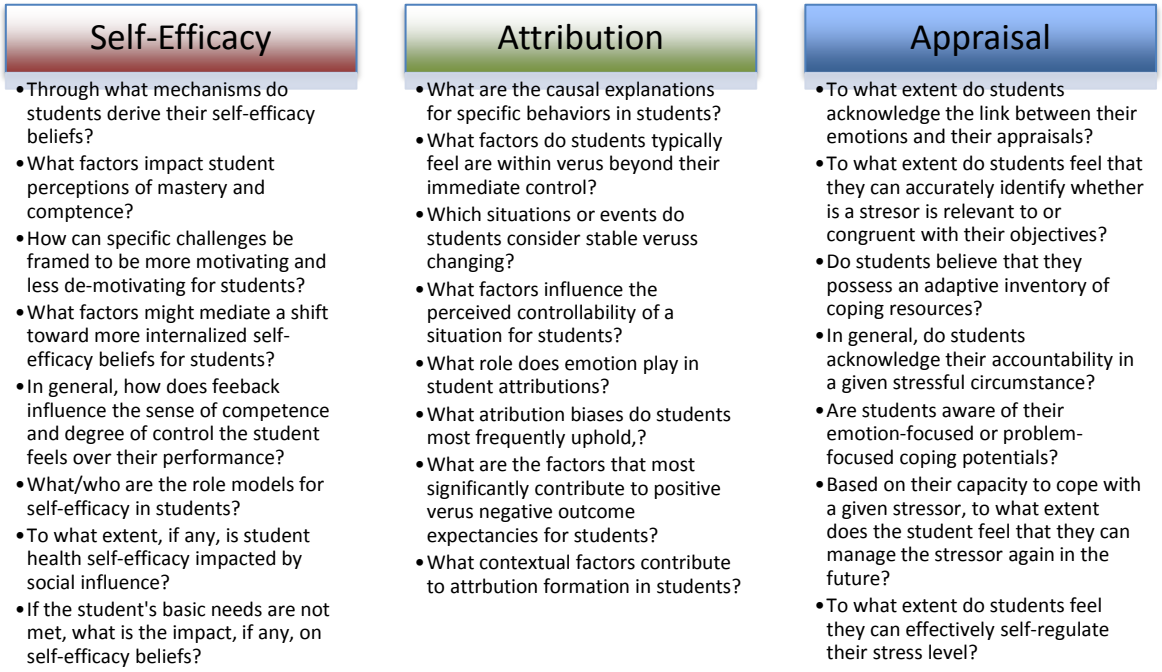

Figure 5: *Questions and Discussion Points for Parents, Educators, Institution Administrators, and Students Pertaining to the Implications of Self-Efficacy, Attribution, and Appraisal on Social Change Skills*

Concluding Perspectives

As in subsequent generations, college students of today encounter psychosocial phenomena that reflect a manifestation of our times. The needs of students to respond to the current economic downturn (Guo, Wang, Johnson, & Diaz, 2011), mitigate significant student loan burden (Wenisch, 2012), and reconcile the increasingly exigent need to reside with parents after graduation (Hulsey, 2012) have implications for adaptation and survival in an increasingly complex world. In addition, acculturative stress (Kim & Omizo, 2005), social physique anxiety (Chu, Bushman, & Woodard, 2008), and the changing mental health needs of students (Kitzrow, 2003) all engender new meanings and novel challenges in an age of technologically facilitated communication, social media networks, and virtual interactions. Given the college campus as a diverse microcosm of integrated learning formats (Tong, Han, Liu, Yang, & Chen, 2012) and converging sociocultural identities (Smith & Hopkins, 2004), the self-efficacy–attribution–appraisal paradigm is mediated by human evolution, with people seeking new pathways to feeling self-efficacious, formulating practical attributions, and promoting adaptive appraisal abilities that will perhaps become the norm for future generations.

Given the college years as a robust period for cultivating social change skills, students can enhance self-efficacy beliefs through the development of life skill competencies, opportunities to cultivate interpersonal effectiveness, and through independent living. Similarly, students can become more

rational attributors of outcomes through opportunities to determine their locus of control, by exploring social dynamics, and through negotiating their controllability over specific events. Further, students can hone their appraisal skills by developing an enhanced understanding of their motives,

increasing their awareness of available coping resources, and through exercising accountability for their actions. Here, the irony of the college experience as a social change classroom emerges: While skill acquisition occurs through social modeling and feedback received on campus, real-world applicability is observed in the competencies that promote leadership abilities, the internalized sense of control that sustains the motivation to effect change, and the adaptive appraisals that serve to identify globally important change objectives.

Finally, the proposed self-efficacy–attribution–appraisal model reflects a series of bidirectional interactions between the perceptions, attitudes, and beliefs that promote positive social change orientations. Here, the highly self-efficacious student may view challenges with a sense of competence, mastery, and perceived controllability, and, thus, view future social change challenges from the standpoint of eustress, not distress (Selye, 1956; 1974). By contrast, the student who lacks accountability and externalizes his or her locus of control over outcomes might experience deficits in self-efficacy, a flawed perceptual schema, and consequently avoid the inherent challenges of social change objectives. Given the inextricable linkages between self-efficacy, attribution, and appraisal and their relevance to future social change orientation in college students, the emergent challenge in nurturing these characteristics during the biopsychosocially transformative college experience becomes clear; however, such a challenge perhaps pales in comparison to the profound responsibility imposed upon students to transform thought process, innovate and improve social systems, and guide divergent perspectives toward a more unified worldview.

Discussion and Future Directions

As assumed, this discussion only addresses the tip of what is perhaps an enormous iceberg of linkages between self-efficacy, attribution, and appraisal in the social change paradigm. While its triadic framework, theoretical alignment, and overlapping characteristics are perhaps clear, the proposed model does not provide a be-all-–end-all solution to fostering social change attributes during young adult development, nor is it a panacea to cure the ills of social justice. Yet beyond the obvious linkages, this discussion serves to reinforce three critical points for young adult college students: (1) that psychosocial challenges could potentially impede the formation of adaptive self-efficacy beliefs, attribution perceptions, and appraisal abilities; (2) that a failure to mediate these challenges could have deleterious impacts on social change self-efficacy; and (3) that an enduring responsibility exists to nurture these ever-evolving attributes as students prepare for the real-world transition.

Today, college students have historically unprecedented options in their choice of educational delivery mode. With the increasing availability of online and blended formats (Tong et al., 2012), no longer are students confined to the traditional, in-house (i.e., brick-and-mortar) classroom, with current evidence revealing one-fourth of all U.S. college students were matriculated in online learning environments in 2010 (Parry, 2010). Additional data revealed a 17% increase in online learners between 2009 and 2010—a 5% increase from 2008–2009 findings (Parry, 2010). And as of 2011, one-third of all college students had minimally registered for one online course during their college experience (Allen & Seaman, 2011). As such, several noteworthy social change implications for online learning modalities emerge, specifically in how online formats will (a) influence learning and communication styles, (b) facilitate social discourse, and (c) mediate the motivation of students to undertake social change initiatives.

Given the fundamental value of self-efficacy, attribution, and appraisal in social change orientation, specific attention should be given to how these constructs promote communication, critical thinking, and the synthesis of prosocial ideals. Citing the systems model posited by Gohlke and Portier (2007),

student development initiatives should encourage students to openly discuss how their self-efficacy beliefs, appraisal tendencies, and future outcome expectancies mediate their social change motivations (e.g.., "I am competent because…," "I am willing to undertake the challenge because…," "I can control outcomes because…"). Similarly, analyzing the rationale and methods employed by students when undertaking social change objectives could elucidate much about the level of self-efficacy, attribution tendencies, and appraisal perceptions students possess for initiating change. Finally, teaching cognitive, social, and self-administrative strategies within a safe, nurturing context will invariably enhance confidence, encourage risk-taking, and induce motivation in students (Brigman, Campbell, & Webb, 2010; Brigman & Webb, 2010)—all of which reflect the cultivation of viable social change attributes during the college experience.

As a breeding ground for progressive ideas and integrative views, the college campus reflects a dynamic opportunity for a collaborative, student-driven, critical think tank for social change discourse. The diverse sociodemography that defines the contemporary college campus would allow for an integration of perspectives, beliefs, and values that contribute to an enriched worldview for future social change agents of the 21st century. Presumably, it is during the college experience that students identify their allies and supporters, as well as their opponents and detractors. As such, educators and institutional administrators should establish measures to nurture the capacity of students to transform social systems, debate social reform, and catalyze community action. Here, the ideas of observing the college student through a generational lens (Wilson, 2004) and becoming acquainted with his or her psyche (DiRamio & Payne, 2007) are salient themes—perhaps powerful testaments to the need for parents, educators, and administrators to observe and embrace the evolutionary path of the college student.

The college experience reflects a hotbed for dynamic, multidimensional growth; a period of significant learning and enlightenment; and an opportunity to develop the competencies, expectancies, and evaluations that underpin the capacity for students to become socially agentic. College can be viewed as a microcosm of the diverse social structures of the real world; therefore, students should be exposed to an array of opportunities to critically evaluate how their college experience continues to prepare them for their contribution to society. As such opportunities present, we must perhaps reframe away from the standpoint of self-efficacy, attribution, and appraisal as a collection of individual constructs—instead, the paradigm should perhaps shift to the idea of each construct as having its own transformational growth process that the student must not contend with, but be encouraged to ideologically embrace, optimally nurture, and continually apply to his or her fullest potential as an agent of social change.

References

Allen, I. E., & Seaman, J. (2011). *Going the distance: Online education in the United States*. The Babson Survey Group. Retrieved from http://sloanconsortium.org/publications/survey/going%5Fdistance%5F2011

Andersen, S. L. (2003). Trajectories of brain development: Point of vulnerability or window of opportunity? *Neuroscience & Biobehavioral Reviews, 27*, 3–18. doi: 10.1016/S0149-7634(03)00005-8

Antonovsky, A. (1998). The sense of coherence: A historical and future perspective. In H.I. McCubbin, E.A. Thompson, A.I. Thompson, & J.E. Fromer (Eds), *Stress, coping, and health in families: Sense of coherence and resiliency* (pp. 3–20). Thousand Oaks, CA: Sage Publications.

Arkoff, A., Meredith, G. M., Bailey, E., Cheang, M., Dubanoski, R. A., Griffin, P., & Niyekawa, A. M. (2006). Life review during the college freshman year. *College Student Journal*, *40*, 263–269.

Arnold, M. B. (1960). *Emotion and personality*. New York: Columbia University Press.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, N.J.: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.

Barnett, R. C., Gareis, K. C., James, J. B., & Steele, J. (2003). Planning ahead: College seniors' concerns about career–marriage conflict. *Journal of Vocational Behavior, 62*, 305–319. doi: 10.1016/S0001-8791(02)00028-3

Boyes, M. E., & French, D. J. (2011). Does appraisal mediate the relationship between neuroticism and maladaptive coping? A pilot study in the context of university exams. *Individual Differences Research*, *9*, 165–172.

Brigman, G., Campbell, C, & Webb, L. (2010). *Student success skills: Group counseling manual* (3rd ed.). Boca Raton, FL: Atlantic Education Consultants.

Brigman, G., & Webb, L. (2010). *Student success skills: Classroom manual* (3rd ed.). Boca Raton, FL: Atlantic Education Consultants.

Brougham, R. R., Zail, C. M., Mendoza, C. M., & Miller, J. R. (2009). Stress, sex differences, and coping strategies among college students. *Current Psychology, 28*, 85–97.

Campbell, W. K., & Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of General Psychology, 3*, 23–43. doi:10.1037/1089-2680.3.1.23

Chan, F., McMahon, B., Cheing, G., Rosenthal, D., & Bezyak, J. (2005). Drivers of workplace discrimination against people with disabilities: the utility of attribution theory. *Work*, *25*, 77–88.

Chowdhury, M. S., & Shahabuddin, A. M. (2007). Self-efficacy, motivation and their relationship to academic performance of Bangladesh college students. *College Quarterly*, *10*, 1–9.

Chu, H., Bushman, B., & Woodard, R. (2008). Social physique anxiety, obligation to exercise, and exercise choices among college students. *Journal of American College Health*, *57*, 7–14.

DiRamio, D., & Payne, R. (2007). Assessing the relationship between campus programs, student self-efficacy, stress, and substance abuse. *College Student Journal*, *41*, 676–695.

Drach-Zahavy, A., & Somech, A. (2006). Professionalism and helping: Harmonious or discordant concepts? An attribution theory perspective. *Journal of Applied Social Psychology*, *36*, 1892–1923. doi:10.1111/j.0021-9029.2006.00087.x

Erikson, E. (1975). *Childhood and society.* Norton.

Faye, C., & Sharpe, D. (2008). Academic motivation in university: The role of basic psychological needs and identity formation. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, *40*, 189–199. doi:10.1037/a0012858

Gohlke, J., & Portier, C. (2007). The forest for the trees: A systems approach to human health research. *Environmental Health Perspectives*, *115*, 1261–1263.

Grande, D., & Srinivas, S. (2001). Student leadership and activism for social change in the U.S. *Education for Health: Change in Learning & Practice (Taylor & Francis Ltd)*, *14*, 198–206. doi:10.1080/13576280110074096

Gutiérrez-Doña, B., Lippke, S., Renner, B., Kwon, S., & Schwarzer, R. (2009). How self-efficacy and planning predict dietary behaviors in Costa Rican and South Korean women: A moderated mediation analysis. *Applied Psychology: Health & Well-Being, 1,* 91–104**.**

Guo, Y., Wang, S., Johnson, V., & Diaz, M. (2011). College students' stress under current economic downturn. *College Student Journal, 45*, 536–543.

Ha, J. (2010). Health locus of control, exercise self-efficacy, and exercise benefits/barriers of female college students [Korean]. *Korean Journal of Women Health Nursing, 16*, 116–125.

Haycock, L. A., McCarthy, P., & Skay, C. L. (1998). Procrastination in college students: The role of self-efficacy and anxiety. *Journal of Counseling & Development, 76*, 317–324. doi: 10.1002/j.1556-6676.1998.tb02548.x

Heckman, S. J., & Grable, J. E. (2011). Testing the role of parental debt attitudes, student income, dependency status, and financial knowledge have in shaping financial self-efficacy among college students. *College Student Journal*, *45*, 51–64.

Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

Hooghiemstra, R. (2008). East-west differences in attributions for company performance: A content analysis of Japanese and U.S. corporate annual reports. *Journal of Cross-Cultural Psychology , 39*, 618–629. doi:10.1177/0022022108321309

Hulsey, T. L. (2012). For many college students, home means both the place they live and the place they left. *Phi Kappa Phi Forum, 92*, 24.

Jones, E., & Nisbett, R. (1971). *The actor and the observer: Divergent perceptions of the causes of behavior*. New York: General Learning Press.

Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct?. *Journal of Personality and Social Psychology, 83(3):* 693–710. doi: 10.1037/0022-3514.83.3.693

Kelley, H. H. (1971). *Attribution in social interaction*. New York: General Learning Press.

Kim, B. K., & Omizo, M. M. (2005). Asian and European American cultural values, collective self-esteem, acculturative stress, cognitive flexibility, and general self-efficacy among Asian American college students. *Journal of Counseling Psychology*, *52*, 412–419. doi:10.1037/0022-0167.52.3.412

Kitzrow, M. (2003). The mental health needs of today's college students: Challenges and recommendations. *NASPA Journal*, *41*, 165–179.

Kuo, J., Hagie, C., & Miller, M. T. (2004). Encouraging college student success: The instructional challenges, response strategies, and study skills of contemporary undergraduates. *Journal of Instructional Psychology*, *31*, 60–67.

Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford, UK: Oxford University Press.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company.

Lowe, R., & Bennett, P. (2003). Exploring coping reactions to work-stress: Application of an appraisal theory. *Journal of Occupational and Organizational Psychology*, *76*, 393–400. doi:10.1348/096317903769647247

Luo, L., Bippus, A. M., & Dunbar, N. E. (2005). Causal attributions for collaborative public speaking presentations in college classes. *Communication Reports*, *18*, 65–73. doi:10.1080/08934210500309892

Lynch, D. J. (2008). Confronting challenges: Motivational beliefs and learning strategies in difficult college courses. *College Student Journal*, *42*, 416–421.

Matsushita, M., Kumano-Go, T., Suganuma, N., Adachi, H., Yamamura, S., Morishima, H., ... Sugita, Y. (2010). Anxiety, neuroticism and oxidative stress: Cross-sectional study in non-smoking college students. *Psychiatry and Clinical Neurosciences*, *64*, 435–441. doi:10.1111/j.1440-1819.2010.02109.x

Mottet, T. P., Martin, M. M., & Myers, S. A. (2004). Relationships among perceived instructor verbal approach and avoidance relational strategies and students' motives for communicating with their instructors. Brief report. *Communication Education*, *53*, 116–122.

Murray, J., & Thomson, M. E. (2009). An application of attribution theory to clinical judgment. *Europe's Journal of Psychology, 2009(3),* 96–104.

Ng, T. W. H., & Feldman, D. C. (2009). Personality, social relationships, and vocational indecision among college students: The mediating effects of identity construction. *Career Development International, 14*, 309–332. doi: 10.1108/13620430910979826

Oghojafor, B., Olayemi, O., Oluwatula, O. O., & Okonji, P. (2012). Attribution theory and strategic decisions on organizational success factors. *Journal of Management & Strategy*, *3*, 32–39. doi:10.5430/jms.v3n1p32

Ogilvie, J., & Stewart, A. (2010). The integration of rational choice and self-efficacy theories: A situational analysis of student misconduct. *Australian & New Zealand Journal of Criminology (Australian Academic Press)*, *43*, 130–155. doi:10.1375/acri.43.1.130

Parry, M. (2010). Colleges see 17 percent increase in online enrollment. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com.ezp.waldenulibrary.org/blogs/wiredcampus/colleges-see-17-percent-increase-in-online-enrollment/20820

Peggy, P., Sullivan, J. R., & Guerra, N. S. (2007). A closer look at college students: Self-efficacy and goal orientation. *Journal of Advanced Academics*, *18*, 454–476.

Rice, K. G., & Van Arsdale, A. C. (2010). Perfectionism, perceived stress, drinking to cope, and alcohol-related problems among college students. *Journal of Counseling Psychology*, *57*, 439–450. doi:10.1037/a0020221

Roberts, L. B., Lee, S. A., Reiss, D. M., Powell, A. M., Yeh, R., Hart, J. W., & Gibbons, J. A. (2011). *Does dispositional mindfulness mediate the relation between neuroticism and depressive symptomatology among college students?* Washington, DC: American Psychological Association.

Roddenberry, A., & Renk, K. (2010). Locus of control and self-efficacy: Potential mediators of stress, illness, and utilization of health services in college students. *Child Psychiatry and Human Development*, *41*, 353–370. doi:10.1007/s10578-010-0173-6

Rotter, J. B. (1954). *Social learning and clinical psychology*. NY: Prentice-Hall.

Rotter, J. B. (1966). Generalized expectancies of internal versus external control of reinforcements. *Psychological Monographs, 80*(609).

Rovira, T., Edo, S., & Fernandez-Castro, J. (2010). How does cognitive appraisal lead to perceived stress in academic examinations? *Studia Psychologica*, *52*, 179–192.

Sanford, N. (1956). Personality development during the college years. *The Personnel and Guidance Journal, 35,* 74–80. doi: 10.1002/j.2164-4918.1956.tb01709.x

Schunk, D. H. (1990). Goal setting and self-efficacy during self-regulated learning. *Educational Psychologist*, *25*, 71–86. doi:10.1207/s15326985ep2501_6

Schunk, D. H. (1982). Effects of effort attributional feedback on children's perceived self-efficacy and achievement. *Journal of Educational Psychology, 74*, 548–556.

Schunk, D. H. (1983). Ability versus effort attributional feedback: Different effects on self-efficacy and achievement. *Journal of Educational Psychology, 75*, 848–856.

Selye, H. (1956). *The stress of life*. New York: McGraw-Hill.

Selye, H. (1974). *Stress without distress*. Philadelphia: Lippincott.

Shepperd, J., Malone, W., & Sweeny, K. (2008). Exploring causes of the self-serving bias. *Social and Personality Psychology Compass, 2,* 895–908. doi: 10.1111/j.1751-9004.2008.00078

Smith, M., & Dust, M. (2006). An exploration of the influence of dispositional traits and appraisal on coping strategies in African American college students. *Journal of Personality*, *74*, 145–174.

Smith, C. E., & Hopkins, R. (2004). Mitigating the impact of stereotypes on academic performance: The effects of cultural identity and attributions for success among African American college students. *The Western Journal of Black Studies*, *28*, 312–321.

Smith, C. A., & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition and Emotion, 7,* 233–269.

Sweet, S. N., Fortier, M. S., Strachan, S. M., & Blanchard, C. M. (2012). Testing and integrating self-determination theory and self-efficacy theory in a physical activity context. *Canadian Psychology/Psychologie Canadienne*, *53*, 319–327. doi:10.1037/a0030280

Tong, J., Han, J., Liu, J., Yang, F., & Chen, S. (2012). The analysis of influencing factors of college students' learning effect in face-to-face, online and blended learning. *Communications in Computer and Information Science, 345*, 528–538. doi: 10.1007/978-3-642-35211-9_67

Tung, W., Cook, D., & Lu, M. (2011). Sexual behavior, stages of condom use, and self-efficacy among college students in Taiwan. *AIDS Care*, *23*, 113–120. doi:http://dx.doi.org.ezp.waldenulibrary.org/10.1080/09540121.2010.498863

Van Overwalle, F., & DeMetsenaere, M. (2011). The effects of attribution-based intervention and study strategy on academic achievement in college freshmen. *British Journal of Educational Psychology, 60*, 299–311. doi: 10.1111/j.2044-8279.1990.tb00946.x

Walinga, J. (2008). Toward a theory of change readiness: The roles of appraisal, focus, and perceived control. *Journal of Applied Behavioral Science, 44*, 315–347. doi: 10.1177/0021886308318967

Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behaviour: A review and integrative cognitive appraisal theory. *European Journal of Marketing, 41*, 487–511. doi: 10.1108/03090560710737570

Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.

Weiner, B. (1992). *Human Motivation: Metaphors, Theories, and Research*. Sage Publications.

Weise, K. (2012). College students are bearing more of the tuition burden. *Businessweek.Com*, 3.

Wenisch, M. (2012). The student loan crisis and the future of higher education. *Catholic Social Science Review, 17*, 345–350.

White, J., Puckett, F., Dutta, A., Hayes, S., Kundu, M. M., & Johnson, E. (2011). The relationship of multidimensional health locus of control and attitude toward HIV/AIDS: College students' perspectives. *Journal of Rehabilitation*, *77*, 12–18.

Williams, C., Povey, R., & White, D. (2008). Predicting women's intentions to use pain relief medication during childbirth using the theory of planned behaviour and self-efficacy theory. *Journal of Reproductive & Infant Psychology*, *26*, 168–179.

Wilson, M. E. (2004). Teaching, learning, and millennial students. *New Directions for Student Services*, *2004(106),* 59–71.

Wise, J. B. (2009). Using the knowledge-and-appraisal personality architecture to predict physically active leisure self-efficacy in university students. *Journal of Applied Social Psychology*, *39*, 1913–1927. doi:10.1111/j.1559-1816.2009.00509.x

Wood, F. B. (2004). Preventing postparchment depression: A model of career counseling for college seniors. *Journal of Employment Counseling*, *41*, 71.

Yang, E., & Gysbers, N. C. (2007). Career transitions of college seniors. *The Career Development Quarterly, 56*, 157–170. doi: 10.1002/j.2161-0045.2007.tb00028.x

Yoau-Chau, J., & Hsin-hua, S. (2009). A longitudinal design study on self-efficacy, attribution, goal setting, and mechanics achievement in department of mechanical engineering students on Taiwan. *International Journal of Learning*, *15*, 161–169.

Zastrow, C., & Kirst-Ashman, K. K. (2009). Psychological aspects of young adulthood. In S. Dorbin & R. Jucha (Eds.), *Understanding human behavior and the social environment, (pp. 411–487*). Brooks/Cole Cenage Learning.
