

CPA President's New Researcher Award – 2011 / Prix du nouveau chercheur, décerné par le Président – 2011

## Life in Transition: A Motivational Perspective

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### Abstract

Across the life span, individuals are faced with critical developmental transitions during which one's motivation can significantly impact achievement striving as well as psychological and physical health. This article provides an overview of the research program of 2011 CPA President's New Researcher Award recipient Dr. Nathan C. Hall, having as its focus the promotion of optimal development during challenging transition phases in the education, employment, and aging domains in exploring the causes, correlates, and consequences of individuals' motivational strategies and interventions for achievement, retention, emotions, health, and well-being.

*Keywords:* motivation, emotions, transitions, interventions, achievement, retention, health

Over 150,000 Canadian undergraduates enrolled in 2009 are expected to drop out of university over the next six years (Statistics Canada, 2008), most during their first year (e.g., 61%; ACT, 2011), with even higher attrition rates found in Germany (30–40%) and the U.S. (54%; OECD, 2010). Upon graduation, university students are faced with an increasingly competitive job market due to increasing postsecondary enrollment combined with limited growth in professional jobs (deWolf & Klemmer, 2010) that have contributed to increasing unemployment for graduates (Babad, 2011). As Canadians get older, those with serious health problems are also likely to encounter limited, delayed, or expensive health care resources due to the increasingly untenable fiscal demand of an aging population on the federal budget (Mickleburgh, 2011). Across the life span, individuals are faced with critical transitions during which one's motivation can significantly impact achieving developmental goals as well as psychological and physical well-being. As outlined below, my primary research focus entails pro-

moting optimal development during these transition phases in the education, employment, and aging domains by exploring the causes, correlates, and consequences of individuals' motivational strategies on achievement, persistence, emotions, health, and well-being with a focus on developing innovative and effective motivational intervention programs.

### Theoretical Background

My research to date is informed mainly by three theoretical models derived from the social, educational, and developmental psychological domains. The first is Weiner's (2000) attribution theory that provides a comprehensive, social-psychological account of how the dimensions underlying individuals' causal attributions (e.g., personal controllability) following failure events effectively predict subsequent cognitions (e.g., expectations, responsibility), emotions (e.g., hope, pride, guilt, shame), and achievement striving (e.g., persistence). The second is Pekrun's (2006) control-value theory of achievement emotions that outlines a user-friendly framework for evaluating emotions in educational settings with respect to their timing (before, during, and after learning), underlying dimensions (e.g., motivationally activating vs. deactivating), motivational antecedents (e.g., perceptions of control and value), and achievement consequences. The third is Heckhausen's motivational theory of life span development (Heckhausen, Wrosch, & Schulz, 2010) that clearly delimits specific classes of motivational strategies that facilitate goal engagement (e.g., persistence, enhanced goal importance, help-seeking) or compensate for threats to emotional and motivational well-being including partial disengagement (e.g., downgrading expectations), complete disengagement (e.g., distraction, withdrawal), or self-protection (e.g., positive reappraisal, downward social comparison). Taken together, these perspectives comprise a balanced approach to evaluating and promoting optimal development by addressing the motivational strategies and emotions that allow individuals to maximize goal striving and success, and respond adaptively to failure experiences.

### Motivational Strategies

My first research focus concerns the self-regulation and effectiveness of motivational strategies during critical transition phases, namely the transition to higher education in young adulthood and to limited functional status following serious health problems in older adulthood. Concerning the first directive, longitudinal field studies suggest that not only are engagement and self-protective (positive reappraisal) strategies predictive of better physical health in first-year students (Hall, Chipperfield, Perry, Ruthig, & Goetz,

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2006), they combine to predict optimal academic motivation and emotions, as well as cumulative measures of achievement and attrition for initially unsuccessful freshman students (Hall, Perry, Ruthig, Hladkyj, & Chipperfield, 2006). Findings further suggest that these health and achievement benefits may be due to students' self-regulatory capacity to shift their relative emphasis between these strategies in response to achievement outcomes (engagement after higher grades, self-protection after lower grades), with efforts to protect one's motivation after initial setbacks predicting increased engagement later in the academic year (Hall, 2008). However, this research also identified a group of *at-risk students* with notably poorer levels of negative emotions, course attrition, and achievement—academically overconfident students who were initially unsuccessful, endorsed engagement strategies, yet ignored failure-oriented self-protection strategies (Hall, Perry, Ruthig, et al., 2006).

Finally, recent research based on prior collaborative projects on motivation, health, and aging (e.g., Ruthig, Chipperfield, Newall, Perry, & Hall, 2007) further explores the long-term benefits and risks of motivational strategies for older adults with debilitating health problems. In a study by Hall, Chipperfield, Heckhausen, and Perry (2010), engagement strategies were found to predict greater survival nine years later for those with acute conditions affording potential recovery (i.e., heart attack, stroke), yet *poorer* physical health for those with chronic degenerative conditions (i.e., heart disease, arthritis) and very old adults (>80 years). In contrast, disengagement predicted poorer health for older adults with acute conditions yet *better* health for those with chronic conditions and old-old adults. Overall, self-protective strategies (positive reappraisal, not downward social comparison) were by far the most beneficial for older adults in predicting greater physical health, functional mobility, subjective well-being, and survival for those with acute health problems, as well as better physical health for old-old adults. In sum, my research on motivational strategies to date highlights the potential health and achievement benefits, as well as risks, of engagement, disengagement, and self-protection strategies for both young and older adults during critical transition periods.

### Motivational Interventions

My second research focus concerns the development and evaluation of motivational interventions for first-year university students at risk of academic failure, and upper-level undergraduates at risk of employment interview failure. Based on Weiner's (2000) attribution theory, motivation programs in which students are encouraged to adopt attributions for failure experiences that are personally controllable (e.g., insufficient effort, persistence), as opposed to uncontrollable or external to one's self (e.g., low ability, luck, poor instruction), consistently produce modest yet reliable improvements in motivation, emotions, and grades for first-year university students at risk of poor performance and attrition (for a review, see Perry, Hall, & Ruthig, 2007). Commonly referred to as Attributional Retraining (AR), these brief yet effective interventions typically consist of an informational session (e.g., videotape presentation, readings) followed by a reflection phase (e.g., discussion, writing exercise, mock failure task) and focus primarily on how failure attributions that foster academic engagement can help students overcome initial academic setbacks.

For students identified at risk of poor performance and attrition due to *learning-related indicators*, our work suggests that AR can improve causal attributions and year-end achievement among first-year students with initially low test scores (Perry, Stupnisky, Hall, Chipperfield, & Weiner, 2010) as well as emotions, motivation, and performance for students who infrequently use elaborative learning strategies (Hall, Hladkyj, Perry, & Ruthig, 2004). Follow-up studies indicated that achievement gains for low-elaborating students were most evident following AR in which reflection on emotions was encouraged, whereas high-elaborating students benefitted from AR that included more abstract reflection tasks (Hall, et al., 2007). For first-year students classified as at risk due to *psychosocial variables*, multiple studies suggest that AR is particularly effective in improving causal attributions, emotions, and cumulative measures of achievement and attrition among overly optimistic students (Haynes, Ruthig, Perry, Stupnisky, & Hall, 2006; Ruthig, Perry, Hall, & Hladkyj, 2004). Subsequent research in which AR was modified to promote engagement (i.e., controllable attributions) as well as self-protective strategies (positive reappraisal) showed similar achievement benefits following AR, combined with more realistic expectations, for overconfident freshmen who endorsed engagement but neglected self-protection strategies (Hall, Perry, Chipperfield, Clifton, & Haynes, 2006).

In an effort to extend AR research to help upper-level undergraduates prepare for unsuccessful *employment interviews*, recent studies also suggest that AR can result in significant improvements in interview-related attributions, motivation, help-seeking, as well as performance (i.e., job offers) particularly for students with low self-esteem (Hall, Jackson Gradt, Goetz, & Musu-Gillette, 2011) or an attributional profile indicating overconfidence (Jackson, Hall, Rowe, & Daniels, 2009). In addition to illustrating employment benefits of AR methods, however, this research also revealed an unexpected treatment effect for students with high self-esteem who were significantly *less* likely to obtain job offers following AR, relative to controls (Hall et al., 2011). This iatrogenic effect has since been replicated on cumulative achievement outcomes for first-year students (Hall, Musu-Gillette, Perry, Nett, & Goetz, 2010). In sum, my research on motivational interventions highlights their benefits, as well as risks, for achievement, retention, and employment in university students, and employs both moderation and mediation analyses to identify those who benefit most, as well as the psychological processes assumed to underlie their effectiveness (e.g., attributions, Jackson et al., 2009; emotions, Hall et al., 2007; motivational strategies; Hall et al., 2006).

### Future Directions

Following from studies on motivational strategies in education students during practicum training (Daniels, Clifton, Perry, Mandzuk, & Hall, 2006), and the achievement benefits of AR administered via the Internet (Hall, Perry, Ruthig, Haynes, & Stupnisky, 2005), recently completed projects explore the effects of motivational strategies and *Web-based interventions* involving both engagement and disengagement (downgrading/realistic aspirations) on cumulative achievement and retention for students in various *academic disciplines* (e.g., physical/biological/computer sciences, engineering, medicine, psychology, education, fine arts, etc.). Consistent with prior collaborations exploring the antecedents (e.g., teaching, parents; Goetz, Frenzel, Ludtke, & Hall,

2011), correlates (e.g., self-concept, coping; Nett, Goetz, & Hall, 2011), classification (e.g., activation, valence; Goetz, Frenzel, Hall, Nett, & Lipnevich, 2011), moderators (e.g., subject domain; Goetz, Frenzel, Pekrun, Hall, & Ludtke, 2007), and achievement consequences of *emotions* in secondary school students (Goetz & Hall, in press), recent projects also explore the relations between underexplored emotions (e.g., boredom), motivation (e.g., perceived control), achievement (e.g., major vs. minor courses), and retention (e.g., course withdrawal, program changes) among first-year and upper-level university students (cf., Pekrun, Hall, & Perry, 2011; Ruthig et al., 2008). Finally, ongoing projects aim to evaluate the potential *health benefits* of motivational programs encouraging engagement, disengagement, and self-protection for first-year university students (Hall, Musu-Gillette, Chipperfield, & Perry, 2011) as well as for older adults with serious health problems.

To summarise, my research explores how individuals adapt and thrive during difficult transition phases from a motivational perspective, in evaluating the benefits and risks of motivational strategies and interventions on critical developmental outcomes including achievement, retention, motivation, emotions, health, and adjustment. Taken together, the findings suggest that motivational strategies and emotions are indeed critical determinants of development during critical life transitions from young to older adulthood, and provide empirical support for the continued improvement of motivational programs that not only capitalize on *technology* but are *balanced* in highlighting the benefits of perseverance as well as disengagement and self-protective strategies. It is anticipated that further research on the types and consequences of motivational strategies, emotions, and related interventions during these transitions may help to inform policies underlying existing mental health resources (e.g., campus student affairs offices; inpatient cardiac counselling) as well as facilitate the dissemination of effective psychological services for these individuals (e.g., smartphone applications for first-year students or job seekers).<sup>1</sup>

<sup>1</sup> For more information on the Achievement Motivation and Emotion (AME) Research Group, please visit <http://www.ame1.net>

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Received September 13, 2011

Revision received September 21, 2011

Accepted September 22, 2011 ■