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Identity construction and information processing in a coaching relationship: The effects of coach behavior on coachee goal-setting and commitment

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IDENTITY CONSTRUCTION AND INFORMATION PROCESSING IN A COACHING RELATIONSHIP: THE EFFECTS OF COACH BEHAVIOR ON COACHEE GOAL-SETTING AND COMMITMENT

by

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ABSTRACT

Coaching (professional, business, executive, leadership) has been shown to be effective generally speaking, but questions remain regarding the explanatory mechanisms underlying coaching. I first propose a context-general model that unpacks the sociocognitive dynamics within coaching. The model explains the emergence of different types of coaching relationships, and how the nature of these relationships differentially determine coaching outcomes. Research and theory on social identity construction and information processing in dyads provides the foundation upon which I outline a model describing the process and dynamics of coaching identity emergence. Beyond this emergence, my proposed model states that the coachee's understanding of appropriate interpersonal relations and division of labor between coach and coachee (i.e., his/her situated coaching identity or coaching structure schema) should partially dictate the focus and depth of the coachee's information processing during a coaching engagement. Past research has shown information processing to be a key determinant of decision-making and goal commitment, both of which are desirable outcomes within the coaching domain.

To explore these issues, I developed a coaching exercise which simulated some of the early aspects of business, leadership, or executive coaching. During this simulation, participants were guided through a process which enabled them to think and talk about their strengths and weaknesses when using different conflict management behaviors. In discussing these aspects of conflict management, participants and coaches (i.e., trained research associates) walked through a supplementary process to facilitate the development of a series of goals (an "action plan") that would enable the participant to improve his or her conflict management behaviors. At the end of

the coaching session, participants were asked to what extent they felt committed to the goals they had developed and whether or not they expected them to be efficacious. Throughout the coaching session, participants were also asked at designated break points to report their levels of information processing and their understanding of the coaching structure schema for that particular coaching relationship. The experimental manipulation was presented at the beginning of the session, wherein the coach would explain to the coachee what the ideal nature of coaching should be. These explanations varied in terms of ascribing responsibility and division of labor – either to a generic coaching process, to the skill and ability of the coach, to the creativity of the participant, or to the joint interaction between coach and participant. Among other things, I hypothesized that coaching structure schemas that emphasized the participant's role in the coaching process would encourage more information processing, and consequently higher levels of goal commitment.

Hypotheses were largely confirmed, showing that information processing and coaching structure schemas are important predictors of goal commitment at the end of one coaching session. The effects of the manipulation were mixed. Claiming behaviors – that is, the coach ascribing responsibility for coaching effectiveness to him/herself – were only marginally effective in shaping participants' coaching structure schemas. Granting behaviors – communicating to the participant that they are responsible for coaching effectiveness – were much more effective in facilitating helpful information processing and driving higher levels of goal commitment. One possible explanation for the relative effectiveness of granting over claiming may be that claiming requires a degree of credibility which the coach (again, a trained research associate) had not attained with the participants. Other findings pertain to: (1) the

unique variance that independent measures of coach- and coachee-relevant structure schemas contribute to models predicting information processing and goal commitment, (2) the importance of identifying the type or focus of coachee information processing, and (3) the role that psychological mindedness may play in characterizing a more “coachable” coachee. Implications include: (1) measuring coachees’ coaching structure schemas, (2) intentionally encouraging a more appropriate schema, (3) measuring coachees’ psychological mindedness prior to coaching, and (4) dynamically monitoring coachees’ schema and their information processing in order to assure better coaching effectiveness. Future researchers should explore ways to enact these implications and also to further explore the theoretical components of these practical implications, such as: (1) measurement methods for better assessing coaching schemas and information processing, (2) what the ideal timings are for different kinds of coaching schemas, and (3) different ways to encourage maximally adaptive and appropriate coaching structure schemas.

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TABLE OF CONTENTS

LIST OF FIGURES ix

LIST OF TABLES x

CHAPTER ONE: INTRODUCTION 1

Contributions of the research 3
CHAPTER TWO: THEORETICAL BACKGROUND 5

Towards the development of a generalizable model of coaching 5
Leadership Identity Theory 7
Conflict Elaboration Theory 8
Identity Construction and Elaboration model 10
Testing the Identity Construction and Elaboration model of coaching 16
Claiming, granting, and coaching structure schemas 18
CSS and information processing 22
Information processing and goal-setting 26
CHAPTER THREE: METHODOLOGY 30

Participants 30
Procedure 30
Baseline intervention 31
Manipulation 35
Measures 36
Data collection and analyses 40
Pilot testing 40
CHAPTER FOUR: RESULTS 42

Preliminary analyses 42
Coaching structure schema scales 42
Information processing scale development 43
Hypothesis testing 44
Hypothesis 1 – Claiming, granting, and CSS 44
Hypothesis 2 – CSS and information processing 47
Hypothesis 3 – Information processing and goal commitment 48
CHAPTER FIVE: DISCUSSION AND CONCLUSIONS 51

Summary of findings and practical implications 51

Identity construction behaviors 51
Coaching structure schemas 52
The nature of information processing 53
The importance of psychological mindedness 54
Limitations of the research 55
Theoretical contributions and future research 58
APPENDIX A: PERSONAL SCORECARD 63
APPENDIX B: THOMAS KILMANN CONFLICT INSTRUMENT 65
APPENDIX C: EXAMPLE GOAL-SETTING EXERCISE 67
APPENDIX D: BASELINE COACHING SCRIPT 70
APPENDIX E: CLAIMING AND GRANTING PRIMES 75
APPENDIX F: INFORMATION PROCESSING SCALE 78
APPENDIX G: COACHEE INTERACTION INVOLVEMENT 80
APPENDIX H: SCHEMA FOR COACHING SCALES 82
APPENDIX I: EXPERIMENTER SCRIPT FOR COACH CREDIBILITY 84
APPENDIX J: COMPILED FIGURES 86
APPENDIX K: COMPILED TABLES 97
APPENDIX L: APPROVAL OF HUMAN SUBJECTS RESEARCH 110
LIST OF REFERENCES 112

LIST OF FIGURES

Figure 1. Identity Construction and Elaboration (ICE) model of coaching. 87

Figure 2. Generic Input-Process-Output model of coaching 88

Figure 3. Proposed hypotheses for testing the ICE coaching model 89

Figure 4. CSS ratings for “Come up with creative ideas” 90

Figure 5. CSS ratings for “Think deeply” 91

Figure 6. CSS ratings for “Identify what it is I need to work on” 92

Figure 7. CSS ratings for “Ensure that I sustain my motivation” 93

Figure 8. CSS ratings for “Make decisions about the focus of coaching” 94

Figure 9. CSS ratings for “Make sure that I learn something” 95

Figure 10. Means for overall coach and coachee CSS scales across four conditions 96

LIST OF TABLES

Table 1 Key variables involved in leader development interventions 98

Table 2 A summary of Conflict Elaboration Theory 99

Table 3 Overlap between common leadership functions and coaching behaviors 100

Table 4 A continuum of coach-coachee identities 101

Table 5 Correlation Matrix, Reliabilities, and Descriptives of Measured Variables 102

Table 6 Independent samples T-tests claiming and granting conditions on CSS 103

Table 7 RM ANOVA, within subjects tests coach, coachee specific CSS ratings 104

Table 8 RM ANOVA within subjects tests coach, coachee overall CSS ratings 105

Table 9 Hierarchical regression predicting joint processing by CSS 105

Table 10 Hierarchical regression predicting commitment by info processing 105

Table 11 CSS on commitment mediated by info processing 106

Table 12 Indirect effects CSS on commitment through info processing 107

Table 13 Granting on commitment mediated by $CSS_{coachee}$ and joint processing 108

Table 14 Indirect effects granting on commitment through CSS, info processing 109

CHAPTER ONE: INTRODUCTION

Professional coaching (e.g., business, executive, leadership, managerial) is a class of interventions defined by a one-to-one relationship in which the coach and coachee work together to identify and achieve organizationally, professionally, and/or personally beneficial developmental goals (Feldman & Lankau, 2005; Kilburg, 2004). While many have made the business case for coaching (McGovern et al., 2001; Parker-Wilkins, 2009; Wasylyshyn, 2003), key issues remain unexplored within the science, mostly surrounding the question of "how and why does coaching work" (de Haan, Duckworth, Birch, & Claire, 2013; McKenna & Davis, 2009). Some even have gone so far as to call this question the "Holy Grail" of coaching research (Duckworth & de Haan, 2010). There exists a broad awareness of *what* works, but due to lack of empirical research, debates rage over topics such as the importance of certification, the advantages of different types of coaches' professional backgrounds (e.g., psychology vs. business), and the role of techniques and theory versus the emergent coach-coachee relationship. Ultimately, disagreements stem from a lack of quantitative research (de Haan et al., 2013; Feldman & Lankau, 2005) and an inconsistent theoretical understanding of the explanatory mechanisms and moderating conditions that contribute to coaching effectiveness. This has prompted Sherman and Freas (2004) to liken the state of coaching research to the "wild west," where theory is disjointed, and methodologies and outcomes are diverse and inconsistent (Coutu & Kaufmann, 2009; Grant, Curtayne, & Burton, 2009; Lowman, 2007; Mackie, 2007). Even casual exposure to this industry will validate their claim. For example, professional coaching *effectiveness* is loosely defined, and may be operationalized in a number of ways such as

improved interpersonal skills, decreased stress, and quicker e-mail response; as such, outcomes are nearly impossible to systematically assess across interventions (Mackie, 2007). This is a major issue for the field of professional coaching, because it is the systematic assessment of interventions that drives scientific and practical progress. It will be difficult, if not impossible, to maximize the effectiveness of coaching on the whole, until more stringent standards of practice and assessment are developed, based in theory, tested, agreed upon, and continually developed (Lowman, 2007; Mackie, 2007).

Accordingly, one of the greatest needs in the field of coaching is a scientifically testable model of coaching. It has been suggested that at this stage in the field of coaching, practical and theoretical development must occur through initial "hypothesis generation and case study" (Lowman, 2007, p.296). Similarly, Mackie (2007), pulling from Roth and colleagues' (1996) work on the scientific development of constructs, laid out a general plan by which coaching could "come of age" so to speak. To summarize his suggestions, the field must: (1) develop a consistent, generalizable theory of coaching, (2) engage in innovative application of the theory, (3) honestly assess these application attempts through case studies, (4) design in-depth analyses of the theory, and (5) develop science-based guidelines and protocols for coaching. Recently, researchers have begun to identify the critical components (e.g., variables such as coach-coachee chemistry, trust, and coachee motivation) of coaching relationships (de Haan et al., 2013; Bozer, Sarros, & Santora, 2013; McKenna & Davis, 2009). Additionally, researchers are beginning to propose generalizable models of coaching. Carey, Philippon, and Cummings (2011) recently reviewed an array of current coaching models, noting a few commonalities across approaches (e.g., the importance of trust) to coaching. However, they identified one major, common

problem: a lack of consistent “measures to determine developmental progress and success” (p.64). While this may be due to the fact that coaching tends to be idiosyncratic and individualized to the coachee (Felman & Lankau, 2005; Turner & Goodrich, 2010), a broad, highly generalizable, process-based framework of coaching would provide consistency to the science of coaching, and would allow coaches and HR professionals to begin systematically assessing the effectiveness of different elements of coaching.

Contributions of the research

It has been suggested that the most successful coaches approach coaching systematically and have a detailed plan of what to accomplish with each coaching session (Joo, 2005; Sherman & Freas, 2004). Similarly, a systematic coaching framework, grounded in both empirical research and anecdotal reports from practicing coaches – similar to existing models of training design (Alvarez, Salas, & Garofano, 2004; Baldwin & Ford, 1988) – enables the scientific research of coaching effectiveness. Because coaching is a relatively eclectic field (Feldman & Lankau, 2005; Kilburg, 1996; Turner & Goodrich, 2010), I leverage research from related fields such as mentoring (Kram, 1988; Murray, 1991), teams (Marks, Mathieu, & Zaccaro, 2001), therapy (Ducharme, 2004; Kilburg, 2000; Sherin & Caiger, 2004), consulting (Berman & Bradt, 2006; Morgan et al., 2005), behavior change (Prochaska et al., 2008; Weinstein et al., 2008), and training (cf., Alvarez et al. 2004; Baldwin & Ford, 1988; Salas & Cannon-Bowers, 2001) to frame a broad input-process-output (IPO) paradigm for researching professional coaching. Accordingly, my research will explore the effects of several coaching inputs on one specific coaching outcome, and the interpersonal and intrapersonal processes that mediate this relationship. As others have noted, the premise underlying personal and leadership development

interventions is that by motivating individuals and making them aware of opportunities to perform at a high level, performance will improve (Van Velsor, McCauley, & Moxley, 2001). Though I acknowledge the importance of motivation, for the sake of parsimony and initial theoretical development, I focus first on the awareness aspect of leadership development – accordingly, I ground my research on coaching from an information processing perspective (Brunswik, 1952; Evans, 2008). Information processing theory and research are focused on the mechanisms that drive the ways in which individuals collect, perceive, store, encode, retrieve, and apply information (Jarvinen & Poikela, 2001; Kolb, 1976). One factor that research has shown to influence information processing is individuals' sense of interpersonal relations in a given situation (Forgas, 2001), which social identity construction research (Ashforth, Rogers, & Corley, 2011; Derue & Ashford, 2010) suggests is an emergent phenomenon. The purpose of this paper therefore is to better understand the explanatory mechanisms behind coachee change, with an emphasis on coachee information processing, and the ways in which the emergent coach-coachee relationship influences this information processing. In so doing, this study will serve to further our understanding of how and under what conditions coaching works.

CHAPTER TWO: THEORETICAL BACKGROUND

For better or for worse, coaching is a relatively eclectic field (Turner & Goodrich, 2010; Kilburg, 1996) that pulls from many different knowledge bases. The end result is a developmental intervention that while more often than not quite effective (Kombarakaran, Yang, Baker, & Fernandes, 2008; Thach, 2002), is also misunderstood as to how it functions (Feldman & Lankau, 2005). Researchers are interested in identifying the "common factors" that explain the effectiveness of coaching interventions (McKenna & Davis, 2009; de Haan et al., 2011; 2013), and the consensus seems to be that factors such as coachee characteristics, coach behaviors/techniques, and the coach/coachee relationship likely account for much of the variance in coaching effectiveness. However, this claim is often made on the basis of the similarity between coaching and therapy (Grant, 2007; McKenna & Davis, 2009), which has a much longer history of empirical research to back up its claims of common factors for therapy. Though these broad factors undoubtedly account for a substantial amount of coaching effectiveness, the question remains as to whether or not coaching and therapy are really that similar (Feldman & Lankau, 2005; Gray, 2006; Hart, Blattner, & Leipsic, 2001). Coaching is also clearly related to other research domains such as therapy, management consulting, mentoring, behavior change, and training (Feldman & Lankau, 2005) (see Table 1).

Towards the development of a generalizable model of coaching

A host of frameworks exist that explain how coaching should be done and how it operates – ranging from the psychodynamic (Kilburg, 1996; 2004) to the highly behavioral (Ducharme, 2004; Joo, 2005; Eldridge & Dembkowski, 2012). Recently, Control Theory (Carver

& Scheier, 1990; Gregory, Beck & Carr, 2011) has been proffered as a context-general framework for understanding coaching; though it is not explicitly framed as such, this is an information processing approach to understanding coaching. To briefly summarize, coachees hold information about themselves, and coaches provide information relevant to the coachees which they then consider (or ignore) and process (or not) in order to generate an action plan for personal and/or leadership development. It should be clarified here that when I say "information" I refer not necessarily to directive information such as the information provided in training or mentoring, but rather any kind of cognitive input provided by the coach. This could refer to the suggestion of an alternative perspective, the offering of an insight into the coachee's behavioral patterns, or even the asking of an open-ended question designed to trigger further coachee cognitive processing (Passmore, 2007).

The information provided by the coach carries with it an implicit influence attempt – the coach is attempting to direct the coachee towards the need for and motivation to make behavioral changes (Prochaska et al., 2008; Weinstein et al., 2008). However, basic Control Theory assumes that decision-makers are actively using the provided information to direct their self-regulation and goal setting efforts (Carver & Scheier, 1990; Gregory et al., 2011). Nonetheless, this may not always occur in coaching, where the available information frequently comes in the form of a dissenting opinion (Ely et al., 2010) which must first be processed to determine whether it is even relevant. For this reason, Control Theory is insufficient to fully explain the coaching phenomenon. For example, what happens when the coachee rejects the information provided and influence attempts made by the coach? And what role does the information that the coachee brings to the table have in driving coaching outcomes? What is needed is a better understanding

of the explanatory mechanisms behind coach influence and coachee information processing. I propose a social information processing approach – derived by integrating Derue and Ashford's (2010) leadership identity model and Mugny, Butera, and Falomir-Pichastor's (2001) model of conflict and information sharing in judge-advisor systems – to help attain a better understanding of the explanatory mechanisms behind coaching.

Leadership Identity Theory

Derue and Ashford (2010) recently proposed a model of leader-follower dynamics grounded in the social identity literature that argues that the influence central to leadership is based on a process of would-be leaders *claiming* a leadership role and others *granting* these would-be leaders the right to lead them. Leadership claims can be explicit (e.g., by stating, "I am the leader of this group") or implicit (e.g., by carrying oneself with greater confidence); similarly, follower identities can be claimed either explicitly (e.g., by making statements like "Don't look at me, I'm just following his lead") or implicitly (e.g., by not seeking leadership roles with greater responsibility). Identities must not only be claimed, but also granted by the other individual – an individual claiming a leadership identity is not a leader, unless those the individual is attempting to lead *grant* him or her the opportunity to levy influence. These granting behaviors may similarly be explicit (e.g., "You need to listen to what I say," "I need you to tell me what to do here") or implicit (e.g., making subordinate requests of others, offering positions of prominence in a meeting). Ultimately, the model argues that leadership is contingent upon individuals' willingness to let another person influence and direct them. In the context of coaching, the coach's effectiveness is contingent upon the coachee's willingness to ascribe a "coach identity" to the coach and assume a "coachee identity" to him or herself. If the coachee

does not perceive the coach's claims to coaching legitimacy as relevant, or if the coachee does not grant the coach the opportunity to influence, or if the coachee does not adopt an effective coachee identity, coaching outcomes will be suboptimal. As I explain more fully later, this claiming and granting process is more than just establishing who is the coach and who is the coachee (because this is automatically determined by the contracting process anyway) – it refers to establishing *what kind* of coach and coachee identities emerge within a given relationship.

The importance of relational identities and "allowing" the coach to influence the coachee are clearly evidenced in a broad array of coaching work extolling the importance of coachee motivation to the coaching process (Peterson, 1996). Applying this theory also allows us to better understand the emergence of coach and coachee identities in specific coaching relationships. Per Derue and Ashford's model, leader and follower identities emerge not only via individuals' claims and grants, but through a process of iterative, reciprocal claiming and granting – for a leader identity to be salient, the would-be leader not only must not only claim this identity, but the follower must validate and reinforce this identity by granting him or her the leader identity and also claiming the corollary follower identity. As I argue in greater detail subsequently, coaches may facilitate the coachee's adoption of an effective coachee identity by leveraging this claiming and granting process. What is an effective coachee identity though? To begin to answer this question, I now turn to Conflict Elaboration Theory (Mugny et al., 2001).

Conflict Elaboration Theory

Conflict Elaboration Theory (Mugny et al., 2001) is a model of source/target conflict and information sharing that takes into account the expertise and competence of both actors. Essentially, the model argues that when one individual (the "source") attempts to provide

information or influence another (the "target"), the source experiences a degree of interpersonal threat (low or high). The effects of this threat are also influenced by the level of competence or expertise of both the source and the target. Conflict Elaboration Theory has been explained elsewhere (Buchs, Butera, Mugny, & Darnon, 2004; Mugny et al, 2001), but I briefly summarize it in Table 3 below. The relevance of this theory to coaching is twofold: (1) it begins to explain when, why, and how the coachee (the target) cognitively processes the coach's (the source) information and influence attempts, and (2) the conditions necessary to achieve the collaborative, constructive processing that I argue is essential to coaching effectiveness. When coachees are not threatened (i.e., they do not perceive the coaching engagement to be a threat to their sense of status, competence, and efficacy), and both coach and coachee are high competence or status – this is when coachees will not only deeply and genuinely (i.e., without a defensive bias) process the information provided by the coach, but will actively share information and collaborate with the coach in the coaching process.

Though this theory is helpful in understanding some of the influence dynamics at play in coaching, it lacks explanatory power in one major area. The theory conceptualizes competence and status as static characteristics of individuals. However, rather than constituting a static characteristic, competence and status are dynamic perceptions by the perceiving individual (DeRue & Ashford, 2010; Fiske, Cuddy, Glick, & Xu, 2002). For example, a source, leader, or coach may be initially perceived as incompetent, but may earn status or prove his or her competence through various influence tactics or with successful task performance (Ben-Naim, Bonnefon, Herzig, Leblois, & Lorini, 2013; Van Swol & Ludutsky, 2007). Similarly, if a coach continually accepts his/her coachee's claims of an ineffective coachee identity, the coaching

dyad will not achieve the optimum configuration of coach and coachee identities. The nature of what constitutes an "optimum" coach-coachee identity configuration is explored in greater detail below and summarized in Table 3.

Identity Construction and Elaboration model

Based on an integration of Derue and Ashford's model of leadership identity and Mugny and colleague's model of conflict elaboration, I develop a context-general framework for understanding coach-coachee relations, and the effects of this relationship on proximal and distal outcomes of coaching. I term this model the Identity Construction and Elaboration (ICE) model of coaching. To provide a high level overview of this model and its implications, I make the argument first in syllogistic form, and then go on to defend each component of the syllogism. Each premise in the syllogism has been implicitly suggested by the summaries of the two theories I am integrating (Derue & Ashford, 2010; Mugny et al., 2001). After presenting the syllogism, I defend each premise and highlight its implications for the coaching context. The syllogism is as follows:

> If (1) *coaching-specific identities and structures emerge through a process of reciprocal claiming and granting,* and (2) *these identities influence behaviors within the coaching relationship,* where (3) *a key coachee behavior is the processing and elaboration of information,* then (4) *claiming and granting behaviors influence information elaboration by influencing coaching-specific identities and structures.* (See Figure 1).

Coaching specific identity emergence. Derue and Ashford argue that "leadership is not simply prescribed because of one's position" (2010, p.627), but that individuals hold schemas (Hogg, 2001; Horowitz, 1989; 1991) regarding their own leader/follower identities, as well as

how leader-follower relations should be structured (i.e., on a continuum from completely shared to completely hierarchical). These schemas, which are engrained over time, may also "shift among group members through a social construction process" (p.628) wherein individuals reciprocally claim and grant either leadership or followership identities. Because the coaching relationship involves two people working together towards a shared goal (e.g., coachee performance improvement) (Baron & Morin, 2009), with (ideally) a clear distinction in roles (Jowett, Kanakoglu, & Passmore, 2012), these social construction processes should similarly guide the emergence of coach and coachee identities within coaching relationships. Based on Derue and Ashford's model, it follows that the relation-specific identities of both coach and coachee are neither static nor prescribed. Rather, each individual's self-concept as a coach or coachee emerges through a reciprocal process of claiming and granting. For example, the coach may suggest that coachees do some "homework" outside the immediate context of the coaching session, or the coach may ask the coachee a challenging and personal question; in so doing, the coach has *claimed* legitimacy with real influence over the coachee. Similarly, if coachees responds positively to these influence attempts, they grant the coach this coaching identity. Conversely, if coachees begin the coaching relationship by denying the need for coaching, they are rejecting the implicit claim that they are a "coachee" and not granting the coach the opportunity to influence them.

But what constitutes an effective coach and coachee identity? Naficy and Isabella state that "at its best, executive coaching is a co-discovery and learning process through which the manager being coached achieves 'a-ha' moments as a result of coach-client interactions" (2008, p.40). O'Flaherty and Everson (2005, p.6) state that the "essential role of a coach is to provide a

powerful learning context in which coachees explore… enabling them to become more effective and powerful." Grant and colleagues (2009) state that "regardless of theoretical formulation, the coaching relationship is one in which the coach and coachee form a collaborative working alliance" (2009, p.397). Others have noted that coaching equips "people with the tools, knowledge, and opportunities they need to develop themselves" (Peterson & Hicks, 1995, p.41). To implicate the negative, the coach is *not* simply a source of advice or a sounding board, nor a provider of one-size-fits-all answers – as are friends and consultants, respectively (O'Flaherty & Everson, 2005). The common theme is that coaching – and particularly the structure of relations between coach and coachee – is meant to be a collaborative and generative process (Flores, 1999; O'Flaherty & Everson, 2005). This process demands that both coach and coachee share leadership responsibility for determining the effectiveness of the intervention. Having explicated the nature of coaching identity emergence, I now turn to highlight the link between coaching identity and the structuring of coach-coachee relations.

Coaching structure schemas. Theory and research in leadership (Derue & Ashford, 2010; Lord, 1985; Schyns & Meindl, 2005) and social cognition (Baldwin, 1992; Ragins & Verbos, 2007), suggest that people hold mental models or schemas that incorporate their self-concept, their concept of others (or a specific other), and the nature of appropriate interaction between self and other. Similar constructs include *role-relationship models* (Horowitz, 1989; 1991), *followership schemas* (Carsten, Uhl-Bien, West, Patera, & McGregor, 2010), and *intersubjective identities* (Ashforth, Rogers, & Corley, 2011). In the context of leadership, Derue and Ashford call these "leadership structure schemas" (LSS; 2010; p.633). Applying this to the coaching context, I propose that coachees implicitly hold "coaching structure schemas" (CSS)

which refer to coachees' mental picture of what coaching is and the most optimal configuration for coach-coachee relations. These CSS are therefore inextricably related to coachees' sense of coach and coachee identities.

The coaching practitioner literature often highlights coaching as a shared process, where there is a balance between coach- and coachee-centrism in the structure of coaching relationships (Feldman & Lankau, 2005; Grant et al., 2009; Naficy & Isabella, 2008; O'Flaherty & Everson, 2005; Peterson, 1996). This same literature implicitly discusses the problems that may arise when coachees approach coaching with the wrong CSS. Interviews with practicing executive coaches (Coultas, Sonesh, & Salas, 2013) reveal that some maladaptive coachee perceptions of the coach include viewing him/her as: (1) a consultant, mentor, or sage, (2) a counselor or therapist, or (3) a threat or irrelevant intrusion. The coachee's concept of the coach inherently suggests his/her CSS. In the first scenario, the coachee's CSS is very coach-centric, placing the bulk of the responsibility for achieving outcomes on the coach – this is not coaching in the truest sense (O'Flaherty & Everson, 2005). In the second scenario, the CSS is more shared, as the counseling schema relies on input from the coachee. However, there is an implicit assumption that the therapist-coach is there to "fix" the coachee in some way, meaning that the coachee's CSS is more coach-centric than it ideally should be (Jowett et al., 2012). In the third scenario, the CSS is overly coachee-centric; by not granting the coach any significant level of coaching identity (i.e., a right to influence and "coach"), coachees either do not acknowledge a need for the coaching intervention at all, or they assume the bulk of the responsibility for making changes. The optimal configuration of coach-coachee relations (and by extension, the optimal CSS for coachees to hold) is one in which the coach and coachee are collaborators in a process of

discovery and joint problem-solving wherein goals are developed and followed through on (Jowett et al., 2012; Naficy & Isabella, 2008). In the next section, I leverage CET (Mugny et al., 2001) to explore the connection between coachees' CSS and the various information processing strategies that they may engage in throughout coaching.

Coachee change and information processing. A plethora of coaching researchers (Cocivera & Cronshaw, 2004; Ducharme, 2004; Gregory et al., 2011; O'Flaherty & Everson, 2005; Sherin & Caiger, 2004) have argued for the importance of coachee information processing in determining the effectiveness of coaching engagements. Indeed, the Development Pipeline model of coaching (Hicks & Peterson, 1999; Peterson, 2006) suggests that coachee insight – the realization of what needs to change – is the first outcome of any coaching engagement. Coachee insight, grounded in the processing of available information (Gregory et al., 2011), is key – coachees must understand what they are targeting before they can be motivated to make a change. Based on the Experiential Learning Cycle (Kolb, 1976), which is the model that coaching is largely based on (O'Flaherty & Everson, 2005), learning requires that coachees reflect on a concrete experience, generate hypotheses about that experience, and then test those hypotheses.

Coaching theory and research would suggest that a coachee may leverage three sources of information when setting goals: (1) the coachee's privately held (internal) information, (2) the information that the coach provides (external) to the coachee, and (3) the information generated (constructive) as the coach and coachee jointly engage in information sharing and processing (Naficy & Isabella, 2008; Peterson, 1996). However, Mugny and colleagues (2001) argue that targets engage in different kinds of information processing when working with sources of

varying competence/status levels and under varying levels of interpersonal threat – suggesting that the information available to coachees may not always be used (or used equally). These different processing strategies are summarized in Table 2 above. Though CET distinguishes among 7 different possible scenarios, three information processing strategies span them – those in which (1) the target rejects the source's information/influence attempts, (2) the target passively accepts the source's information/influence attempts, and (3) the target both accepts the legitimacy of the source's influence attempts while also actively participating in the information generation and decision-making processes. CET, in agreement with other theories of information processing (Forgas, 2001), argues that the nature of target information processing is important in predicting task performance and other important outcomes. For example, targets who passively accept the source's information may learn, but because they are not processing deeply or thinking critically, transference and generalization may be minimal. This follows the same line of reasoning as that found in training research, which has shown that incorporating difficulty into the training environment yields longer-lasting knowledge gains as a result of the deep cognitive processing associated with training difficulty (Schmidt & Bjork, 1992; Salas & Cannon-Bowers, 2001). Conversely, targets who process deeply and constructively collaborate with the source are likely to engage in a deeper level of cognitive processing which will enable the development and/or discovery of more effective and persistent task solutions (Mugny et al., 2001). To connect this clearly to the ICE model, the implication is that *coach-coachee relations, which emerge from coachees' coaching identities influence the nature and degree to which they process information made available through the coaching process.*

Testing the Identity Construction and Elaboration model of coaching

Having presented the underlying logic behind the ICE model, I now turn to elaborate several testable hypotheses that emerge from this framework. To test a subset of the ICE model, I first propose a high level input-process-output (IPO) framework that will guide the explication of my specific hypotheses (as well as future coaching research). This model, which borrows heavily from Baldwin and Ford's (1988) model of training effectiveness, argues that coaching inputs (e.g., coach/coachee characteristics, coaching behaviors) influence the coach-coachee relationship (e.g., trust, information sharing), which together influence immediate coaching outcomes (e.g., insight, learning, motivation). To illustrate this claim, consider the following scenario. Coaches and coachees meet and begin forming a relationship; coaches provide information to their coachees (inputs) about a given issue, which further affects the relationship. Coachees perceive inputs from their coaches and must then process this information by comparing it with the information that they already hold (Carver & Scheier, 1990; Gregory et al., 2011) to determine whether this information demands further attention or action (Prochaska et al., 2008; Weinstein et al., 2008). Processing of coach inputs are influenced by the nature of the coach/coachee relationship (Bluckert, 2005; Baron & Morin, 2009). If coachees process coach inputs (e.g., "You need to change X") such that they determines that it warrants action, they will then set goals to reduce the identified discrepancies (Carver & Scheier, 1990; Gregory et al., 2011). The idea that coaching is essentially a matter of "input-process-output" is neither new nor creative – indeed, Ely and colleagues (2010) reviewed the coaching literature and have identified many of these same concepts. However, the explicit modeling and parsing apart of coaching inputs, relationship variables, and immediate coaching outcomes constitutes a contribution to the

coaching literature because it allows for the testing of causal linkages within any given coaching intervention.

Integrating Conflict Elaboration Theory (Mugny et al., 2001) as part of the ICE model allows me to focus on the role of a key variable that is to date understudied – coachee information processing (or "elaboration"). Theories of behavior change (Prochaska et al., 2008; Weinstein et al., 2008), as well as theories of adult learning (Hicks & Peterson, 1999; Kolb, 1976; Osterman & Kottkamp, 1993) and development (Van Velsor et al., 1998) highlight the importance of moving individuals away from a state of unawareness/misinformation and disengagement or no intention to behave. Behavioral change in psychotherapy has also been found to be predicated on similar processes – the identification of a specific problem, potential solutions to that problem, and outcomes that are motivating to the individual (Gassman & Grawe, 2006). Coaching entails a process wherein coachees: (1) compare actual behaviors/performance levels with ideal performance levels, (2) determine the cause of the actual-ideal gap, and (3) develop goals and action plans to minimize that gap (Gregory et al., 2011; O'Flaherty & Everson, 2005). Based on the arguments implicit in the ICE model (Derue & Ashford, 2010; Mugny et al., 2001), coachees must not only hold a coachee identity that acknowledges the need for and possibility of change, but they must also perceive their coaches to be capable of facilitating the change process. To test these implicit propositions, I explore the role of coach claiming and granting behaviors in driving coachees' schema (Ashforth et al., 2011; Carsten et al., 2010; Horowitz, 1989; 1991) of roles and identities within the coaching engagement, as well as their processing of available information.

Claiming, granting, and coaching structure schemas

Research has suggested that the nature of the coach-coachee relationship, which is determined in large part by coach claiming and granting behaviors, may be more important than more "content-focused" aspects of various coaching interventions (de Haan, Culpin, & Curd, 2011; de Haan, Duckworth, & Jones, 2013). For this reason, I focus on the effects that coach claiming and granting behaviors have on outcomes in coaching. Through claiming and granting behaviors, coaches frame, change, or reinforce coachees' notion of what coaching is and what it means to be a coach or coachee. As the ICE model suggests, coachees' CSS may have important effects on the depth and nature of their information processing within the coaching relationship.

Coach-centrism in CSS. What the ICE model suggests then, in accordance with research in the fields of identity (Ashforth et al., 2011; Carsten et al., 2010; Derue & Ashford, 2010; Horowitz, 1989; 1991) and social influence/leadership (Chemers, 2001; French & Raven; 1959), is that coaches can impart a coach-centric CSS to their coachees through the use of coach claiming behaviors. Examples of coach claiming behaviors may include introducing oneself as a coach, dressing professionally, acting with confidence, or emphasizing one's competence at coaching (Evetts, 2008; Lin & Guan, 2002; Roest & Rindfleisch, 2010). Competence-based trust (Mayer, Davis, & Schoorman, 1995) – which is grounded in the trustor's (coachee's) perception of the trustee (coach) as someone having a degree of expertise or ability in a given domain – is often automatically granted because the coachee places the coach in the category of "expert" (Roberts et al., 2009; Wildman et al., 2012). This expert category (or "coach" identity) can be reinforced through claiming behaviors (Derue & Ashford, 2010) – provided it is not diminished through identity-inconsistent behaviors such as faulty or seemingly useless advice (Ben-Naim et

al., 2013; Van Swol & Ludutsky, 2007). According to Conflict Elaboration Theory (CET; Mugny et al., 2001), when advisees (coachees) perceive advisors (coaches) as being competent and helpful, they are more likely to rely upon advisor-provided information. On the other hand, if coaches are perceived to be lacking in competence, the information that they provide will either be ignored or actively opposed (Mugny et al., 2001). This suggests that coach claiming behaviors will encourage coachees to trust and rely on the coach to achieve outcomes as part of the coaching intervention.

H1a: Coachees will report higher levels of coach-centrism as part of their CSS when their coaches primarily leverage coach-claiming behaviors.

Coachee-centrism in CSS. Just as effective coach claiming behaviors should facilitate coachees' perceptions of their coaches as being competent and an active player in the behavior change process, effective coachee granting behaviors should strengthen their perception that they themselves are an essential component to the coaching process. Pulling from the social construction literature, follower identities may be passive (e.g., deferent and obedient to leaders) or active (e.g., collaborating with and at times challenging their leaders), and influenced by the ways in which leaders interact with them (Carsten et al., 2010). As I have discussed previously, coaching is predicated on the coachee's *active* participation in coaching (Naficy & Isabella, 2008; Peterson, 1996). Coachee granting behaviors – intended at engaging the coachee in the process – may be something as simple as explaining to the coachee that his or her participation is essential. Research in information processing and social roles suggests that cognitive processing and active engagement in the coaching process may be more likely "when there are explicit or implicit situational demands for more elaborate processing" (Forgas, 2001, p.106). The ICE

model would also suggest that coaches may facilitate effective coachee identities by responding positively to coachees' attempts to engage in the process. Williams' (2007) threat regulation model suggests rapport and trust (Whitener, Brodt, Korsgaard, & Werner, 1998) are essential to decreasing levels of interpersonal risk and threat, which will in turn positively influence the degree to which the coachee actively participates (Mugny et al., 2001). Similarly, when coachees feel a higher level of specific self-efficacy for engaging in coaching-relevant behaviors, they will be more involved in the coaching process – evidenced by increased information sharing, among other process variables (Cabrera & Cabrera, 2002; Hsu, Ju, Yen, & Chang, 2007). On the basis of this evidence, I propose that coaches facilitate a coachee-centric CSS by engaging in coachee-granting behaviors.

H1b: Coachees will report higher levels of coachee-centrism as part of their CSS when their coaches primarily leverage coachee-granting behaviors

Coaches may move coachees' CSS towards coach-centrism with coach-claiming behaviors, or towards coachee-centrism with coachee-granting behaviors. However, as I have already discussed, the ideal CSS is neither completely coach- nor coachee-centric. Coachees should hold a CSS that emphasizes the responsibility of both the coach and coachee in eliciting the desired outcomes of coaching (Baron & Morin, 2009; Jowett et al., 2012; Naficy & Isabella, 2005). How can coaches encourage this helpful CSS? By engaging in both coach-claiming and coachee-granting behaviors, coaches facilitate coachees' sense of a complementary coaching CSS (see previous arguments). However, coachee-granting behaviors not only should have a main effect on the coachee-centrism of coachees' CSS, but these behaviors may also increase the effectiveness of coach-claiming behaviors by increasing the amount of rapport and perceived

similarity between coach and coachee. Coachee-granting behaviors, because they focus on coachees' sense of responsibility and ownership in the coaching process should also increase coachees' sense of rapport in the coaching relationship (Campbell, White, & Johnson, 2003; O'Broin & Palmer, 2010). A substantial amount of empirical research suggests that rapport, liking, and perceived similarity (even on the basis of superficial issues) typically lead to higher levels of interpersonal influence (Bonaccio & Dalal, 2006; Cialdini & Goldstein, 2004; Gino, Shang, & Croson, 2009). Furthermore, the presence of coach-claiming and coachee-granting behaviors should increase perceived similarity by establishing role clarity and similarity between coach and coachee (Derue & Ashford, 2010; Jowett et al., 2012; van Woerkom, 2010). In other words, when coaches leverage both claiming and granting behaviors, they are essentially saying (respectively), "I, as the coach, am able and should have the right to coach you towards higher performance, and you, as the coachee, are able and must also actively contribute to this process." Put in the negative, if the coach facilitates a highly coach- *or* coachee-centric CSS, the coachee will see both coach and coachee as highly distinct "others" with separate and possibly conflicting roles (Jowett et al., 2012; van Woerkom, 2010). By increasing the coachee's perception of coach-coachee similarity, coupled with the higher levels of rapport that should be associated with effective coachee-granting behaviors (Campbell et al., 2003), can therefore be expected to increase the effectiveness of coach-claiming behaviors.

H1c: Coachees will report higher levels of coach- and coachee-centrism as part of their CSS when their coaches leverage both coachee-granting and coach-claiming behaviors

CSS and information processing

The counseling literature, from which coaching frequently borrows (Feldman & Lankau, 2005; Kilburg, 2004; Hart et al., 2001) speaks to the importance of the therapeutic relationship or alliance in eliciting changes in the client (Gassman & Grawe, 2006; McKenna & Davis, 2009). This refers to the relationship between therapist and patient (or coach and coachee), and is evaluated along a number of dimensions such as respect, openness, and affect (Saltzman, Luetgert, Roth, Creaser, & Howard, 1976). While there have been many different definitions of this therapeutic relationship (Cole & McLean, 2003; DiGiuseppe, Leaf, & Linscott, 1993; Horvath, 2005; Horvath & Symonds, 1991), the common trend spanning these definitions is mutual respect/trust, and the shared goal that the patient/coachee improves in some arena (Bluckert, 2005; Horvath, 2005). As discussed previously, the ideal structure of coach-coachee relations is characterized by a sense of collaboration, consensus, and "alliance" between coach and coachee (Baron & Morin, 2009; Bordin, 1976; McKenna & Davis, 2009). In other words, there should be a balance between coach- and coachee-centrism. What happens when the coaching relationship is not structured with this balance in mind, or when the coachee does not endorse a balanced CSS? I propose that coachees' CSS influences both *what* they process (focus), and *how* they process (depth).

Effects on focus of processing. What information is available to facilitate coachees' decision making and goal-setting efforts? As discussed earlier, in any given coaching relationship, coachees have three sources of information at their disposal: (1) information provided by the coach, (2) information accessible to the coachee prior to coaching, and (3) information previously inaccessible to the coachee but made accessible by the coaching process

(Hicks & Peterson, 1999; Jarvinen & Poikela, 2001; Kolb, 1976; Kukenberger, Mathieu, & Ruddy, 2012; Osterman & Kottkamp, 1993; Prochaska et al., 2008). These sources may be theoretically *available* to coachees, but as I argue below, their influence on coachees' decision-making and goal-setting is at least partially determined by their CSS. Drawing from Conflict Elaboration Theory (Mugny et al., 2001), the degree to which coachees pay attention to coach-provided information will be dependent on their perception of the coach. Research has found that the degree that targets perceive advisors to be competent and accurate is positively associated with the influence of the advice and information that advisors provide (Sniezek & Buckley, 1995; Van Swol & Sniezek, 2001; Yaniv & Kleinberger, 2000). If coachees perceive their coaches as competent sources of information and advice, but do not perceive themselves as being essential to the coaching process, then they will not actively engage in the coaching *process* (e.g., communicating, jointly setting goals, etc.), but will be more likely to passively receive the coach-provided information (Mugny et al., 2001). In other words, coachees who hold a strictly coach-centric CSS are relying on the coach to fulfill some kind of mentor, sage, or consultant role – providing directive information and solutions.

H2a: When coachees hold a coach-centric CSS, as opposed to other CSS, they will focus on and process more directive information provided by the coach

Directive, solution-oriented information is not the only source of information that coachees may process in a given coaching engagement. Coaches commonly provide information to their coachees through insightful questions that provide dissenting opinions and assist the coachee in thinking more deeply on issues relevant to behavioral change and goal progress (De Dreu, Nijstad, & van Knippenberg, 2008; Passmore, 2007; Van Kleef et al., 2009). In JAS

research, it has been suggested that dissenting opinions from advisors (coaches) are preferred by judges (coachees) because they are perceived as unique information; additionally, they have been found to more strongly trigger cognitive processing than do consenting opinions (Savadori, Van Swol, & Sniezek, 2001; Van Swol & Ludutsky, 2007). However, for these challenging questions and perspectives to "unlock" previously inaccessible information, they must be actively processed (Sniezek & Buckley, 1995; Van Swol & Ludutsky, 2007). This is predicated on two things. First, the coachee must perceive the coach's questions to be relevant and appropriate (Sniezek & Van Swol, 2001). Coachees filter information from advisers as a function of: (1) the degree to which they perceive the advisor as being knowledgeable and having relevant expertise, and (2) their relationship with the advisors (Bonaccio & Dalal, 2006; Gino & Schweitzer, 2008). In other words, a without a coach-centric identity (characterized by trust in and active reliance on the coach), coachees will be more likely to ignore (or process less deeply) the questions posed by their coaches. Second, coachees must actively engage and process the questions posed by coaches, in order to access personal information that was previously inaccessible to them. This active engagement is determined by coachees' perception that they are an important component to the coaching process (De Dreu et al., 2008; Mugny et al., 2001), which is driven by coachee granting behaviors. Because this information is dependent on a process of coaching questions (deemed relevant as a result of coach claiming behaviors) interacting with coachee engagement and information processing (deemed appropriate as a result of coachee-granting behaviors), coachees holding a shared CSS should focus more on the questions asked by coaches and the insights generated from these questions. This phenomenon is loosely suggested in coaching research. Case studies and interviews suggest that coachees often experience "critical moments"

of deep processing, insight, and sudden awareness when working with their coaches (de Haan et al., 2010; 2013). These moments often come as a result of intense interpersonal processes. For example, in an interview, a coachee describes such a critical moment:

> *I started out the session introducing a topic that we hadn't talked about in the previous session. It had to do with me finishing one stage of my life to go back to what I had previously done. When I started talking about it, I noticed how I became nervous, started blushing, my voice became shaky, and tears came to my eyes.* ***I was surprised to notice those symptoms, because I hadn't been aware of the fact that the topic was an emotional one to me***. (de Haan & Nieb, 2012, p.213 emphasis added)

H2b: When coachees hold a shared CSS, as opposed to other CSS, they will focus on and process more coaching questions and the insights generated from them

Effects on depth of processing. Based on a wealth of research on individuals' information processing strategies, the information that coachees focus on will be inextricably linked to the cognitive effort (depth) that they expend in processing the information. Two factors that have been found to influence individuals' information processing strategies are *personal relevance* and *complexity/typicality* (Forgas, 2001). In personally relevant situations, individuals typically process information more deeply than they do when the information is not (Albarracin, 2002; Forgas, 2001). When coachees hold a more coachee-centric CSS, they are acknowledging the personal relevance of coaching for themselves, and as such they may be more likely to process information deeply. However, if the *only* information that coachees process in coaching is the information that they already had access to prior to coaching, this highly familiar set of information may actually encourage shallow processing, despite its personal relevance. Research

has found that when processing highly familiar information, individuals tend to engage in shallow, heuristic-based processing (Forgas, 1992; 1994; 2001). Conversely, when presented with complex and/or unique information, individuals tend to engage in deep, constructive processing. Integrating these findings, it follows that for coachees to engage in deep cognitive processing during coaching, they must not only perceive the personal relevance of the information (facilitated by coachee-granting behaviors), but the information that the coachee processes must be perceived as complex and new (facilitated by coach-claiming behaviors). Conflict Elaboration Theory supports this hypothesis as well - when the advisee actively shares information and participates with the advisor, the coachee is engaging in deep, constructive information processing (Mugny et al., 2001). CET proposes that interpersonal situations characterized by less threat and more support will minimize the likelihood that the coachee will either withdraw from the process or actively reject the information provided by the coach – leading to deeper and more active levels of information processing (Mugny et al., 2001); though "threat" may seem an odd term to implicate here, it is simply the inverse of high levels of benevolence-based trust (Mayer et al., 1995). Understanding this, by facilitating coachees' sense of a shared CSS, a coach may create an environment that facilitates coachee information processing by minimizing informational familiarity and enhancing perceived personal relevance for the coachee.

H2c: When coachees hold a shared CSS, as opposed to other CSS, they will process information most deeply

Information processing and goal-setting

Coachee commitment to personal development is one of the most important and

foundational predictors of whether the nascent progress made in a coaching setting will actually transfer to the coachee's life and job environments (Kilburg, 2001; Klein, Wesson, Hollenbeck, & Alge, 1999). Regarding tangible behavioral change, one of the first (most proximal) change-directed behaviors a coachee can take is the setting of and commitment to behavioral change goals (Lewis-Duarte, 2009; Prochaska et al., 2008; Weinstein et al., 2008). While simply the act of goal-setting is unlikely to be a final outcome that organizations are interested in contracting for, because it represents a first step towards desirable behavior change, goals and goal-setting behaviors may also be considered a meaningful outcome of a coaching engagement, especially during the beginning stages of coaching (Lewis-Duarte, 2009; Smewing, 2006). This means that coaches should also be concerned with how to encourage coachee goal commitment.

Research and theory alike have suggested that individuals who process information more intensely during goal-setting tend to be more committed to and work harder to carry out their goals (Gollwitzer, Heckhausen, & Ratajczak, 1990; Kruglanski & Thompson, 1999; Locke, 1996). Other research in the healthcare industry has found that depth of cognitive processing typically mediates the relationship between various interventions and outcomes (Creswell et al., 2007). Meyer, Becker, and Vandenberghe's (2004) integrative model of commitment and motivation also suggests that an individual's identification, value congruence, and involvement with a set goal (realizations that emerge from information processing) lead to high levels of goal commitment. The underlying theme of these theories and findings is that the more effort that individuals commit to provided information when setting goals, the more committed they will be to the goals once they are set. On the basis of such evidence, it follows that depth of processing will lead to higher levels of commitment to the goals set in coaching.

H3a: Depth of coachee information processing will be positively associated with initial commitment to self-set goals.

Though the depth of coachee information processing is undoubtedly important, the focus of coachee information processing is also important to coaching outcomes. Goal-setting theory and research suggest that when individuals set their own goals, the importance of specific self-efficacy is paramount in determining goal commitment (Locke, Frederick, Lee, & Bobko, 1984; Zimmerman, Bandura, & Martinez-Pons, 1992). If coachees incorporate their own insights and information, this is more volitional than if they just passively accept the coach's information as the primary driver of the goal-setting process; this enhanced volition leads to higher levels of goal commitment (Erez et al., 1985; Wright, 1992). Conversely, if goal-setting is overly influenced by others, difficult goals may be attributed to the other person being unrealistic or out of touch, resulting in lower levels of goal commitment (Hollenbeck & Klein, 1987; Hollenbeck, Williams, & Klein, 1989); in other words, if coachees' goal-setting processes are too focused on coach-provided information, they will be less likely to be committed to goals set in coaching. However, this is not to suggest that coachees who ignore their coaches will be highly committed to their set-goals. Research suggests that *more* information when setting goals – which should be achieved through processing coach-provided information – is linked to greater self-efficacy and goal commitment (Earley, 1986). Similarly, a host of research suggests that goal specificity is linked to higher levels of goal commitment (Fuhrmann & Kuhl, 1998; Lozano & Stephens, 2010; Wright & Kacmar, 1994); while the coachee's sense of control in setting his or her own goals is helpful in eliciting commitment, the goal specificity and clarity gained by a collaborative coaching process should lead to even higher levels of goal commitment.

H3b: *The focus of coachee information processing will influence coachee goal commitment, such that coachees who focus on personally held, coach-provided,* and *jointly constructed information will report higher levels of goal commitment*

CHAPTER THREE: METHODOLOGY

Participants

Participants were 126 undergraduate students from a large university in the southeastern United States. Participants signed up through the university's participant recruitment system, through which they received extra credit. Data cleaning was guided by two processes. First, a log was kept by research associates, who noted on a log after each session the nature of any methodological problems or variations that occurred. These problems included questionnaire malfunctions, severe language barriers, and coordination issues between research associates (n=8). Second, because some research associates began working as coaches with less training than other coaches, the first few sessions conducted by these coaches were deemed to be training sessions, and were accordingly excluded from further analysis (n=9). After data cleaning, 109 of these participants yielded usable data. This final sample consisted of 56% females, with 47% of all participants identifying as Caucasian, 24% Hispanic/Latino, 11% African-American, 4% Asian-American, and 11% as multiracial. The mean age of all participants was 19 years.

Procedure

Participants sat for a brief "coaching" session with trained research assistants who acted as coaches. The coaching process is described in greater detail below, but overall, the coaching consisted of four elements: (1) a brief rapport-building session, (2) a period of identifying strengths and weaknesses in the participant's conflict management skills, (3) a decision to focus on one conflict management behavior in particular, and (4) a series of questions designed to help the participant generate a few ideas/action steps to move toward improving the conflict

management behavior in question. To control for any possible effects due to the focus of coaching (e.g., time management vs. delegation) the coaching session focused on improving coachees' skills in only one content domain – conflict management. The coaching sessions lasted between one and one and half hours. After completing the coaching session and responding to several questionnaire items, participants were thanked and debriefed regarding the nature of the study. All data were collected electronically through the online survey software, Qualtrics.

Baseline intervention

Though coaching sessions are typically focused on whatever content areas the coachee identifies, to control any variability due to differences in intended coaching outcomes, all coaching conditions will be focused on discussing and improving participants' conflict management skills. More specifically, the content of coaching will be limited to working on one of four broad conflict management behaviors – *clearly communicating, listening and clarifying, identifying and focusing,* and *validating the other person.* These categories were adapted from a larger set of conflict management skills (Arellano & Markman, 1995) because they are decidedly more behavioral and controllable than other conflict management skills (e.g., controlling emotions, resisting escalation). In all conditions, the confederate guided the participant through a very basic coaching simulation, consisting of a "personal scorecard" (see Appendix A), the interpretation of an adapted version of the Thomas-Kilman Conflict Instrument (TKCI; see Appendix B), a series of goal clarification questions (see Appendix C), ending with the completion of a goal-setting activity (see Appendix D). This intervention follows the GROW structure of coaching, which is the most widely used method for structuring coaching sessions (Grant, 2011). The GROW model is a way to structure coaching interventions to make sure that

they are: *goal-focused* (G), grounded in *reality* (R), accounting for all *options and obstacles* to goal success (O), and driven by sufficient coachee motivation and *will to succeed* (W). The personal scorecard, goal clarification questions, and TKCI are all intended to help coachees determine which conflict management behavior they would like to improve.

Rapport-building. Tickle-Degnen and Rosenthal (1990) note that rapport is based on three factors: *mutual attentiveness, positivity,* and *coordination.* Because attentiveness and positivity are thought to be more important at the beginning phases of a relationship, and because they can be more easily driven by one individual (Tickle-Degnen & Rosenthal, 1990), I constrain my manipulation to these two factors. Attentiveness in the coaching relationship refers to coaches' conveyance that they are interested in their coachees and what they have to say (Jones & Gorell, 2012); positivity refers to a sense of "friendliness and caring" (Tickle-Degnen & Rosenthal, 1990, p.286). This kind of rapport can be built by asking coachees questions about their personal life and communicating genuine interest while they respond (Megginson & Clutterbuck, 2005; Vallano & Compo, 2011). Megginson and Clutterbuck (2005) suggest that the coach follow a "conversation ladder" for getting to know the coachee, discussing personal (but unthreatening) issues such as: *current family, education, work, interests,* and *dreams/aspirations*. These domains can then be used by the coach to identify commonalities with the coachee, another antecedent to rapport (Kelly, Miller, Redlich, & Kleinman, 2013). Several rapport-building behaviors commonly mentioned in the coaching literature include: *giving full attention without constant eye contact, acknowledging understanding with quick verbal and nonverbal affirmations, mirroring facial expressions,* and *reflecting and clarifying information when necessary* (Greif et al., 2008; Jones and Gorell, 2012; Kelly et al., 2013). For a more

detailed description of the rapport-building section of the intervention, see Appendix C.

Personal scorecard. The scorecard technique is simply a guided reflection technique that provides a baseline level of content for the coach and coachee to then move through the goal-setting exercises. The personal scorecard technique is conceptually similar to the balanced scorecard technique used in organizational development (Kaplan & Norton, 1996). Balanced scorecard techniques guide organizational leaders through a process of identifying the interrelated domains that contribute organizational goals (e.g., financial and customer service outcomes, operating procedures, a desirable business climate). Organizational leaders then work to understand how these domains are interrelated and how they can be objectively measured (Kaplan & Norton, 1996; SMA Canada, n.d.). The personal scorecard technique is similar in that it requires coachees to identify aspects of their life that are especially valuable and meaningful and to ascribe units of measurement to these areas. In Marshall Goldsmith's (2009) personal "Mojo" scorecard, he identifies ten domains spread across both the personal and professional aspects of his life. These domains address such things as knowledge, confidence, happiness, and meaning – if an activity scores high on these domains, it is something he extracts much value from. The purpose of this technique is to help coachees gain insight into the behavioral patterns that are more or less valuable or effective for them. Though this technique is not widely discussed, the general concept of guided reflection and introspection are core components of leader development and coaching interventions (Axelrod, 2012; Datar, Garvin, & Knoop, 2008; Jones & Gorell, 2012); the personal scorecard technique is just one way to facilitate reflection, introspection, and generate insights.

Conflict styles self-assessment. The Thomas-Kilman Conflict Mode Instrument

(Thomas & Kilman, n.d.) is a widely used tool in coaching that helps coachees identify their typical patterns of conflict management. There are five conflict styles – *competing, accommodating, avoiding, collaborating,* and *compromising.* Participants will take this measure before interacting with their coach, and during the course of the coaching session, the coach will provide an analysis of this instrument and discuss its implications with the participant.

Coaching questions. A series of coaching questions was pulled from the existing coaching literature (Hicks & McCracken, 2010; ICF, 2010; Jones & Gorell, 2012, Nekouranic & Fourrier, 2013; Simplicity Life Coaching, 2013; Warner, 2013) and also generated on the basis of existing motivation and goal-setting theories (Locke & Latham, 2002; Vroom, Porter, & Lawler, 2005). These questions are intended to move participants through the GROW model. See Appendix C for a table of coaching questions and a complete explication of the question process.

Goal-setting. Additionally, participants were asked to set a goal regarding steps to improve their interpersonal skills. I include goal-setting as part of this baseline intervention because one of the most universal aims of coaching is behavioral change (Bono et al., 2009; Morgan et al., 2005), coaching engagements should focus on maximizing the coachee's opportunity to recognize and enact changes. However, after coachees agree that change is necessary and desirable, but before they begin working to enact that change, they must somehow prepare to make those changes (Prochaska et al., 2008; Weinstein et al., 2008). Effective goal-setting practices serve this preparatory function. Goal-setting is a well-evidenced tool for guiding individual efforts, maintaining persistence, and generally enhancing motivation (Locke & Latham, 2002). After participants were guided through the coaching questions, they were asked to develop a plan to help them achieve their conflict management goal (see Appendix D).

Manipulation

Participants were randomly assigned to one of four conditions (a fully factorial 2 x 2 research design). To more firmly establish causality, measurement periods were time separated to establish temporal precedence. The two manipulated independent variables are the presence/absence of coach claiming behaviors and coachee granting behaviors.

As Derue and Ashford note, leader claiming behaviors refer to "the actions people take to assert their identity as a leader" (2010, p. 631). Similarly, coach-claiming behaviors refer to actions that coaches take to assert a coach identity in any given coaching relationship. This means that coach-claiming behaviors should foster the coachee's perception of the coach as someone who has the right and ability to challenge, motivate, question, and provide insights (de Haan et al., 2013; Ely et al., 2010). As discussed earlier, this entails appealing to and developing a sense of leadership, responsibility, competence-based trust, and expert power. Similarly, follower granting behaviors refer to "the actions that a person takes to bestow a… follower identity onto another person" (Derue & Ashford, 2010, p. 631). In the coaching context, this refers to behaviors that the coach engages in that facilitate the coachee's adoption of the correct (i.e., active, collaborative) kind of coachee identity (Carsten et al., 2010; Mugny et al., 2001; O'Flaherty & Everson, 2008; Peterson, 1996). This means that coaches must explain to their coachees that coachees must be a collaborator in the coaching process – not a passive recipient of information. Again, to preclude the possibility that identity construction behaviors simply minimize role ambiguity, I also developed a control script that defines the nature of the coaching relationship in terms of "process" (as opposed to ascribing responsibility to either the coach or coachee). See Appendix E for these scripts.

Measures

Research and interviews with practicing executive coaches point to the essential nature of coachee motivation and willingness to change (McKenna & Davis, 2009); these and other relevant variables will be measured and statistically controlled for, though participants will not be filtered on account of these variables.

Information processing. Because of the difficulty associated with assessing individuals' information processing strategies, I propose to use multiple measurements and methodologies to measure the focus and depth of participants' cognition. First, participants will be asked to report their cognitive experiences throughout the coaching session. To assess this, a measure was developed by synthesizing techniques from essay evaluation studies (Bower, Kemeny, Taylor, & Fahey, 2003; Pennebaker & Beall, 1986) as well as market research studies (Hammond, Fong, McDonald, Cameron, & Brown, 2003). In the essay evaluation studies (Bower et al., 2003; Pennebaker & Beall, 1986), participants were asked to evaluate their own essays in terms of what they talked about and how deeply they thought about it. In the market research studies (Hammond et al., 2003), participants were asked how carefully they thought about different sources of information. By adapting and synthesizing these two measures, I have created a measure of information processing in a coaching situation that tests the degree to which the coachee engages in independent, dependent, or interdependent processing (see Appendix F1).

Participant information processing may also be measured by coding their behavior (Greenwald, 1968; Waldron et al., 1995; Yalch & Elmore-Yalch, 1984). Past research has had participants list as many thoughts as they could generate regarding a given experience, with the underlying logic being that deeper cognitive processing would yield more thoughts. This

approach must be modified in several ways to make it workable for the coaching context – this measure cannot be given during the coaching session, as it will serve as a confounding intervention (i.e., triggering cognitive processing that is external to the actual coaching). To circumvent this, coaching sessions will be recorded, transcribed, and qualitatively coded to measure participants' cognitive processing and engagement throughout the session (e.g., richness of responses to questions, nonverbal indicators of attentiveness). Furthermore, after the coaching session ends, the experimenter will interview participants regarding their experiences in coaching. This interview will ask participants to report on any thoughts they had on conflict management prior to coaching, things that they felt like the coach directly taught them, things they realized as a result of actually interacting with the coach, and finally, the nature and specificity of their goals (see Appendix H). This interview, which will be recorded, transcribed, and coded, will serve as a manipulation check to the self-report measures of cognitive processing.

Additional constructs related to information processing. In addition to the measures described above, participants will respond to a few additional measures of constructs similar to information processing – *insight* and *interaction involvement.* Insight, or "serendipity" is a construct that refers to the degree to which participants experience new or sudden revelations or perspectives; the five-item, five point Likert scale measure was developed by McCay-Peet and Toms (2011), Cronbach's alpha level = 0.80. Though this does not directly assess focus or depth of information processing, it may serve as a good proxy for processing depth and focus, because strictly focusing on previously held information or only processing information very shallowly would likely not generate *new* insights. Interaction involvement refers to "the extent to which an

individual partakes in a social environment" (Cegala, 1981, p.112), which in the context of coaching would refer to the degree to which the coachee perceives, processes, and reacts to information within the coaching session. Participants will take an adapted measure of the Interaction Involvement Scale (Cegala, 1981; Appendix F2), which includes three subscales – *perceptiveness, other-oriented perceptiveness,* and *attentiveness.* I also include a measure dedicated strictly to attentiveness (Norton & Pettegrew, 1979; Perse, 1992).

Coaching structure schemas. To assess coachees' CSS, I developed a measure of this construct by combining a variation of Morgeson, DeRue, and Karam's (2010) measure of functional leadership behaviors and McClean, Yang, Kuo, Tolbert, and Larkin's (2005) measure of coaching behaviors. Select items were chosen from Morgeson and colleagues' measure and added to the McClean measure because the latter formed an insufficient representation of coaching behaviors (on the basis of literature review and interviews with practicing executive coaches). The items selected from Morgeson and colleagues' measures, though developed in the context of functional leadership, were selected on the basis of their conceptual overlap with behaviors and processes that typically occur in a coaching engagement (e.g., setting goals, asking questions). This measure will assess coachees' CSS by asking to what extent coaches and coaches are responsible for engaging in each of the presented behaviors. Presenting items in this fashion allows for participants to indicate low but shared ratings (e.g., both coach and coachee are rated low), high and shared, or divergent ratings of coach- and coachee-centrism within the CSS. See Appendices I and J.

Dependent variables. Goal commitment, the main dependent variable in this study will be measured using multiple measures. Hollenbeck, Williams, and Klein (1989) developed a nine-

item scale of goal commitment, which after significant research and criticism has been pared down to a more unidimensional five item measure (Klein, Wesson, Hollenbeck, Wright, & DeShon, 2001), which is the measure I use in this study. Participants' action plans will also be coded for specificity and complexity (i.e., number of goals comprising the overall action plan). This coding process will follow the methodology outlined by Waldron, Caughlin, and Jackson (1995). I also propose to measure additional peripheral (though still important) dependent variables using a follow-up study methodology. Participants who complete the study will be offered the opportunity to engage in a brief follow-up study one week after the study date. This study will assess participants' recall of set goals, continued goal commitment (Hollenbeck et al., 1989), goal-directed behaviors, and goal attainment (Grant, Curtayne, & Burton, 2009).

Other measures. Coaching researchers have suggested several intra- and interpersonal process variables as well as individual difference variables that should be associated with coaching effectiveness (de Haan et al., 2013; Feldman & Lankau, 2005; Grant, 2007; McKenna & Davis, 2009). Some of these include: working alliance (Corbiere, Bisson, Lauzon, & Ricard, 2006), rapport (Jap, Robertson, & Hamilton, 2011; Puccinelli & Tickle-Degnen, 2004), trust (Colquitt, Scott, & LePine, 2007; Mayer & Davis, 1999), conflict (Pearson, Ensley, & Amason, 2002), core self-evaluations (Judge, Erez, Bono, & Thoresen, 2003), goal orientation (VandeWalle, Cron, & Slocum, 2001), narcissism/humility (Ames, Rose, & Anderson, 2006), and psychological mindedness (Nyklicek & Denollet, 2009). Psychological mindedness is a fairly new construct and thus bears explanation here. According to Nyklicek and Denollet, psychological mindedness (PM) "refers to a person's interest and ability to be in touch with and reflect on his or her psychological states and processes" (2009, p.32). By way of the arguments

implicit in the ICE model, participants higher in PM should benefit from coaching more than those low in PM. Though these variables were not manipulated or directly hypothesized about, I measured them so that I might control for any explanatory variance they might account for.

Data collection and analyses

All data were collected with online surveys, created in and distributed through Qualtrics. All data was analyzed with the SPSS 20 statistical software package. For several of the regression analysis, I used the Hayes (2012) PROCESS and MEDIATE syntax for SPSS to test for directionality and simple effects. This method produces equivalent results as a standard simultaneous hierarchical regression would in SPSS, but can automatically mean center products as well as integrate bootstrapping estimates. More importantly, it reports the effects of IVs on DVs at different levels of specified moderators and produces specific data points for plotting purposes, helpful in plotting simple effects.

Pilot testing

One hundred and seventeen undergraduate students completed an online survey that consisted of: (1) basic CSS primes (see Appendix E), (2) the CSS measure that I developed, and (3) the measure of coachee information processing that I developed. Participants read a brief description of what coaching is (much like the prime they will receive in the face-to-face coaching session), priming them to adopt a coach- or coachee-centric or shared CSS. Upon reading the prime, participants completed two CSS measures and completed an automated goal-setting process (somewhat similar to the face-to-face coaching procedure). Afterwards, they responded to the measure of information processing (Appendix F1).

The reliability coefficient for the full information processing measure was an excellent

α= 0.92. Exploratory factor analyses largely confirmed the intended factor structure as well. Using principal components analysis and varimax rotation, three factors were extracted, which explained 71.7% of the variance. Expanding the rule of thumb which excludes items with factor loadings below 0.70 to include items with factor loadings of 0.60 and above, the following factors were extracted: *independent processing* (items 1 through 4; α = 0.83), *dependent processing* (items 5 through 9; α = 0.91), and *joint processing* (items 10 through 14; α = 0.90). This rule of thumb was expanded so that the initial factor structure could be maintained. The intercorrelation coefficients between these factors ranged from 0.44 to 0.73. The reliability coefficient for the behavioral CSS measure (Appendix J) was also sufficiently high at α = 0.89.

CHAPTER FOUR: RESULTS

Preliminary analyses

Preliminary analyses consisted of reliability checks, calculations of means and standard deviations, checks for normality of distributions, and intercorrelation analyses (see Table 5). Furthermore, for the creation of study-specific scales (i.e., information processing, CSS), in-depth analyses were conducted.

Coaching structure schema scales

The psychometric properties of the CSS scale were first assessed. Means and standard deviations for specific CSS items are reported in Table 6. Reliability analyses indicated good internal consistency – coachee CSS α=.75, coach CSS α=.82. To ensure that these were two separate factors, I conducted an exploratory factor analysis (principal components analysis, varimax rotation) on the twelve CSS items. The initial EFA, with extraction of eigenvalues greater than one, yielded an uninterpretable three-factor structure which explained 61% of the variance. The first factor was comprised entirely of coach-relevant CSS items, and factors two and three were comprised only of the coachee-relevant CSS items, with one item loading (>.50) on both factors two and three. Due to the lack of interpretability, I conducted another EFA, requesting only two factors be extracted. This two-factor solution explained 51% of the variance, with factor one consisting solely of coach-relevant CSS items, and factor two consisting only of the coachee-relevant CSS items. Because some of my hypotheses were related to the difference between scores on equivalent coaching behaviors between coach and coachee, I calculated delta scores such that a positive score indicated the coachee felt more personally responsible for said

behavior, while a negative score indicated that the coachee saw the coach as being responsible. A score closer to zero indicated a greater degree of sharedness in the coachee's CSS. To potentially combine these distance scores into a single measure of CSS sharedness, I transformed all of these distance scores into absolute values – in this way a "coach-centric" (i.e., a negative delta) would simply indicate distance from complete sharedness. Combining these absolute delta scores into a measure of overall sharedness was deemed appropriate, as internal consistency reached α=.75.

Information processing scale development

Reliability analyses were conducted on the proposed four factors of information processing. Joint processing, consisting of items such as "Together, the coach and I come up with ideas on how to achieve my goals" and "Sometimes, questions that the coach asks me make me think of something in a new light" refers to the degree to which the coachee thinks about content that is generated as a result of dynamic interactions with the coach. This measure reached acceptable internal consistency levels, α=.72. Joint processing is in contrast to independent processing which refers to the degree to which the coachee thinks privately (without engaging the coach) about things relating to coaching. For the independent processing scale, which initially consisted of items one through four (see Appendix F), I dropped the first item, which had low item-total correlations; the resulting reliability was α=.67. Joint and independent processing are distinct from dependent processing, which refers to the degree to which the coachee thinks about content directly provided by the coach. The dependent processing scale was also reduced from five to four items (again, due to low internal consistency); the resulting reliability was α=.62. Finally, the four items worded in the negative – which indicated an overall lack of interest and information processing (labeled "distractedness") had acceptable reliability

levels, α=.73. Due to the low reliability associated with the dependent processing scale, this scale is only used in very limited instances throughout the remainder of the manuscript.

Hypothesis testing

It should be reiterated here that while the hypotheses are presented in the form of an overall model, I did not expressly hypothesize mediation of the effects of coach behavior all the way through to goal commitment. This was intentional – because this is an analog study, using novel manipulations and measures, I was primarily interested in the relationships between proposed constructs (i.e., claiming and granting behaviors, CSS, information processing), rather than validating a complex mediation model. In other words, at this phase in the theoretical development, it is more important to simply evince the utility and plausibility of the discussed constructs than to clearly argue for mediated effects. That being said, the importance and interest associated with testing the overall model is not overlooked; accordingly, auxiliary analyses are conducted where appropriate in order to test the overall proposed model.

Hypothesis 1 – Claiming, granting, and CSS

To test hypotheses relating to the effects of coach claiming and granting behaviors on coachee CSS, I conducted a series of independent samples T-tests, followed by an overall repeated measures ANOVA. To test the main effects of the claiming conditions (i.e., claiming only, and claiming and granting), I conducted an independent samples T-test on the overall coach-relevant CSS, $t(107)= -0.63$, *ns.* Accordingly, I could not support the hypothesis that coach claiming behaviors would yield a more coach-centric CSS.

Due to the lack of support for this hypothesis, I conducted several *exploratory analyses* by running independent samples T-tests on the delta values for each of the six CSS items (with a

lower score indicating a more coach-centric behavioral attribution). These tests are described in greater detail in Table 6, but the only coaching behavior item that was significantly different across the claiming conditions was "Identify what it is I need to work on," $t(107)=1.67$, $p<.05$ (one-tailed). One possible reason for this weak support was the relative similarity between the control condition and the claiming-only condition. Accordingly, I re-ran the independent samples T-tests, this time without the control condition (i.e., comparing the claiming and claiming/granting conditions against the granting only). Participants in claiming conditions reported significantly higher overall coach CSS levels than did those in the granting only condition, $t(78)=-1.69$, $p<.05$ (one-tailed). Furthermore, CSS delta values were significantly more coach-centric for three of the six CSS items. Participants ascribed the CSS item "come up with creative ideas," significantly more to coaches than coachees when receiving a claiming condition, $t(78)=2.84$, $p<.001$. This same pattern of results was also found for the CSS items "identify what it is I need to work on," $t(78)=1.70$, $p<.05$ (one-tailed), and "make decisions about the focus of coaching," $t(78)=1.95$, $p<.05$ (one-tailed). Given the exploratory nature of these analyses, I do not infer support for Hypothesis 1a. However, there were at least some trends that were promising, suggesting that further research needs to be conducted.

I followed the same steps to assess the overall effect of the two granting conditions on CSS variables. The granting conditions largely exhibited significantly greater coachee-centrism. Means for the overall coachee CSS scale were significantly higher in granting conditions, $t(107)=-2.08$, $p<.05$. Accordingly, Hypothesis 1b was supported. By way of exploratory analyses, it should be noted that this pattern was also seen in the delta values for four of the six CSS items (see Table 6, Figure 4).

Because Hypothesis 1c posited simultaneous effects of claiming and granting on both components of the coachee's CSS (i.e., coach- and coachee-relevant), and because each of the six items on the CSS scales are duplicated – once in relation to the coach and once in relation to the coachee (making the coach- and coachee-CSS scales essentially repeated measures) – repeated measures ANOVA were conducted. This analysis also enables an accurate visualization of participants' CSS in relation to the coach and coachee (strength) and the closeness in strengths (sharedness). To control for the effects of participants' performance prove orientation, this variable was included in the analysis model. Performance prove orientation (PPO) was thought to play a meaningful role in determining participants' total CSS (i.e., taking both coach- and coachee-relevant CSS into account) because PPO is inherently competitive and comparative in nature (Brett & Van de Walle, 1999; Farr, Hoffmann, & Ringenbach, 1993); individuals higher in PPO should be more likely to attribute coaching behaviors to whichever coaching partner (coach or coachee) they perceive as most appropriate and most likely to yield an effective outcome. First, repeated measures ANOVA were conducted using all six paired CSS items as independent measures. The model was significant, $F(18, 303)=2.27$, $p<.01$, partial $\eta^2 = .12$, (see Figures 4 through 9 and Table 7). Univariate analyses suggested that three of the six CSS behaviors exhibited significant effects, with a fourth exhibiting marginally significant effects, partially supporting Hypothesis 1c. To further test this hypothesis, another repeated measures ANOVA was conducted, this time with the mean CSS ratings for coach and coachee. This enabled a more reliable estimate of participants' sense of the coach and coachee's responsibility for the execution of the various coaching behaviors. Overall repeated measures ANOVA provided support for the hypothesis, finding a small to medium effect size, $F(3,104)=2.91$,

$p<.05$, partial $\eta^2 = .08$. Figure 10 effectively illustrates the nature of CSS ratings for coach and coachee. In line with Hypothesis 1c, participants in the claiming and granting condition reported *stronger* (i.e., higher overall) and *more shared* (i.e., less distance between overall coach and coachee) coaching structure schemas. See Table 8 for more information.

Hypothesis 2 – CSS and information processing

To test the effects of participants' CSS on the nature of their information processing, I conducted bivariate and partial correlations between both components of CSS (i.e., coach- and coachee-centric) and the four components of information processing. Following that, I conducted multiple regression analyses. Simple hierarchical regression analyses were conducted first in order to directly test the hypotheses and concepts in their most basic form. To test the overall model (i.e., the effects of claiming and granting behaviors on coachee CSS, information processing, and goal commitment), I conducted auxiliary mediation tests, which I present at key points throughout the remainder of the results section.

In support of Hypothesis 2a, coach-relevant CSS was significantly correlated with dependent processing, $r=.23$, $p<.05$. To ensure that this effect was not attributable to an overall interest in or commitment to the coaching process, I conducted partial correlations, controlling for coachee-centric CSS; this test was also significant $r_p=.22$, $p<.05$. Bivariate correlations (see Table 5) found significant relationships between coachee-relevant CSS and joint processing, $r=.29$, $p<.001$, and distractedness, $r=-.20$, $p<.05$. These correlations provided initial support for my hypotheses regarding the connection between CSS and coachee information processing. To further test these hypotheses, I regressed participants' joint information processing on to a model first controlling for psychological mindedness, and then entering coach- and coachee-centric

CSS. The model was significant, explaining over 18% of the variance in joint information processing. In partial support of my hypotheses, the regression coefficient coachee-centric CSS was significant, β=.18, $t(107)=2.00$, $p<.05$, while the coefficient for coach-centric CSS was only marginally significant, β=.18, $t(107)=1.94$, $p<.03$ (one-tailed) (see Table 9). This provides some evidence that coach- and coachee-centric CSS positively (and independently) contribute to participants' joint information processing.

I also ran auxiliary analyses in order to test the direct and indirect effects of coach claiming and granting behaviors on coachee information processing through coachees' CSS. To do this, I used the Hayes (2013) PROCESS macro, which tests for mediation using direct and indirect effects, multiple mediators, and bootstrapping confidence intervals. I regressed coachees' joint information processing onto a mediation model (model 4) with granting as the independent variable, coach- and coachee-relevant CSS as the mediators, and claiming and psychological mindedness as covariates. The overall model was significant, $F(5, 103)=5.71$, $p<.001$, and explained 22% of the variance in joint processing. The table is not replicated here because it largely mirrors analyses conducted and reported in Table 9. Additionally, the indirect effect of granting behaviors had a significant indirect effect on joint processing as mediated by coachee-relevant CSS (B=.05, 95% LLCI .01, ULCI.12). Though I did not directly hypothesize that coach behaviors would influence information processing as mediated by coachees' CSS, that this effect was mediated is noteworthy.

Hypothesis 3 – Information processing and goal commitment

Initially testing the relationship between information processing and goal commitment, I ran bivariate correlation tests (see Table 5). In support of my hypothesis, goal commitment was

significantly correlated with joint (r=.39, p<.001) and dependent processing (r=.19, p<.05, one-tailed), as well as distractedness (r=-.39, p<.001); however, it was not significantly correlated with independent processing (r=.06, *ns*). To further test this hypothesis, I conducted multiple regression analyses, controlling for psychological mindedness, which has shown to be connected to information processing, learning, and commitment (Brown, Ryan, & Creswell, 2007; Grant, 2001). This step accounted for nearly 10% of the variance in participants' goal commitment; entering the four factors of information processing accounted for an additional 16% of the variance in goal commitment. In the overall model, both joint and independent processing, as well as distractedness had significant regression coefficients (see Table 10); dependent processing was not included due to its low alpha value. In accordance with my hypotheses, this suggests that different aspects of coachee information processing account for unique components of goal commitment.

Finally, I conducted auxiliary analyses in order to better assess the effects that coach claiming and granting behaviors, as well as coachee CSS, might have on coachee's goal commitment. Again, these effects were not explicitly hypothesized, but it seemed appropriate to test for them nonetheless. First, I used the Hayes (2013) MEDIATE syntax to assess the effects of CSS on coachee goal commitment as mediated by information processing (I just used joint processing and distractedness, due to their higher reliabilities), with psychological mindedness as a covariate. The final overall model predicting goal commitment was significant, F(5,103)=9.17, p<.001, adjusted R^2 = .27. The MEDIATE syntax automatically displays indirect effects of both independent variables through multiple mediators. Of the four possible indirect effect paths of CSS through information processing, the two paths through joint processing were both

significant. Indirect effects of $CSS_{coachee}$ (B=.04, se=.02, 95% LLCI .009, ULCI .109) and CSS_{coach} (B=.04, se=.02, 95% LLCI .003, ULCI .097) on goal commitment were both significant (if admittedly small) and in the expected direction. Indirect effects of CSS were not mediated by distractedness (see Tables 11 and 12). This suggests that coachees' CSS had significant, positive effects on goal commitment by increasing the level of participants' joint information processing. Second, I used the Hayes (2013) PROCESS macro to assess the effects of coach granting behaviors on goal commitment as mediated by coachee CSS *and* joint information processing; however, this time I tested for serial mediation (i.e., granting effects are transmitted first through CSS, *then* through processing). The overall model predicting commitment was significant, $F(6,102)=5.90$, $p<.001$, $R^2=.26$, with the effects of granting behaviors being significantly mediated first through coachee-relevant CSS and then through joint information processing (B=.02, LLCI .01, ULCI .06). See Tables 13 and 14 for more information.

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

This study simulated a conflict management coaching session in a laboratory setting and manipulated a specific behavior that coaches engage in – claiming and granting behaviors – to illustrate that subtle coaching techniques and interpersonal behaviors can influence various aspects of the coaching process. The methodology and research questions were grounded in a synthesized form of social information processing theory (Derue & Ashford, 2010; Mugny et al., 2001), which ultimately posited that coaches can help frame and direct coachees' information processing efforts by engaging in identity construction behaviors (i.e., claiming and granting). By helping to co-create the coachee's situational/relational identity within the coaching context, the coach in turn implicitly directs the coachee to engage in different kinds and intensities of information processing. Past research on behavior change and motivation has suggested that the focus and depth of information processing are important predictors of behavior change and goal commitment (Creswell et al., 2007; Gollwitzer et al., 1990; Kruglanski & Thompson, 1999; Locke, 1996). This research found several things with important implications for coaches, coaching researchers, and those looking to hire a coach.

Summary of findings and practical implications

Identity construction behaviors

I found mixed support for my hypothesis that the coach's identity construction behaviors would affect coachees' reported CSS levels. On the one hand, I found moderate support for the effect of the coach's *granting* behaviors in facilitating higher levels of coachee-centrism. On the other hand, I did not find a similar pattern in relation to coach *claiming* behaviors; that is, coach

claiming behaviors seemed to have little to no effect on coach-centrism within coachees' CSS. However, it was found that the condition that combined *claiming and granting* behaviors tended to yield a coachee CSS that was higher in both coach- and coachee-centrism. Furthermore, auxiliary analyses showed some initial (albeit weak) support for an overall model wherein the effects of coaching behaviors (specifically coach granting behaviors) were transmitted through coachees' CSS and their information processing efforts. When coaches used granting behaviors, coachees tended to adopt a more coachee-centric CSS which in turn facilitated more information processing and goal commitment. The International Coach Federation notes that "establishing the coaching agreement" (ICF A2, nd) as well as communicating the nature of coaching (ICF A1-3, nd) are core competencies of effective coaching. Furthermore, in interviews with many executive coaches, I have found that the coachee's level of role clarity and adoption of an effective CSS to be an important predictor of desirable coaching outcomes. This study represents the first empirical test that illustrates the importance of role clarification and identity construction behaviors. Findings are more supportive of the effect of granting behaviors (as opposed to claiming behaviors) on coachees' CSS. This may either imply that coachee-centric factors such as coachee engagement and self-efficacy are more important than coach-centric factors such as credibility and trust in the coach, or it may simply suggest that the claiming manipulation was not sufficiently strong. Possible reasons for the weakness of the claiming manipulation are discussed in the limitations section.

Coaching structure schemas

One of the first things to note about coachees' CSS is that there appears to be a relatively consistent division of labor across the six coaching behaviors included in the CSS measure.

Typically, coming up with creative ideas, making decisions about the focus of coaching, and making sure that the coachee learned something were ascribed more to the coach than the coachee – regardless of what claiming/granting condition the participant was in. Similarly (albeit to a lesser extent), thinking deeply and monitoring motivation seemed to be attributed more to the domain of coachee responsibility. I propose that the former coaching behaviors represent more service-oriented, interpersonal behaviors, while the latter represent more cognition-oriented, intrapersonal behaviors. It seems that irrespective of condition, service behaviors tend to get more strongly attributed to the coach, while cognition behaviors are attributed to the coachee. Despite the overall trend, identity construction (particularly granting) behaviors were mostly effective at influencing the *distance* between coach and coachee attributions of coaching behaviors. Implications for coaches include paying attention to specific aspects of what the coachee assumes is an appropriate division of labor, and focusing identity construction and role clarification efforts on CSS domains that are misaligned with the purposes of coaching.

In addition to shedding light on the nature of coachees' CSS, this study explored the effects of CSS on coaching processes and outcomes. Specifically, it was found that both coach- and coachee-centric CSS were important in predicting joint processing, coach-centric CSS was linked to dependent processing, and coachee-centric CSS was associated with lower reported levels of distractedness and disengagement. Furthermore, coachee-centric CSS was significantly correlated directly with goal commitment. These all suggest that CSS is indeed an important construct for coaches and coaching researchers to be aware of and continue to develop.

The nature of information processing

Coaching is a dynamic process that ideally should include inputs and efforts on the part

of both coach and coachee. Confidants offer no input, and consultants may do all or most of the work for you, but coaching is meant to facilitate a process wherein the coach and coachee work together. This duality means that multiple sources of information are available for the coachee to pull from, making it essential that measures be developed that can effectively assess what the coachee is focusing on during coaching. To this end, I developed a four-factor measure of coachee information processing, which was designed to tap joint processing (i.e., focusing on information generated jointly by coach and coachee), independent processing (i.e., thinking about the goals of coaching without actively engaging the coach), dependent processing (i.e., heavily relying on the coach's inputs and opinions), and generic distractedness (i.e., thinking about things unrelated to coaching). Though the measure admittedly had some issues, it exhibited decent convergent validity with related variables such as psychological mindedness and goal orientation. Furthermore, regression analysis showed that joint and independent processing, as well as distractedness, all accounted for unique variance when predicting goal commitment. This suggests that coachees need more than one source of information to focus on when generating action plans, and perhaps that coaches that can effectively engage multiple channels of information processing may be more effective.

The importance of psychological mindedness

Though not explicitly hypothesized, one auxiliary finding of note has to do with the importance of psychological mindedness. Psychological mindedness was consistently found to be linked to important constructs within the coaching relationship, including strength of coachees' CSS, coachee information processing, and perhaps most importantly, the level of self-reported goal commitment at the end of coaching. This suggests that the coachee's psychological

mindedness – the degree to which he or she is interested in actively thinking about inter- and intrapersonal phenomena – may be an important determinant in coaching effectiveness. Practically, this has importance for coaches and hiring organizations, who are both often interested in assessing coachees prior to coaching in order to allocate resources only to those coachees most likely to yield a positive ROI. This suggests that coaches and hiring organizations should consider a potential coachee's psychological mindedness prior to beginning coaching. Theoretically, this raises interesting questions for future research. If coaches and/or hiring organizations are indeed effective at screening out low-psych mindedness individuals, to what extent is *coaching* being effective, as opposed to simply having highly motivated, interested, and "coachable" individuals? If psychological mindedness (and other individual difference characteristics) begin or continue to be used as screening variables for coaching, perhaps future research could explore to what extent these kinds of individuals benefit from other (less resource-intensive) development opportunities.

Limitations of the research

Though I found support for some of my hypotheses, as with all studies this one is not without its limitations. Briefly, the limitations cover issues of reliability, content validity, and overall generalizability. I address these in turn below.

Though the information processing scales achieved more than acceptable levels of internal consistency during pilot testing, the scales did not hold together as well during the final phase of data collection. Particularly, scales for independent and dependent processing failed to reach alpha levels of .70. Though this is unfortunate, and hinders the study's ability to make strong inferences regarding the importance of information processing *focus* as an important

driver of goal commitment, it does not invalidate the findings that were derived. Coachees' CSS were significantly linked to joint processing and distractedness, and both of these variables contributed unique predictive variance to models predicting goal commitment. Furthermore, independent processing, which had near-acceptable reliability levels (α=.67) also contributed variance when predicting goal commitment. Though this should be taken with a grain of salt, it is a promising and interesting finding that suggests that accounting for the focus of coachee information processing may add explanatory power to models of coaching effectiveness.

One limitation of this study is the apparent ineffectiveness of coach claiming behaviors. Coach-centrism in coachees' CSS was not strongly influenced by claiming behaviors as expected, at least when running independent samples T-tests comparing claiming vs. not claiming conditions. However, as discussed earlier, when removing the control condition from analysis and simply comparing the "granting only" condition to both claiming conditions, more significant differences became apparent. Why would this be? One likely possibility is that the control condition may have constituted somewhat of a claiming condition as well. Coaches in the control conditions ascribed a large portion of the effectiveness of coaching to the coaching "process." That was meant to absolve both coach and coachee of responsibility, and to lower coachees' CSS ratings, while also avoiding the potential confound of role clarity (or lack thereof) as being a possible reason for group differences. However, by appealing to the coaching process – something which the coach knows intimately and which the coachee has no control over – the coach may have actually been implicitly engaging in some low-level claiming behaviors by leveraging expert power (French & Raven, 1959). While this is obviously not ideal, this limitation is unlikely to overinflate effects and cause Type I errors. Because of the possible

presence of claiming behaviors within the control condition, this would decrease any between-group differences when comparing the control condition with others. Future research should compare claiming and granting behaviors against controls while accounting for role clarity. Another thing that may have limited the effectiveness of claiming behaviors is that their effectiveness is somewhat based on the coachee's evaluation of the claimant's credibility (Derue & Ashford, 2010). In other words, it is one thing to be *granted* leadership and authority within a relationship – the effectiveness of the granting behavior will likely be influenced by the grantee's self-efficacy and motivation to accept the grant (Ashforth, Harrison, & Cooley, 2008; Smith & Foti, 1998). It is an entirely different thing to have someone else (in this case, the coach) *claim* leadership and authority, especially when this person has little other than positional authority (French & Raven, 1959; Kraus, Ahearne, Lam, & Wieske, 2012; Ran & Golden, 2011). I attempted to circumvent this by having the experimenters emphasize to participants the nature and degree of the coach's training, but there is no way to know to what extent this worked at increasing perceived credibility, because this was not a manipulated condition. Future research could explore further the effects of coach claiming behaviors on coaching effectiveness by manipulating various types of coach claiming behaviors.

One aspect of generalizability that cannot be overlooked is that this study attempted to explore a complex, idiosyncratic phenomenon which is typically targeted at professional individuals with a sample of undergraduate university students. However, controlled studies of coaching are extremely rare (de Haan et al., 2013; Grant, 2007), despite their importance in developing a context-general theoretical framework for coaching. This study represents the first effort to develop and test such a model. The development of new and generalizable theories of

coaching are essential for the science and practice of coaching to advance (Grant, 2007), and controlled experimental studies are essential to provide initial validation for new theoretical developments (Driskell & Salas, 1992). To conduct this theory-building research, I simulate only a small portion (goal-setting) of the larger phenomenon (coaching), which is much more realistic to simulate. Other related research has also found that many times university students do not differ significantly from "real-world" individuals (Bernstein, Hakel, & Harlan, 1975; Dipboye & Flanagan, 1979; Greenberg, 1987) on many important characteristics and behaviors. Finally, to maximize the psychological fidelity and generalizability of this simulation, the coaching simulation was constrained to discussing a behavior that not only is fairly common in real coaching engagements (Bono et al., 2009; Peterson, 1996; Stern, 2004), but that is relevant to undergraduate students' experiences as well – conflict management. By focusing strictly on conflict management, I was able to develop a coaching script that is both controllable and natural, and which will be motivating and interesting to undergraduate participants. This not only increased validity, but generalizability to other populations as well.

Theoretical contributions and future research

Coaching is inherently idiosyncratic (Ely et al., 2010; Feldman & Lankau, 2005) and pulls from a wide variety of practical and theoretical fields (Feldman & Lankau, 2005). While this contributes to the flexibility and appeal of coaching, it also makes evaluation and rigorous research of the *how* of coaching difficult. In this study, I leveraged broad psychological theories (i.e., identity and information processing theory) that encompass a wide array of coaching approaches (e.g., cognitive behavioral, Ducharme, 2004; psychodynamic, Kilburg, 2004) to generate a process-based model in the vein of the Baldwin and Ford (1981) model of training

evaluation. The model posits that coaching inputs first elicit an ever-evolving coaching relationship, which in turn collectively serve to influence immediate psychological changes (e.g., attitudes, cognition) within the coachee; these changes function as the precursor to more distal changes (e.g., behavioral, organizational). This study represents the first test of this process model of coaching, and illustrates the utility of a theoretical foundation that can guide the development and testing of specific aspects of the coaching phenomenon. Future researchers can use this process-based framework to consider different variables that may drive coaching effectiveness. For example, how do coach and coachee personality discrepancies influence the coach-coachee relationship? What aspects of the coaching relationship (e.g., trust, information sharing, conflict, role clarity) are most important for coaching effectiveness, and does their importance change depending on the intended outcome of coaching? How do situational characteristics such as supervisory support affect ultra-proximal outcomes (e.g., goal commitment, insight, behavior change on a "trial basis")? Are there certain coaching behaviors that can be used to help overcome problematic or unmotivated coachees? This framework offers researchers the opportunity to consider these and many more questions that will ultimately serve to advance the science and practice of coaching.

This study also proposed that the coachee's understanding of role allocation and division of labor within the coaching relationship – the coaching structure schema – is an important explanatory construct within the coaching process. Initial support was found for these hypotheses, suggesting that future researchers incorporate measures of CSS in models predicting coaching effectiveness. Before this happens though, several avenues for research should take preeminence, all relating to the improvement of CSS measurement tools. Some items in the CSS

scales seem to be more clearly in favor of one member of the coaching relationship over the other. On the other hand, some behaviors were rarely distinguished between coach and coachee. This could mean that some items were clearer than others, that coachees were still unsure as to the appropriate division of labor, or simply that some behaviors seemed more appropriate to share evenly, regardless of the manipulation. Future research could explore a wider array of coaching behaviors. Furthermore, item analysis and IRT-driven research could develop a highly sensitive measure of coachee CSS. For example, making decisions about the focus of coaching was strongly linked to the coach over the coachee; coachees who report an even distribution of this coaching behavior between coach and coachee might be more accurately described as having a coachee-centric CSS than a truly shared CSS. By the same token, thinking deeply tended to be ascribed to the coachee. A coachee stating that the coach and coachee should share this responsibility might actually have an overall coach-centric CSS. Another potential way to improve the CSS measure would be to use geographic grids comprised of two combined Likert scales. This could potentially better tap the notion of CSS, because participants would be simultaneously comparing coach and coachee contribution to various coaching behaviors, rather than rating them separately and likely forgetting the initial reference point. Measure validation research grounded in item response theory and leveraging unique elicitation techniques could enable the development of brief adaptive tests that could effectively assess (and dynamically monitor) the nature of the coachee's CSS, enabling coaches to clarify (and re-clarify if necessary) an appropriate and effective CSS.

Another avenue for further CSS research would be to consider the role of time and the various different phases of a typical coaching relationship on the evolution of coachees' CSS.

For example, while (broadly speaking) coaching engagements progress through a period of role clarification, goal identification, generation of action plans, work towards achieving goals, and continual monitoring of progress (Grant, 2011; Palmer, 2007; Passmore, 2007), perhaps different CSS configurations are more or less effective at different phases in the process. A coach-centric CSS would be logical during the early phases of coaching, when coachees may be less clear about the nature of coaching or when they are unaware of specific needs or methods to change (Palmer, 2007). As coachees progress towards the end of the coaching contract, a more coachee-centric CSS may be increasingly important – if the goal of coaching is sustainable long-term behavioral change, then overreliance on the coach's help could be counterproductive. The notion of shifting leadership in teams is prevalent in the literature on shared leadership (Fuqua & Newman, 2005; Li, Wang, Chen, 2008; Shamir, 1999), and it would not be surprising to find it to be an important factor in coaching. Future research could explore the rate of this CSS shift as well; should the shift to a more coachee-centric CSS happen almost immediately, or is it more effective to gradually ease the coachee into this responsibility? This raises further questions related to coachee individual differences – perhaps some coachees are more ready to rapidly accept granting behaviors and take ownership of the coaching engagement while others are less likely to do so. Preliminary evidence from this study suggests that individual differences such as performance prove orientation may encourage a coach-centric CSS (r=.18, p<.05). Research in this domain would ultimately allow coaches to tailor their techniques and processes to better fit the psychological profile of the coachee – ultimately yielding a more effective and efficient coaching intervention.

Finally, some support was found for coachee information processing as a mediating

variable between coach behaviors and coachee goal commitment. It should be clarified here that this mediated effect of coach granting behaviors on goal commitment was very small. This constitutes something of a theoretical contribution, providing limited initial evidence for the utility of a process-based model that places the coaching relationship *and* coachee psychological processes as key mediating variables explaining the connection between coaching inputs and outcomes. The weakness of the effect suggests that future research should look at different coach behaviors – perhaps ones with a more targeted impact on information processing. Beyond this, however, some support was found for a multifactor structure of coachee information processing, where the factors successfully contribute unique variance in predictive models of coachee goal commitment. Future researchers should continue to develop measures of information processing that account for *focus* of processing – not just depth. As these measures continue to be developed and refined, researchers should explore the ways in which different processing foci contribute to coaching effectiveness, and to facilitate the most effective modes of coachee information processing. Advancement in this area will better enable coaches to monitor and adapt to subtle intrapsychological changes within their coachees, leading to a more dynamic and responsive coaching experience.

APPENDIX A: PERSONAL SCORECARD

_____’s Conflict Scorecard **EVENT**	**Clearly communicating**	**Listening and clarifying**	**Identifying and focusing**	**Validating the other person**
DESCRIPTION OF EVENT	**My score**	**My score**	**My score**	**My score**
NEED TO IMPROVE				
DESIRE TO IMPROVE	**BEST?** **WORST?** **WORK?**	**BEST?** **WORST?** **WORK?**	**BEST?** **WORST?** **WORK?**	**BEST?** **WORST?** **WORK?**

APPENDIX B: THOMAS KILMANN CONFLICT INSTRUMENT

Consider situations in which you find your wishes differing from those of another person. How do you usually respond to such situations?

On the following pages are several pairs of statements describing possible behavioral responses. For each pair, please circle the "A" or "B" statement which is mot characteristic of your own behavior.

In many cases, neither the "A" nor the "B" statement may be very typical of your behavior, but please select the response which you would be more likely to use.

1. There are times when I let others take responsibility for solving the problem. (A)
   Rather than negotiate the things on which we disagree, I try to stress the things upon which we both agree. (B)
2. I try to find a compromise situation. (A)
   I attempt to deal with all of his and my concerns. (B)
3. I am usually firm in pursuing my goals. (A)
   I might try to soothe the other's feelings and preserve our relationship. (B)
4. I try to find a compromise solution. (A)
   I sometimes sacrifice my own wishes for the wishes of the other person. (B)
5. I consistently seek the other's help in working out a solution. (A)
   I try to do what is necessary to avoid useless tensions. (B)
6. I try to avoid creating unpleasantness for myself. (A)
   I try to win my position. (B)
7. I try to postpone the issue until I have had some time to think it over. (A)
   I give up some points in exchange for others. (B)
8. I am usually firm in pursuing my goals. (A)
   I attempt to get all concerns and issues immediately out I the open. (B)
9. I feel that differences are not always worth worrying about. (A)
   I make some effort to get my way. (B)
10. I am firm in pursuing my goals. (A)
    I try to find a compromise solution. (B)
11. I attempt to get all concerns and issues immediately out in the open. (A)
    I might try to soothe the other's feelings and preserve our relationship. (B)
12. I sometimes avoid taking positions which would create controversy. (A)
    I will let him have some of his positions if he lets me have some of mine. (B)
13. I propose a middle ground. (A)
    I press to get my points made. (B)
14. I tell him my ideas and ask him for his. (A)
    I try to show him the logic and benefits of my position. (B)

15. I might try to soothe the other's feelings and preserve our relationship. (A)
    I try to do what is necessary to avoid tensions. (B)
16. I try not to hurt the other's feelings. (A)
    I try to convince the other person of the merits of my position. (B)
17. I am usually firm in pursuing my goals. (A)
    I will let him have some of his positions if he lets me have some of mine. (B)
18. If it makes the other person happy, I might let him maintain his views. (A)
    I will let him have some of his positions if he lets me have some of mine. (B)
19. I attempt to get all concerns and issues immediately out in the open. (A)
    I try to postpone the issue until I have had some time to think it over. (B)
20. I attempt to immediately work through our differences. (A)
    I try to find a fair combination of gains and losses (B)
21. In approaching negotiations, I try to be considerate of the other person's wishes. (A)
    I always lean toward a direct discussion of the problem. (B)
22. I try to find a position that is intermediate between his and mine. (A)
    I assert my wishes. (B)
23. I am very often concerned with satisfying all our wishes. (A
    There are times when I let others take responsibility for solving the problem. (B)
24. If the other's position seems very important to him, I would try to meet his wishes. (A)
    I try to get him to settle for a compromise. (B)
25. I try to show him the logic and benefits of my position. (A)
    In approaching negotiations, I try to be considerate of the other person's wishes. (B)
26. I propose a middle ground. (A)
    I am nearly always concerned with satisfying all our wishes. (B)
27. I sometimes avoid taking positions that would create controversy. (A)
    If it makes the other person happy, I might let him maintain his views. (B)
28. I am usually firm in pursuing my goals. (A)
    I usually seek the other's help in working out a solution. (B)
29. I propose a middle ground. (A)
    I feel that differences are not always worth worrying about. (B)
30. I try not to hurt the other's feelings. (A)
    I always share the problem with the other person so that we can work it out. (B)

APPENDIX C: EXAMPLE GOAL-SETTING EXERCISE

In this appendix, I provide an example of how the automated goal-setting program functions as part of the coaching process. To illustrate, I provide the questions that participants are asked, as well as example responses (in italics)

Section 1
Based on your coaching session, what is the conflict domain you'd most like to improve on?

Clearly communicating

Section 2
Think about *clearly communicating* and how you might be able to improve your conflict management skills in this area. Here are a few questions to guide your thinking.

1. What is your own theory as to why you have not do not do "clearly communicating" as well as you would like?
2. What is stopping you from improving on "clearly communicating?"
3. Think of a specific time when you did not do "clearly communicating" as well as you'd like. Can you identify the things that caused you to behave in this way?
4. What people, knowledge, skills, habits, or tools do you need to help you improve your ability in "clearly communicating?"

With these questions in mind, think about any obstacles that might prevent you from achieving the goal of being someone who is good at "clearly communicating." If possible, these obstacles should be things that you can personally control.

I don't really know what it is I need to communicate or how
I forget and get caught up in the moment

Section 3
Now let's clarify the issue further. Below are obstacles that you have identified as blocking your path to improving your ability in *clearly communicating.*

Think about how you might remove these obstacles from your path with clear, specific action steps. Consider the following questions regarding each of the obstacles below to help you determine whether you might generate an action plan to overcome all or part of the obstacle:

1. What will you have to do to get the job done?
2. What support do you need to accomplish it?
3. How do you suppose you could improve the situation?
4. What will you do?
5. When will you do it?

You should select "I can think of some action steps right now" if you can provide specific answers to the above questions for any of the obstacles below.

You should select "Out of my control" if, thinking about the obstacle, you come to believe that there is literally nothing (or realistically nothing) you can do to remove that obstacle.

You should select "Might be controllable if broken down more" if you cannot come up with an action plan but are not certain that the obstacle is completely out of your control.

I don't really know what it is I need to communicate or how – I can think of action steps
I forget and get caught up in the moment – out of my control

Section 4
Now, please think about how you will go about addressing the solvable obstacle:

"*I don't really know what it is I need to communicate or how"*

Below are some questions to help you generate an action step.

1. What will you have to do to remove the obstacle?
2. What support do you need to accomplish it?
3. How do you suppose you could improve the situation?
4. What will you do?
5. When will you do it?

An action step should be clear and concise. It should be specific enough that you can answer most of the following questions...

1. Who am I doing this action step with?
2. When will I do or start doing this action step?
3. Where will I do or start doing this action step?
4. How will I do or start doing this action step?
5. For how long will I do this action step?

I have a friend who is very good about clearly communicating. I will ask him tomorrow what he does that helps him communicate so well. I will also sit down, think about, and write out exactly what it is I need to communicate, rather than just going into the conversation and hoping I can communicate effectively.

APPENDIX D: BASELINE COACHING SCRIPT

RAPPORT BUILDING
Hi, my name is NAME, and yours?

Nice to meet you COACHEE! … Thanks for coming in today… I look forward to getting to know you in the short time we have today. As you know, the goal today is to improve your conflict management and resolution skills…

Why don't we start by just getting to know each other a little bit? … Why don't you tell me a little bit about yourself? Start anywhere.

[*if conversation is minimal and coachee has not mentioned any of the topics below.*…]

- What is your family like?
- What are a few of your hobbies?
- Do you have any jobs besides being a student?
- Are there any accomplishments you are particularly proud of?
- What do you intend to do with your degree?

Great! [*highlight any points of commonality you share with the coachee*]

Main identity priming language
Coaching is a process that facilitates behavioral change and improvement, and the focus of today's coaching session is conflict management. The first part of the process will bring out a key conflict area that you would benefit from improving on. The second part of the process will consist of a goal-setting exercise that will contribute to your improvement in this conflict management area. [NOTE: see Appendix E for other versions of this prime]

PROBLEM IDENTIFICATION AND GOAL CLARIFICATION
So the first exercise in the process is the personal scorecard technique.

[pass the personal scorecard handout to the participant]

This is a sample personal **scorecard designed to clarify conflict management behaviors.** You can keep this copy to look at. I'll use my copy of this scorecard to take notes as I ask you a few questions. Ready?

In the "event" column, there are three rows. These rows represent three events that you can remember that are good examples of times you had a conflict with someone else. Earlier you thought of those three events. Would you mind walking me through one of these events?

[If they need help use these ELABORATION QUESTIONS]

- Could you provide me with a brief description of what initiated these events?
- Who was your conflict with, specifically?
- What ended up happening?
- What did you do to manage each conflict?

- What were the outcomes of each situation?

Now that the left hand side of the paper is filled out, the next thing is to go through the rest of the paper. There are four columns which all define something that is essential to good conflict management and resolution.

The process has a few definitions to go through, and after each one, please tell me how you think you performed, given the circumstances, in each of your three events, on a scale of one to ten, with one being not well at all, and ten being almost perfectly. Stop me if you have any questions, ok?

- **Communicating clearly** – this refers to when you tell the other person clearly, constructively, and simply what you are thinking or feeling. If that makes sense, go ahead and rate yourself on that behavior across the three events.
- **Listening and clarifying** – this is summarizing or asking for clarification from the other person to be certain you understand them. This is NOT just passively listening or assuming you understand them
- **Identifying and focusing**– this means you refuse to allow yourself to dwell on or bring up other things and that you and the other person focus on one problem at a time. This might also require you to figure out what the underlying conflict is and focus on that first.
- **Validating the other person**– this means that you acknowledge and express value about what the other person is trying to say to you. For example, by listening closely to the other person and communicating the value in their arguments, you are validating them.

Thanks. Now that we've done a bit of data collection, **the next step is to figure out where to focus the rest of the coaching session**.

It's already been identified how you think you *managed* those conflicts, but is it possible that you might have contributed to or made those conflicts *worse*? Perhaps if you improved one of those four conflict management behaviors, you would be able to manage conflict better? Think about this while I analyze the data and let me know when you are ready to go on.

Ready, do you have any thoughts?

Alright, **this next section will** identify what area or areas of conflict management that you might benefit from improving on.

Based on the three scenarios you just told me about, which conflict management behavior or behaviors do you think that you are the best at? [*if needed, ask - could you elaborate*?]

What aspects of conflict management do you think you struggle with? [if needed ask - could you elaborate?

Of the four conflict management domains, which one area in particular would you like to improve on?

Great! Now that **your thoughts are written down, the next step is to review the data and see if any new insights arise,** OK?

You mentioned that _____was the conflict management behavior you'd most like to improve upon. You rated yourself a ___ out of a possible 30 points on that behavior. That may be the behavior you would most benefit from improving on.

What is your reaction to this score?

However, you also rated yourself a ___ out of 30 on ___
[select the lowest OR second-lowest score here].

- What is your reaction to this score?
- Do you think you might need to work on one as opposed to the other?
- What would be gained by working on (Behavior2) instead of (Behavior1)?

Great! The next step is to discuss your scores from one of the pre-surveys you took earlier. This survey is intended to complement the Personal scorecard by identifying your typical conflict style. There are five conflict styles, competing, accommodating, avoiding, collaborating, and compromising. Feel free to read the definition of each style while I provide a summary of each. **The next step then is to consider how your two weakest conflict management behaviors might relate to each of these conflict styles.** Make sense?

[hand participant the summary of the five conflict styles]

- ***Competing*** refers to a style where you pursue your interests at the other person's expense. It's focused on power, winning, and defending yourself.
- ***Accommodating*** is the opposite of competing and refers to a style where you neglect your interests in favor of what the other person wants. It involves self-sacrifice, generosity, yielding, and obedience even when you'd rather not.
- ***Avoiding*** involves simply not addressing the conflict. You might sidestep the issue and focus on other things, postpone the issue, or withdraw from the conflict situation altogether.
- ***Collaborating*** is the opposite of avoiding and refers to a style where you actively work together with the other person to find a solution that completely satisfies both yourself and the other person.
- ***Compromising*** refers to a style where you try to find a simple solution – the middle ground – that somewhat satisfies both parties.

Which style or styles do you think are most typical of the way you act in conflict situations?

Is there a style or styles that you would prefer to utilize more frequently?

Is there a style or styles that you feel like you overuse?

Could you elaborate?

OK, **regarding your results** on that pre-survey. **The results of the survey indicate that...**
[provide results from the excel document]

What is your reaction to those results? [Elaboration questions if needed –]

- Is that what you were expecting the results to be?
- Are you happy with your conflict style?
- Would you like to use another style more?

Alright, so think about your conflict management behaviors. Do you think that weakness in those areas might contribute to you overusing (Style1) or under using (Style2)?

Alright, in summarizing what has been uncovered so far, it was discovered that the conflict management behavior you were most interested in working on was _____ and that you also might need to work on _____.

From the survey, it seems as if you might overuse _____ and/or underuse _____ You mentioned you wanted to use _____ more frequently, correct?

- **The process suggests that** by improving [BEHAVIOR 1] and [BEHAVIOR 2], you will improve your ability to [STYLE].
- Of these two behaviors, which would contribute more to your overall goal of improving your conflict management skills and use of the _____ style?

OK, great! That concludes the first portion of the coaching session. Now that your conflict management skills have been clarified and it has been identified that you could improve on _____ it is time to develop an action plan that will guide you towards improving this skill.

APPENDIX E: CLAIMING AND GRANTING PRIMES

CONTROL CONDITION
Coaching is a process that facilitates behavioral change and improvement, and the focus of today's coaching session is conflict management. The first part of the process will bring out a key conflict area that you would benefit from improving on. The second part of the process will consist of a goal-setting exercise that will contribute to your improvement in this conflict management area.

CLAIMING CONDITION
Coaching is a process that facilitates behavioral change, by allowing me, your coach, to walk you through a process where I will use a few different coaching techniques to provide you with insightful analysis of your conflict management behaviors. The focus of today's coaching session is conflict management. During the first part of the process, I will analyze your responses to determine what key conflict area you would benefit most from improving on. If you want to get something out of this session, you'll need to listen carefully to the information I provide you with. After this, I will provide you with a goal-setting exercise that will contribute to your improvement in this conflict management area.

I, _____, understand that coaching is a process where my coach will complete a few exercises and provide me with some information so that a plan to improve my conflict management behaviors can be developed. I understand that I must do a few things today if I do not want today's session to be a waste of time. I must listen to what my coach says – both the information he provides me and the questions he asks me. If I do not do this, I understand that I will not get anything out of this session and it will have been a waste of time. I therefore commit to listening to the information my coach provides and the questions he asks in today's session.

GRANTING CONDITION
Coaching is a process that facilitates behavioral change by encouraging you, the coachee, to think deeply and come up with creative and insightful solutions to improving your own behaviors. As you know the focus of today's coaching session is conflict management. During the first part of the session, you will think through a series of questions and identify a key conflict area that you would benefit from improving on. If you want to get something out of this session, you'll need to really get into this process and think deeply and creatively. During the second part of the session, you'll go through a goal-setting exercise that will help you think through your conflict management habits, and come up with realistic solutions to help you improve your conflict management skills.

I, _____, understand that coaching is a process largely centered around me, the coachee, and how I can come up a plan to improve my own conflict management behaviors. I understand that I must do two things today if I do not want today's session to be a waste of time. I must think deeply and creatively about conflict and conflict management so that I come up with practical and insightful solutions to my conflict management habits. If I do not do this, I understand that I will not get anything out of this session and it will have been a waste of time. I therefore commit to thinking deeply and creatively in today's session.

CLAIMING AND GRANTING CONDITION

Coaching is a process that facilitates behavioral change, by allowing us to walk together through a coaching process. During this process, I will use a few different coaching techniques to provide you with insightful analysis of your conflict management behaviors, and you will be encouraged to think deeply and come up with creative and insightful solutions to improving your own behaviors. As you know, the focus of today's coaching session is conflict management. During the first part of the process, I will ask you a few questions, and based on your responses, we will be able to determine what key conflict area you would benefit most from improving on. If you want to get something out of this session, you'll need not only to listen carefully to the questions I ask, but to think deeply and provide thoughtful answers to these questions. After this, I will provide you with a goal-setting exercise which will help you think through your conflict management habits, and come up with realistic solutions to help you improve your conflict management skills

I, _____, understand that coaching is a give-and-take process between myself and my coach, and how together we can come up a plan to improve my conflict management behaviors. I understand that I must do a few things today if I do not want today's session to be a waste of time. First, I must listen to what my coach says – both the information he provides me and the questions he asks me. Second – and just as importantly – I must think deeply and creatively so that together we can come up with practical and insightful solutions to my conflict management habits. If I do not do these things I understand that I will not get anything out of this session and it will have been a waste of time. I therefore commit to listening to the information my coach provides and the questions he asks, and also thinking deeply and creatively in today's session.

APPENDIX F: INFORMATION PROCESSING SCALE

Below are a few statements that may or may not accurately describe your experiences in today's coaching session thus far. Please read each statement and indicate on a scale of 1 (strongly disagree) to 5 (strongly agree) the degree to which you agree or disagree with each statement.

Independent processing

1. Private ideas on how to achieve my goals
2. Personal events the coach doesn't know about
3. Things I was already thinking before coaching
4. Private questions that I don't ask

Dependent processing

1. Things the coach teaches me
2. The coach's answers to my questions
3. Things the coach says
4. The coach's ideas on how to achieve my goals

Interdependent processing

1. Ideas the coach and I jointly arrive at
2. Questions the coach asks me
3. How to respond to the coach's questions
4. Things I said to the coach
5. The coach's responses to my statements
6. My answers to the coach's questions

No processing

1. Things unrelated to the coaching session

APPENDIX G: COACHEE INTERACTION INVOLVEMENT

Below are a few statements that may or may not accurately describe your experiences in today's coaching session thus far. Please read each statement and indicate on a scale of 1 (strongly disagree) to 5 (strongly agree) the degree to which you agree or disagree with each statement.

Perceptiveness

1. I'm unsure of what to say and I can't seem to find the appropriate lines
2. I'm not sure what my role is – I'm not sure how I'm expected to relate to the coach
3. I'm not sure what the coach is *really* saying
4. I feel sort of "unplugged" from this conversation
5. I'm uncertain of my role, the coach's motives, and what's happening here
6. I really know what's going on in this conversation – I have a "handle on the situation"
7. I'm not sure how I'm expected to respond

Other perceptiveness

8. I am keenly aware of how the coach is perceiving me
9. I carefully observe how the coach responds to me
10. I am sensitive to subtle or hidden meanings of what the coach has to say
11. I am very observant in this conversation with the coach
12. I pay close attention to what the coach says and does – I try to obtain as much information as I can
13. I accurately perceive the coach's intentions
14. I am responsive to the meaning of what the coach says and does

Attentiveness

15. My mind wanders and I miss parts of what is going on
16. I pretend to be listening to the coach when in fact I'm thinking about something else
17. I listen carefully to the coach
18. I am preoccupied and am not paying complete attention to the coach

APPENDIX H: SCHEMA FOR COACHING SCALES

Schema for coaching – coachee

Below are a few items that represent behaviors that you – the COACHEE (i.e., the person receiving coaching) – might engage in as part of the coaching relationship. Please read each of the behaviors and indicate (on a scale of 1 – *none,* to 5 – *a lot*) to what extent you think YOU should be doing this during coaching.

1. Come up with creative ideas
2. Think deeply
3. Identify what it is I need to work on
4. Ensure that I sustain my motivation
5. Make decisions about the focus of coaching
6. Make sure that I learn something

Schema for coaching – coach

Below are a few items that represent behaviors that your COACH (i.e., the person providing coaching) – might engage in as part of the coaching relationship. Please read each of the behaviors and indicate (on a scale of 1 – *none,* to 5 – *a lot*) to what extent you think YOUR COACH should be doing this during coaching.

1. Come up with creative ideas
2. Think deeply
3. Identify what it is I need to work on
4. Ensure that I sustain my motivation
5. Make decisions about the focus of coaching
6. Make sure that I learn something

APPENDIX I: EXPERIMENTER SCRIPT FOR COACH CREDIBILITY

Today you'll be working with one of our conflict management coaches. COACH NAME is a senior-level psychology student who has spent over 80 hours training for this process. This process is based on an extensive amount of theory and research – it works. The purpose of today's study is NOT to figure out *if* this coaching works, but how to perfect it. With that being said, I'd like to invite COACH NAME into the room and allow you two to start the coaching process.

APPENDIX J: COMPILED FIGURES

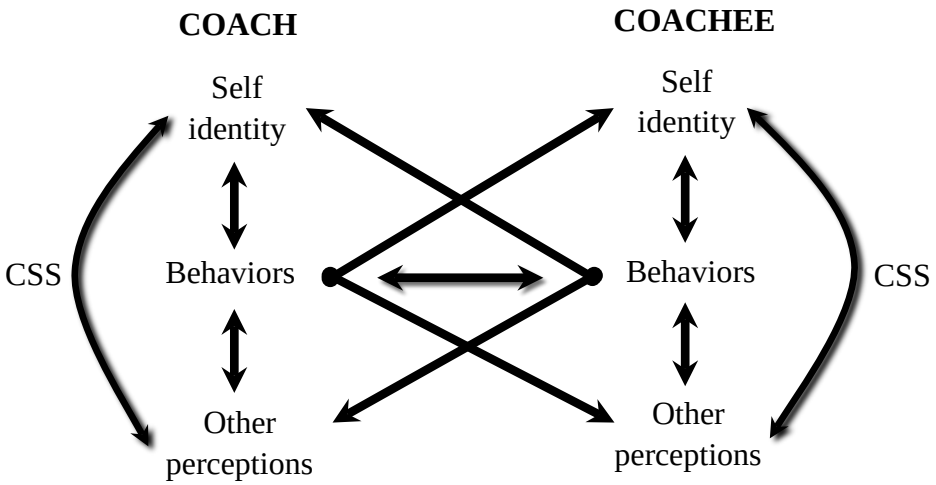
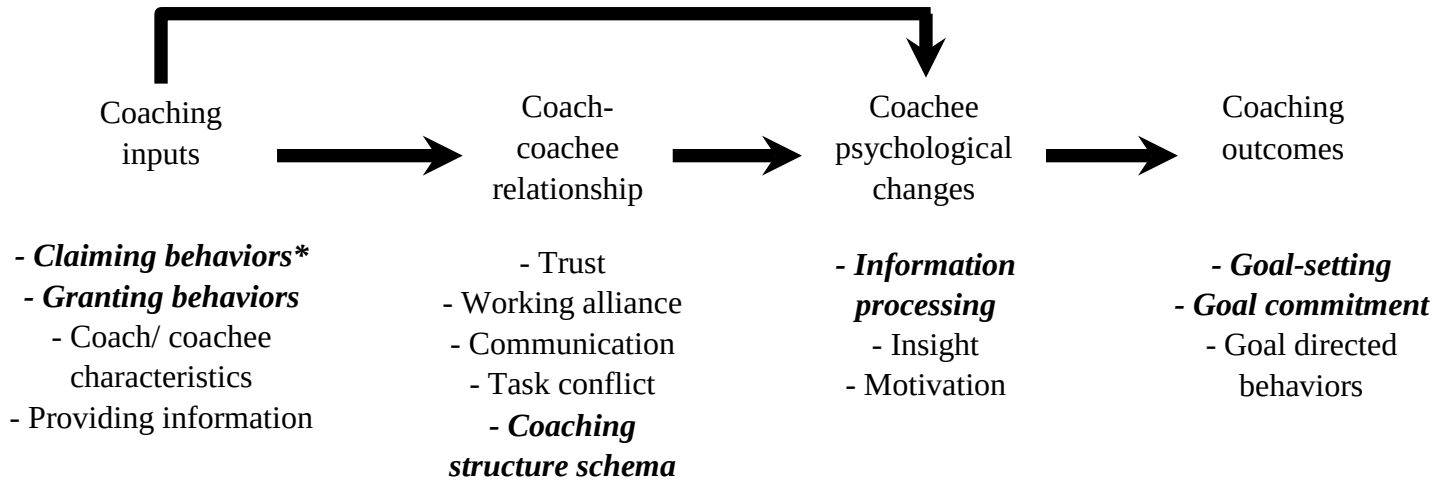


Figure 1. Identity Construction and Elaboration (ICE) model of coaching.



***NOTE:** Variables in bold italics are those explored in the manuscript. Plain text variables are simply offered as examples.

Figure 2. Generic Input-Process-Output model of coaching

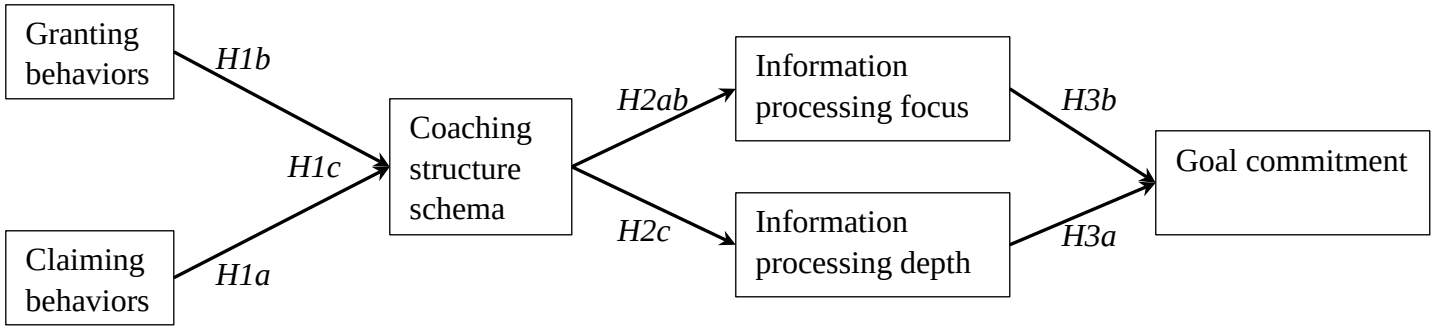


Figure 3. Proposed hypotheses for testing the ICE coaching model

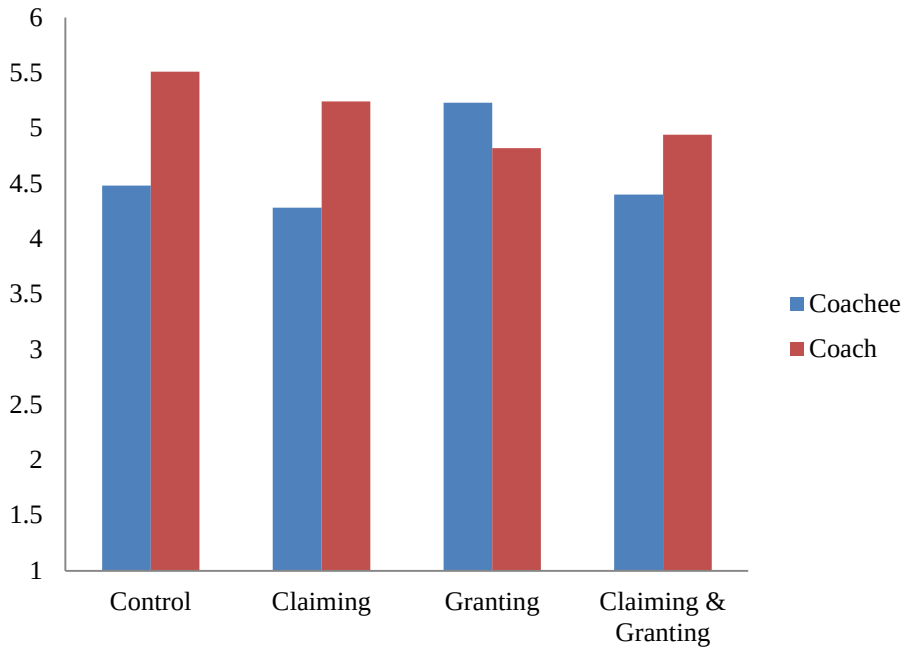


Figure 4. CSS ratings for “Come up with creative ideas”

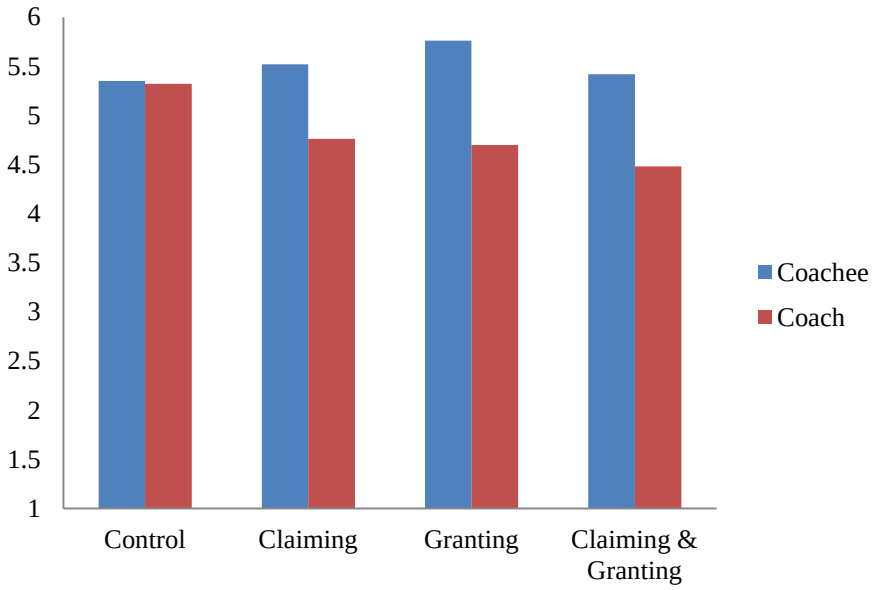


Figure 5. CSS ratings for “Think deeply”

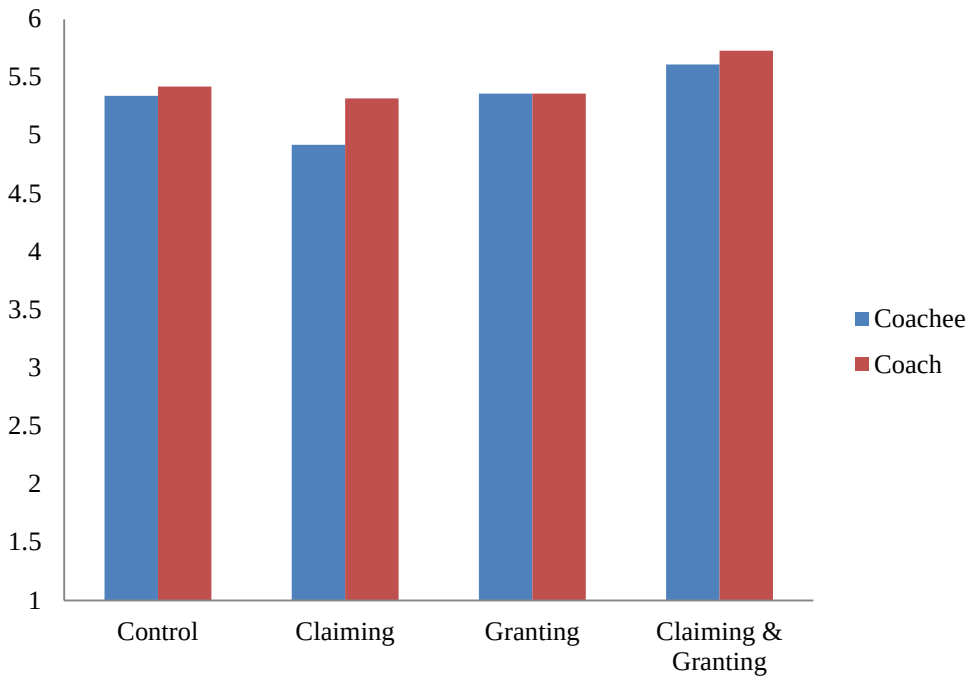


Figure 6. CSS ratings for “Identify what it is I need to work on”

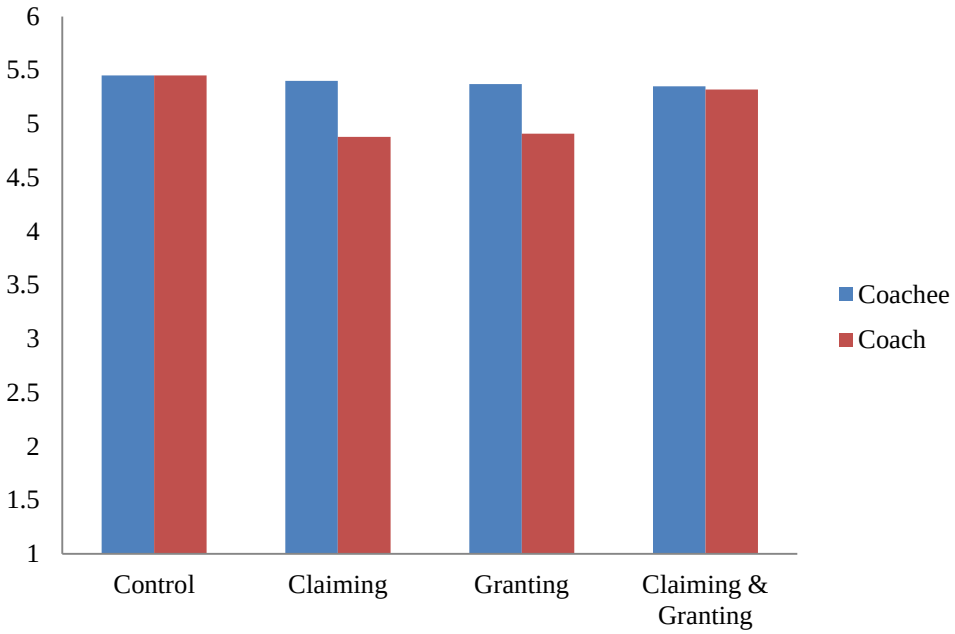


Figure 7. CSS ratings for “Ensure that I sustain my motivation”

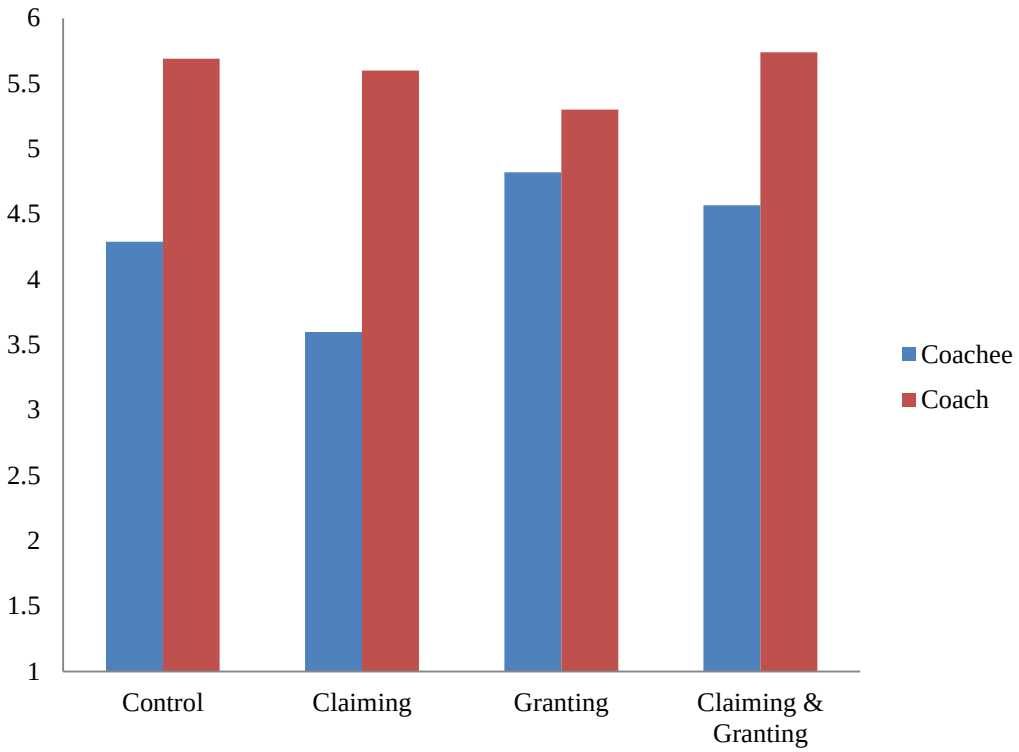


Figure 8. CSS ratings for “Make decisions about the focus of coaching”

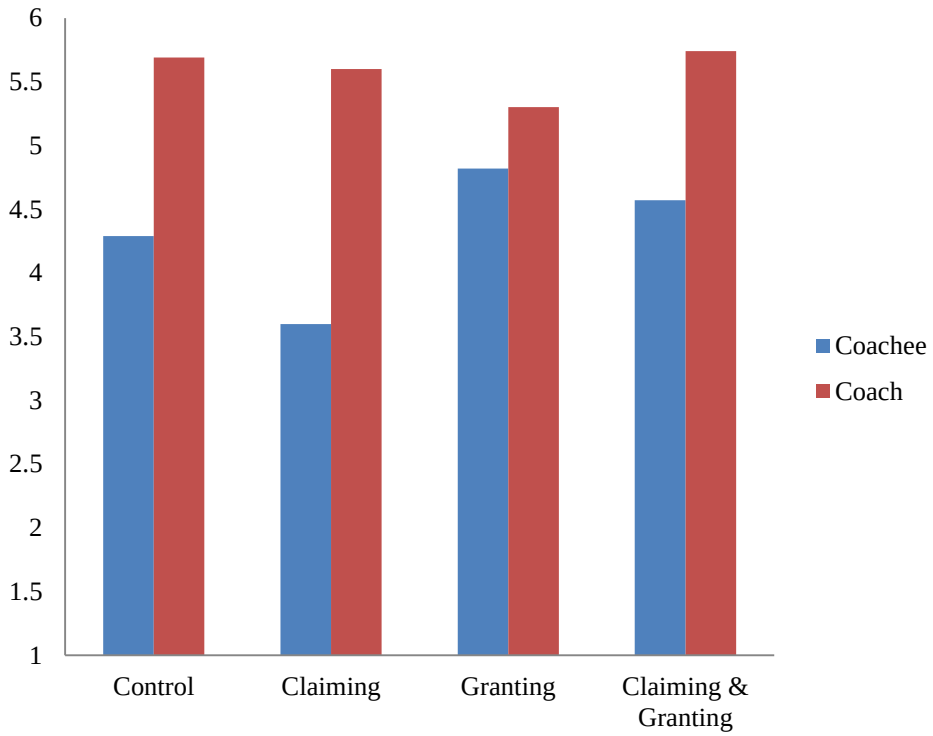


Figure 9. CSS ratings for “Make sure that I learn something”

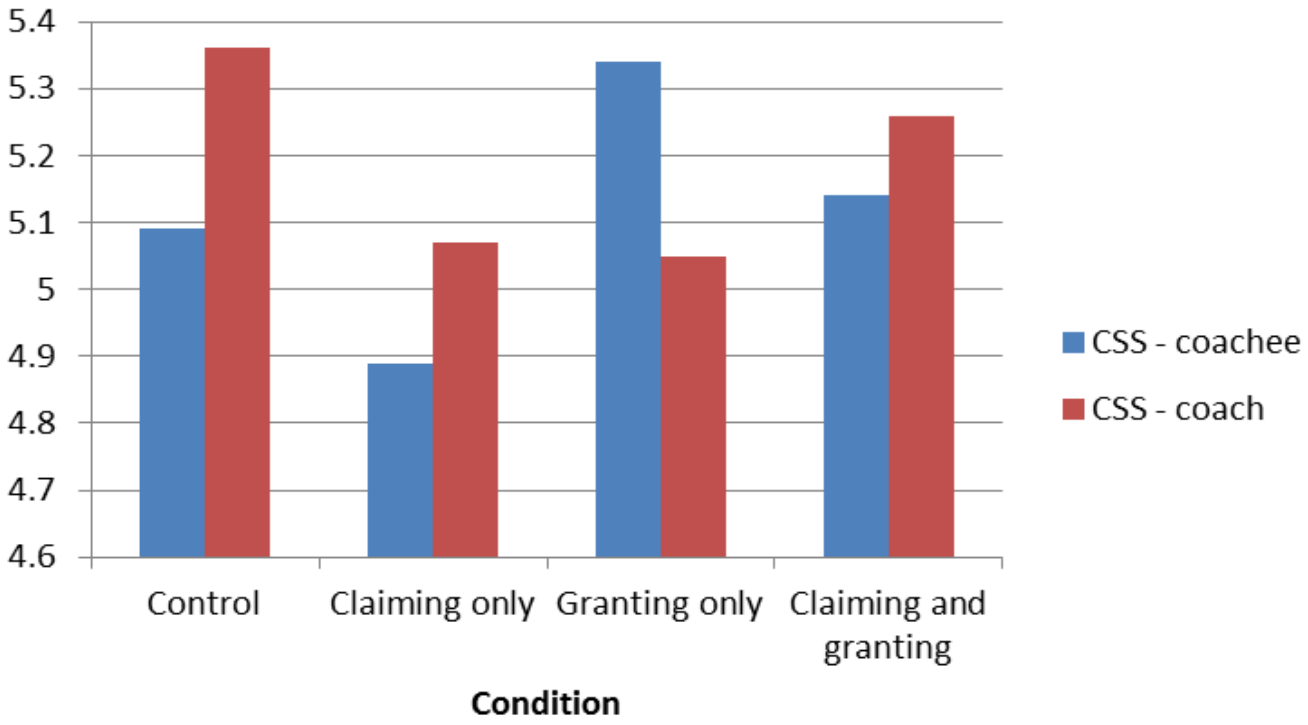


Figure 10. Means for overall coach and coachee CSS scales across four conditions

APPENDIX K: COMPILED TABLES

Table 1

Key variables involved in leader development interventions

	Coaching	**Therapy**	**Consulting**	**Mentoring**	**Training**
Coach inputs	Expertise[1], techniques[2]	Theoretical approach[7]	Information (models)[10]	Functional background[14]	Information (content)[17]
Coachee inputs	Humility[1], Motivation[3]	Motivation[7]	Organizational culture[10]	Motivation, personality[15]	Motivation, learning goal orientation[17]
Situational variables	Perceived organizational support[4]	Social support[7]	Purpose for consultation[11]	Organizational culture[14]	Perceived organizational support[17]
Interpersonal variables	Working alliance, trust[2]	Therapeutic alliance, liking[8]	Trust climate[12]	Friendship, honesty, trust [14, 15]	Trust[18]
Intrapersonal variables	Insight[5], increased self-awareness[6], Information processing[19]	Insight[9]	Increased knowledge[13]	Self-efficacy[16]	Attitude change, increased knowledge[17]

(Berglas, 2013; Natale & Diamante, 2005)[1]; (McKenna & Davis, 2009)[2]; (Grant, 2003)[3]; (Zhang & Chen, in press)[4]; (de Haan et al., 2010)[5]; (Wasylyshyn, 2003)[6]; (Asay & Lambert, 1999)[7]; (Saltzmann et al., 1976)[8]; (Mahrer & Nadler, 1986)[9]; (Alvesson & Empson, 2008)[10]; (Empson, 2001)[11]; (Cohen, 1993)[12]; (Argyris, 1991)[13]; (Ragins & Cotton, 1999)[14]; (Allen & Poteet, 1999; Leck, & Orser, 2013)[15]; (Chopin, Danish, Seers, & Hook)[16]; (Coultas, Grossman, & Salas, 2012)[17]; (Smith, 1980)[18]; (Gregory et al., 2011)[19]

Table 2

A summary of Conflict Elaboration Theory

	High competence source		*Low competence source*	
Comparison	***Threatening***	***Non-threatening***	***Threatening***	***Non-threatening***
High competence target	**Conflict of competencies** – target's fear of feeling incompetent compared to source elicits a tendency to invalidate the source's influence attempts	**Informational interdependence –** no fear of incompetence leads both parties to share information and collaborate constructively	-----	**Absence of conflict** – target withdraws psychologically from the process, believing the source's influence attempts to be irrelevant
Low competence target	**Informational constraint –** target's fear of incompetence drives a shallow level of processing that focuses on providing a right answer but limiting long term learning	**Informational dependence –** no fear of incompetence leads source to accept and deeply process the source's influence attempts	**Downward comparison** – target's fear of feeling incompetent compared to the source elicits a tendency to invalidate the source's influence attempts	**Conflict of incompetencies** – both parties realize incompetence and are not threatened by it, so they engage in constructive processing and collaboration

Table 3

Overlap between common leadership functions and coaching behaviors

Selected functional leadership behaviors[1]
Ensures the team has a clear direction
Emphasizes how important it is to have a collective sense of mission
Ensures the team has a clear understanding of its purpose
Helps provide a clear vision of where the team is going
Defines and emphasizes team expectations
Ensures that the team has clear performance goals
Works with the team and individuals in the team to develop performance goals
Reviews team goals for realism, challenge, and business necessity
Works with the team to develop the best possible approach to its work
Helps the team learn from past events or experiences
Helps new team members to further develop their skills
Assists the team in interpreting things that happen inside the team
Facilitates the team's understanding of events or situations
Provides positive feedback when the team performs well
Provides corrective feedback
Requests task relevant information from team members
Notices flaws in task procedures or team outputs
Reconsiders key assumptions in order to determine the appropriate course of action
Suggests new ways of looking at how to complete work
Contributes ideas to improve how the team performs its work
Participates in problem-solving with the team
Encourages the team to be responsible for determining the methods, procedures, and schedules with which the work gets done
Encourages the team to solve its own problems
Encourages the team to assess its performance
Goes beyond own interests to make it pleasant to be a team member
Does things to make it pleasant to be a team member
Looks out for the personal well-being of team members

Table 4

A continuum of coach-coachee identities

	Consultant	**Coach**	**Confidant**
"Leader"	Provide information and solutions	Provide information and feedback; suggest solutions; ask questions	Listen to information and solutions; provide information and suggest solutions
"Follower"	Listen to information and solutions; implement solutions	Provide information; suggest solutions; process and act on feedback; ask questions	Listen to information and solutions; provide information and suggest solutions
Relational structure schema	Hierarchical, focused on goals	Complementary, focused on goals	Limited structure, limited focus

Table 5

Correlation Matrix, Reliabilities, and Descriptives of Measured Variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
$CSS_{coachee}$	5.12	.69	*.75*															
CSS_{coach}	5.19	.78	**.27**	*.82*														
$CSS_{sharedness}$	1.02	.79	**.50**	**.55**	*.75*													
Joint processing	4.23	.48	**.28**	**.30**	.20	*.72*												
Dependent processing	3.79	.57	.04	**.22**	.00	**.39**	*.60*											
Independent processing	3.01	.88	.10	.01	.04	-.09	.07	*.67*										
Distracted	2.06	.72	-.21	-.15	-.07	**-.33**	-.09	.20	*.74*									
Attentive	1.57	.66	**-.23**	-.02	-.02	**-.38**	-.16	.16	**.62**	*.86*								
Perceptive	3.88	.65	**.30**	-.01	-.04	**.42**	.16	-.09	**-.40**	**-.44**	*.81*							
Other perceptive	3.64	.62	.18	**.28**	.21	.20	.16	.05	-.20	**-.25**	**.28**	*.73*						
Psych. Mindedness	3.35	.72	.18	**.24**	.07	**.36**	.09	.21	**-.30**	**-.18**	**.24**	.10	*.72*					
LGO	4.06	.63	**.29**	.19	.22	**.38**	.09	-.11	-.18	-.20	**.34**	.23*	24**	*.84*				
PPO	3.64	.77	.04	.18	.01	.04	.07	-.01	-.14	-.00	-.08	.00	.18	.16*	*.66*			
PAO	2.62	.95	-.01	.12	.05	**-.25**	.00	**.28**	.09	.14	**-.24**	-.08	-.03	-.50**	.04	*.86*		
Believability	4.14	.58	.16	.05	-.12	**.35**	.13	.13	**-.30**	**-.33**	**.57**	.30**	**.23****	**.23**	**-.26**	-.06	*.71*	
Goal commitment	3.93	.60	**.27**	.04	.00	**.41**	.18	.11	**-.41**	**-.52**	**.50**	.28**	.33**	.21	-.04	.00	**.62**	*.81*

NOTES: Italicized correlations on the diagonal are alpha coefficients. Underlined correlations are significant at $p < .05$, bold at $p < .01$, one-tailed. Due to the skewed distribution of SFC sharedness, all reported correlations with SFC_{shared} are Spearman brown correlations.

Table 6

Independent samples T-tests claiming and granting conditions on CSS

	Claiming conditions						
	M_0	M_1	SD_0	SD_1	t	df	*p*
CSS_{coach}	5.14	5.24	.86	.68	-.63	107	.27
$CSS_{coachee}$	5.19	5.04	.65	.73	1.12	107	.13
Delta – "come up with creative ideas"	-.07	-.37	1.65	1.63	.94	107	.18
Delta – "think deeply"	.63	.75	1.19	1.44	-.47	107	.32
Delta – "Identify what it is I need to work on"	.07	-.35	1.25	1.36	1.67	107	.05
Delta – "Ensure that I sustain my motivation"	.26	.23	1.20	1.45	.13	107	.45
Delta – "Make decisions about the focus of coaching"	-1.04	-1.46	1.59	1.63	1.38	107	.09
Delta – "Make sure that I learn something"	.67	.42	1.57	1.11	.93	107	.18
	Granting conditions						
	M_0	M_1	SD_0	SD_1	t	df	*p*
CSS_{coach}	5.24	5.14	.75	.81	.63	107	.27
$CSS_{coachee}$	4.98	5.25	.66	.69	-2.08	107	.02
Delta – "come up with creative ideas"	-.73	.26	1.54	1.60	-3.30	107	.00
Delta – "think deeply"	.38	.96	.99	1.50	-2.36	107	.01
Delta – "Identify what it is I need to work on"	-.23	-.04	1.59	1.00	-.78	107	.22
Delta – "Ensure that I sustain my motivation"	.21	.28	1.27	1.37	-.27	107	.39
Delta – "Make decisions about the focus of coaching"	-1.67	-.84	1.58	1.56	-2.76	107	.00
Delta – "Make sure that I learn something"	.81	.32	1.41	1.30	1.89	107	.03

NOTE: all reported p-values are one-tailed. Negative deltas indicate coach-centric responses

Table 7

RM ANOVA, within subjects tests coach, coachee specific CSS ratings

	df	*F*	*partial* η^2	*p*
Between subjects effects				
Intercept	(6,99)	49.45	.75	.00
PPO	(6,99)	2.05	.11	.07
Condition	(18,303)	1.80	.10	.03
Within subjects effects				
Coaching partner	(6,99)	1.84	.10	.10
Come up with creative ideas	(1,104)	10.51	.09	.00
Think deeply	(1,104)	32.74	.24	.00
Identify what it is I need to work on	(1,104)	1.17	.01	.28
Ensure that I sustain my motivation	(1,104)	3.94	.04	.05
Make decisions about the focus of coaching	(1,104)	71.77	.41	.00
Make sure that I learn something	(1,104)	18.43	.15	.00
Partner * PPO	(6,99)	1.22	.07	.30
Come up with creative ideas	(1,104)	.58	.01	.45
Think deeply	(1,104)	3.01	.03	.09
Identify what it is I need to work on	(1,104)	.34	.00	.56
Ensure that I sustain my motivation	(1,104)	1.74	.02	.19
Make decisions about the focus of coaching	(1,104)	3.12	.03	.08
Make sure that I learn something	(1,104)	.49	.01	.48
Partner * Condition	(18,303)	2.27	.12	.00
Come up with creative ideas	(3,104)	4.19	.11	.01
Think deeply	(3,104)	3.84	.10	.01
Identify what it is I need to work on	(3,104)	.55	.02	.65
Ensure that I sustain my motivation	(3,104)	1.17	.03	.32
Make decisions about the focus of coaching	(3,104)	4.50	.12	.01
Make sure that I learn something	(3,104)	2.25	.06	.09

Table 8

RM ANOVA within subjects tests coach, coachee overall CSS ratings

	df	*F*	*partial* η^2	*p*
Coaching partner	1	2.73	.03	.10
Partner * PPO	1	3.47	.03	.07
Partner * Condition	3	2.91	.08	.04
Error (partner)	104			

Table 9

Hierarchical regression predicting joint processing by CSS

	Adj. R^2	F	df	*df (e)*	β	*t*	*p*
Model 1	.12	15.67	1	107			.00
Psych mindedness					.36	3.96	.00
Model 2	.18	9.02	3	105			.00
Psych mindedness					.28	3.11	.00
$CSS_{coachee}$					.18	1.99	.05
CSS_{coach}					.18	1.94	.06

Table 10

Hierarchical regression predicting commitment by info processing

	Adj. R^2	F	df	*df (e)*	β	*t*	*p*
Model 1	.10	12.66	1	107			.00
Psych mindedness					.33	3.56	.00
Model 2	.28	11.26	4	104			.00
Psych mindedness					.09	.90	.37
Joint processing					.29	3.19	.00
Independent processing					.18	2.03	.05
Distractedness					-.33	-3.59	.00

Table 11

CSS on commitment mediated by info processing

	R^2	F	df	*df (e)*	B	*se*	*t*	*p*
M_1 Joint processing	.18	9.02	3	105				.00
Psych mindedness					.19	.06	3.11	.00
$CSS_{coachee}$					.13	.06	2.00	.05
CSS_{coach}					.11	.06	1.94	.05
M_2 Distractedness	.09	4.56	3	105				.00
Psych mindedness					-.26	.10	-2.74	.01
$CSS_{coachee}$					-.16	.10	-1.56	.12
CSS_{coach}					-.04	.09	-.44	.66
Overall model Commitment	.27	9.17	5	103				.00
Psych mindedness					.13	.08	1.73	.09
$CSS_{coachee}$					.13	.08	1.70	.09
CSS_{coach}					-.12	.07	-1.74	.08
Joint processing					.34	.12	2.89	.00
Distractedness					-.22	.07	-3.01	.00

Table 12

Indirect effects CSS on commitment through info processing

	Effect (B)	SE (boot)	95% LLCI	95% ULCI
Joint processing				
$CSS_{coachee}$	.043	.024	.009	.109
CSS_{coach}	.038	.024	.003	.097
Distractedness				
$CSS_{coachee}$	.035	.027	-.004	.106
CSS_{coach}	.009	.020	-.018	.005

Table 13

Granting on commitment mediated by $CSS_{coachee}$ and joint processing

	R^2	F	df	*df (e)*	B	*se*	*t*	*p*
M_1 $CSS_{coachee}$	.17	5.23	4	104				.00
Psych mindedness					.17	.09	1.88	.06
CSS_{coach}					.22	.08	2.74	.01
Claiming					-.18	.12	-1.48	.14
Granting					.36	.13	2.84	.01
M_2 Joint processing	.22	5.71	5	103				.00
Psych mindedness					.19	.06	2.99	.00
CSS_{coach}					.10	.06	1.78	.08
Claiming					-.12	.10	-1.14	.26
Granting					.05	.11	.46	.65
$CSS_{coachee}$					.14	.07	2.11	.04
Overall model Commitment	.26	5.90	6	102				.00
Psych mindedness					.18	.08	2.23	.03
CSS_{coach}					-.11	.07	-1.54	.13
Claiming					-.12	.10	-1.14	.26
Granting					.05	.11	.46	.65
$CSS_{coachee}$					.13	.08	1.60	.11
Joint processing					.43	.12	3.59	.00

Table 14

Indirect effects granting on commitment through CSS, info processing

	Effect (B)	SE (boot)	95% LLCI	95% ULCI
Path 1	.048	.04	-.007	.148
Path 2	.022	.013	.006	.067
Path 3	-.009	.042	-.104	.065

NOTE: Below are what each indirect effect path represent
Path 1: Granting → $CSS_{coachee}$ → Commitment
Path 2: Granting → $CSS_{coachee}$ → Joint processing → Commitment
Path 3: Granting → Joint processing → Commitment

APPENDIX L: APPROVAL OF HUMAN SUBJECTS RESEARCH

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Eduardo Salas**

Date: **January 16, 2014**

Dear Researcher:

On 1/16/2014, the IRB approved the following minor modifications to human participant research that is exempt from regulation:

Type of Review:	Exempt Determination
Modification Type:	Addition of study instruments: Interaction involvement scale, goal commitment, and perceived coach credibility. There will also be an additional participant task – going though one additional phase of the coaching exercise to improve their conflict management behaviors, which increased time of study to 90 minutes. Addition of a research assistant: Nykole Gonzalez-Mestres. A revised consent document has been approved for use.
Project Title:	Improving conflict management behaviors through coaching
Investigator:	Eduardo Salas
IRB Number:	SBE-13-09770
Funding Agency:	Society for Human Resource Management Foundation(SHRM)
Grant Title:	The science and practice of executive coaching: Development of a process-based model and measurement toolkit of executive coaching effectiveness
Research ID:	1054793

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 01/16/2014 10:35:52 AM EST

IRB Coordinator

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