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Quiet Ego and Well-Being: The What, Why, and How -- An Investigation of the Implications of the Quiet Ego for Psychological Well-Being

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Quiet Ego and Well-Being: The What, Why, and How

An Investigation of the Implications of the Quiet Ego for Psychological Well-Being

A Dissertation Presented

by

GUANYU LIU

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Psychological and Brain Sciences

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DEDICATION

To mom and dad, for your unwavering and unconditional love and support,

it means the world.

ACKNOWLEDGEMENTS

Acknowledgements is probably the hardest section to write because no matter what you write, you feel it is not right. And there is no theoretical framework to guide you through the process. But one thing I would like to acknowledge is that I do not want to acknowledge my indebtedness because that would imply once I "clear" my "debt," I will be "free" again. Instead, I would like to acknowledge my embeddedness, which is more than interconnectedness, as that would suggest whatever can be connected can be disconnected. It is inter-penetration, or inter-be. By that I mean this dissertation is not a work of my own, it is a work of many — to be sure, I wrote it, but I could not have done so without the input and voice from so many others. As much as I used my own words, I expressed their thoughts and ideas. And the reason I could write about and expand these ideas in this dissertation is because so many others have helped me run studies and many more have participated in them, which was only possible with the generous funding support from various sources that enabled me to put these ideas to test in the first place. Therefore, I owe this dissertation to all these extraordinary people, who have taught me so much about ego and quiet ego.

By a stroke of luck, I came across Dr. Heidi Wayment and Dr. Jack Bauer's seminal work *Transcending Self-Interest* from an APA catalogue in the second year of graduate school. I was so fascinated and inspired by the program of research that I decided to devote the next few years to studying and thinking about it. I wish to acknowledge my gratitude and appreciation to Dr. Wayment and Dr. Bauer for their groundbreaking research and for their remarks and reviews of some of the studies in this dissertation.

The studies would not have been possible without the help of research assistants and research participants that I have had the privilege to work with over the years. I appreciate their time and assistance.

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ABSTRACT

QUIET EGO AND WELL-BEING: THE WHAT, WHY, AND HOW

AN INVESTIGATION OF THE IMPLICATIONS OF THE QUIET EGO FOR

PSYCHOLOGICAL WELL-BEING

FEBRUARY 2022

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Ego is that which constructs and evaluates the concept of self in that it processes information and interprets objects (e.g., people, experiences) and labels them as part of the self (or not). To put it another way, ego is an active experiencer, perceiver, and doer that constructs, maintains, and regulates our sense of self and our relationships with others. Ego processes information in different modes. The mode that has been most extensively studied is the egotistical-narcissistic one because it fits well with the predominant cultural ideology of being individualistic and being motivated by self-interest. Thus, what has largely been ignored is an ego that is not predominantly motivated by self-interest. The quiet ego refers to a self-understanding that transcends egotism and identifies with a less defensive and growth-oriented stance toward the self and others. As a relatively new construct, its validity has been examined in domains related to balance, compassion, or growth. Its validity, however, has rarely been examined with respect to other aspects of self-identity that are both conceptually similar

and have implications for well-being. In the dissertation studies, I first evaluated and established construct validity of the quiet ego with respect to the domains of self-perception (self-concept clarity or SCC), other-perception (theory of mind or ToM), and emotional intelligence (or EI) (Chapter 2). Building on these studies, I further examined the associations between the quiet ego and well-being through the lenses of SCC, ToM, and EI, demonstrating that the quiet ego predicts enhanced psychological well-being and self-esteem (Chapter 3.1), enriching interpersonal relations (Chapter 3.2), improved subjective well-being and attenuated stress (Chapter 3.3) via its associations with SCC, ToM, and EI, respectively. Finally, to further explore the nature of the association between the quiet ego and well-being, in Chapter 4, I investigated the causal link between the quiet ego and well-being using a longitudinal, randomized experiment. I found that a quiet ego contemplation improved participants' subjective well-being, diminished their stress, and elevated their psychological flourishing. Taken together, these studies established the importance and validity of the quiet ego, and the results may have significant implications in applied, real-world contexts.

Keywords: ego, quiet ego, cognitive intervention, self-concept clarity, theory of mind, emotional intelligence, psychological well-being, affectivity, stress, psychological flourishing

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CHAPTER 1

INTRODUCTION

1.1 Background

One of the fundamental questions in personality psychology is how one thinks, understands, and perceives the self and others (Bauer & Wayment, 2008; Brown, 1998). To a large extent, this is influenced by the predominant cultural and societal values of one's time (Brown, 1998). In the past few decades, the predominant societal values in the West have been those of egotistical values — an excessive focus on self-interest and an instrumental view toward others (Leary, 2004; Wayment & Bauer, 2008).

Given such cultural obsession on "me" and "mine," it is not surprising that egotism has been the focus of academic self-psychology (Wayment & Bauer, 2008). The concerted research effort has uncovered an underlying structure through which one views and understands the self and others — the egoistical-narcissistic framework — together with how this structure functions to filter information and constructs a view of oneself and one's world (Bauer & Wayment, 2008; Campbell & Buffardi, 2008).

Compared to the unified framework and the ensuing findings, research on the qualities and benefits of transcending self-interest has been sparse and has only emerged as a dedicated and unified research program over the past 10 years or so (Bauer & Wayment, 2008).

1.2 The Emerging Science of the Quiet Ego

Research on the quiet ego started in a 2005 conference as an attempt to pull together disparate research programs on transcending self-interest (Wayment & Bauer, 2008). Among the many achievements of the conference was the identification and consensus of two overarching themes that cut across all qualities that a self-transcending ego embodies, namely those of balance and growth — the quiet ego views and understands itself and others in a balanced and growth-oriented manner (Bauer & Wayment, 2008; Wayment, Bauer, & Sylaska, 2015). Balance refers to the quiet ego's tendency to take both the self and others' needs and perspectives into account; growth-mindedness refers to the quiet ego's concern for the long-term, eudaimonic development of the self and others (Bauer & Wayment, 2008; Wayment, Bauer, & Sylaska, 2015).

1.2.1 Precursor to Quiet Ego Research

The direct precursor and impetus that precipitates the quiet ego research is the positive psychology movement — an attention-pivoting and energy-redirecting movement in psychological science toward the study of optimal human functioning and flourishing and away from a near-exclusive fixation on pathology and maladaptivity (Bauer & Wayment, 2008; Seligman & Csikszentmihalyi, 2000). Its vision is to foster human strength, virtue, and build psychological resilience as opposed to only repair psychological damages (Seligman, 2005). To that vision, positive psychology concerns itself with subjective states (e.g., well-being), individual traits (e.g., grit), and collective circumstances (e.g., social institutions) that characterize, exemplify, and promote

adaptive, optimal human functioning (Seligman, 2005; Seligman & Csikszentmihalyi, 2000).

Many of the individual traits and characteristics studied in positive psychology are related to quiet ego or ego-quieting, such as gratitude (Emmons & Shelton, 2005), humility (Tangney, 2005), forgiveness (McCullough & Witvliet, 2005), or altruism (Batson et al., 2005), as they all, in one way or another, concern the motivation to transcend the bounds of self-interest and include in one's self-representation others and their welfare (Bauer & Wayment, 2008; Snyder & Lopez, 2005).

They also contain an important limitation, however, as they are concerned with specific motivations of someone who has transcended excessive self-interest, but they do not concern that active agent, doer, or experiencer that organizes and integrates our experiences as well as constructs and regulates our relationships with others (Brown, 1998; Cooley, 1902; Loevinger, 1976). In other words, they are personality content, not personality structure that gives rise to and regulates the content (Kegan, 1982), that is, they are more about the "Me," (object or specific motivations) and less about the "I" (subject or that which actively organizes our experiences and relations) (Bauer & Wayment, 2008). This thus leaves an important gap in our understanding of a *quiet-ego-way* of organizing experiences and structuring relationships, which also contributes to the conundrum of disparate and loosely connected research programs on transcending egotism (Bauer & Wayment, 2008).

Seen in this light, the quiet ego framework arrives at a timely junction; among the promising features of this framework is its ability to establish a common ground on which stranded research programs can be rejoined. At a theoretical level this has

involved building bridges between organismic-existential (e.g., fully functioning person) and trait theories (e.g., effects of personality) (Wayment, Bauer, & Sylaska, 2015). At a conceptual level this has involved a new way of understanding the inner workings of a non-egotistical, self-transcending ego (Bauer & Wayment, 2008). At the level of practice, this has involved a new operationalization that integrates principles rooted in humanistic-organismic psychology (e.g., ideas of the whole person, purpose of life, eudaimonic growth), thereby opening up research avenues for investigating "how the individual might arrive at a less defensive, more integrative stance toward the self and others" (Bauer & Wayment, 2008, p. 8; Bauer et al., 2015; Wayment, Bauer, & Sylaska, 2015; Wayment & Bauer, 2018). The following section explains the construct in detail.

1.3 The Quiet Ego Construct

The quiet ego is conceptualized as a "self-identity that transcends egoism and identifies with a less defensive, balanced stance toward the self and others" (Wayment, Bauer, & Sylaska, 2015, p. 999). In other words, the quiet ego is a way of understanding, perceiving the self that goes beyond egotism and its immediate, short-term lures to include, in one's self-concept, others as well as one's long-term, eudaemonic well-being (Wayment & Bauer, 2017; Wayment, Bauer, & Sylaska, 2015).

The quiet ego is theorized as best captured by the intersection between four characteristics: inclusive identity, perspective taking, detached awareness, and growth-mindedness (Wayment & Bauer, 2017; Wayment, Bauer, & Sylaska, 2015). Inclusive identity refers to the extent to which one includes others in one's self-representation or the extent to which one considers oneself as sharing the same qualities with others (Leary

et al., 2008). Perspective taking refers to a cognitive or conceptual understanding of others' points of view (Davis, 1983). Detached awareness is a non-defensive, present-centered, and receptive state of consciousness; it enables one to focus on the immediate moment while minimizing the influence of ongoing feelings, thoughts, and preconceptions (Brown et al., 2007). Growth-mindedness refers to a humanistic and organismic orientation that focuses on long-term, eudaimonic well-being, as well as achieving a sense of meaning and purpose in life (Wayment, Bauer, & Sylaska, 2015).

The quiet ego is *not* a simple addition of these four characteristics. It is a construct that has been conceptualized as the interaction between four characteristics that can be measured by existing, validated scales. In other words, the overlap between the quiet ego and each of the four constructs is *only* at the measurement level because they concern different things at a theoretical level. Items from the existing scales were selected because they reflect well the underlying construct and they confer the advantage of clear, tested, and understandable wording (DeVellis, 2017).

This distinction can be examined empirically, i.e., a model with the quiet ego as a higher order construct (giving rise to the four, first-order, characteristics) should fit data better than the four constructs alone would (see Figure 1). Indeed, a comparison of two confirmatory factor analysis (CFA) models supported this hypothesis ($N = 1075$)[1] (Liu, 2019). The higher order CFA model (Model A) fit the data well:[2] Satorra-Bentler scaled

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[1] The data were collected from a prescreen survey administered to UMass undergraduate students in the fall of 2018.

[2] Goodness of fit was evaluated by using the standardized root mean square residual (SRMR), root mean square error of approximation (RMSEA) and its 90% confidence interval and test of close fit (CFit), comparative fit index (CFI), and the Tucker-Lewis index (TLI). Guided by suggestions provided in Brown (2015) and Kline (2016), acceptable model fit was defined by the following criteria: RMSEA ($\leq .08$, 90% CI $< .10$, CFit *ns*), SRMR ($< .10$), CFI ($\geq .90$), and TLI ($\geq .90$).

Prior to the analyses, the data were evaluated for multivariate normality and were found to have violated the assumption, Doornik-Hansen $\chi^2(28) = 2897.77$, $p < .001$. Thus, the Satorra-Bentler scaled Maximum

$\chi^2(73) = 297.80, p < .001$, SRMR = .058, S-B RMSEA = .054, S-B TLI = .89, S-B CFI

= .91; whereas the four-factor-alone-model (Model B) did not fit the data as well:

Satorra-Bentler scaled $\chi^2(77) = 635.53, p < .001$, SRMR = .13, S-B RMSEA = .082, S-B

TLI = .75, S-B CFI = .79. A scaled difference in χ^2s test revealed that Model B did not

fit the data as well as Model A: $T_S = 400.79, df = 4, p < .001$. This provided evidence

that the quiet ego, as a theoretical construct, is distinct from a simple addition of the four

characteristics and is best conceived as representing the interrelations among the four

constructs.[3]

Figure 1

Model Specification of the Higher Order Factor Model (A) vs Non-Higher Order Factor

Model (B)

Likelihood (ML) estimator was used (Brown, 2015).
[3] Although these items do not constitute complete scales as they were selected from their respective scales to form the quiet ego scale, they nevertheless are observed variables that have the highest loadings with their respective constructs and can thus represent those constructs well because they all come from well validated scales (i.e., in well validated scales and sub-scales, all items are highly correlated with each other to the extent that they become interchangeable) (Brown, 2015; Kline, 2016)

Model A

Model B
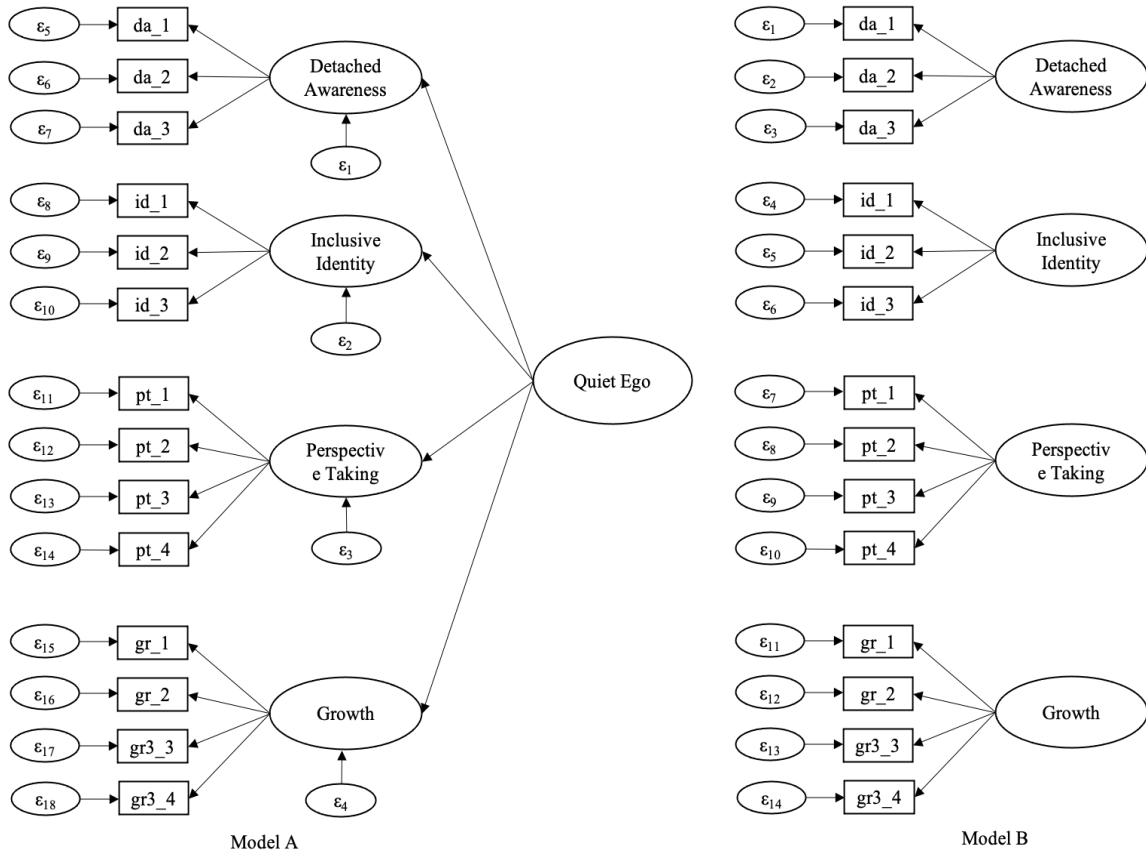
Although the quiet ego is distinct from its four constituent components, it is still informative to take note of the work that has been done on each of the four constructs. Table 1 below summarizes findings as regards each constituent construct.

Table 1

Summary of Findings Regarding Each Constituent of the Quiet Ego Construct

Facet	Relationship with Other Constructs	Reference
Inclusive Identity	Positively related to concern for others; more oriented toward social relationships; negatively related to social dominance; more inclined toward spiritual experiences	Leary et al., 2008
	Feeling connected to nature promoted both affective and social well-being	Howell et al., 2011; Zelenski & Nisbet, 2014

	Feeling connected to nature promoted vitality, positive affect, and life satisfaction	Capaldi et al., 2014
	Feeling connected to nature promoted pro-environmental behavior	Davis et al., 2009
	Self-expansion (i.e., incl. others in one's self-concept) predicted job satisfaction, commitment, self-concept clarity, and self-esteem	McIntyre et al., 2014
Perspective Taking	Positively related to Theory of Mind	Baron-Cohen et al., 2001; Kidd & Castano, 2013
	Negatively related to egotism and narcissism	Campbell & Buffardi, 2008
	Positively related to trait emotional intelligence	Schutte et al, 2001; Schroder-Abe & Schuetz, 2011
	Positively related to ability emotional intelligence	Mayer & Geher, 1996
	Predicted self-other overlap, thereby facilitating social coordination and social bond	Galinsky et al., 2005
	Associated with positive interpersonal relationships	Davis, 1983
	Positively related to guilt-proneness	Leith & Baumeister, 1998
Detached Awareness	Positively related to trait emotional intelligence	Bao et al., 2015; Schutte & Malouff, 2011
	Positively related to self-concept clarity	Hanley & Garland, 2017
	Positively associated with self-compassion; negatively related to neuroticism and problematic emotion regulation	Baer et al., 2006
	Positively associated with metacognitive insight and decentering, i.e., less caught up in self-referential thoughts	Brown et al., 2007; Creswell, 2017
	Associated with increased vitality, self-determination, life satisfaction; negatively related to depression, anxiety, negative emotions	Brown & Ryan, 2003

	Predicted increased counseling self-efficacy	Greason & Cashwell, 2009
	Associated with positive self-esteem and unconditional self-acceptance	Thompson & Waltz, 2008
	Buffered ego-depletion, and increased self-control	Friese et al., 2012; Masicampo & Baumeister, 2007
Growth Mindedness	Predicted psychosocial maturity, psychological well-being, generativity, and self-actualization	Bauer et al., 2015
	Predicted eudaimonic development and subjective well-being	Bauer & McAdams, 2010; Ryan & Deci, 2001
	Positively related to internal locus of control, concentration on tasks, healthy coping, goal directedness, career decision making self-efficacy	Robitschek & Cook 1999
	Associated with better neuroendocrine regulation (low cortisol, low inflammatory markers), and longer REM sleep	Ryff & Singer, 2008

1.3.1 Construct Validity of the Quiet Ego

Initial construct validity was examined in Wayment, Bauer, and Sylaska (2015) and Wayment and Bauer (2018). Given its conceptualization as a balanced and growth-oriented self-construal, results revealed that the quiet ego was positively related to self-determination (a tendency to seek growth through competence, autonomy, and relatedness), the Honesty-Humility personality trait, holistic and cooperative thinking, self-compassion, and growth motivation. It was negatively related to tendencies toward excessive self-focus such as self-image goals, aggression, hostility, negative thinking, and psychological entitlement.

In addition, the quiet ego was positively associated with self-transcendence (tendency to expand boundaries intra- and inter-personally), pro-environmental attitudes, psychological resilience, authenticity, and affective and cognitive well-being (Wayment, Bauer, & Sylaska, 2015). Furthermore, the quiet ego was positively associated with value orientations reflecting universalism, benevolence, and self-direction; conversely, it was negatively associated with power (Wayment & Bauer, 2018). Correlations between the quiet ego and other constructs are summarized in Table 2.

Table 2

Correlations Between the Quiet Ego Scale and Other Psychological Measures

	Wayment et al (2015) Study 1	Wayment et al (2015) Study 2	Wayment et al (2015) Study 3	Wayment et al (2015) Study 4	Wayment & Bauer (2018)
Study *N*	*633*	*564*	*459*	*155*	*1117*
Self-determination[a]	.42***				
Humility[b]	56***				
Holistic thinking: causality[c]		.25**			
Holistic thinking: attitudes toward contradictions		.20**			
Self-compassion[d]	48***		.32***	.36***	
Growth motivation[e]					.53***
Self-image goals[f]					-.09*
Physical aggression[g]		-.21**			
Verbal aggression		-.14**			
Hostility		-.26**			
Negative thinking[h]		-.12**			
Psychological entitlement[i]		-.12**			
Self-transcendence scale (Reed)[j]			.44***		
Self-transcendence scale (Levenson)[k]			.47***		
Pro-environmental attitudes[l]			.35***		
Affective well-being[m]			.40***		
Life satisfaction[n]			.28***	.24***	
Psychological resilience[o]				.37***	
Authenticity[p]				.52***	
Value Orientation[q]					
Universalism					.37***
Benevolence					.36***
Self-direction					.25***
Power					-.12**

Note. [a] Self-Determination Scale (Sheldon, 1995); [b] Scale created by Wayment et al 2015; [c] Analysis-Holism Scale (Choi et al., 2007); [d] Self-Compassion Scale (Neff, 2003); [e] Growth Motivation Index (Bauer et al., 2015); [f] Self-Image and Compassionate Goals (Crocker & Canevello, 2008); [g] Buss and Perry Aggression Questionnaire (Buss & Perry, 1992); [h] Habit Index of Negative Thinking (Verplanken et al., 2007); [i] Psychological Entitlement Scale (Campbell et al., 2004); [j] Self-Transcendence Scale (Reed, 2003; updated 2012); [k] The Adult Self-Transcendence Scale (Levenson et al., 2005); [l] New Ecological Paradigm Scale (Dunlap et al., 2000); [m] Affects Balance Scale (Watson et al., 1988); [n] Satisfaction with Life Scale (Diener et al., 1985); [o] Dispositional Resilience

Scale (Bartone, 2007); [p] Authenticity Inventory (Kernis & Goldman, 2006); [q] Value survey adapted from Lindeman and Verkasalo (2005). $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$. Most of the scales and their associated references can be found in the note section of Table 3 in Wayment, Bauer, and Sylaska (2015).

Although the quiet ego's construct validity has been examined in domains related to balance and growth, as a new construct, little is known about its convergence with other domains that appear to have conceptual overlap such as self-perception, other-perception, and emotional intelligence, which are important constructs because of their predictive relationship with psychological well-being (Hanley & Garland, 2017; Kidd & Castano, 2013; Light, 2017; Mikolajczak et al., 2007; Petrides & Furnham, 2006). I addressed this by testing the quiet ego's construct validity with respect to these domains.

In addition, I further examined the construct's factor structure using multiple independent samples. Although the quiet ego has a strong theoretical backing (Bauer & Wayment, 2008; Wayment & Bauer, 2017) as well as empirical support (Wayment, Bauer, & Sylaska, 2015), its factor structure has not been examined with independent samples nor has it been replicated by independent research groups.

1.4 Dissertation Overview

In a broad sense, this dissertation is devoted to examining the implications of an ego-quieting way of perceiving and conceptualizing the self — the implications to the self, to others, and to one's well-being. I start by considering how, theoretically, the quiet ego is related to each of these domains and then move on to examine if the theoretical relationships translate into empirical findings.

In Chapter 2, I validate the quiet ego construct with respect to self-perception (i.e., self-concept clarity), other-perception (i.e., Theory of Mind), and emotional intelligence. In Chapter 3, I build on and extend the findings from Chapter 2 to the domain of well-being (i.e., personal and interpersonal well-being). Finally, in Chapter 4, I examine the causal link between the quiet ego and well-being by conducting a longitudinal, randomized experiment. Figure 2 illustrates the dissertation structure.

Figure 2

Dissertation Structure

Chapter 2: Testing construct validity with respect to the following domains.

Chapter 3: Examining the implications of the quiet ego for well-being.

Quiet ego

Self-concept clarity

Theory of Mind

Emotional Intelligence

Psychological well-being & self-esteem

Interpersonal relationship

Subjective well-being & flourishing

Chapter 4: Testing the causal relationship between the quiet ego and subjective well-being and psychological flourishing.

CHAPTER 2

CONSTRUCT VALIDITY

2.1 The Quiet Ego and Self-Concept Clarity

2.1.1 Introduction

Self-concept clarity (SCC) refers to the extent to which one's ideas about oneself are defined clearly and confidently, internally consistent, and temporally stable (Campbell et al., 1996). In other words, SCC is about how coherently and holistically one's ideas about oneself are organized into a functioning whole. It is important because when ideas about the self are clearly and coherently organized, one feels positive about oneself (Campbell, 1990; Campbell et al., 1996), and one develops a sense of psychological well-being (Hanley & Garland, 2017; Light, 2017).

A clear and coherent organization of self-ideas implies an integrating, organizing force because good organization does not happen haphazardly as in a heap of stones — they have to be *related* to each other so as to form a well-defined order (Blasi, 1993; Brown, 1998; Loevinger, 1976). In fact, the opposite happens when ideas about the self are not well integrated with one another — a heightened tendency toward depression, neuroticism, and low self-esteem (Brown, 1998; Donahue et al., 1993).

Considering the integrating, organizing force, it must have one basic characteristic: To organize ideas, it must operate at a more basic level than ideas themselves, i.e., it must be an orientation or tendency so as to provide the direction and impetus for ideas to become united (Kegan, 1982).

One such driving, organizing force is the organismic tendency toward growth or as Rogers (1951) put it: "The organism has one basic tendency and striving — to actualize, maintain, and enhance the experiencing organism" (p. 487) — which in humans manifests as a forward-moving tendency toward psychosocial maturation (Deci & Ryan, 2000; Kegan, 1982; Loevinger, 1976; Ryan, 1995), the hallmark of which is an increasing ability to think complexly (differentiation in ideas and perspectives) and integratively (harmony between ideas and perspectives) about the self — that is, heightened self-concept clarity (SCC) (Bauer, 2008; Deci & Ryan, 2000; Kegan, 1982; Loevinger, 1976). Additionally, this very process entails a detached, non-defensive, and non-evaluative orientation toward one's shortcomings or otherwise undesirable qualities because to achieve psychosocial maturation, one has to recognize one's shortcomings and acknowledge them in a non-defensive way so as to improve or change them (Brown et al., 2008; Kegan, 1982; Wayment, Bauer, & Sylaska, 2015).

This thus suggests that people who have these two facets (detached awareness and growth-mindedness) in their psychological make-up should show reasonably high self-concept clarity. I tested this hypothesis in the first study.

2.1.2 Method

2.1.2.1 Participants

Participants ($N = 1289$) were UMass Amherst undergraduates who took the prescreen survey in Fall 2018 in which the measures for this study were included. Participants ($n = 190$) whose native language was not English were excluded from analysis to minimize the influence of cultural context. The final sample consisted of

1099 participants (female = 854), whose mean age was 19.7 years ($SD = 1.6$); ethnically, 855 (77.8%) identified as Caucasian, 103 (9.4%) as Asian, 67 (6.1%) as Multi-Racial, 46 (4.2%) as African American, 18 (1.6%) as Other.

2.1.2.2 Materials

The Quiet Ego

The Quiet Ego Scale was used to measure the extent to which the four quiet ego characteristics were endorsed: inclusive identity, perspective taking, detached awareness, and growth-mindedness (Wayment, Bauer, & Sylaska, 2015). The scale consists of 14 items, assessed on a 5-point Likert scale, ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Sample items include "I rush through activities without being really attentive to them" (Detached Awareness item, reverse-keyed); "When I think about it, I haven't really improved much as a person over the years" (Growth-Minded item, reverse-keyed); "I feel a connection to people of other races" (Inclusive-Identity item); "I try to look at everybody's side of a disagreement before I make a decision" (Perspective Taking item). Higher scores indicate greater endorsement of the quiet ego characteristics. Its McDonald's omega was .72 for this sample.

Self-Concept Clarity (SCC)

SCC was measured by the Self-Concept Clarity Scale (Campbell et al., 1996), a unidimensional scale that consists of 12 items, assessed on a 5-point Liker scale, from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Sample items include "My beliefs about myself often conflict with one another" (reverse-keyed); "In general, I have a clear sense

of who I am and what I am." Higher scores (theoretical range of 12-60) indicate greater

levels of SCC. Its McDonald's omega was .89 for this sample.

2.1.2.3 Analysis

I employed a confirmatory factor analysis (CFA) approach to examine construct

validity. So far, construct validity of the quiet ego has only been examined by simple

correlations — although a valid approach (DeVellis, 2017), it can be less accurate in that

it does not distinguish between true construct variance and random measurement error,

i.e., it treats construct variance as if it reflects the true variability of the construct *without*

any error (Brown, 2015; Kline, 2016). The CFA approach is superior in that it partitions

the variance of a construct into two components: true variance and random measurement

error (unexplained variance), which can provide a better (and purer) estimate of the

relationship between two constructs (after removing random measurement error) (Brown,

2015; Kline, 2016).

I conducted the analysis in two steps: first, I ran a CFA model to test if the factor

structure reported in Wayment, Bauer, and Sylaska (2015) would hold in the current

sample. If it did, I then ran a second CFA model that included both the quiet ego and

self-concept clarity as latent constructs to test their association. I used Stata/IC (version

16) and Mplus (version 7) to perform the CFA analyses. Figure 3A and 3B depict model

specifications.

2.1.3 Results

Based on Wayment, Bauer, and Sylaska (2015), I specified a higher-order CFA model in which the first-order factors (detached awareness, inclusive identity, perspective taking, and growth) were loaded onto the higher order factor, the quiet ego. Prior to the CFA analysis, I evaluated the data for multivariate normality and found the assumption was violated, Doornik-Hansen $\chi^2(28) = 2897.77$, $p < .001$. Thus, I used the Satorra-Bentler scaled Maximum Likelihood (ML) estimator for standard error (Brown, 2015). In addition, I evaluated model goodness-of-fit by using the standardized root mean square residual (SRMR), root mean square error of approximation (RMSEA) and its 90% confidence interval and test of close fit (CFit), comparative fit index (CFI), and the Tucker-Lewis index (TLI). Guided by suggestions provided in Brown (2015) and Kline (2016), I defined acceptable model fit by the following criteria: RMSEA ($\leq .08$, 90% CI $\leq .08$, CFit *ns*), SRMR ($< .10$), CFI ($\geq .90$), and TLI ($\geq .90$).

The model in Figure 3A reproduced the factor structure in Wayment, Bauer, and Sylaska (2015) in that it fitted the data well, Satorra-Bentler scaled $\chi^2(73) = 297.80$, $p < .001$, SRMR = .058, S-B RMSEA = .054, S-B TLI = .89, S-B CFI = .91. The fit indices are comparable to those reported in Wayment, Bauer, and Sylaska (2015), $\chi^2(73) = 126.19$, $p < .001$, RMSEA = .05, TLI = .92, CFI = .94.

Figure 3A

Quiet Ego Higher Order Factor Model with Factor Loadings
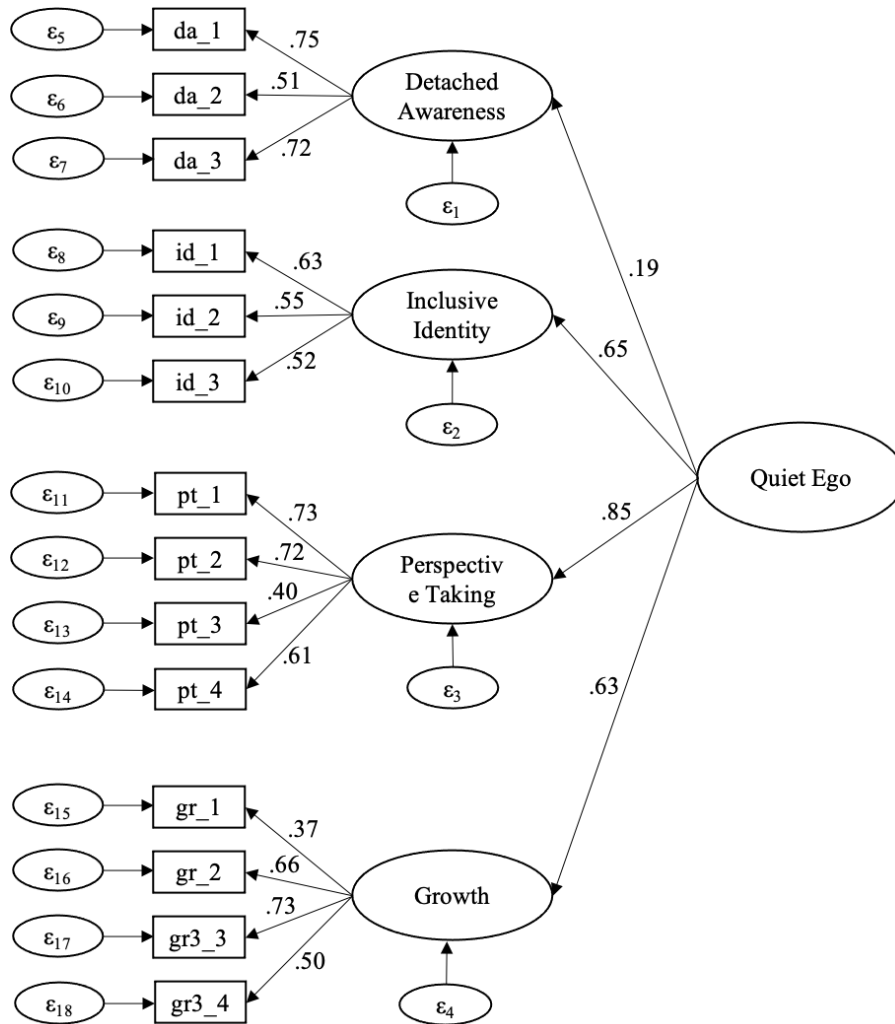
Note. All loadings are statistically significant.

Figure 3B

CFA Model Measuring Quiet Ego Construct Validity With Respect to Self-Concept

Clarity
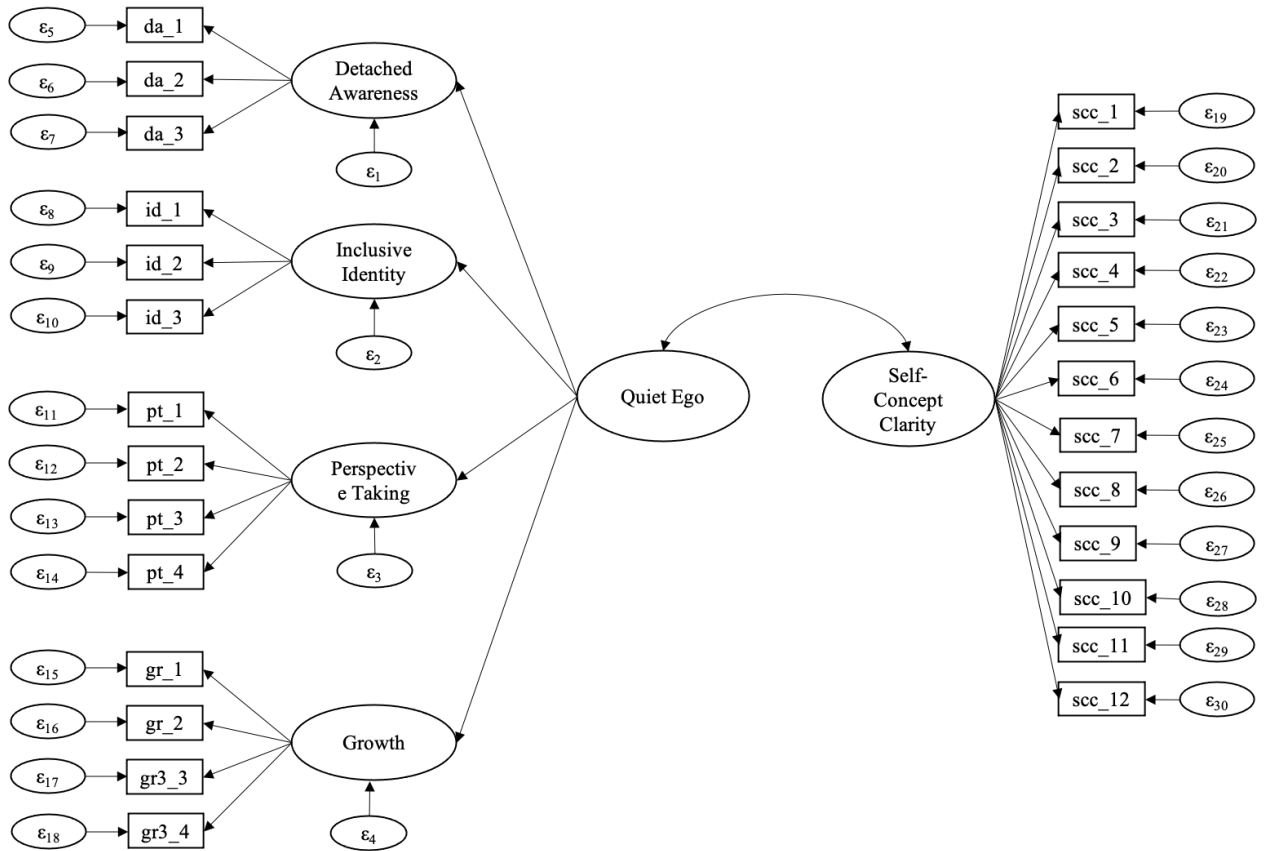
Thus, I followed up with a second CFA analysis in which both latent constructs (i.e., quiet ego and SCC) were fitted into one model (Figure 3B). This model, however, did not provide good fit to the data, Satorra-Bentler scaled $\chi^2(294) = 1468.82$, $p < .001$, SRMR = .083, S-B RMSEA = .062, S-B TLI = .83, S-B CFI = .85, especially concerning the comparative indices (CFI and TLI) as both are below the .90 cutoff. As such, the correlation coefficient between the quiet ego and SCC produced by the model cannot be relied on because it is biased (Brown, 2015). Therefore, the correlation was calculated by using the observed scores (i.e., single indicators) of the quiet ego and SCC (see Figure 3C). It was also done in a CFA framework because their measurement errors were

calculated and removed so the relationship between the two constructs was purer and more accurate (Brown, 2015; Kline, 2016).

Measurement errors were calculated by multiplying each variable's variance by its unreliable component, which is 1 minus its reliability (measured by McDonald's omega) (e.g., $\text{Error}_{QE} = \text{Var}_{\textit{quiet ego}} \times [1 - \omega_{\textit{quiet ego}}]$) (i.e., it essentially computes the amount of variance that's actually caused by the underlying construct) (Brown, 2015; Kline, 2016). The correlation between the two constructs was $r = .32$, $SE = .04$, $p < .001$, 95% CI [.25, .39]. The result thus provided an initial evidence of the quiet ego's construct validity with respect to the domain of self-perception.

Figure 3C

CFA Single Indicators Model Measuring Quiet Ego Construct Validity With Respect to Self-Concept Clarity
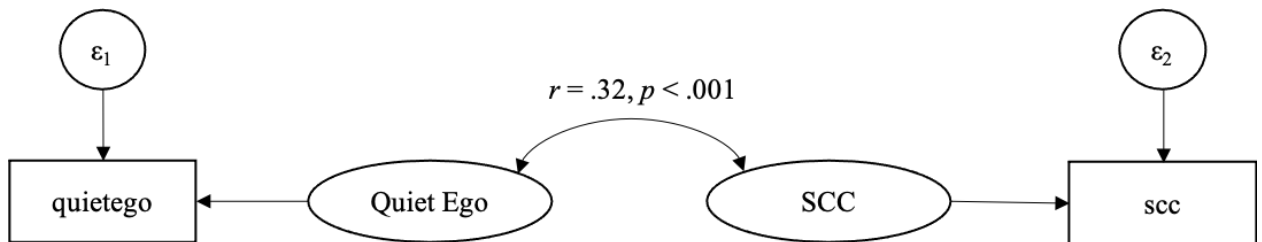
2.2 The Quiet Ego and Theory of Mind

2.2.1 Introduction

In Chapter 2.1, I examined how the quiet ego — as a self-construal — was related to processing self-referential information. Self-construals are, however, not only related to how we process information about ourselves, they also influence how we process information about others, i.e., we use ourselves as a reference when processing

information about others (Brown, 1998; Brown & Ryan, 2003). How we process information about others matters because it influences the quality of our relationship with them. Therefore, in Chapter 2.2, I study how the quiet ego relates to our perception of others.

Specifically, I examine how the quiet ego relates to perception of others' mental and emotional states, i.e., Theory of Mind (ToM). ToM is defined as the ability to attribute mental states (e.g., beliefs, desires, intentions) to oneself and others and to use this information to interpret and predict behaviors (Premack & Woodruff, 1978). Research has discovered two kinds of ToM: social-perceptual and social-cognitive ToM (Tager-Flusberg & Sullivan, 2000). Social-perceptual ToM refers to the ability to make on-line, rapid judgments about others' mental states using non-verbal cues such as facial, vocal expressions or bodily postures. Social-cognitive ToM concerns the ability to represent and reason about others' mental states and to make complex cognitive inferences about the content of those mental states (Tager-Flusberg & Sullivan, 2000).

Four theoretical considerations support the hypothesis that the quiet ego and ToM are related. First, ToM, by definition, entails perspective taking (Baron-Cohen et al., 2001). To the extent that one thinks solely from an ego-basis, one engages in *less* perspective taking because one focuses on oneself and concerns others only insofar as doing so benefits oneself (Campbell & Buffardi, 2008). The quiet ego, on the other hand, does not operate solely from an egotistical basis (Bauer & Wayment, 2008), i.e., one with a quiet ego expands attention to others and thinks from their points of view (Bauer & Wayment, 2008). Further, the quiet ego's growth mindset facilitates perspective-taking, i.e., as people become more psychosocially mature, they routinely think more complexly

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and integratively about the self and others (Bauer, 2008). Then, the quiet ego's inclusive identity complements and enhances perspective-taking in that it reduces one's protective and defensive stance toward others because one includes others in one's psychosocial identity (i.e., one does not regard others as qualitatively different from oneself) (Wayment, Bauer, & Sylaska, 2015).

Finally, the quiet ego's detached awareness contributes to ToM as it allows one to remain non-judgmental amidst feelings, thoughts, and preconceived notions, reducing their impact on one's understanding of others' mental states. When perceiving, one's mind generates automatic cognitive and affective reactions toward objects that are held in attention (Brown et al., 2007). Such reactions usually come from past experience with similar objects. Insofar as the current object resembles past objects, such reactions become activated and then direct one's attention and behaviors. In many ways, such automated reactions bias one's thinking and impede perspective taking by fixating one's responses on previously learned patterns. Thus, to the extent that one can refrain from giving in to such automatic reactions, one can be less influenced by them, and therefore, be more accurate in one's understanding of the current object (e.g., others' affective tone or nonverbal behavior) (Brown et al., 2007; Brown & Ryan, 2003).

2.2.2 Method

2.2.2.1 Participants

Three-hundred and fifty-seven (357) US participants were recruited from Amazon MTurk for a 35-minute survey. One hundred and four participants were rejected, for four reasons: (a) 54 participants' responses contained either nonsensical strings, letters or

randomly made-up words that were clearly not relevant to the question prompts; (b) 31 participants skipped most of the open questions in the second part of the survey; (c) 16 participants' responses to the open questions contained mostly copy-pasted text from the question prompts; and (d) 3 participants completed each of the 36 multiple choice questions in less than 1 second — an impossible speed to read a question and make a reasoned selection. Such a high concentration of dishonest behavior in summer 2018 was not unique to this study — other research groups experienced a similar surge in these behaviors (Dreyfuss, 2018).

The remaining 253 participants (female = 139) had a mean age of 36.9 (SD = 12.2). Ethnically, 181 identified as Caucasian (71.5%), 24 as African American (9.5%), 21 as Asian (8.3%), 11 as Hispanic or Latino (4.3%), 10 as Native American (4%), and 5 as Multi-Racial (2%).

2.2.2.2 Materials

The Quiet Ego

Same as in the previous study, the Quiet Ego Scale was used to measure the extent to which the four quiet ego characteristics were endorsed (Wayment, Bauer, & Sylaska, 2015). Its McDonald's omega in this sample was .84.

Theory of Mind (ToM)

ToM was measured by two tests, corresponding to the two types of ToM: social-perceptual and social-cognitive ToM (Tager-Flusberg & Sullivan, 2000). Social-perceptual ToM was tested by the Reading the Mind in the Eyes test in which participants were presented with 36 photographs of different individuals' eye regions and were asked

to choose from 4 possible options as to which option best captured what the person was thinking or feeling (Baron-Cohen et al., 2001). Higher scores (theoretical range of 0—36) indicate greater social perceptual ToM. Its McDonald's omega in this sample was .86.

Social cognitive ToM was examined by the Faux Pas test, a measurement containing 20 vignettes, each describing a social situation, with 10 containing a faux pas or social blunder, and the other 10 serving as control stories (Stone et al., 1998). In each vignette, participants were first asked if a character had committed a faux pas. If answered yes, participants would then be asked who had committed it, why it was awkward, what the motive behind the faux pas was, as well as how the person offended would feel; finally, participants would answer two control questions to have their understanding of the vignette tested. If answered no (i.e., no faux pas had been committed), participants would be asked the control questions directly.

Participants received 1 point for each correctly identified faux pas as well as for each correctly identified non-faux-pas (i.e., in the control vignettes). They also received 1 point for each correctly answered follow-up question (e.g., that the faux pas was inappropriate; that it was unintentional). Scoring was based on the total number of correctly answered faux pas questions divided by the total number of correctly answered control questions (Stone et al., 1998)[4]. Its McDonald's omega in this sample was .95.

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[4] There were two rounds of scoring. The first round scored the 5 faux pas questions: (1) faux pas detection (whether participants detected a faux pas); (2) faux pas understanding (whether participants understood the inappropriateness of the faux pas); (3) faux pas intention (whether participants could tell the unintentional nature of the faux pas); (4) faux pas belief (whether participants believed the faux-pas-committing character knew their action was going to be awkward); (5) faux pas empathy (whether participants could identify the feeling of the character offended by the faux pas). The second round computed an overall faux pas score by averaging the 5 scores.

2.2.2.3 Analysis

I again evaluated construct validity in two steps: first, I performed a CFA model on the quiet ego to check the construct's factor structure in this sample. I then conducted a second and third CFA models to investigate the relationships between the quiet ego and social-perceptual and social-cognitive ToM, respectively.

2.2.3 Results

I ran a higher-order CFA model with the same specification as in Chapter 2.1. Prior to the CFA analysis, I evaluated the data for multivariate normality and found the assumption violated, Doornik-Hansen $\chi^2(28) = 271.24$, $p < .001$. Thus, I used the Satorra-Bentler scaled Maximum Likelihood (ML) estimator. The CFA model provided acceptable fit to the data, suggesting the factor structure held in this sample, Satorra-Bentler scaled $\chi^2(73) = 171.06$, $p < .001$, SRMR = .099, S-B RMSEA = .073, S-B TLI = .87, S-B CFI = .91.

Next, I conducted a second CFA analysis to test the association between the quiet ego and social-perceptual ToM (the Eye test). Since I measured social-perceptual ToM with a single variable (the Eye test score), I specified it as a single indicator latent variable in the model with measurement errors partialled out.

The CFA model did not provide an acceptable fit to the data, Satorra-Bentler scaled $\chi^2(86) = 212.03$, $p < .001$, SRMR = .11, S-B RMSEA = .076, TLI = .86, CFI = .89. I then computed the correlation between the two constructs by using their observed scores (i.e., single indicators) in a CFA framework with their measurement errors partialled out (same as in the study between QE and SCC) (Figure 4A). The correlation

between the quiet ego and social-perceptual ToM was .38, *SE* = .07, *p* < .001, 95% CI

[.25, .51].

Figure 4A

CFA Single Indicators Model Measuring Quiet Ego Construct Validity With Respect to

Social-Perceptual ToM
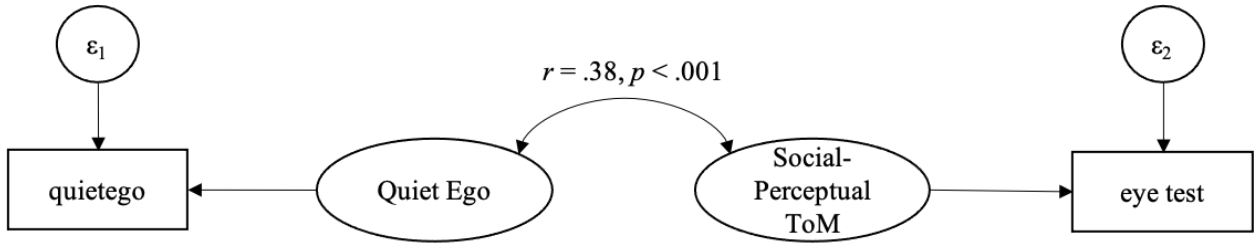
Next, I ran a third CFA model to test the association between the quiet ego and

social-cognitive ToM (i.e., the Faux Pas test). The model did not fit the data well:

Satorra-Bentler scaled $\chi^2(86) = 202.02$, *p* < .001, SRMR = .10, S-B RMSEA = .073, S-B

TLI = .88, S-B CFI = .90. Thus, I again calculated the correlation by using their

observed scores in a CFA framework with measurement errors partialled out (Figure 4B).

The correlation between the quiet ego and social-cognitive ToM was .34, *SE* = .06, *p*

< .001, 95% CI [.21, .46]. Together, the results provide initial evidence for construct

validity of the quiet ego with respect to the domain of other-perception.

Figure 4B

CFA Single Indicators Model Measuring Quiet Ego Construct Validity With Respect to

Social-Cognitive ToM

ε_1

ε_2

$r = .34, p < .001$

quietego

Quiet Ego

Social-Cognitive ToM

faux pas
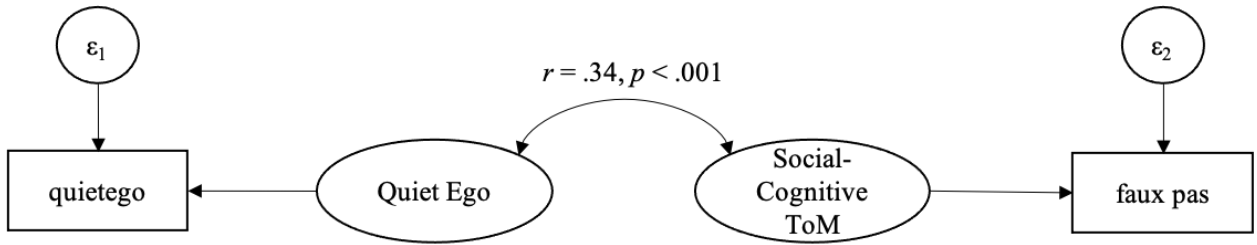
2.3 The Quiet Ego and Emotional Intelligence

2.3.1 Introduction

Next, I examine the subject of emotional intelligence (EI) and investigate its theoretical association with the quiet ego.

2.3.1.1 Emotional Intelligence

Research on EI has developed in two parallel streams based on two different conceptualizations (Ferguson & Austin, 2010; MacCann & Roberts, 2008). This development has resulted in two kinds of EI: ability EI and trait EI. Ability EI refers to a set of four hierarchically related abilities: (1) the ability to perceive and express emotions; (2) the ability to integrate emotions into thought processes (e.g., label emotions appropriately); (3) the ability to understand the relations between emotions as well as between emotions and situations; (4) the ability to manage and adjust emotions to adapt to situations (Colman, 2015; McCann & Roberts, 2008).

This conceptualization suggests that EI is a reasoning, problem-solving ability in the emotion domain (Ferguson & Austin, 2010). Therefore, as a set of abilities, EI can be objectively measured in much the same way as cognitive intelligence (Ferguson & Austin, 2010; MacCann & Roberts, 2008). Hence, assessment in this tradition features

instruments with multiple choice questions that can be objectively scored (MacCann & Roberts, 2008).

The trait EI approach conceptualizes EI as a set of emotion-related self-perceptions and dispositions, i.e., one's evaluations and judgements of how capable one is in the emotion domain (Petrides & Furnham, 2006; Petrides et al., 2007). This conceptualization maintains that emotions are subjective in nature; therefore, anything emotion-related is also subjective in nature (incl. emotional intelligence), hence cannot be measured objectively. Therefore, research in this tradition replies on self-report questionnaires such as the Trait Emotional Intelligence Questionnaire (Petrides, 2009).

The two conceptualizations do not seem to differ on whether EI is a cognitive phenomenon, but rather on what the cognitive phenomenon is *about* — if it's about reasoning or solving problems in the emotion domain, then it's an ability (Ferguson & Austin, 2010); if it's about understanding one's tendencies and dispositions related to emotions, then it's a trait (Petrides et al., 2007).

2.3.1.2 The Quiet Ego and Emotional Intelligence

The quiet ego is theoretically related to both ability and trait EI. In terms of ability EI, the theoretical connection revolves around detached awareness and perspective taking.

The Quiet Ego and Ability EI

Detached awareness is a non-defensive, receptive state of awareness that is present-centered (i.e., experiencing whatever is in the present moment without superimposing preconceived notions) (Brown et al., 2007). It provides a critical mental

distance between attending to stimuli and reacting to them, enabling one to experience

psychological phenomena (e.g., emotions, thoughts, motivations) without getting

entangled in them, thereby allowing one to achieve a deeper understanding of the nature

of these phenomena (Brown et al., 2007). In relation to ability EI, detached awareness

will likely enable one to recognize and label one's emotions appropriately and achieve a

clear understanding between one's emotions and the triggering situations as both the

emotions and the situations can be directly observed as part of the ongoing stream of

consciousness. This clear understanding, coupled with an objective, non-defensive

processing of experience would also allow for a more informative adjustment of emotions

(Brown & Ryan, 2003; Brown et al., 2007).

Perspective taking refers to the ability and tendency to adopt another's

psychological point of view (Davis, 1983; Wayment, Bauer, & Sylaska, 2015). It allows

one to anticipate another's behavior and reactions (e.g., cognitive and affective

reactions), which facilitates understanding of their emotional states as well as adjustment

of one's own emotional states (Davis, 1983). Since understanding and managing

emotions are components of ability EI, it is therefore expected that ability EI will be

positively related to perspective taking, which is itself a component of the quiet ego.

The Quiet Ego and Trait EI

The theoretical connection between the quiet ego and trait EI concerns inclusive

identity, perspective taking, and detached awareness. Inclusive identity refers to the

extent to which one identifies with others or views oneself as similar to others (Wayment,

Bauer, & Sylaska, 2015). Trait EI is emotional self-efficacy, i.e., one's judgments of

how well one can execute actions to deal with prospective emotional situations (Petrides

et al., 2007). One important emotional situation involves one's perception on how well one can deal with other people (Petrides et al., 2007). Following this logic, inclusive identity is expected to be positively related to trait EI in that including others in one's psychosocial identity necessarily entails the judgment that one *can* engage with them.

Perspective taking complements inclusive identity in its connection to trait EI in that it enables one to understand things from others' points of view. This understanding in turn confers confidence in one's perception of one's ability to address others, including their emotions (Petrides et al., 2016).

Detached awareness is associated with clear comprehension and receptive, non-judgmental processing because it enables one to disengage and switch awareness from the usual mode of self-referential processing to an objective, experiential mode of processing that allows one to understand deeply and accurately the meaning and import of one's emotional experience (Bauer & Wayment, 2008; Brown et al., 2007; Brown & Ryan, 2003). This increase in accuracy in one's understanding would in turn enhance one's perception of one's capability in coping with emotion-related issues.

2.3.2 Method

2.3.2.1 Participants

Three hundred (300) UMass Amherst undergraduate students (female = 231) participated in the study in exchange for course credit. Their mean age was 19.7 years (*SD* = 1.7). Ethnically, 225 (75%) identified as Caucasian, 31 (10.3%) as Asian, 17 (5.7%) as African American, 13 (4.3%) as Hispanic, 7 (2.3%) as Multi-Racial, and 7 (2.3%) as Other.

2.3.2.2 Materials

The Quiet Ego

Same as in the other studies, the Quiet Ego Scale was used to measure the extent to which the four quiet ego characteristics were endorsed: inclusive identity, perspective taking, detached awareness, and growth-mindedness (Wayment, Bauer, & Sylaska, 2015). Its McDonald's omega was .71 for this sample.

Ability EI

Ability EI was measured by the Situational Test of Emotional Management - Brief (STEM-B) (Allen et al., 2015). It is an abbreviated version of the Situational Test of Emotional Management (STEM) — an instrument that was developed as a theory-driven and ecologically valid alternative to the then dominant, proprietary Mayer-Salovey-Caruso Emotional Intelligence Test (MacCann & Roberts, 2008).

STEM-B consists of 18 questions, each presenting an emotional scenario in which participants were asked to choose what they think is the most effective way to manage emotions in that scenario (among 4 alternatives). A typical scenario reads as follows: "Jacob is having a large family gathering to celebrate him moving into his new home. He wants the day to go smoothly and is a little nervous about it. What action would be the most effective for Jacob?" Each of the four options following the scenarios is *a priori* scored by experts on a 6-point scale (i.e., emotion researchers and professionals in related fields such as psychotherapy). Scoring is done by summing up expert ratings of the options selected for each question, with higher scores indicating greater ability in emotion management. Its McDonald's omega in this sample was .72.

Trait EI

Trait EI was measured by the Trait Emotional Intelligence Questionnaire — Short Form (TEIQue-SF) (Petrides, 2009). The scale consists of 30 items, answered on a 7-point Likert scale, from 1 (*Completely Disagree*) to 7 (*Completely Agree*). Sample items include "I can deal effectively with people" and "I usually find it difficult to regulate my emotions" (reverse-keyed). Scoring is done by first reverse scoring certain items and then averaging across all items, with higher scores indicating greater trait EI. Its McDonald's omega in this sample was .89.

2.3.2.3 Analysis

Similar to the last two studies, I assessed construct validity in two steps: first, I ran a CFA on the quiet ego to evaluate its factor structure in this sample. Then, I conducted a second and third CFAs to examine the relations between the quiet ego and ability EI and trait EI, respectively.

2.3.3 Results

Prior to the CFA analysis, I evaluated the data for multivariate normality and found the assumption to be violated, Doornik-Hansen $\chi^2(28) = 743.77$, $p < .001$. Thus, the Satorra-Bentler scaled Maximum Likelihood (ML) estimator was used. The CFA model provided poor fit to the data (particularly concerning the two comparative indices TLI and CFI), suggesting the factor structure did not hold in this sample, Satorra-Bentler scaled $\chi^2(73) = 175.73$, $p < .001$, SRMR = .077, S-B RMSEA = .068, TLI = .85, CFI = .88. This likely reflects sample idiosyncrasy as the factor structure was shown to be

robust in the previous two samples (one with an *N* of 1075) as well as in Wayment,

Bauer, and Sylaska (2015).

Because the factor structure did not hold in this sample, I analyzed the

correlations between the quiet ego and ability and trait EI by using their observed scores

in a CFA framework with measurement errors partialled out. Measurement errors were

calculated by multiplying each variable's variance by its unreliable component, which is

1 minus its reliability (measured by McDonald's omega) (Brown, 2015; Kline, 2016).

The correlation between QE and ability EI was $r = .18$, *SE* $= .08$, $p = .021$, 95%CI

[.03, .34]. And the correlation between QE and trait EI was $r = .75^5$, *SE* $= .04$, $p < .001$,

95%CI [.67, .83] (Figure 5).

Figure 5

CFA Single Indicators Model Measuring Quiet Ego Construct Validity with Respect to

Emotional Intelligence

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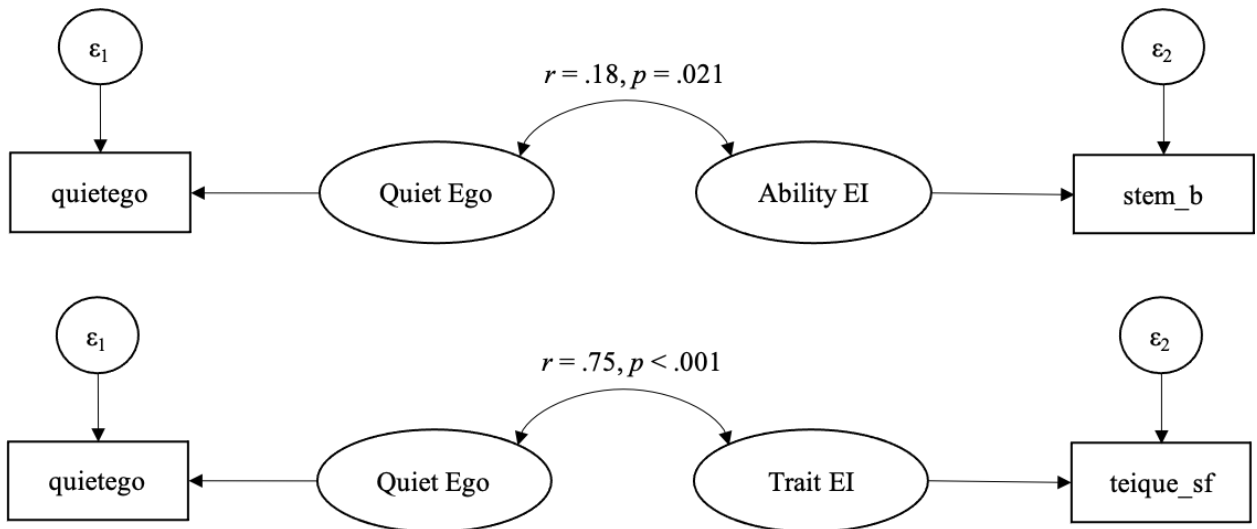
[5] Although highly correlated, the two constructs are not identical (both theoretically and empirically). The *r* value .75 was *Fisher z* transformed to z $= .95$ and it was compared to z $= 2.65$ (i.e., $r = .99$) with a standard deviation of 1/SQRT(N-3). $r = .75$ was significantly different from $r = .99$, $z = -20.4$, $p < .001$.

2.4 Discussion

Using a CFA framework, I systematically examined the quiet ego's construct validity vis-à-vis domains of self-perception (self-concept clarity), other-perception (Theory of Mind), and emotional intelligence. The quiet ego's factor structure replicated in two of the three samples (collective $n = 1328$). It did not fit the data well in the third sample ($n = 300$), mainly because the two comparative indices CFI (.88) and TLI (.85) fell below the critical threshold of .90 (though the other two indices, SRMR = .08 and RMSEA = .068, were acceptable). This was likely due to sample idiosyncrasy as the factor structure has been reproduced in multiple samples by different research groups (e.g., Wayment, Bauer, & Sylaska, 2015).

The quiet ego was theorized to be positively associated with self-concept clarity, positively associated with social-perceptual and social-cognitive ToM, and positively associated with ability and trait EI. The hypotheses were well supported: Quiet ego significantly correlated with SCC (.32), social-perceptual (.38) and social cognitive (.34) ToM in the small-to-medium range; it had a significant but low correlation with ability EI (.18), and a high correlation with trait EI (.75). Table 3 below summarizes the results.

Table 3

Quiet Ego Construct Validity Summary

	SCC[1]	Soc-perc ToM[2]	Soc-cog ToM[3]	Ability EI	Trait EI
Study N	1075	253	253	300	300
QES McDonald's ω	.72	.84	.84	.71	.71
Correlation[*]	.32	.38	.34	.18	.75

Note. 1 = Self-Concept Clarity; 2 = Social-perceptual Theory of Mind (the Eye test); 3 = Social-cognitive Theory of Mind (the Faux Pas test). [*]Correlations with measurement errors partialled out.

Together, these results provide the first evidence of the quiet ego's construct validity with respect to these domains. Not only do they theoretically enrich the quiet ego construct, they also pave the way for further investigations between the quiet ego and psychological well-being for which SCC, ToM, and EI are implicated (e.g., Hanley & Garland, 2017; Kidd & Castano, 2013; Light, 2017; Mikolajczak et al., 2007). In Chapter 3, I capitalize on these findings and examine their implications for well-being.

CHAPTER 3

THE QUIET EGO AND WELL-BEING

3.1 The Quiet Ego, Self-Concept Clarity, and Well-Being

3.1.1 Introduction

In Chapter 2.1, I found that the quiet ego correlated significantly with SCC (r = .32, $p < .001$, 95% CI [.25, .39]). The result is consistent with the theory of the quiet ego — a mature self-construal that is growth-oriented and that is able to think complexly and integratively about the self — a process in which ideas about the self are being increasingly discerned and integrated (Bauer, 2008; Wayment, Bauer, & Sylaska, 2015). The result is also consistent with the organismic perspective that holds that growth and striving are the underlying impetus of self-development (Rogers, 1951; Kegan, 1982; Loevinger, 1976), the end result of which is increasing understanding, differentiation, and organization of the self-concept (Bauer, 2008; Ryan, 1995).

SCC, however, is not an end state in itself; it has implications for self-esteem and psychological well-being (Campbell, 1990; Campbell et al., 1996; Hanley & Garland, 2017; Light, 2017). For example, Campbell (1990) and Campbell et al. (1996) found that SCC was positively associated with global self-esteem — one's overall evaluation of one's self-worth, suggesting that a more holistic and integrated self-structure could bring psychological benefits. Similarly, Hanley and Garland (2017) reported that self-concept clarity was positively associated with psychological well-being (measured by the Scales of Psychological Well-Being) ($r = .46$, $p < .001$).

In this study, I tested the hypothesis that the quiet ego would predict increased psychological well-being and self-esteem via its positive association with self-concept clarity. In addition, I tested a potential mechanism linking the quiet ego to SCC — although it was assumed that the tendency toward growth mediated the relationship, it was not tested: Saying someone has this tendency and their actually displaying it are two different matters, especially when it comes to displaying this tendency in specific domains, such as when thinking about the self. Finally, I used a general population sample to test the generalizability of the association between the quiet ego and SCC (which has only been tested in a convenient undergraduate sample).

3.1.2 Method

3.1.2.1 Participants

I preregistered and recruited 500 US participants from Amazon MTurk. I excluded 9 participants because they failed at least 2 of the 4 attention checks (this criterion was also preregistered); I then replaced them with another 9 participants. Participants averaged 38.9 years in age (SD = 11.4); ethnically, 364 (72.8%) identified as Caucasian, 50 (10%) as African-American, 41 (8.2%) as Asian, 25 (5%) as Hispanic or Latino, 16 (3.2%) as Multi-Racial.

3.1.2.2 Materials

The Quiet Ego

Same as in the other studies, the Quiet Ego Scale (QES) was used to measure participants' endorsement of the four quiet ego characteristics: inclusive identity,

perspective taking, detached awareness, and growth-mindedness. McDonald's omega was .83 for this sample.

Self-Concept Clarity

Same as in 2.1, the Self-Concept Clarity Scale was used to measure SCC. The scale consists of 12 items, answered on a 5-point Liker scale (theoretical range 12—60), from 1 (*Strongly disagree*) to 5 (*Strongly agree*). McDonald's omega was .94 for this sample.

Growth Tendency

The Growth Motivation Index was used to measure the extent to which participants displayed a tendency toward personal growth (Bauer et al., 2015). The scale consists of 8-items; It asks how often participants do particular activities for reasons of personal growth. A sample item includes "I try to form my personal goals in life around my deeper interests." It is assessed on a 7-point Likert scale ranging from 1 (*never*), 4 (*periodically*), to 7 (*always*). Higher scores indicate a greater tendency toward engaging in activities for personal growth. Its McDonald's omega was .87 for this sample.

Psychological Well-Being

The Scales of the Psychological Well-Being Short Form were used to measure psychological well-being (Ryff & Keyes, 1995). The instrument consists of 18-items, assessing an overall sense of psychological well-being from 6 domains: Self-Acceptance, Positive Relationships with Others, Personal Growth, Purpose in Life, Autonomy, and Environmental Mastery. It was assessed on a 6-point Likert scale, from 1 (*completely disagree*) to 6 (*completely agree*). Sample items include "When I look at the story of my life, I am pleased with how things have turned out so far" (Self-Acceptance); "Some

people wander aimlessly through life, but I am not one of them" (Purpose in Life).

Higher scores (theoretical range 18—108) indicate greater felt sense of psychological

well-being. McDonald's omega was .89 for this sample.

Self-Esteem

The Self-Liking/Self-Competence Scale-Revised (SLCS-R) was used to measure

self-esteem (Tafarodi & Swann, 2001). It taps into global self-esteem via two related but

distinct dimensions, self-competence and self-liking. Self-competence refers to one's

overall evaluation of one's power and efficacy (i.e., an overall sense of confidence one

has in one's ability to achieve desired results). Self-liking concerns one's overall

evaluation of oneself as a good (moral) or bad (immoral) person. The scale consists of 16

items with 8 items measuring each dimension and is assessed on a 5-point Likert scale

from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Sample items of Self-Competence

include "I am highly effective at the things I do" and "I sometimes deal poorly with

challenges" (reverse-keyed); samples items of Self-Liking include "I am very

comfortable with myself" and "I tend to devalue myself" (reverse-keyed). Higher scores

(theoretical range 8—40) indicate higher self-competence or self-liking. McDonald's

omegas were .90 for Self-Competence and .95 for Self-Liking.

3.1.2.3 Analytical Strategy

I used an improved path modeling technique to test the study hypotheses. This

approach improves upon traditional path modeling by partitioning variances into true and

unexplained variances (i.e., random measurement error), thus enabling purer estimates of

the relationships between the study variables (Brown, 2015; Kline, 2016). Same as in the

previous studies, measurement errors were calculated by multiplying each variable's variance by its unreliable component, which is 1 minus its reliability (measured by McDonald's omega). Figures 6A-1 and 6B-1 depict the models.

I estimated the indirect effects by using the product of coefficients approach (Fairchild & McDaniel, 2017; Hayes, 2018). The products of paths a_1 and b_1, a_1 and b_2 estimate the indirect effects of the quiet ego on psychological well-being and self-esteem via SCC (Figure 6A-1); in Figure 6B-1, the product of paths a_1 and d_{21} estimates the indirect effect of the quiet ego on SCC via Growth Motivation. Finally, the products of paths a_1, d_{21}, b_3 and a_1, d_{21}, b_4 estimate the serial indirect effects of the quiet ego on psychological well-being and self-esteem via Growth Motivation and SCC, respectively.

Figure 6A-1

Model Specification Testing Indirect Effects of Quiet Ego on Psychological Well-Being and Self-Esteem via SCC
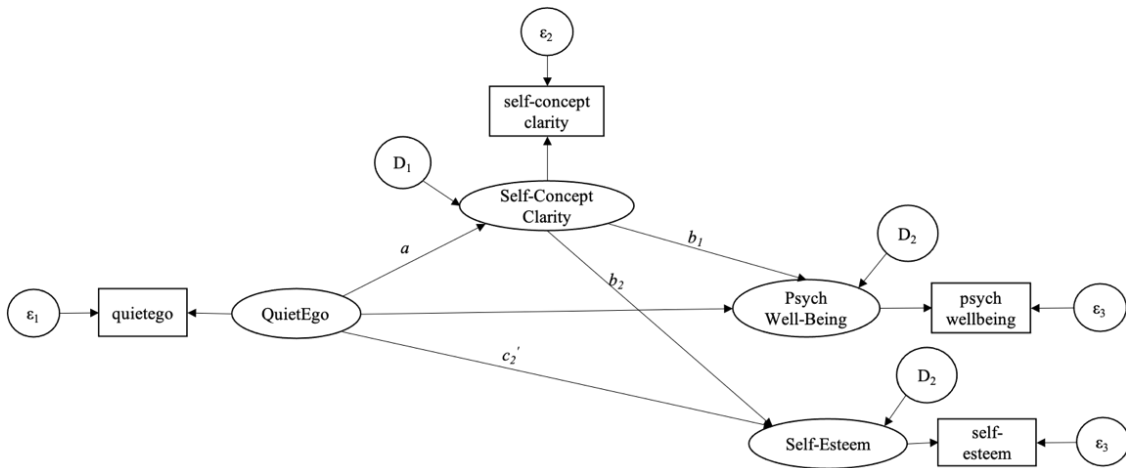
Figure 6B-1

Model Specification Testing Serial Indirect Effects of Quiet Ego on Psychological Well-Being and Self-Esteem via Growth Motivation and SCC

growth
motiv

ε_2

self-concept
clarity

ε_3

D_1

d_{21}

D_2

Growth
Motiv

Self-Concept
Clarity

D_3

a

b_1

b_3

c_1'

b_2

b_4

ε_1

quietego

QuietEgo

c_2'

Psych
Well-Being

psych
wellbeing

ε_4

c_3'

D_4

Self-Esteem

self-
esteem

ε_5
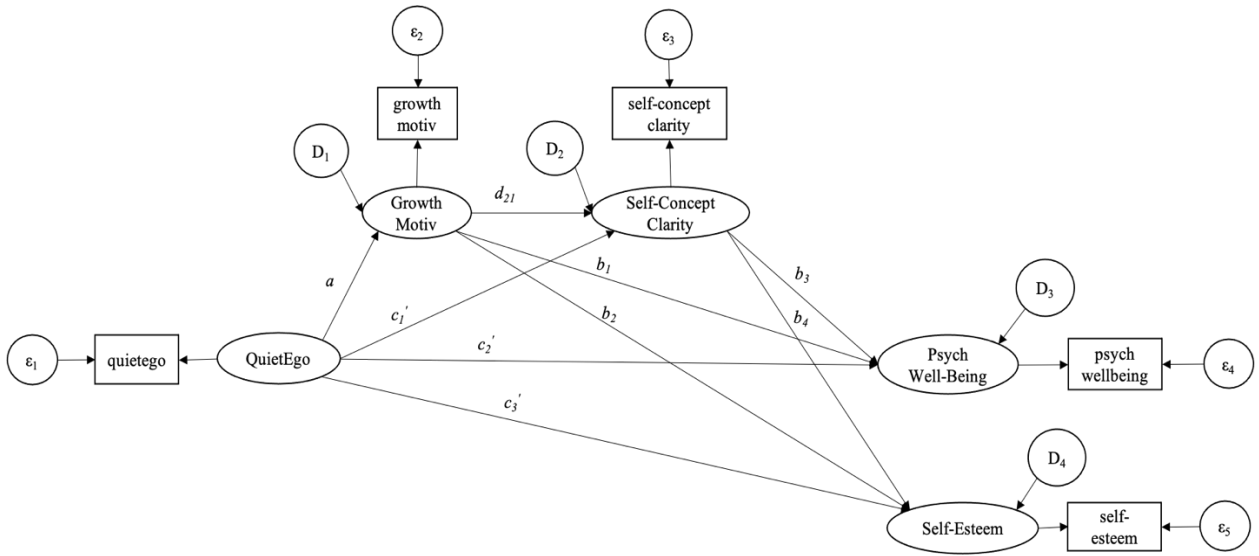
3.1.3 Results

Table 4 presents the correlations between the study variables as well as their means and standard deviations. Particularly noticeable is the strong positive correlation between Self-Competence and Self-Liking ($r = .85$) — it reflects the two converging aspects of global self-esteem. It is common to observe high correlations between the two aspects; for example, they correlated at .90 in the original Tafarodi and Swann (2001) study. Although correlated highly, they are not identical, either theoretically (Tafarodi & Swann, 2001) or empirically as $r = .85$ (Fisher's $z = 1.26$) is significantly different from $r = .99$ (Fisher's $z = 2.65$), $z = -21.92$, $p < .001$.

Table 4

Correlations, Means, and Standard Deviations of Study 3.1 Variables

	1	2	3	4	5	6	M (SD)
1. Quiet Ego	—						3.71 (.63)
2. SCC	.44**	—					45.67 (11.66)
3. Growth Motiv	.65**	.10*	—				4.94 (1.06)
4. PWB	.66**	.70**	.43**	—			78.82 (15.47)
5. Self-Competence	.45**	.52**	.31**	.73**	—		27.12 (7.23)
6. Self-Liking	.45**	.60**	.28**	.74**	.85**	—	28.17 (9.09)

Note. SCC = Self-Concept Clarity; PWB = Psychological Well-Being; $^*p < .05$; $^{**}p < .01$.

Pertaining to the indirect effects from the quiet ego to psychological well-being and self-esteem, the model fit the data reasonably well: Satorra-Bentler scaled $\chi^2(12) = 24.91$, $p = .02$, SRMR = .021, S-B RMSEA = .046 (90% CI = .020 - .072), S-B TLI = .970, S-B CFI = .995 (see Figure 6A-2). Further, consistent with the hypotheses, I found significant indirect effects linking the quiet ego, via self-concept clarity, to psychological well-being, ($ab_1 = 6.09$, $p < .001$, 95% CI [4.76, 7.42], $ab_{1\ cs}{}^6 = .25$), self-competence ($ab_2 = 2.35$, $p < .001$, 95% CI [1.69, 3.00], $ab_{2\ cs} = .20$), and self-liking ($ab_3 = 3.68$, $p < .001$, 95% CI [2.73, 4.63], $ab_{3\ cs} = .26$), after controlling for age, gender, ethnicity, social status, and religiosity.

Independent of the indirect effects, the quiet ego predicted increases (i.e., direct effects) in psychological well-being ($c_1' = 12.54$, $p < .001$, 95% CI [10.59, 14.50]), self-competence ($c_2' = 3.74$, $p < .001$, 95% CI [2.61, 4.86]), and self-liking ($c_3' = 3.82$, $p < .001$, 95% CI [2.40, 5.23]).

Together, the results suggest that participants who score higher on the quiet ego scale tend to have a more organized and integrated self-structure and those who have a

---

[6] Completely standardized indirect effect: $ab_{cs} = SD_X (ab) / SD_Y$. It expresses indirect effects in terms of the difference in standard deviations in the dependent variable (Y) between two cases that differ by one standard deviation in the independent variable (X) (Hayes, 2018).

more integrated self-structure tend to experience higher psychological well-being and self-esteem, all with clear and visible effect sizes.

Figure 6A-2

Coefficients in the Path Model Investigating the Indirect Relationship from Quiet Ego to Psychological Well-Being and Self-Esteem
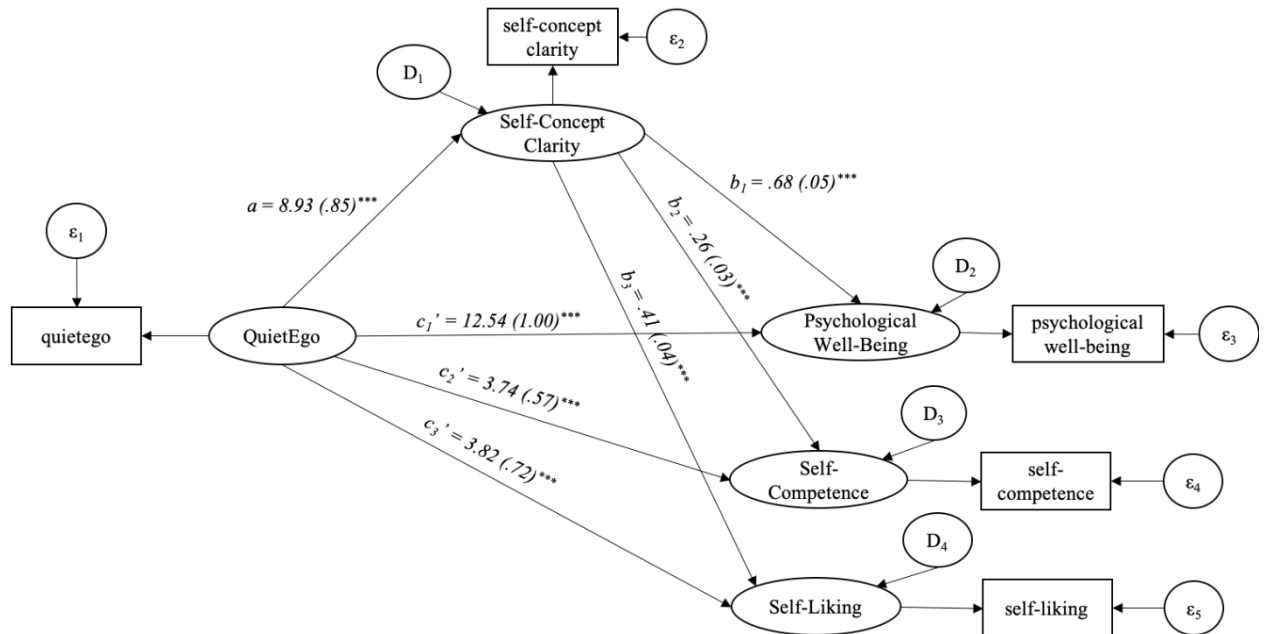
Note. $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$. Pairwise covariances between the DVs were omitted to save space. Also omitted were covariates age, gender, ethnicity, social status, and religiosity.

As regards the serial indirect effects from the quiet ego to psychological well-being and self-esteem via growth motivation and self-concept clarity, the model fit the data reasonably well: Satorra-Bentler scaled $\chi 2(12) = 24.91$, $p = .02$, SRMR = .021, S-B RMSEA = .046 (90% CI = .020 - .072), S-B TLI = .969, S-B CFI = .996 (see Figure 6B-2). However, inconsistent with the hypotheses, the serial indirect effects exhibited the opposite patterns as predicted: the quiet ego *negatively* predicted psychological well-being ($a\, d_{21}\, b_4 = -6.96$, $p < .001$), self-competence ($a\, d_{21}\, b_5 = -2.59$, $p < .001$), and self-

liking ($a\ d_{21}\ b_6$ = -4.14, p < .001) via its association with growth motivation and self-concept clarity.

Probing these highly unexpected findings, I found that they were all caused by the coefficient turning negative that links growth motivation to self-concept clarity (i.e., d_{21} = -7.69, p < .001, Figure 6B-2), which contradicted the positive, zero-order correlation between growth motivation and self-concept clarity (Table 4), thereby suggesting a suppression effect.

Figure 6B-2

Coefficients in the Path Model Investigating the Serial Indirect Relationship from Quiet Ego to Psychological Well-Being and Self-Esteem
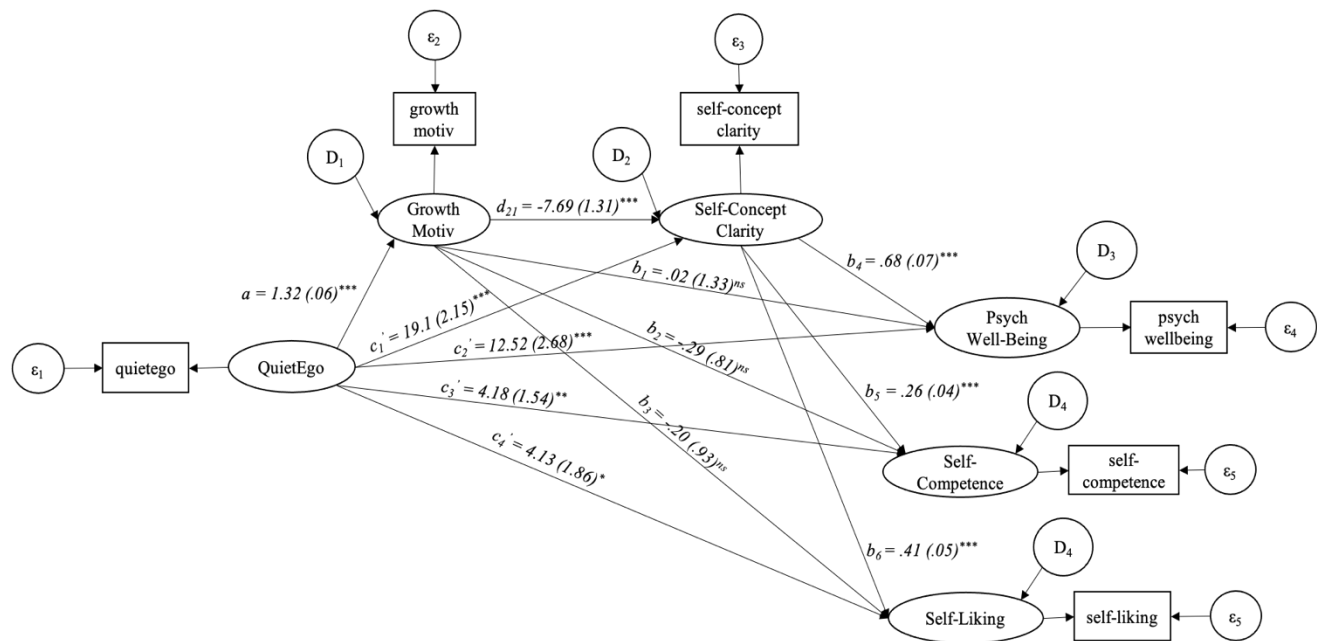
Note. $^{*}p$ < .05, $^{**}p$ < .01, $^{***}p$ < .001. Pairwise covariances between the DVs were omitted to save space. Also omitted were covariates age, gender, ethnicity, social status, and religiosity.

A suppression effect is defined as cases in which "the inclusion of a second predictor increases the predictive power of one or both predictors" (Watson et al., 2013,

p. 2). In other words, if predictor number 2 is a good measure of the sources of error

(i.e., criterion-*irrelevant* variance) of predictor number 1, then by giving predictor

number 2 a negative weight, the model as a whole can predict the criterion more

accurately than either predictor 1 or 2 can alone (Darlington & Hayes, 2017).

      With respect to these findings, growth motivation is a good measure of the

sources of error in quiet ego, i.e., it complements the quiet ego in the prediction of self-

concept clarity and thus by giving a negative weight to growth motivation, the model as a

whole would be more accurate in predicting variances in self-concept clarity. For

example, for two participants with the same level of self-concept clarity, if one was lower

on quiet ego, then one must be higher on growth motivation to make up the disadvantage

and this amounts to giving a different sign to growth motivation vis-à-vis the quiet ego

(in this case, a negative sign).

      This was immediately clear when the path from the quiet ego to self-concept

clarity was removed, which resulted in a positive coefficient linking growth motivation to

self-concept clarity ($d_{21} = 2.40$, $p < .001$), as well as positive serial indirect effects from

the quiet ego to psychological well-being ($a\ d_{21}\ b_4 = 2.48$, $p < .001$, 95% CI [1.36, 3.59],

$a\ d_{21}\ b_{4\ cs} = .10$), self-competence ($a\ d_{21}\ b_5 = .92$, $p < .001$, 95% CI [.49, 1.35], $a\ d_{21}\ b_{5\ cs}$

$= .08$), and self-liking ($a\ d_{21}\ b_6 = 1.39$, $p < .001$, 95% CI [.75, 2.04], $a\ d_{21}\ b_{6\ cs} = .10$), via

growth motivation and self-concept clarity (as hypothesized), after accounting for age,

gender, ethnicity, social status, and religiosity.

      Independent of the serial indirect effects, the quiet ego predicted enhanced

psychological well-being ($c_2' = 11.91$, $p < .001$, 95% CI [8.39, 15.43], $c_2'_{cs} = .49$), self-

competence (c_3' = 4.00, $p < .001$, 95% CI [1.87, 6.14], $c_3'_{cs}$ = .35), and self-liking (c_4' = 4.21, $p = .001$, 95% CI [1.78, 6.64], $c_4'_{cs}$ = .29).

3.1.4 Discussion

Building on theories of the quiet ego and self-concept clarity as well as capitalizing on the quiet ego's construct validity tested in Chapter 2.1, in this study, I examined the quiet ego's relations with psychological well-being and self-esteem from the angle of self-concept clarity.

The findings supported the hypotheses and are congruent with the conceptualization of the quiet ego as a less defensive and growth-oriented identity that is relatively free from caving into the immediate impulses and short-term lures that characterize an egotistical identity (Bauer & Wayment, 2008; Campbell & Buffardi, 2008). Underlying the quiet ego is a tendency toward psychosocial maturation that manifests itself as a development toward increasing differentiation and reintegration of the self (i.e., subject) and one's psychosocial environment (i.e., object) that results in an increasingly clear, integrated, stable, and consistent self-structure, i.e., increased self-concept clarity (Bauer, 2008; Deci & Ryan, 2000; Kegan, 1982; Loevinger, 1976).

The association between the quiet ego and self-concept clarity has intimate implications for psychological well-being and self-esteem as research has shown that self-concept clarity is closely and positively associated with both in that it provides a unified, coherent basis for processing self-relevant experience and information, and for facilitating one's autonomy and the discovery and realization of one's potential (Bigler et al., 2001; Hanley & Garland, 2017; Light, 2017; Ryff & Singer, 2008). A lack of such

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solid basis, on the other hand, often results in distress, disorientation, and a dislike toward oneself that ultimately undermines one's psychological well-being and self-esteem (Brown, 1998; Diehl & Hay, 2011; Ryff & Singer, 2008).

The indirect effects shown in Figure 6A-2 concur with these theoretical propositions in that higher quiet ego scores were positively associated with higher self-concept clarity that, in turn, was associated with greater psychological well-being and positive self-esteem.

In addition to testing the simple indirect effects, I also investigated whether the quiet ego was associated with psychological well-being and self-esteem via growth motivation and self-concept clarity in a serial fashion. Directly contradicting the hypotheses, however, the serial indirect effects turned out to be negative. Upon closer examination, I found that the unexpected findings were caused by a suppression effect, i.e., growth motivation suppressed the sources of error in quiet ego when predicting self-concept clarity and thus, by giving growth motivation a negative sign, the model (quiet ego plus growth motivation) as a whole became more accurate.

When the path from quiet ego to self-concept clarity was removed, the serial indirect effects became positive (as hypothesized): The quiet ego predicted enhanced psychological well-being and elevated self-esteem via its positive association with growth motivation and self-concept clarity in a serial fashion. The results lent support to the idea that a mechanism linking the quiet ego to self-concept clarity is via growth motivation, i.e., the extent to which one strives to and displays a tendency toward long-term growth and psychosocial maturity (Bauer et al., 2015).

In addition to the indirect and serial indirect effects, the quiet ego independently predicted increases in psychological well-being and self-esteem. The results are consistent with prior theorizing of the quiet ego as a strong sense of self that is characterized by stable and secure feelings of self-worth (Kernis & Heppner, 2008), long-term, process-oriented view toward eudaimonic well-being (Bauer & Wayment, 2008; Wayment, Bauer, & Sylaska, 2015), and greater tolerance and reflective acceptance of negative information about the self (Brown et al., 2008; Neff, 2008).

3.2 The Quiet Ego, Theory of Mind, and Interpersonal Relations

3.2.1 Introduction

In Chapter 2.2, I demonstrated that the quiet ego correlated significantly with both social-perceptual (i.e., the Eye test, $r = .38$, $p < .001$) and social-cognitive ToM (i.e., the Faux Pas test, $r = .34$, $p < .001$), providing an initial test of its construct validity in the domain of other-perception. In this section, I present a study that extends it by examining the association between the quiet ego and interpersonal relations via ToM as ToM has been shown to predict the quality of interpersonal relations (Gallese et al., 2007; Kidd & Castano, 2013). In addition, I also examine a potential mechanism linking the quiet ego to ToM — mindfulness (see discussion on the theoretical association between the quiet ego and ToM in Chapter 2.2).

Although mindfulness is similar to the quiet ego's characteristic of detached awareness, they are two distinct constructs in that the quiet ego concerns personhood, i.e., what it means to be a person (Wayment, Bauer, & Sylaska, 2015). It deals with one's fundamental conceptualization of one's self or in William James's terms, it deals with the

I's framing of the *Me* (Brown, 1998). Mindfulness, on the other hand, is a quality of consciousness, characterized by attentiveness and non-conceptual, non-judgmental awareness (Brown et al., 2007; Brown & Ryan, 2003). The quiet ego and mindfulness are independent but related concepts — a quiet ego is likely to display mindfulness but is not necessarily so. And it is possible that the quiet ego exhibits mindfulness in some domains but not in all domains, as mindfulness can fluctuate from situation to situation (Baer et al., 2006; Brown et al., 2007; Brown & Ryan, 2003).

I hypothesize that the relationship between the quiet ego and interpersonal relations would be mediated by ToM. I further hypothesize that mindfulness would mediate the relationship between the quiet ego and ToM, i.e., the effect of the quiet ego on interpersonal relations would be transmitted via mindfulness and ToM in a serial fashion.

3.2.2 Method

3.2.2.1 Participants

I pre-registered and recruited 500 US participants from Amazon MTurk. This sample size satisfied the requirement for achieving at least 80% power in serial mediation analyses with small effect sizes (Taylor et al., 2008, Table 7). Unfortunately, however, I found a substantial percentage of participants engaged in *random responding* and failed to perform the study tasks adequately. Random responding refers to behavior by which participants respond with little pattern or thought[7] (Osborne & Blanchard, 2011), which negates the usefulness of responses and introduces considerable error variances to

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[7] Random responses in this study included nonsensical words, letters, and phrases as well as copy-pasted question prompts as responses.

analyses (e.g., biasing the effect toward zero, making effect size smaller or confidence intervals larger). As recommended and preregistered, I removed these participants from analyses ($N = 105$), leaving a final sample consisting of 395 participants.

Participants (female = 183) averaged 37.1 in age ($SD = 11.2$). Ethnically, the majority or 308 (or 78%) participants identified as Caucasian; 33 or 8.4% identified as African American; 24 or 6.1% as Asian; 23 or 5.8% as Hispanic; and 7 or 1.8% as Multiracial.

3.2.2.2 Materials

The Quiet Ego

Same as in the other studies, the Quiet Ego Scale was used to measure the quiet ego construct. Its McDonald's omega for this sample was .83.

Theory of Mind (ToM)

Same as in 2.2, both types of ToM were measured: Social-perceptual ToM was measured by the Reading the Mind in the Eyes Test and social-cognitive ToM measured by the Faux Pas Test (see 2.2 for scoring procedures). McDonald's omegas were .82 and .93, respectively, for the social-perceptual ToM and social-cognitive ToM tests.

Interpersonal Relations

The quality of interpersonal relations was measured by the Social Provision Scale (Cutrona & Russell, 1983). It taps into 6 aspects of interpersonal relations — Attachment, Social Integration, Reassurance of Worth, Reliable Alliance, Guidance, and Opportunity for Nurturance. Sample items include "There are people I know will help me if I really need it" or "I am with a group of people who think the same way I do about

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things." The scale consists of 24 items, assessed on a 4-point Likert scale, from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher scores (theoretical range from 24 to 96) indicate more satisfying interpersonal relations. McDonald's omega was .96 for this sample.

Mindfulness

Mindfulness was measured by the Five Facet Mindfulness Scale (FFMS) (Baer et al., 2006). The FFMS consists of 5 subscales, each measuring 1 facet of the underlying construct mindfulness: (1) Nonreactivity to Inner Experience; (2) Observing Sensations/Perceptions/Thoughts; (3) Acting with Awareness; (4) Describing with Words; (5) Nonjudging of Experience (Baer et al., 2006). Sample items include "When I'm walking, I deliberately notice the sensations of my body moving" (Observing Sensations) and "I can easily put my beliefs, opinions, and expectations into words" (Describing with Words). The scale consists of 39 items, answered on a 5-point Likert scale from 1 (*Never or very rarely true*) to 5 (*Very often or always true*). Higher scores indicate greater levels of trait mindfulness. McDonald's omega was .92 for this sample.

3.2.2.3 Analytical Strategy

Similar to Chapter 3.1, I employed path modelling with single indicators that controlled for measurement errors. Figures 7A-1 and 7B depict the model — the product of the coefficients a and b estimated the indirect effect of quiet ego on interpersonal relations via ToM (Figure 7A-1). In Figure 7B, the product of a_1 and d_{21} estimated the indirect effect of quiet ego on ToM via mindfulness; finally, the product of a_1, d_{21}, b_1 estimated the serial indirect effect of quiet ego on interpersonal relations via first

mindfulness, and then ToM. I controlled for the effects of age, gender, race, social status, and religious affiliation in all analyses.

I observed 3 missing values in the analyses (1 in quiet ego and 2 in mindfulness). I used multiple imputation to compute and replace them, with 5 imputations using predicative mean matching in the "mice" package in R Studio (van Buuren & Groothuis-Oudshoorn, 2011).

Figure 7A-1

Model Specification Testing the Indirect Effect of Quiet Ego on Interpersonal Relations via ToM
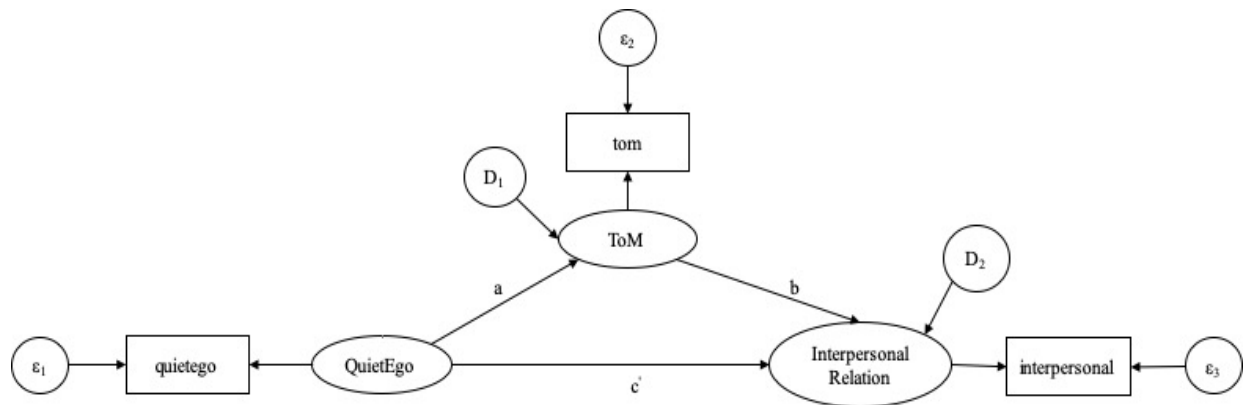
Figure 7B

Model Specification Testing the Serial Indirect Effect of Quiet Ego on Interpersonal Relations via Mindfulness and ToM
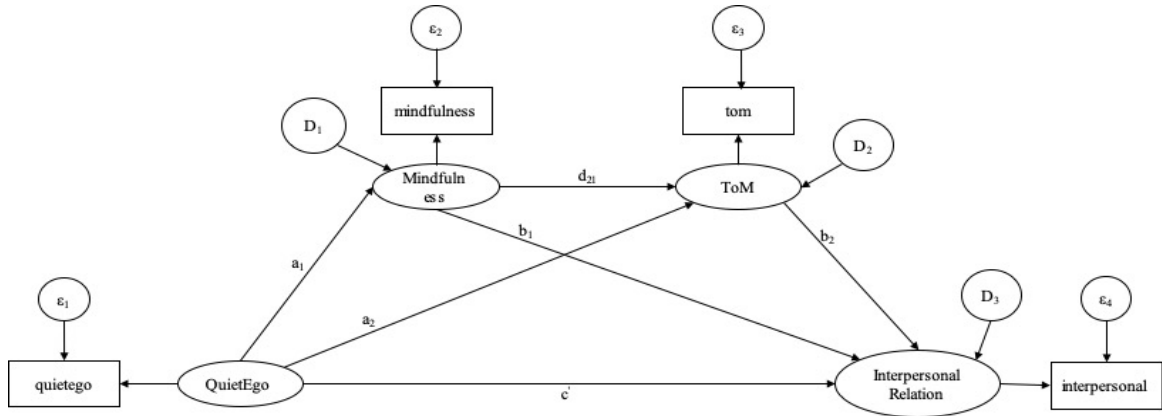
3.2.3 Results

Table 5 presents the correlations as well as means and standard deviations of the study variables.

Table 5

Correlations, Means, and Standard Deviations of Study 3.2 Variables

	1	2	3	4	5	M (SD)
1. QE	—					3.76 (.61)
2. Eye	.21**	—				26.83 (5.57)
3. Faux Pas	.18**	.57**	—			.78 (.13)
4. Mindful	.64**	.15**	.12*	—		3.56 (.60)
5. Support	.45**	.22**	.26**	.51**	—	77.04 (13.80)

Note. QE = Quiet Ego Scale; Eye = Reading the Mind in the Eyes; Faux Pas = Faux Pas Social-Cognitive ToM Test; Mindful = Five Facet Mindfulness Scale; Support = Social Provision Scale. $^*p < .05$, $^{**}p < .01$.

3.2.3.1 Hypothesis Testing

With respect to the relationship between the quiet ego and interpersonal relations, consistent with the hypothesis, I found that the quiet ego predicted enhanced interpersonal relations, $b = 9.33$, $SE = 1.01$, $p < .001$. The effect is visible and medium-

to-large in size; it amounts to an increase of .68 *SDs* in the quality of interpersonal

relations between 1 unit difference in quiet ego.

Unpacking this relationship, consistent with the hypothesis, I found that it was

mediated by the positive association between quiet ego and social-cognitive ToM (i.e.,

the faux pas test) *ab* = .93, *SE* = .35, *p* = .008, 95% CI [.25, 1.61]. As can be seen in

Figure 7A-2, participants who were higher on quiet ego showed heightened social-

cognitive ToM (*a* = .04, *SE* = .01, *p* = .001) and participants who exhibited higher social-

cognitive ToM reported more enriching social relations (*b* = 20.83, *SE* = 4.71, *p* < .001).

Independent of the indirect effect, quiet ego also predicted improved interpersonal

relations (*c'* = 10.30, *SE* = 1.15, *p* < .001).

Figure 7A-2

Coefficients in the Path Model Investigating the Indirect Relationship from Quiet Ego to

Interpersonal Relations via Social-Cognitive ToM
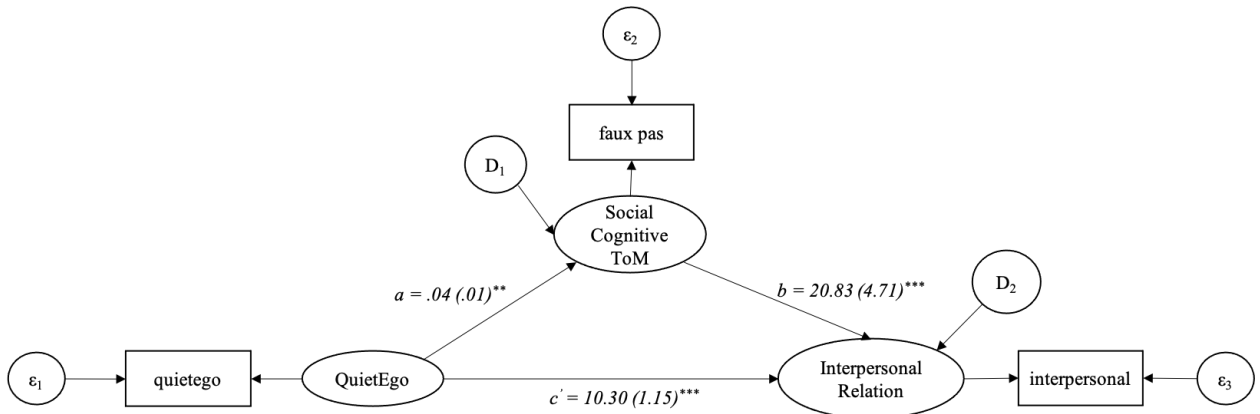
Note. $^{*}p$ < .05, $^{**}p$ < .01, $^{***}p$ < .001. The covariates age, gender, ethnicity, social status, and religious affiliation were omitted to save space.

With respect to a second route from the quiet ego to interpersonal relations,

namely via social-perceptual ToM, I found marginal evidence for mediation, *ab* = .79, *SE*

$= .42$, $p = .06$, 95% CI [-.04, 1.61] (Figure 7A-3). Independent of the marginally

significant indirect effect, there was evidence of a direct effect from quiet ego to

interpersonal relations ($c' = 10.44$, $SE = 1.27$, $p < .001$).

Figure 7A-3

Coefficients in the Path Model Investigating the Indirect Relationship from Quiet Ego to

Interpersonal Relations via Social-Perceptual ToM

ε_2

eye test

D_1

Social Perceptual ToM

$a = 2.28 (.55)^{***}$ $b = .35 (.17)^*$ D_2

ε_1 quietego   QuietEgo   Interpersonal Relation   interpersonal ε_3

$c' = 10.44 (1.27)^{***}$
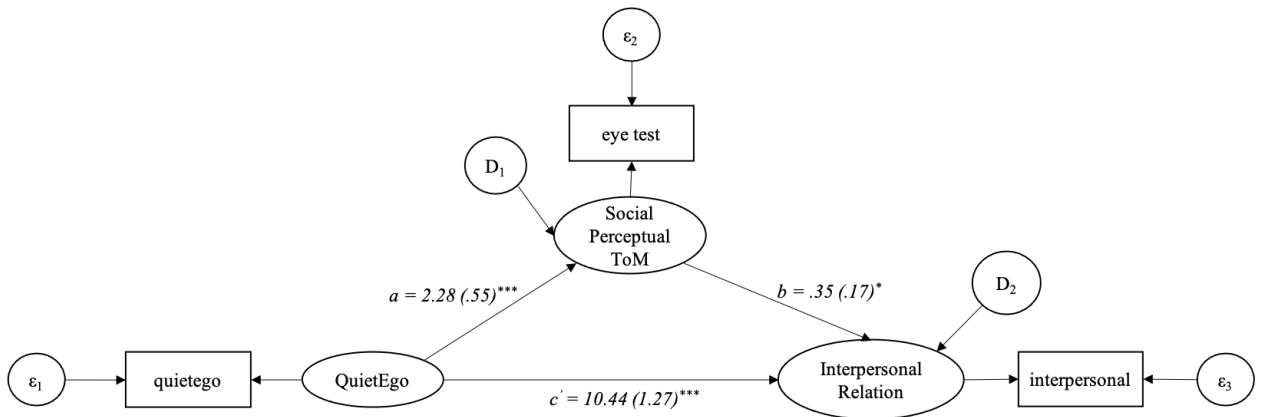
Note. $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$. The covariates age, gender, ethnicity, social status, and religious affiliation were omitted to save space.

I then proceeded to testing the proposed serial indirect effects from the quiet ego

to interpersonal relations via mindfulness and then ToM. Contrary to hypotheses, I did

not find evidence of serial mediation for either social-cognitive ToM ($a_1d_{21}b_2 = -.27$, p

$= .42$) or social-perceptual ToM ($a_1d_{21}b_2 = -.20$, $p = .40$). There was, however, evidence

of mediation via mindfulness, after controlling for social-cognitive ToM ($a_1b_1 = 6.16$, SE

$= 1.69$, $p < .001$, 95% CI [2.85, 9.47]) as well as social-perceptual ToM ($a_1b_1 = 6.10$, SE

$= 1.75$, $p < .001$, 95% CI [2.67, 9.52]) (see Figure 7B for model specification).

3.2.4 Discussion

In this study, I capitalized on the quiet ego's construct validity examined in Chapter 2.2 to extend the relationship between the quiet ego and ToM to the realm of interpersonal relations. I also examined a potential mediator (mindfulness) in the relation between quiet ego and ToM.

Consistent with the hypotheses, I found that the quiet ego predicted more satisfying interpersonal relations. The finding is in line with the theorizing of the quiet ego as a compassionate, self-transcending identity that is more inclusive in its identification with others and more expansive in its psychosocial sphere that gives rise to more enriching and engaging interpersonal relations (Bauer & Wayment, 2008; Campbell & Buffardi, 2008; Crocker, 2008). This finding also fits nicely with a collection of evidence indicating that the quiet ego was positively associated with values of universalism and benevolence (Wayment & Bauer, 2018) and that the quiet ego correlated positively with agreeableness and social relatedness (Wayment, Bauer, & Sylaska, 2015).

Unpacking this relationship, I found that it was mediated by both social-cognitive and social-perceptual ToM, thereby extending the association between the quiet ego and ToM (reported in 2.2) into the domain of interpersonal relations[8]. Additionally, the finding further substantiates the link between ToM and interpersonal relations demonstrated in previous research (e.g., Gallese et al., 2007; Kidd & Castano, 2013).

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[8] The indirect effect from quiet ego to interpersonal relations via social-perceptual ToM (the eye test) was marginally significant at $p = .06$.

I also examined a mediator that might have played a role in the relationship between quiet ego and interpersonal relations. Specifically, I hypothesized that mindfulness would transmit the effect of the quiet ego to ToM which would, in turn, enhance interpersonal relations, i.e., a serial indirect effect. Contrary to hypotheses, however, I did not find evidence for serial indirect effects via mindfulness and then social-cognitive or social-perceptual ToM. I did, however, observe evidence that mindfulness independently mediated the effect of the quiet ego on interpersonal relations, after accounting for the effects of social-cognitive or social perceptual ToM (see Figure 7B for model specification). This finding also suggests that the effect of mindfulness on interpersonal relations is more salient that after accounting for it, the effects of social-cognitive or social perceptual ToM on interpersonal relations become much more attenuated as to drop below significance (hence the nonsignificant serial indirect effects).

3.3 The Quiet Ego, Emotional Intelligence, and Well-Being

3.3.1 Introduction

In Chapter 2.3, I reported that the quiet ego correlated significantly with both ability ($r = .18$, $p = .025$) and trait EI ($r = .75$, $p < .001$), providing an initial test of construct validity in the domain of EI. In this section, I extend that relationship to the realm of subjective well-being and examine the associations between the quiet ego and subjective well-being (i.e., life satisfaction, positive and negative affect, psychological stress) via the lenses of ability and trait EI.

3.3.1.1 Emotional Intelligence and Subjective Well-Being

Both ability and trait EI are linked to subjective well-being. Ability EI has been found to be associated with increased life satisfaction (MacCann & Roberts, 2008; Mayer et al., 2008), enhanced affective well-being (i.e., with increased positive affect and diminished negative affect) (Burrus et al., 2012), and attenuated psychological stress (MacCann & Roberts, 2008). For example, high ability EI is positively associated with life satisfaction after controlling for cognitive intelligence and social emotional variables (Mayer et al., 2008). Using a Day Reconstruction Method, Burrus et al (2012) reported that people with higher ability EI tend to experience more positive affect and less negative affect across different life activities (e.g., working, dining, socializing, studying). Finally, McCann and Roberts (2008) reported that ability EI is negatively associated with both anxiety and psychological stress.

Trait EI has also been linked to life satisfaction (Petrides et al., 2007), affective well-being (Kong & Zhao, 2013; Kong, Zhao, & You, 2012), and psychological stress (Mikolajczak & Luminet, 2008; Mikolajczak et al., 2007; Petrides & Furnham, 2006). For example, trait EI predicted increased life satisfaction above and beyond major personality dimensions (as categorized by the Big Five and the Eysenck Personality Questionnaire) (Petrides et al., 2007). Unpacking this relationship, Kong and Zhao (2013) found that it was mediated by affect, such that higher trait EI was associated with elevated positive affect and reduced negative affect, both of which contributed to increased life satisfaction.

In addition, higher trait EI has been linked to lowered stress, both in general (Mikolajczak & Luminet, 2008) and in the workplace (Mikolajczak et al., 2007; Petrides & Furman, 2006). This relationship is mediated by higher trait EI leading to more

adaptive coping in general (Mikolajczak & Luminet, 2008), or greater perceived autonomy in a work environment (Petrides & Furnham, 2006). These findings are consistent with the nature of trait EI — as emotional self-efficacy — being one's judgment about how well one can execute actions to deal with prospective emotional situations (Petrides et al., 2007). People with higher trait EI believe they are capable of coping with difficult emotional situations, so they employ more active strategies such as perceiving a difficult situation as a challenge rather than a threat (Mikolajczak & Luminet, 2008), or using reason-based coping in stressful situations (Petrides et al., 2007).

3.3.1.2 Study Hypotheses

I tested two hypotheses in this study. I hypothesized that the quiet ego would be positively associated with both ability and trait EI, which would then be associated with subjective well-being and perceived stress.

Building on existing work showing the positive association between trait EI and mindfulness (Bao et al., 2015; Schutte & Malouff, 2011; Wang & Kong, 2014), I then examined a serial mediation model in which the quiet ego transmitted its effects to subjective well-being and stress first via mindfulness, and then via trait EI. I hypothesized that the quiet ego would be positively associated with mindfulness, which would then be positively associated with trait EI, that, in turn, would translate into increased subjective well-being and decreased psychological stress.

3.3.2 Method

3.3.2.1 Participants

I recruited 300 participants, all of whom (female = 231) were UMass Amherst undergraduate students who participated in exchange for course credit. Their mean age was 19.7 years (SD = 1.7). Ethnically, 225 (75%) identified as Caucasian, 31 (10.3%) as Asian, 17 (5.7%) as African American, 13 (4.3%) as Hispanic, 7 (2.3%) as Multi-Racial, and 7 (2.3%) as Other.

3.3.2.2 Materials

The Quiet Ego

Same as in the other studies, the Quiet Ego Scale was used to measure the construct (Wayment, Bauer, & Sylaska, 2015). McDonald's omega for this sample was .71.

Ability EI

Same as in 2.3, ability EI was measured by the Situational Test of Emotional Management - Brief (STEM-B) (Allen et al., 2015). It's McDonald's omega was .72 in this sample (refer to Chapter 2.3 for a detailed description of this measure).

Trait EI

Same as in 2.3, trait EI was measured by the Trait Emotional Intelligence Questionnaire — Short Form (TEIQue-SF) (Petrides, 2009). Its McDonald's omega in this sample was .89.

Mindfulness

Same as in 3.2, mindfulness was measured by the Five Facet Mindfulness Scale (FFMS) (Baer et al., 2006). McDonald's omega for this sample was .87.

Subjective Well-Being (Cognitive Well-Being)

The Satisfaction with Life scale was used to measure cognitive well-being (Diener et al., 1985). This 5-item, unidimensional scale was designed to measure a global cognitive evaluation of one's satisfaction with life. A sample item included "If I could live my life over, I would change almost nothing." Items are answered on a 7-point Likert scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Higher scores (theoretical range 5—35) indicate greater satisfaction with life. Its McDonald's omega in this sample was .89.

Subjective Well-Being (Affective Well-Being)

The Positive and Negative Affect Schedule (PANAS) was used to measure affective well-being (Watson et al., 1988). This scale consists of 20 words (e.g., Upset, Active), with 10 assessing positive affect and the other 10 evaluating negative affect. The scale was answered by participants indicating the extent to which each word applied to their lives over the past week, using a 5-point Likert scale ranging from 1 (*Very Slightly or Not at All*) to 5 (*Extremely*). Scoring was done by summing up positive items and negative items separately to yield a positive affect score (theoretical range 10—50) and a negative affect score (theoretical range 10—50). McDonald's omegas were .90 for positive affect and .85 for negative affect.

Perception of Stress

Perception of stress was measured by the Perceived Stress Scale (Cohen et al., 1983). It measures the extent to which situations in one's life are perceived as stressful

(for example, as a result of an inability to predict or control things in life). The scale

consists of 10 items, answered on a 5-point Likert scale ranging from 0 (*Never*) to 4

(*Very Often*). Scoring was done by first reverse scoring certain items and then summing

across all items, with higher scores indicating more perceived stress (theoretical range

0—40). Its McDonald's omega in this sample was .88.

3.3.2.3 Analytical Strategy

To test the hypotheses, I employed the same, enhanced path modeling technique

that was used in 3.1 and 3.2. Figures 8A-1—8C-1 depict the models[9]. I estimated

mediation effects by using the product of coefficients approach (Fairchild & McDaniel,

2017; Hayes, 2018). The products of the paths $a\,b_1$, $a\,b_2$, $a\,b_3$, and $a\,b_4$ estimated the

indirect effects of the quiet ego on life satisfaction, positive affect, negative affect, and

stress via ability EI, as shown in Figure 8A-1 below.

Figure 8A-1

Model Specification Testing the Indirect Effects of Quiet Ego on Life Satisfaction,

Positive Affect, Negative Affect, and Stress via Ability EI

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[9] All three models are saturated (just identified) models and all used the Satorra-Bentler standard error estimator due to violation of multivariate normality (Brown, 2015; Kline, 2016).
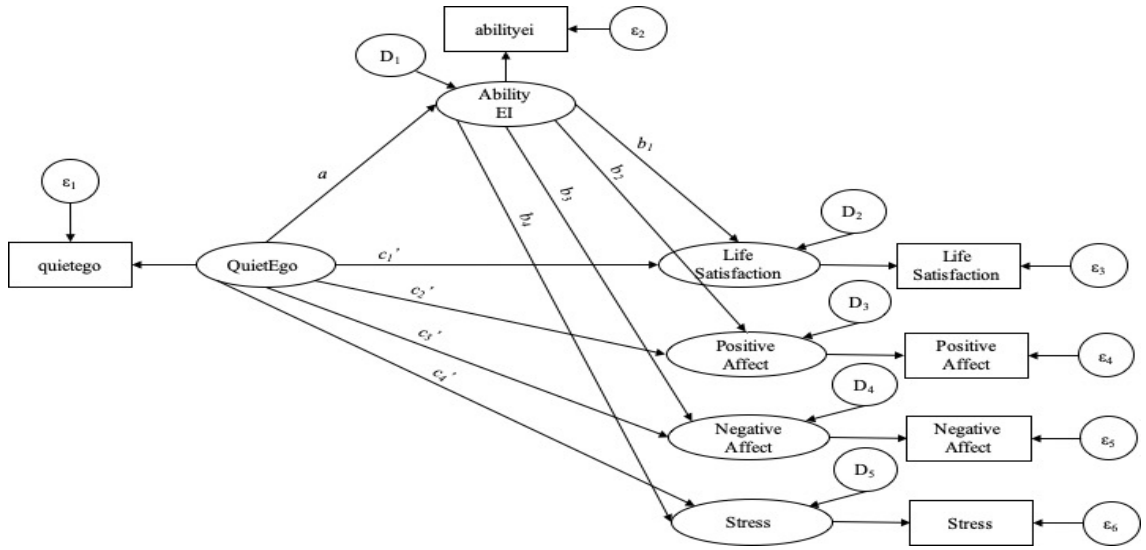
Similarly, the products of the paths $a\,b_1$, $a\,b_2$, $a\,b_3$, and $a\,b_4$ estimated the indirect effects of the quiet ego on life satisfaction, positive affect, negative affect, and stress via trait EI, as can be seen in Figure 8B-1.

Figure 8B-1

Model Specification Testing the Indirect Effects of Quiet Ego on Life Satisfaction,

Positive Affect, Negative Affect, and Stress via Trait EI
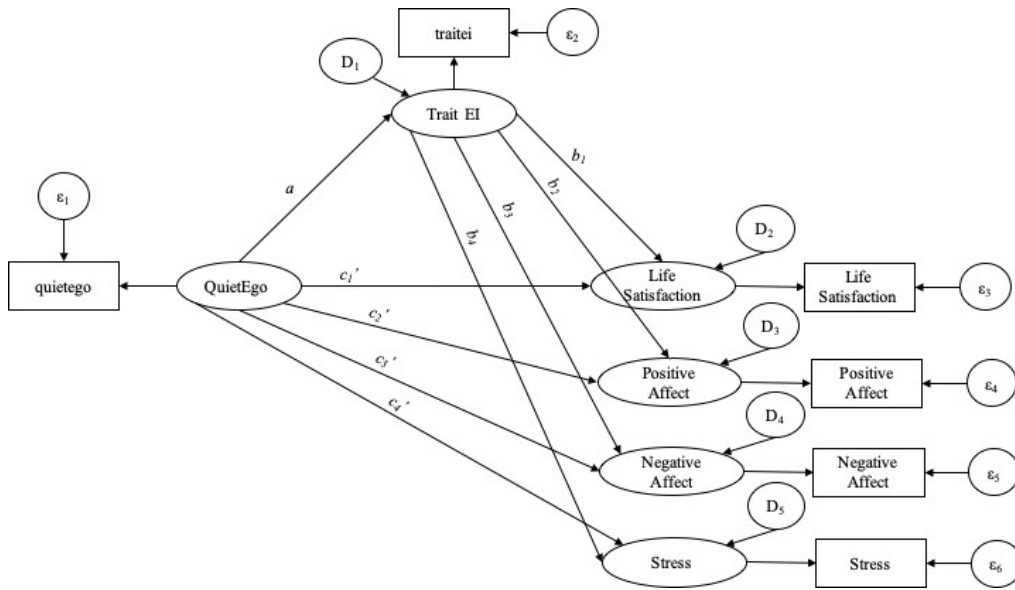
Finally, in Figure 8C-1, the products of the paths $a_1 d_{21} b_5$, $a_1 d_{21} b_6$, $a_1 d_{21} b_7$, and $a_1 d_{21} b_8$ estimated the serial indirect effects of the quiet ego on life satisfaction, positive affect, negative affect, and stress via first mindfulness and then trait EI.

Figure 8C-1

Model Specification Testing the Serial Indirect Effects of Quiet Ego on Life Satisfaction, Positive Affect, Negative Affect, and Stress via Mindfulness and Trait EI
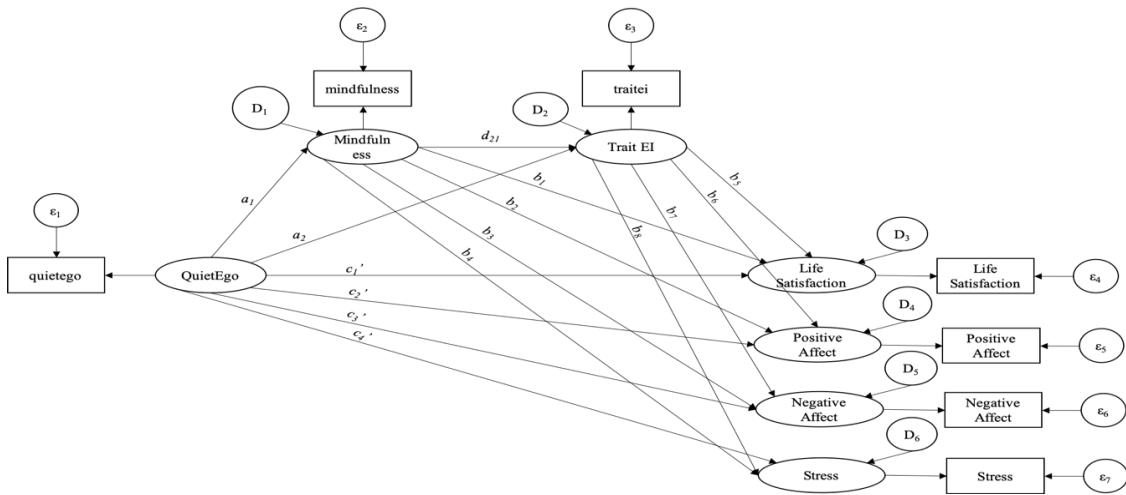
In addition, the model accounted for the (unexplained) covariances within subjective well-being measures (i.e., life satisfaction, positive affect, and negative affect) and between subjective well-being and psychological stress by correlating their error variances.

3.3.3 Results

Table 6 presents the correlations between the study variables as well as their means and standard deviations. As can be seen, the quiet ego correlated highly with trait EI (.60); this may reflect the fact that both measures tap into one's understanding of oneself, with the quiet ego being a general understanding of the kind of person one is and trait EI being a specific understanding of one's characteristics and tendencies when it comes to dealing with emotional situations. In addition, the quiet ego correlated moderately with mindfulness (.51) — this may reflect that one of the quiet ego characteristics is detached awareness which is akin to mindfulness, though they differ in the sense that mindfulness is about moment-by-moment awareness whereas detached

awareness also reflects situational awareness, "an ability to step back when necessary and adjust initial understanding or response" (Huffman et al., 2015, p. 664).

Table 6

Correlations, Means, and Standard Deviations of Study 3.3 Variables

	1	2	3	4	5	6	7	8	M (*SD*)
1. Quiet Ego	—								3.72 (*.41*)
2. STEM-B	.13*	—							83.91 (*5.40*)
3. TEIQue	.60**	.08	—						4.88 (*.73*)
4. Mindfulness	.50**	.05	.73**	—					3.15 (*.48*)
5. LS	.39**	.01	.65**	.48**	—				23.31 (*7.00*)
6. PA	.40**	-.06	.63**	.48**	.55**	—			34.03 (*8.31*)
7. NA	-.18**	-.03	-.45**	-.47**	-.37**	-.12*	—		23.10 (*7.31*)
8. Stress	-.30**	-.04	-.65**	-.62**	-.55**	-.46**	.66**	—	17.93 (*6.88*)

Note. STEM-B = Situational Test of Emotional Management - Brief; TEIQue = Trait Emotional Intelligence Questionnaire — Short Form; Mindfulness = Five Facet Mindfulness Scale; LS = Life Satisfaction; PA = Positive Affect; NA = Negative Affect; Stress = Perceived Stress Scale. *$p < .05$, **$p < .01$

3.3.3.1 Predicting Subjective Well-Being and Psychological Stress via Ability EI and Trait EI

For ability EI, mediation analyses did not reveal significant indirect effects from the quiet ego to life satisfaction ($ab_1 = -.18$, $SE = .29$, $p = .54$), positive affect ($ab_2 = -.58$, $SE = .49$, $p = .24$), negative affect ($ab_3 = -.07$, $SE = .31$, $p = .81$), and perceived stress ($ab_4 = -.04$, $SE = .26$, $p = .90$).

After accounting for the indirect effects, the direct effects of the quiet ego (i.e., *c'* paths in Figure 8A-2) on life satisfaction, positive, negative affect, and perceived stress were significant; that is, holding constant ability EI, participants who were higher on the quiet ego reported experiencing greater satisfaction with life ($c_1' = 9.00$, $SE = 1.16$, p

$< .001$, $c_1'_{cs}{}^{10} = .53$), more positive affect ($c_2' = 11.49$, $SE = 1.63$, $p < .001$, $c_2'_{cs} = .57$),

less negative affect ($c_3' = -4.11$, $SE = 1.36$, $p < .01$, $c_3'_{cs} = -.23$), and less perceived stress

in their lives ($c_4' = -7.32$, $SE = 1.32$, $p < .001$, $c_4'_{cs} = -.44$).

Figure 8A-2

Coefficients of Path Model Testing the Indirect Effects of Quiet Ego on Life Satisfaction,

Positive Affect, Negative Affect, and Stress via Ability EI
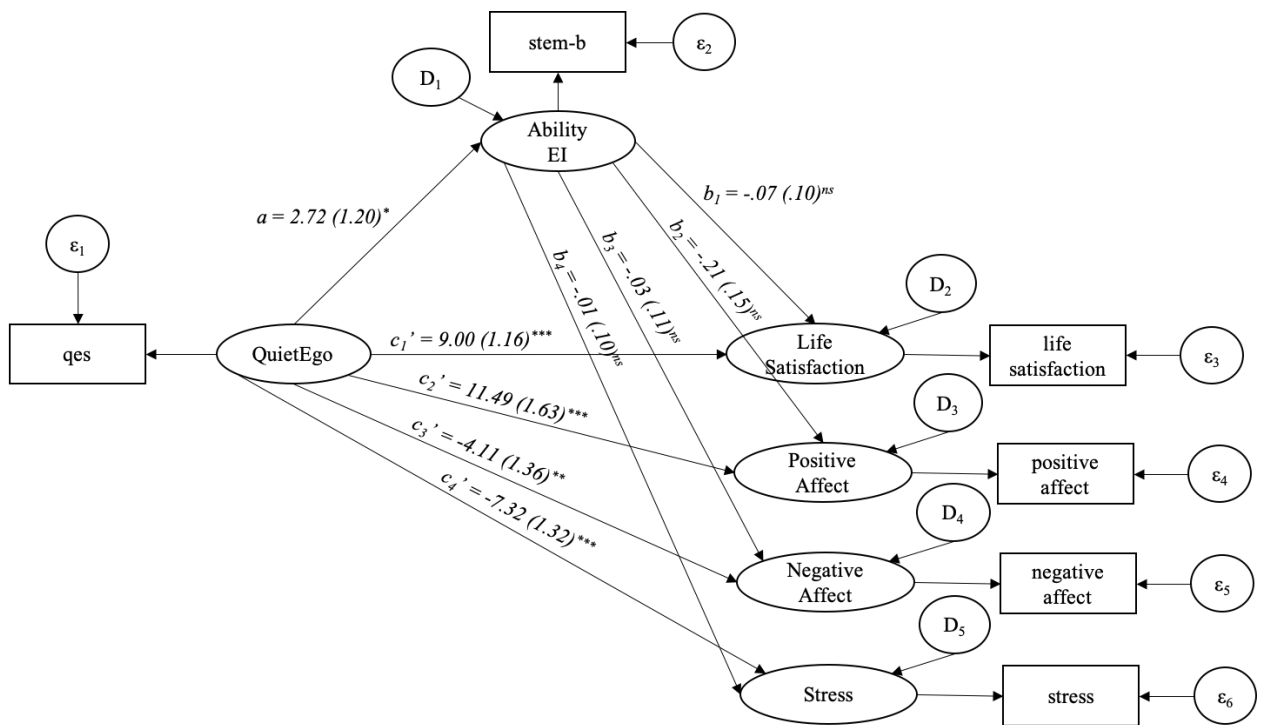
Note. $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$

Regarding trait EI, as can be seen in Figure 8B-2, mediation analyses revealed

significant indirect effects from the quiet ego to life satisfaction ($ab_1 = 11.74$, $SE = 2.07$,

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[10] Completely standardized direct effect: $c'_{cs} = SD_X(c') / SD_Y$, It expresses direct effects in terms of the difference in standard deviations in the dependent variable (Y) between two cases that differ by one standard deviation in the independent variable (X) (Hayes, 2018).

$p < .001$, $ab_{1\ cs} = .69$, 95% CI [7.68, 15.80]), positive affect ($ab_2 = 11.20$, $SE = 2.13$, p

$< .001$, $ab_{2\ cs} = .55$, 95% CI [7.03, 15.37]) , negative affect ($ab_3 = -12.34$, $SE = 2.43$, p

$< .001$, $ab_{3\ cs} = -.69$, 95% CI [-17.10, -7.58]), and perceived stress ($ab_4 = -14.90$, $SE =$

2.15, $p < .001$, $ab_{4\ cs} = -.89$, 95% CI [-19.12, -10.68]), via trait EI.

Figure 8B-2

Coefficients of Path Model Testing the Indirect Effects of Quiet Ego on Life Satisfaction,

Positive Affect, Negative Affect, and Stress via Trait EI
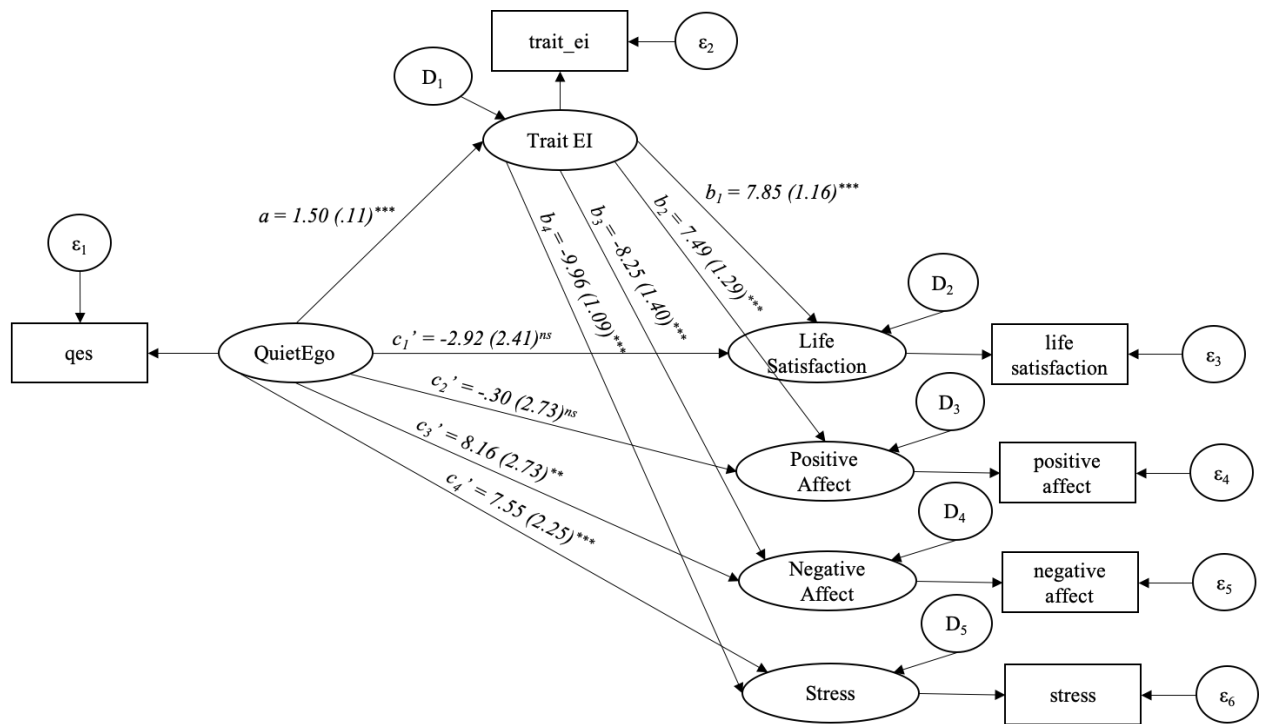
Note. $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

There was no evidence that the quiet ego influenced life satisfaction ($c_1' = -2.92$,

$p = .23$) and positive affect ($c_2' = -.30$, $p = .91$) independent of its effect on trait EI; there

was, however, evidence that the quiet ego was associated with *increased* negative affect

($c_3' = 8.16$, $SE = 2.73$, $p = .003$) and stress ($c_4' = 7.55$, $SE = 2.25$, $p = .001$) after

controlling for trait EI (i.e., independent of the mediation). The results are at odds with the negative, zero-order correlations between the quiet ego and negative affect and stress. This mostly likely reflects a suppression effect (first encountered in Chapter 3.1), defined as cases in which "the inclusion of a second predictor increases the predictive power of one or both predictors" (Watson et al., 2013, p. 2). In other words, if a second predictor is a good measure of the sources of error (i.e., criterion-irrelevant variance) of the first predictor, then by giving the second predictor a negative weight, the model as a whole can predict the criterion more accurately than either the first or second predictor can alone (Darlington & Hayes 2017).

With regard to the current results, trait EI and quiet ego are positively correlated with each other but negatively correlated with stress and negative affect (Table 6). In the models predicting stress and negative affect, a negative weight or sign was given to quiet ego, making its coefficient positive (which was originally negative), thereby making the model as a whole more accurate in predicting variances in stress and negative affect. In fact, the suppression effect showed up for all DVs as the quiet ego coefficients predicting life satisfaction ($c_1' = -2.92$) and positive affect ($c_2' = -.30$) turned negative (as opposed to its positive, zero-order correlations with the two variables), although the coefficients were not significant.

3.3.3.2 Predicting Subjective Well-Being and Stress via Mindfulness and Trait EI

As can be seen in Figure 8C-2, there was evidence of serial indirect effects from the quiet ego to life satisfaction ($a_1\, d_{21}\, b_5 = 6.39$, $SE = 1.56$, $p < .001$, $a_1\, d_{21}\, b_{5\,cs} = .38$, 95% CI [3.33, 9.45]), positive affect ($a_1\, d_{21}\, b_6 = 6.21$, $SE = 1.70$, $p < .001$, $a_1\, d_{21}\, b_{6\,cs}$

= .31, 95% CI [2.87, 9.55]), negative affect ($a_1\,d_{21}\,b_7$ = -3.67, SE = 1.41, p < .01, $a_1\,d_{21}\,b_7$

$_{cs}$ = -.21, 95% CI [-6.43, -.91]), and perceived stress ($a_1\,d_{21}\,b_8$ = -5.53, SE = 1.32, p

< .001, $a_1\,d_{21}\,b_{8\,cs}$ = -.33, 95% CI [-8.11, -3.00]), first via mindfulness, and then via trait

EI.

Independent of the serial indirect effects, there was no evidence that quiet ego

influenced life satisfaction (c_1' = -2.50, p = .29) and positive affect (c_2' = .10, p = .97);

there was, however, evidence that quiet ego was associated with increased negative affect

(c_3' = 8.52, SE = 2.60, p = .001) and stress (c_4' = 7.67, SE = 2.10, p < .001) after

controlling for mindfulness and trait EI (i.e., independent of the serial mediation). This

again is consistent with a suppression effect as explained above.

Figure 8C-2

Coefficients of Path Model Testing the Serial Indirect Effects of Quiet Ego on Life

Satisfaction, Positive Affect, Negative Affect, and Stress via Mindfulness and Trait EI
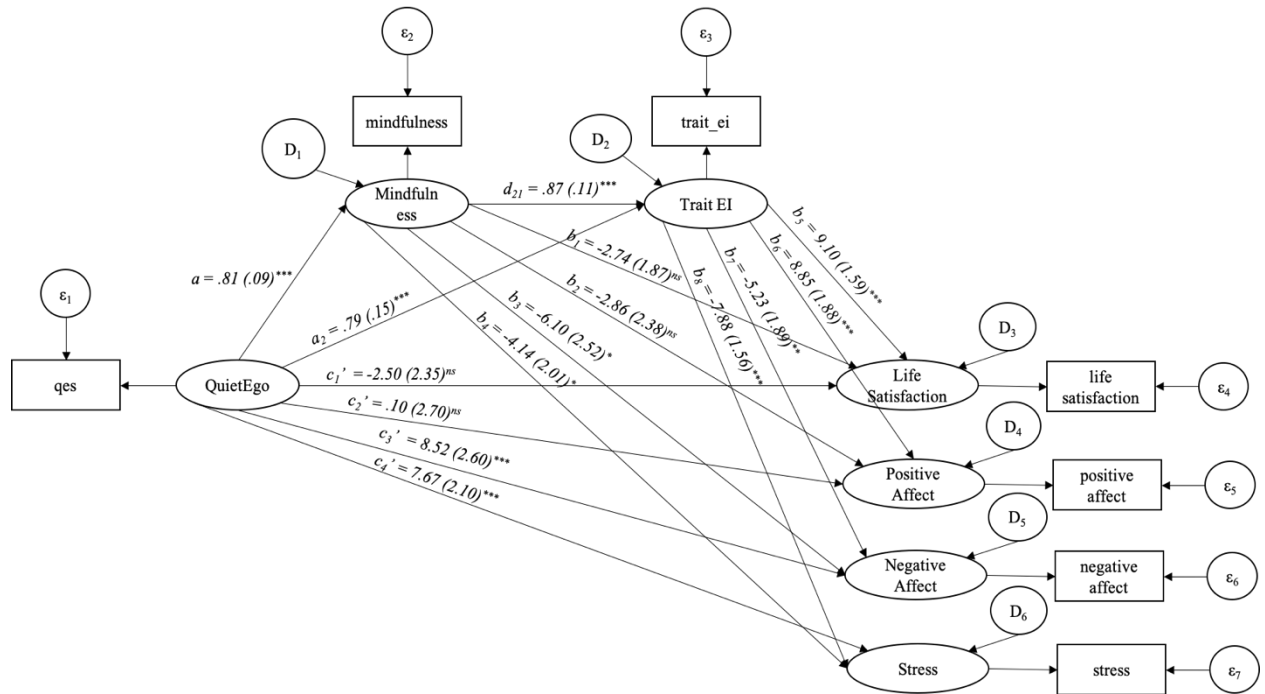
Note. $^*p$ < .05, $^{**}p$ < .01, $^{***}p$ < .001.

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3.3.4 Discussion

In this section, I approached the link between the quiet ego and subjective well-being from the angle of EI. Based on prior work on EI, I hypothesized that EI would mediate the effects of the quiet ego on cognitive well-being (as measured by life satisfaction), affective well-being (as measured by PANAS), and psychological stress.

Consistent with the predictions, I found that participants higher in quiet ego exhibited greater trait EI, which in turn was associated with enhanced life satisfaction, elevated positive affect, lowered negative affect, and diminished psychological stress. These indirect effects were of medium-to-large in size as shown by the completely standardized effects (the smallest of which was .55 for positive affect: One standard deviation difference in the quiet ego was associated with .55 standard deviations difference in positive affect through trait EI).

The results are consistent with the theories of both the quiet ego and trait EI. As a compassionate self-identity, people higher in the quiet ego are more inclusive in their identity, engage in more perspective taking, a tendency that not only facilitates social interaction but also enhances one's self-efficacy in dealing with other people, which is inherently an emotional situation (Barron-Cohen et al., 2001; Wayment, Bauer, & Sylaska, 2015). One's self-efficacy in dealing with other people is part of one's trait EI, i.e., one's judgement on how well one can deal with others' emotions (Petrides et al., 2007). In addition, the results align well with findings linking trait EI to subjective well-being and psychological stress (e.g., Kong & Zhao, 2013; Mikolajczak & Luminet, 2008; Petrides et al., 2007).

Inconsistent with the predictions, however, ability EI did not mediate the effects of the quiet ego on subjective well-being and stress.

Ability EI is conceptualized as a reasoning, problem-solving ability that can be measured objectively; whereas the quiet ego — as a self-construal — is subjective in nature and may therefore not correspond well with ability EI. This is also shown in the low zero-order correlation between the two ($r = .13$, Table 6). The same logic extends to the non-significant relations between ability EI and life satisfaction, positive affect, negative affect, and perceived stress as these measures are also subjective in nature (i.e., they are about people's perceptions of their lives), and may therefore concur less with the objectively measured ability EI.

Although there was no evidence that the quiet ego transmitted its effects via ability EI, there was evidence that the quiet ego predicted each of the dependent variables in the predicted directions (i.e., the direct effects): After controlling for ability EI, the quiet ego predicted increased life satisfaction and positive affect; it also predicted decreased negative affect and psychological stress. These results effectively replicated past findings showing the connections between the quiet ego and subjective well-being (Wayment, Bauer, & Sylaska, 2015; Wayment & Bauer, 2018), but with more stringent control of measurement error.

In addition to testing trait EI as the sole mediator, based on the literature on mindfulness and trait EI, I also examined whether mindfulness and trait EI acted in a serial fashion to transmit the quiet ego's effects to subjective well-being and psychological stress.

Consistent with the hypotheses, I found that mindfulness and trait EI mediated (serially) the quiet ego's effects: Participants who were higher on the quiet ego were also more mindful; participants who were more mindful perceived themselves to be more capable in dealing with emotional situations (i.e., trait EI), a perception that translated into greater life satisfaction, more frequently experienced positive affect, less frequently experienced negative affect, and diminished psychological stress.

The results are consistent with findings that showed that trait EI mediated the relations between mindfulness and life satisfaction (Petrides et al., 2007; Wang & Kong, 2014), affective well-being (Kong & Zhao, 2013; Schutte & Malouff, 2011), and perceived stress (Mikolajczak et al., 2007; Mikolajczak & Luminet, 2008). In addition, the results extend this line of research to the quiet ego, theoretically enriching not only the quiet ego construct, but also mindfulness and trait EI research.

There is one caveat to the study. The results are correlational in nature and therefore do not lend themselves to causal claims about the quiet ego's effects on subjective well-being and psychological stress. It would be of great theoretical and practical interest to test if experimentally manipulating the quiet ego would generate the same results as regards subjective well-being and stress. In the next study, I examine these hypotheses using a longitudinal, randomized design.

CHAPTER 4

QUIET EGO TRAINING, FLOURISHING, AND SUBJECTIVE WELL-
BEING

4.1 Introduction

In this part, I extend the previous chapters by investigating the potential causal link between the quiet ego and subjective well-being and psychological flourishing; and in doing so, I attempt to replicate past research showing the effectiveness of empirical training on improving the quiet ego characteristics (Wayment, Collier, et al., 2015).

4.1.1 Malleability of the Quiet Ego

The quiet ego is conceptualized as a trait; but being a trait does not mean it could not change. In fact, three pieces of evidence support the opposite — traits are mutable and dynamic. First, research in personality has revealed that personality traits (such as the Big Five: Open-Mindedness, Conscientiousness, Extraversion, Agreeableness, Neuroticism) are dynamic and exhibit moment to moment fluctuations; therefore, traits are better conceptualized as density distributions — distributions that are marked by location (i.e., the mean), size (i.e., width or breath of the distribution), and shape (i.e., if a distribution approaches normal, as most personality trait distributions do) (Fleeson & Jayawickreme, 2015).

For example, an extrovert will exhibit a range of extroverted and introverted behaviors throughout a day. But when these moment-to-moment states are aggregated,

the central tendency (i.e., the mean of the state distribution) will be at the upper end of the extraversion-introversion scale (with its corresponding size and shape).

Second, at least three of the four quiet ego characteristics are malleable in the sense that training can change or improve those characteristics. To begin with, in the inter-group prejudice literature, research has shown that training on developing a more inclusive identity (i.e., recategorizing out-group members as one's in-group members) could reduce intergroup bias (Brewer, 2010). Then, in the child development literature, research has revealed that interventions in perspective taking could improve interpersonal skills and reduce delinquent behavior in both developmentally normal and children with autism (Chandler, 1973; Charlop-Christy & Daneshvar, 2003; Marsh et al., 1980). Finally, in the mindfulness literature, research has demonstrated that brief mindfulness interventions could improve mindfulness-related abilities such as attention (for a detailed review, see Creswell, 2017).

The third and most direct piece of evidence comes from Wayment, Collier, et al. 2015 that examined a quiet ego intervention on cognitive focus and stress in undergraduate female students who were at high risk for developing stress. Participants ($N = 32$) were randomly assigned to one of three conditions: quiet ego contemplation, quiet ego contemplation using a virtual reality headset, and a control condition. Participants went through a 10–15-minute quiet ego training program three times in a 30-day period. In each session, participants first listened to a recording that explained the quiet ego construct and elaborated its four characteristics (detached awareness, inclusive identity, perspective taking, growth-mindedness). They then contemplated how the four quiet ego characteristics were related to themselves. Results showed that participants in

the quiet ego contemplation condition demonstrated the greatest improvement in their quiet ego characteristics, cognitive focus (as measured by a go/no-go task on mind wandering), and physiological stress (measured using participants' urine samples) (Wayment, Collier, et al., 2015). The study provided initial evidence on the malleability of the quiet ego.

Building on the results of Wayment, Collier, et al. (2015) and the study in Chapter 3.3 (the QE and EI study), in this part, I examine the causal associations between the quiet ego and subjective well-being and psychological stress in a randomized, longitudinal experiment. In addition, based on the literature on psychological flourishing (Keyes, 2005, 2007) — a conceptualization of mental health as a constellation of affective well-being, positive social functioning, and psychological fulfillment and *not* as the mere absence of psychopathology — I also examine the causal link between the quiet ego and flourishing.

Thus, in this final study, I first aim to replicate Wayment, Collier, et al. (2015) to examine whether a quiet ego contemplation (QEC) would improve participants' quiet ego characteristics. I then investigate whether QEC would improve subjective well-being, diminish psychological stress, and enhance psychological flourishing; I also probe whether the effects would be mediated by trait EI.

4.2 Method

4.2.1 Participants

I pre-registered a sample size of 68; I over-recruited to compensate for participant attrition. Eventually, 75 participants completed this study (via Amazon MTurk) and all

their data were retrained in the analyses. I included a CONSORT diagram in Figure 9 that details the flow of participants throughout the study.

To prevent ceiling effect, I targeted participants who scored at or below 3.45 on the Quiet Ego Scale (Wayment, Bauer, & Sylaska, 2015); this value approximately corresponds to the 34th percentile in the quiet ego score distributions in prior studies employing MTurk participants (total $N = 753$). The sample size satisfied the requirement for achieving at least .80 power for mediation models using bootstrapping, assuming a medium to large effect size from the independent variable (intervention) to the mediator (trait EI), and from the mediator (trait EI) to the dependent variable (subjective well-being, stress, and flourishing) (Fritz & MacKinnon, 2007, Table 3).

To minimize the influence of cultural context, I only recruited participants who were raised in the US. Participants averaged 37.96 years in age (SD = 11.43). Fifty-six percent identified as female (N = 42) vs 44 percent as male (N = 33). In terms of ethnicity, the majority (N = 61; 81.3%) identified as Caucasian, 7 (9.3%) identified as Asian, 4 (5.3%) as Hispanic, 2 (2.7%) as Multiracial, and 1 (1.3%) as African American.

Figure 9

Chapter 4 Study CONSORT Diagram[11]

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[11] Participants who completed the study did not differ in their pre-intervention quiet ego characteristics from participants who did not respond to the initial study invitation, Welch's *t*(126.34) = -.74, *p* = .46. They also did not differ in their pre-intervention quiet ego characteristics from participants who were rejected due to suboptimal performance on the study tasks (e.g., failing attention checks), Welch's *t*(141.78) = 1.21, *p* = .23.

Accessed for eligibility
(n=2986)

Excluded (n=2602)
- QES scores greater than 3.45 (n=1589)
- Failed attention checks (n=925)
- Uninterested in participating (n=88)

Initially invited (n=384)
- Accepted invitation (n=221)
- Did not respond to invitation (n=159)
- Failed to submit on Mturk (n=4)

Time 1

Randomized to QEC Condition (n=101)
- Received intervention (n=101)
- Failed intervention (n=18)
  - Failed attention checks (n=6)
  - Other (n=12)
    - Expressed clear disinterest, disapproval or disengagement with the intervention (n=10)
    - Study link sent too early (n=2)
- Invited for Time 2 (n=83)

Randomized to Control Condition (n=120)
- Received control task (n=120)
- Failed task (n=33)
  - Failed attention checks (n=31)
  - Mistakenly sent wrong link (n=1)
  - Other (n=1)
- Invited for Time 2 (n=87)

Time 2

Accepted Time 2 invitation (n=54)
Did not respond (n=29)
- Received intervention (n=54)
- Failed intervention (n=1)
  - Audio cut off halfway through (n=1)
- Invited for Time 3 (n=53)

Accepted Time 2 invitation (n=67)
Did not respond (n=20)
- Received control task (n=67)
- Failed task (n=10)
  - Failed attention checks (n=10)
- Invited for Time 3 (n=57)

Time 3

Accepted Time 3 invitation (n=46)
Did not respond (n=7)
- Received intervention (n=46)
- Failed intervention (n=2)
  - Expressed clear disinterest, disapproval or disengagement with the intervention (n=1)
  - Non US native participant (n=1)
- Invited for Time 4 (n=44)

Accepted Time 3 invitation (n=45)
Did not respond (n=12)
- Received control task (n=45)
- Failed task (n=4)
  - Failed attention checks (n=4)
- Invited for Time 4 (n=41)

Time 4 (Post-Training Survey)

Accepted Time 4 invitation (n=39)
Did not respond (n=5)
- Failed task (n=1)
  - Failed attention checks (n=1)
- Completed the study (n=38)

Accepted Time 4 invitation (n=37)
Did not respond (n=4)
- Completed the study (n=37)

Time 5 (1-Month Follow-Up Survey)

Invited for Time 5 (n=26)
Did not respond (n=5)
- Completed the follow-up (n=21)

Invited for Time 5 (n=27)
Did not respond (n=6)
- Completed the follow-up (n=21)

4.2.2 Materials

The Quiet Ego

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Same as in the other studies, the Quiet Ego Scale was used to measure the quiet ego construct. Its McDonald's omegas at Time 1, Time 4, and Time 5 were .70, .79, and .80, respectively.

Trait EI

Same as in 3.3, trait EI was measured by the Trait Emotional Intelligence Questionnaire — Short Form (TEIQue-SF) (Petrides, 2009). McDonald's omegas for this scale were .92, .93, and .93 at Time 1, Time 4, and Time 5.

Subjective Well-Being (Cognitive Well-Being)

Same as in 3.3, the Satisfaction with Life scale (5 items) was used to measure cognitive well-being (Diener et al., 1985). Its McDonald's omegas at Time 1, Time 4, and Time 5 were .93, .95, and .94, respectively.

Subjective Well-Being (Affective Well-Being)

Same as in 3.3, the Positive and Negative Affect Schedule (PANAS) was used to measure affective well-being (Watson et al., 1988). McDonald's omegas for positive affect were .86, .90, .88 and for negative affect were .93, .94, .90 at Time 1, Time 4, and Time 5.

Perception of Stress

Same as in 3.3, psychological stress was measured by the Perceived Stress Scale (Cohen et al., 1983). McDonald's omegas for this scale were .93, .93, and .92 at Time 1, Time 4, and Time 5.

Flourishing Mental Health

The Mental Health Continuum Short Form (MHC-SF) was used to measure a sense of flourishing, which is a combination of high levels of affective, social, and

psychological well-being (Keyes, 2007, 2009). Across 14 items, participants were asked

about the frequencies with which they experienced various sentiments and thoughts

during the past month on a 6-point Likert scale from 0 (*Never*) to 5 (*Everyday*). They

were asked, for example, how often they felt "interested in life" (affective well-being) or

how often they felt that they "had something important to contribute to society" (social

well-being). Scoring is done by summing across all items, with higher scores (theoretical

range of 0-70) indicating a greater tendency toward experiencing flourishing mental

health. Its McDonald's omegas for Time 1, Time 4, and Time 5 were .94, .95, and .96,

respectively. In addition, I also coded flourishing as a binary categorical variable (i.e.,

experiencing flourishing or not) according to the instructions in Keyes (2009) as the two

methods of coding provide different information as regards flourishing (e.g., categorical

coding would provide the odds and probability of experiencing flourishing in logistic

regressions).

4.2.3 Procedure

I randomly assigned participants to either a quiet ego contemplation (QEC) or

control condition. Similar to Wayment, Collier, et al. (2015), I designed the training to

be completed in 3 sessions, with each separated by a week. And one week after the final

session, I invited participants back for a post-training survey. Thus, for each participant,

the study duration was 4 weeks in total.

In the first session, participants answered the Trait EI, Subjective Well-Being,

Stress and Flourishing questionnaires; they did not complete the Quiet Ego Scale, as their

responses had been recorded in a prior survey that evaluated their eligibility based on the

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cutoff score of 3.45. Then, participants in the QEC condition went through a 6-minute

contemplation training in which they listened to an audio recording[12] that explained the

quiet ego construct as well as elaborated its four characteristics (inclusive identity,

perspective taking, detached awareness, growth-mindedness). The recording begins with

a definition of the quiet ego as a self-identity that is motivated and able to transcend

excessive self-interest. It makes clear that the quiet ego is neither a squashed nor a

deflated ego but one that is able to balance self-interest with concerns for others. The

recording then delves into the four quiet ego characteristics and illustrates each with

detail. After listening, participants answered a few manipulation-check questions to

verify that they paid attention to the recording[13]. Finally, they were instructed to

complete a brief reflective writing task on how the four quiet ego characteristics were

related to themselves and in what ways the ideas could be applied to their lives.

Participants in the control condition listened to a 6-minute audio recording of a

chapter from the book *In a Wild Place*: *A Natural History of High Ledges* that portrayed

natural scenery at High Ledges in Western Massachusetts (Barnard, 1998). Both the

control and quiet ego recording scripts were narrated by the same person. After listening,

participants completed 5 manipulation-check questions to verify that they paid attention

to the recording[14].

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[12] I obtained the training script by email from Dr. Heidi Wayment.

[13] Manipulation check for the training condition consists of two parts — the first part involves 5 statements
with a mixture of quiet-ego- and non-quiet-ego-related statements; the assumption is that after listening to
the recording, the quiet-ego-related statements (e.g., "listening to the recording helped you remember the
importance of review your own actions to learn from them") should be endorsed more than non-quiet-ego-
related statements (e.g., "listening to the recording helped you imagine beautiful places on earth"). The
second part is the reflective writing task, the absence or skipping of which constitutes a failure in attention.
As pre-registered, failing both parts would result in a rejection and termination of the study.

[14] Manipulation check for the control condition consists of 5 multiple-choice questions (on each recording),
with each question presenting 4 answer choices. Incorrectly answering more than 2 questions would result
in a rejection and termination of the study.

In the second and third (last) training sessions, participants in the QEC condition listened to the same audio recording about the quiet ego and then answered manipulation-check questions, after which time they were instructed to complete a brief writing task on the changes they noticed since the previous training and whether they had applied any ideas in the training to their lives. Participants in the control condition, on the other hand, listened to recordings on two other chapters from the same book *In a Wild Place*: *A Natural History of High Ledges* and then answered manipulation-check questions (Barnard, 1998).

Finally, in the fourth session, participants from both conditions completed a questionnaire battery measuring the quiet ego, life satisfaction, affective well-being, psychological stress, trait EI, and flourishing. Participants were then debriefed about the purpose of the experiment.

Because data collection coincided with the onset and initial rapid escalation of the COVID-19 pandemic in the US (from mid-February to mid-May 2020), I added a 1-month follow up to examine whether the quiet ego training resulted in a relatively long-lasting effect. By the time I received institutional ethics approval, however, about half the participants had already passed the 1-month marker, so I reached out to the remaining participants and eventually managed to retain 42 participants (out of the 75 who participated). In this session, participants followed the same procedure as in the post-training session in which they completed questionnaires of quiet ego, trait EI, and flourishing. Figure 10 illustrates the study procedure.

Figure 10

Chapter 4 Study Procedure

| Time 1 | Time 2 | Time 3 | Time 4 | Time 5 Follow-Up |

Eligibility Screening

Time 1

Training (*N* = 38)
- Life Satisfaction
- Positive Affect
- Negative Affect
- Stress
- Trait EI
- Flourishing

- Quiet Ego Training
- Manipulation Checks
- Reflective Writing

Control (*N* = 37)
- Life Satisfaction
- Positive Affect
- Negative Affect
- Stress
- Trait EI
- Flourishing

- Control recording #1
- Manipulation Checks

Time 2

Training (*N* = 38)
- Quiet Ego Training
- Manipulation Checks
- Reflective Writing

Control (*N* = 37)
- Control recording #2
- Manipulation Checks

Time 3

Training (*N* = 38)
- Quiet Ego Training
- Manipulation Checks
- Reflective Writing

Control (*N* = 37)
- Control recording #3
- Manipulation Checks

Time 4

Training (*N* = 38)
- Quiet Ego Scale
- Life Satisfaction
- Positive Affect
- Negative Affect
- Stress
- Trait EI
- Flourishing

Control (*N* = 37)
- Quiet Ego Scale
- Life Satisfaction
- Positive Affect
- Negative Affect
- Stress
- Trait EI
- Flourishing

Time 5 Follow-Up

Training (*N* = 21)
- Quiet Ego Scale
- Life Satisfaction
- Positive Affect
- Negative Affect
- Stress
- Trait EI
- Flourishing

Control (*N* = 21)
- Quiet Ego Scale
- Life Satisfaction
- Positive Affect
- Negative Affect
- Stress
- Trait EI
- Flourishing

1 Week   1 Week   1 Week   1 Month

4.2.4 Analytical Strategy

To test the hypothesis that QEC intervention would enhance quiet ego characteristics, I conducted a regression analysis predicting quiet ego at Time 4 from condition (control condition coded 0 and QEC condition coded 1). To examine the hypotheses that QEC intervention enhanced subjective well-being, diminished psychological stress, and improved flourishing at Time 4 and that the effects were mediated by trait EI (at Time 4), I conducted a series of mediation analyses using the PROCESS macro (version 3.5; Model 4) in SPSS, with 10,000 bootstrap re-samples per analysis (Hayes, 2018). In addition, I assessed flourishing both as a continuous and as a categorical variable, as recommended by Keyes (2007) because each approach provides valuable information and can attest whether conclusions vary by approach.

I examined the assumptions and influential cases of the regression models prior to the main analyses. I tested the assumptions of homoscedasticity, normality, and independent errors with the Breusch-Pagan test (R package "lmtest"), the Shapiro-Wilk test, and the Durbin-Watson test in R Studio (v1.2.5). I examined influential cases using

Cook's D, DFbeta values, and studentized residuals and I used the following diagnostic criteria to handle influential cases: They were removed if they exceeded Cook's D greater than .06 (cutoff = 4/n-k-1, Hair et al., 2010), absolute DFbeta values greater than .24 (cutoff = 2/ √n, Bollen & Jackman, 1990), or absolute studentized residuals larger than 2 (these residuals are exactly t-distributed; greater than 2 suggests significant outlying values).

4.3 Results

Table 7 summarizes the correlations between study variables as well as their means and standard deviations. A few points are noteworthy: DVs at Time 1 are highly correlated with their scores at Time 4 (3 weeks later), with the highest correlation being .87 between Time 1 trait EI and Time 4 trait EI. This may suggest that the DVs did not change much between the two time points; but this does not imply that the QEC intervention did not make a difference on the DVs. And even at .87, they are not identical (Fisher z transformed and compared to $r = .99$, $z = -7.88$, $p < .001$). Next, flourishing correlated highly with life satisfaction and trait EI; for example, at Time 4, flourishing correlated with life satisfaction and trait EI at .74 and .81, respectively. This may reflect the fact that all three constructs concern people's subjective and cognitive evaluation of their lives, either in terms of overall satisfaction and functioning (Diener et al., 1985; Keyes, 2007) or in terms of their capability to deal with prospective emotional situations (Petrides et al., 2007). Finally, negative affect correlated highly with stress (e.g., $r = .77$ at Time 4). It is common to observe high correlations between the two constructs (e.g., in 3.3) as perceived stress assesses the extent to which an individual

appraises a situation as demanding and whether they perceive that they have the necessary resources to effectively cope with the demand, a lack of which would result in heightened negativity (Clore & Huntsinger, 2007; Cohen et al., 1983).

Table 7

Correlations, Means, and Standard Deviations of Chapter 4 Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	M (SD)
1. T1 Quiet Ego	—														3.05 (.34)
2. T1 Life	.16	—													18.28 (7.83)
3. T1 Positive	.06	.45**	—												24.29 (6.24)
4. T1 Negative	-.04	-.51**	-.28*	—											20.77 (8.79)
5. T1 Stress	-.03	-.67**	-.40**	.78**	—										19.69 (8.17)
6. T1 Flourish	.21	.79**	.64**	-.45**	-.63**	—									31.29 (14.85)
7. T1 TEI	.23	.73**	.35**	-.53**	-.73**	.78**	—								4.15 (.83)
8. T4 Quiet Ego	.40**	.40**	.29*	-.28*	-.28*	.45**	.52**	—							3.32 (.55)
9. T4 Life	.17	.86**	.46**	-.46**	-.56**	.71**	.67**	.44**	—						18.64 (8.11)
10. T4 Positive	.18	.46**	.72**	-.38**	-.48**	.62**	.48**	.43**	.53**	—					25.25 (6.73)
11. T4 Negative	.01	-.51**	-.21	.79**	.67**	-.41**	-.56**	-.31**	-.50**	-.23*	—				18.80 (8.17)
12. T4 Stress	-.05	-.61**	-.38**	.66**	.77**	-.58**	-.65**	-.29*	-.68**	-.51**	.77**	—			17.13 (8.43)
13. T4 Flourish	.31**	.66**	.55**	-.39**	-.55**	.78**	.71**	.53**	.78**	.74**	-.41**	-.66**	—		32.20 (16.89)
14. T4 TEI	.21	.67**	.38**	-.45**	-.59**	.72**	.87**	.57**	.78**	.56**	-.52**	-.70**	.81**	—	4.33 (.87)

Note. T1 = Time 1, T4 = Time 4, Life = Life Satisfaction, Positive = Positive Affect, Negative = Negative Affect, TEI = Trait Emotional Intelligence, $^{*}p < .05$, $^{**}p < .01$.

4.3.1 Randomization Check

Prior to the main analyses, I examined whether randomization was successful. I found no significant differences between participants in the two conditions in terms of the quiet ego, $b = .04$, $p = .58$, trait EI, $b = .33$, $p = .08$, life satisfaction ($b = 2.85$, $p = .12$), positive affect ($b = -.43$, $p = .77$), negative affect ($b = -2.58$, $p = .21$), stress ($b = -1.25$, $p = .51$), or flourishing scores, $b = 3.62$, $p = .29$, at Time 1. Participants also did not differ in age, gender, race, social status, and religiosity (all p's > .29), suggesting randomization was effective.

4.3.2 Hypothesis Testing

Supporting the hypothesis, the QEC intervention significantly improved participants' quiet ego scores in the training versus the control condition, $b = .37$, $SE = .11$, $p < .001$. The effect is of medium-to-large in size as it is equivalent to an increase of .67 SDs in the quiet ego scores at Time 4 (i.e., $b = .37$ divided by Time 4 quiet ego $SD = .55$, Table 7).

I obtained this result after removing two highly influential cases with extreme outlying values that were substantially beyond the cutoffs (Cook's D = .16 and .14, |DFbetas| = .43 and .39, |studentized residuals| = 3.73 and 3.39) that also distorted the normality assumption, $W(75) = .95$, $p < .01$. Their removal restored the assumption, $W(73) = .98$, $p = .32$. The effectiveness of the QEC intervention was still visible even when these two cases were included in the analysis, $b = .27$, $SE = .12$, $p = .03$, albeit with attenuation.

Consistent with the hypotheses, I found that the QEC intervention indirectly enhanced participants' life satisfaction, elevated their positive affect, diminished their negative affect, attenuated their stress, and improved their psychological flourishing through trait EI at Time 4. As can be seen in Figure 11A, participants in the training condition reported higher trait EI scores at Time 4 compared to those in the control condition ($a = .52$, $SE = .19$, $p < .01$), and participants who reported higher trait EI scores exhibited improved life satisfaction ($b_1 = 7.30$, $SE = .73$, $p < .001$), elevated positive affect ($b_2 = 4.51$, $SE = .79$, $p < .001$), mitigated negative affect ($b_3 = -4.74$, $SE = .99$, $p < .001$), alleviated psychological stress ($b_4 = -7.03$, $SE = .85$, $p < .001$), and enhanced psychological flourishing at Time 4 ($b_5 = 16.12$, $SE = 1.39$, $p < .001$).

Bootstrap confidence intervals based on 10,000 re-samples were above zero for

the indirect effects of QEC on life satisfaction (ab_1 = 3.78, $BootSE$ = 1.45, 95% Boot CI

[.96, 6.68], $ab_{1\,ps}$ = .47), positive affect (ab_2 = 2.34, $BootSE$ = .97, 95% Boot CI [.57,

4.39], $ab_{2\,ps}$ = .35), negative affect (ab_3 = -2.46, $BootSE$ = 1.02, 95% Boot CI [-4.62,

-.60], $ab_{3\,ps}$ = -.30), stress (ab_4 = -3.65, $BootSE$ = 1.45, 95% Boot CI [-6.64, -.92], $ab_{4\,ps}$

= -.43), and flourishing (ab_5 = 8.35, $Boot\ SE$ = 3.20, 95% Boot Boot CI [2.19, 14.77],

ab_{ps} = .49). The effects are of small-to-medium in size as revealed by the partially

standardized effects that re-express the effects in terms of standard deviations of the

dependent variables. Further, there was no evidence that QEC influenced these variables

independent of the indirect effects via trait EI (all p's > .28).

Figure 11A

Path Diagram Presenting the Results of Trait EI Mediating the Effects of the QEC

Intervention on Subjective Well-Being, Stress, and Flourishing at Time 4
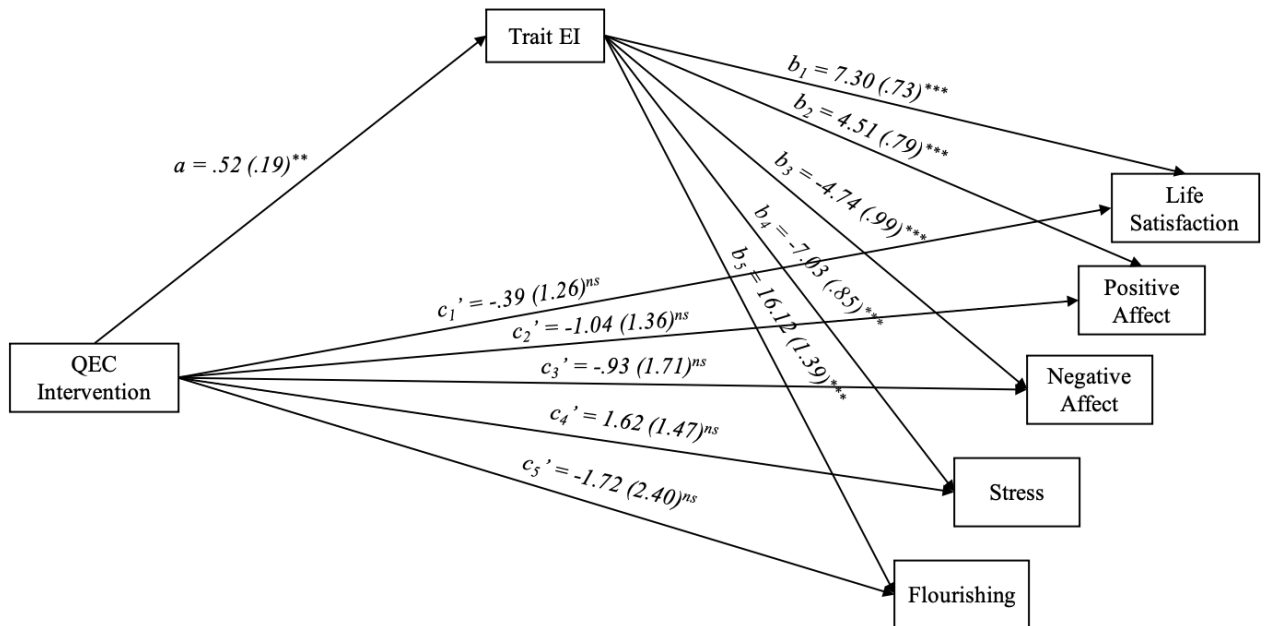
Note. SE in parentheses. $^*p \le .05$, $^{**}p \le .01$, $^{***}p \le .001$.

As mentioned in the Materials subsection, I also examined flourishing as a binary categorical variable and ran a mediation analysis with logistic regression. I found that QEC indirectly increased the likelihood of experiencing flourishing through its effect on trait EI. As can be seen in Figure 11B, QEC improved trait EI at Time 4 ($a = .52$, SE $= .19$, $p < .01$), and greater trait EI was associated with higher odds of experiencing flourishing at Time 4 ($b_{logit} = 3.57$, $SE = .96$, $p < .001$). Bootstrap confidence intervals based on 10,000 re-samples were entirely above zero for the indirect effect of QEC on flourishing, $ab_{logit} = 1.85$, $Boot\ SE = 4.47$, 95% Boot CI (.47, 5.79). The indirect effect ab is on a log-odds metric, its equivalent odds ratio and probability are 6.36 and 86%, respectively. That is, the odds of experiencing flourishing for participants in the training condition are 6.36 times higher than those for participants in the control condition. Equivalently, participants are 86% more likely to experience flourishing in the training than in the control condition as a result of QEC's effect on trait EI that, in turn, boosted the probability of flourishing. There was no evidence that QEC affected flourishing independent of its effect on trait EI, $c'_{logit} = -1.36$, $p = .13$.

Figure 11B

Path Diagram Presenting the Results of Trait EI Mediating the Effect of the QEC Intervention on Flourishing as a Categorical Outcome

Trait EI

$a = .52\,(.19)^{**}$

$b_{logit} = 3.57\,(.96)^{***}$

QEC Intervention

$c'_{logit} = -1.36\,(.90)^{ns}$

Flourishing as Categorical
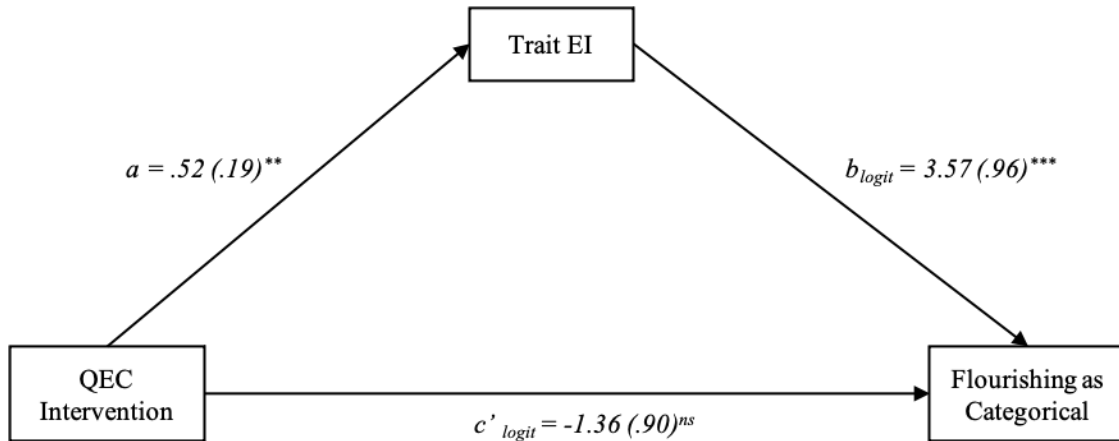
Note. SE in parentheses. $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$.

4.3.3 Post-Hoc 1 Month Follow-Up

As mentioned in the Procedure subsection, I added a 1-month follow-up after participants completed Time 4 to examine whether the QEC intervention would generate relatively longer-lasting effect during the COVID-19 pandemic. Thirty-three participants were lost by the time the IRB approval was received; thus, the analyses were based on the remaining 42 participants.

I repeated the main analyses with the subsample. I found that participants in the QEC condition reported higher quiet ego scores at the follow-up (Time 5), $b = .36$, *SE* = .17, $p = .036$; the effect is comparable to that at Time 4 (.37), suggesting the QEC intervention generated a stable, longer-lasting positive effect on quiet ego characteristics beyond the initial first week after training, even during the pandemic.

With respect to the mediation analyses, I ran the same models as in the main analyses, i.e., condition was treated as the independent variable, trait EI at *Time 5* as the mediator, and life satisfaction, positive affect, negative affect, stress, and flourishing at *Time 5* as dependent variables. I could not run flourishing at Time 5 as a categorical

dependent variable as there were only 7 cases that could be categorized as experiencing flourishing according to Keyes (2009), which failed the requirement of having at least 10 cases in the less frequent category of a binary dependent variable for logistic regression (Peduzzi et al., 1996).

I did not find evidence of mediation in these analyses: Participants in the QEC condition did not show greater trait EI scores at Time 5 ($a = .45$, $SE = .28$, $p = .11$), although trait EI at Time 5 did predict enhanced life satisfaction ($b_1 = 6.43$, $SE = 1.00$, $p < .001$) and positive affect ($b_2 = 5.59$, $SE = .80$, $p < .001$), diminished negative affect ($b_3 = -4.26$, $SE = .92$, $p < .001$) and stress ($b_4 = -7.13$, $SE = .97$, $p < .001$), as well as elevated flourishing ($b_5 = 14.85$, $SE = 1.83$, $p < .001$). Bootstrap confidence intervals with 10,000 resamples included 0 for the indirect effects from QEC to life satisfaction ($ab_1 = 2.91$, 95% Boot CI [-.56, 6.68]), positive affect ($ab_2 = 2.53$, 95% Boot CI [-.49, 5.84]), negative affect ($ab_3 = -1.93$, 95% Boot CI [-4.35, .39]), stress ($ab_4 = -3.23$, 95% Boot CI [-7.31, .61]), and flourishing ($ab_5 = 6.72$, 95% Boot CI [-1.31, 14.97]), suggesting no definitive evidence of trait EI linking the effects of the QEC intervention to subjective well-being, stress, and flourishing at Time 5.

This was most likely due to a lack of power in detecting the effect of QEC on trait EI (the a path) as a post-hoc power analysis using G*Power (v 3.1) indicated that the test for the a path achieved a power of only .29. In fact, this can be readily seen in the much larger standard error ($SE = .28$) of the QEC coefficient (predicting trait EI) at Time 5 as compared to that at Time 4 ($SE = .19$), suggesting an insufficient sample size drove up the standard error, which caused a drop in power.

4.4 Discussion

In this randomized controlled experiment and final study of the dissertation, I set out to investigate whether a QEC intervention would (1) improve quiet ego characteristics; and (2) enhance subjective well-being, attenuate psychological stress, and improve psychological flourishing through trait EI. I found that, relative to controls, participants in the intervention condition showed higher quiet ego scores, suggesting the QEC intervention effectively improved quiet ego characteristics. I also found that the QEC intervention enhanced subjective well-being, alleviated psychological stress, and elevated flourishing via its positive effect on trait EI; that is, the intervention strengthened trait EI that, in turn, boosted well-being, curtailed stress, and elevated flourishing.

The study results replicated findings in Wayment, Collier, et al. (2015) and Wayment et al. (2019) regarding the effectiveness of the QEC intervention in strengthening quiet ego characteristics. This study is the first to directly examine the effectiveness of QEC on flourishing, which complements a series of prior experiments and studies examining the effectiveness of QEC on art-making's ability to diminish negative mood and amplify positive mood (Collier & Wayment, 2019) or on curtailing compassion fatigue and improving health condition in healthcare providers (Wayment et al., 2019). The study also complemented past studies in providing more causal evidence to the associations between the quiet ego and subjective well-being and stress (e.g., Wayment, Bauer, & Sylaska, 2015) as well as to the role of trait EI in mediating these relationships (e.g., Liu et al., 2020). Additionally, the results lend further support to the theoretical notion concerning the malleable nature of the quiet ego (Wayment, Collier, et al., 2015) and are consistent with past research showing that relatively stable traits or

dispositions can exhibit momentary fluctuations and are subject to deliberate training or intervention (Fleeson & Jayawickreme, 2015; Nelis et al., 2009).

The study also improved upon previous studies in various aspects. For example, the study design improves upon Wayment, Collier, et al.'s (2015) by using a control task that was delivered via the same modality; that is, participants listened to the control recordings narrated by the same person who also narrated the QEC script, whereas control participants in Wayment, Collier, et al. (2015) were instructed to read paper magazines. This not only strengthened the validity of the current results, but also supported the soundness and reliability of prior study results.

The results aligned well with the theorizing of the quiet ego as a mindful and compassionate self-identity that is not rooted in egotistic and self-aggrandizing needs but in a need to transcend egotism to achieve an inclusive identity that is oriented toward one's long-term, eudaimonic well-being (Bauer & Wayment, 2008; Campbell & Buffardi, 2008). The quiet ego's concern for long-term growth contributes to eudaimonic well-being, as it clears a space for one to put one's action (mental and/or behavioral) in a larger, longer-term perspective, facilitating a sense of purpose and meaning over time (Bauer, 2008; Wayment, Bauer, & Sylaska, 2015). This long-term orientation, working in tandem with detached awareness, shifts the locus of self-evaluation from the immediate situation (i.e., one's evaluation of the self is no longer predicated on how the immediate moment makes one feel) to a long-term, process-oriented base, buffering one from processing self-relevant information in overly defensive manners often accompanied by negative affect, tension, and inner conflict, all of which are detrimental to affective well-being (Bauer & Wayment, 2008; Kernis & Heppner, 2008; Leary,

2004). With less egotistical or self-image concerns, the quiet ego is more inclusive in its identification with others and more expansive in its psychosocial sphere that gives rise to more enriching, engaging, and satisfying interpersonal and social relations (Brown et al., 2008; Crocker, 2008; Wayment & Bauer, 2017).

The results are also consistent with theories and empirical evidence regarding trait EI and the relationship between quiet ego and trait EI. Trait EI refers to one's emotional self-efficacy — an evaluation of one's capacity to execute actions to handle prospective emotional situations (Petrides et al., 2007). Trait EI has been shown to be positively associated with subjective well-being (Kong et al., 2012; Petrides et al., 2007), psychological flourishing (Callea et al., 2019; Schutte & Loi, 2014), and negatively associated with stress (Mikolajczak & Luminet 2008; Petrides & Furnham, 2006). Trait EI has also been shown to be positively associated with the quiet ego in its mediating role between the quiet ego and subjective well-being and stress (Liu et al., 2020). This makes sense considering that the quiet ego concerns personhood, i.e., one's reflection and fundamental conceptualization of one's self (Wayment, Bauer, & Sylaska, 2015) whereas trait EI concerns a subset of this conceptualization as it pertains to emotional situations (Petrides et al., 2007). From this perspective, trait EI is uniquely positioned to be a mediator between the quiet ego and subjective well-being, stress, and flourishing.

This notion is supported by experimental evidence demonstrating that trait EI is malleable and can be improved via deliberate training (Nelis et al., 2009), which results in salutary effects such as enhanced life satisfaction, greater subjective happiness, improved social well-being, and lowered neurotic reactions (Nelis et al., 2011), findings with which the current study results concur and which also support the order or flow of

effects in the current study design (QEC, trait EI, and subjective well-being, stress, and

flourishing).

CHAPTER 5

GENERAL DISCUSSION

5.1 General Discussion

Ego is that which constructs and evaluates the concept of self in that it processes information and interprets objects (e.g., people, experiences) and classifies them as part of the self (or not) (Bauer & Wayment, 2008). It is the zone of mediation in which information gets processed, organized, unified, and in which sensory information actually becomes a private event that *means* something to us (Cooley, 1902; Kegan, 1982). To put it another way, ego is an active experiencer, perceiver, and doer that actively constructs, maintains, and regulates our sense of self and our relationships with others (Brown, 1998; Kegan, 1982; Wayment, Bauer, & Sylaska, 2015). It even has a felt topography — most people reported their "ego-center" as located behind their eyes (Leary, 2004; Mitson et al., 1976). It is that mental presence that registers their experiences, thinks their thoughts, and feels their feelings (Leary, 2004).

Ego processes information in different modes. The mode that has been most extensively studied is the egotistical-narcissistic one because it fits so well with the predominant cultural ideology of being individualistic and being motivated by self-interest (Bauer & Wayment, 2008; for a review, see Campbell & Buffardi, 2008). Thus, what has largely been ignored is an ego that is not predominantly motivated by self-interest, that does not process information in an overly self-flattering manner, and that does not jeopardize interpersonal relations and one's long-term interests (Bauer & Wayment, 2008; Campbell & Buffardi, 2008). From this perspective, the quiet ego

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research supplies a missing piece in the jigsaw puzzle of ego research. This dissertation is situated in that piece — it further examines the construct validity and implications of the quiet ego with respect to self-concept clarity (SCC), Theory of Mind (ToM), and emotional intelligence (EI) as well as investigates the effects of these implications on psychological well-being.

In Chapter 2.1, I examined the construct validity of the quiet ego with respect to self-perception — self-concept clarity (SCC) — the extent to which one's ideas about oneself are defined clearly and confidently, internally consistent, and temporarily stable (Campbell et al., 1996). I predicted that the quiet ego would be positively associated with SCC because of its growth tendency toward psychosocial maturity, the hallmark of which is an increasing ability to think complexly and integratively about the self — that is, heightened self-concept clarity (Bauer, 2008; Wayment, Bauer, & Sylaska, 2015). Results supported this prediction, i.e., participants with greater quiet ego showed greater SCC.

With this initial evidence of construct validity and capitalizing on the existing literature between SCC and psychological well-being and self-esteem, I extended the relationship between the quiet ego and SCC in Chapter 3.1 to investigate whether it would predict increased psychological well-being and self-esteem via SCC. Results supported the hypotheses: Participants who were higher on the quiet ego exhibited more organized and integrated self-structure and those who showed more integrated self-structure reported higher psychological well-being and self-esteem, all with clear and visible effect sizes.

In addition to examining how the quiet ego — a self-construal — was related to processing information about the self, in Chapter 2.2, I studied how the quiet ego was related to processing information about others, specifically, about others' mental and emotional states, i.e., Theory of Mind (ToM). I hypothesized that the quiet ego would be positively associated with ToM because of its inherent characteristics of perspective-taking and detached awareness that would enable it to perceive others' mental and emotional states more accurately (Brown et al., 2007; Brown & Ryan, 2003). Results supported the hypotheses that the quiet ego was positively associated with both social-perceptual and social-cognitive ToM.

Building on this initial evidence and drawing on prior research regarding ToM and interpersonal relations, I examined the implications of this relationship in the realm of interpersonal relationship in Chapter 3.2. I hypothesized that the quiet ego would predict more satisfying interpersonal relations via ToM. Consistent with the hypothesis, I found that quiet ego predicted increased interpersonal relations and that ToM mediated this relationship. This finding was consistent with both quiet ego and ToM theories; it also corroborated the link between ToM and interpersonal relations demonstrated in previous studies (e.g., Gallese et al., 2007; Kidd & Castano, 2013).

In addition to examining how the quiet ego was related to processing self- and other-oriented information, in Chapter 2.3, I investigated how the quiet ego was related to processing emotional information and studied its relationship with emotional intelligence. Based on the EI literature and the nature of the quiet ego construct, I hypothesized that the quiet ego would be related to both ability and trait EI. Results supported the

hypotheses: Participants with greater quiet ego showed more ability and trait EI,

providing evidence of the quiet ego's construct validity in the domain of EI.

Building on this evidence and leveraging findings on the associations between EI

and subjective well-being and psychological stress (e.g., Kong & Zhao, 2013; MacCann

& Roberts, 2008; Mikolajczak & Luminet, 2008), in Chapter 3.3, I investigated whether

the quiet ego would predict enhanced subjective well-being and attenuated psychological

stress via ability and trait EI. Further, building on existing work showing the positive

association between trait EI and mindfulness (Bao et al., 2015; Schutte & Malouff, 2011;

Wang & Kong, 2014), I examined whether the quiet ego would predict subjective well-

being and stress via mindfulness and trait EI in a serial fashion.

Supporting the hypotheses, I found that the quiet ego predicted improved

subjective well-being and diminished psychological stress via trait EI, with medium-to-

large effect sizes. The results are congruous with the theories of the quiet ego and trait EI

(Chapter 3.3). Further, a serial indirect analysis revealed that the quiet ego transmitted its

effects to subjective well-being and stress via mindfulness and trait EI. The results not

only mapped onto research on the relations between mindfulness, trait EI, subjective

well-being, and stress (e.g., Mikolajczak & Luminet, 2008; Petrides et al., 2007; Schutte

& Malouff, 2011), but also extended this body of research to the quiet ego, theoretically

enriching the construct.

Thus far, the results I presented are correlational in nature and do not lend

themselves to causal claims about the quiet ego's effects on subjective well-being and

psychological stress. Therefore, it would be important (theoretically and practically) to

substantiate these findings in an experimental framework. Thus, in Chapter 4, building

on the results of Chapter 3.3, on the literature of psychological flourishing (e.g., Keyes, 2005), and drawing on the malleable nature of the quiet ego (Wayment, Collier, et al., 2015), I investigated the causal associations (and a mechanism) between the quiet ego and subjective well-being, psychological stress, and psychological flourishing in a randomized, longitudinal experiment.

Consistent with the predictions, I found that a quiet ego contemplation effectively strengthened quiet ego characteristics as well as enhanced subjective well-being, mitigated psychological stress, and elevated psychological flourishing via trait EI. The results speak to the moderating quality of the quiet ego on the deleterious impact of stress and negative experience, complementing a series of prior studies showing the quiet ego's moderating effect on stress and anxiety (Wayment, Collier, et al., 2015; Wayment & Silver, 2018), negative mood (Collier & Wayment, 2019), and compassion fatigue among healthcare providers (Wayment et al., 2019).

Notably, the results bear contemporary relevance. The study was conducted between mid-February and mid-May 2020, a period that overlapped with the onset and initial rapid escalation of the COVID-19 pandemic in the US, a devastating public health emergency that profoundly impacted people's subject well-being, inflamed their stress levels, and aggravated their sense of flourishing (Holman et al., 2020). Importantly, preliminary evidence suggests that traditional coping and stress appraisal techniques failed to adequately address its negative impact (Zacher & Rudolph, 2020). In light of this, the study results are promising in helping mitigate the pandemic's detrimental impact by engaging in a brief contemplation that involves listening to the quiet ego's four components and reflecting about their personal relevance—a readily scalable intervention

that anyone can use. This may be especially pertinent to the frontline healthcare workers

combating the pandemic to help alleviate their burnout and compassion fatigue

(Wayment et al., 2019). In fact, this intervention is ideal in a pandemic context in that it

is easy to implement; it is brief and non-costly; and it is secular and not tied to any

religious practice (Huffman et al., 2015). Moreover, the follow-up assessment indicated

that the benefits of the intervention might be durable during the protracted pandemic,

although a drop in power prevented drawing a definitive conclusion from the data.

5.2 Development of the Quiet Ego (and What Thwarts It)

One of the inherent characteristics of ego is its social nature and origin, that is, it

arises and develops out of interactions between the person and their social environment

(Cooley, 1902; Kegan, 1982; Loevinger, 1976). The quiet ego, from this perspective, is

no exception: It too emerges from interacting with the social environment (Bauer &

Wayment, 2008; Brown et al., 2008; Wayment, Bauer, & Sylaska, 2015). And just like

an individualistic, competitive, self-oriented environment encourages an egotistical ego,

so does an interdependent, compassionate, and other-oriented environment foster a quiet

ego (Campbell & Buffardi, 2008). To put it another way, to develop a quiet ego, one

needs a social environment or culture that supports, acknowledges, recognizes, and

confirms these ego-transcending qualities so that one will feel that one is not alone and

that one's way of construing the self and others is valid (Kegan, 1982). Since social

environments are embodied in actual persons with whom one has a relationship, role

models that exemplify these ego-transcending qualities would be a catalyst and

motivating force to the development of the quiet ego.

In addition, one's social environment or community must contradict or otherwise send corrective message (e.g., in the form of social approval) to confront those who exhibit overly egotistical and self-aggrandizing tendencies and behaviors so as not to make the impression that egotism is the norm (rather than the exception) (Campbell & Buffardi, 2008).

But how would one develop the quiet ego in a reality and social environment that is so disconfirming of ego-transcendence that it actually thwarts one's attempts to quiet the ego (e.g., a tit-for-tat culture)? Such a culture amounts to social isolation or suffocation of a person who attempts to quiet the ego as not only is there no sign of confirmation of their way (a quiet-ego-way) of relating to others, but others, who are embedded in an egotistical ego, might even see this as an opportunity for exploitation.

This is where deliberate training can help to ameliorate and counteract the harmful effects of certain social environments. As I have argued in Chapter 4, the quiet ego can be conceptualized as both a trait and a state, or a trait that is responsive to persistent changes in states such that it can be deliberately altered by repeated practice. I examined this hypothesis in Chapter 4 and found that participants who underwent a 3-session quiet ego contemplation training demonstrated increase in their quiet ego characteristics, and such increase generated beneficial downstream consequences such as enhanced subjective well-being, lowered stress, and improved psychological flourishing. The intervention, seen from the perspective of counteracting harmful social influence, amounts to setting up a structure for developing the quiet ego internally when the structure cannot be set up externally with the help of social environment.

5.3 Limitations

There were a few limitations to the studies. First, participants in Chapter 2.1, 2,3, and 3.3 consisted of undergraduate students who were predominantly Caucasian (75% - 78%) and within limited age range (19 - 22). Thus, to what extent the study results from these sections would generalize to other populations remains to be tested. Despite this limitation, however, the chapters contributed from the perspective of process inference, that is "inferences about the processes at work generating the pattern of associations rather than what the associations would be if all members of a population participated in the study" (i.e., population inference) (Hayes 2018 p. 64; Mook 1983). In other words, the studies intended to test whether the processes linking the study variables would be consistent with and as predicted by the relevant theories.

For example, the focus of Chapter 3.3 was to test the theoretical proposition that people with higher quiet ego scores would be more mindful and would be higher on trait EI which would translate to greater subjective well-being and reduced stress. The fact that the associations emerged largely as predicted suggests that the processes that the quiet ego and trait EI theories attempt to explain are largely accurate. From this perspective, it matters less that the participants were not randomly selected from a larger population because the inferences were geared more toward the theoretical processes that generated the observed associations; in other words, it's geared toward "the generalization of theoretical conclusions" (Mook 1983 p. 381).

It is of course important to wonder whether these processes would still hold in other populations (or cultures). For example, given the large percentage of Caucasians in these samples, would the theoretical processes still hold in members of other ethnic

groups? If they do, the results would further strengthen the theoretical propositions that the studies tested; if they don't, the results would require the theoretical propositions be modified in light of the new evidence (in which case race would become a boundary condition to the theories).

Second, except for the experimental study in Chapter 4, studies in the other chapters were correlational in nature and did not satisfy the necessary conditions for establishing causation: covariation, temporal ordering, and the elimination of competing hypotheses—at best, they established covariation among the variables (Hayes 2018). Therefore, interpretations of the study results were couched in non-causal language throughout the chapters.

Then, the 1-month follow-up study in Chapter 4 was post-hoc and close to half of the participants were lost. Yet, this remains an important question and future studies should continue to address long-term effects of quiet ego interventions.

Finally, because I targeted participants whose quiet ego scores were below the 34th percentile to prevent ceiling effect, the effectiveness of the quiet ego training remains unknown for participants at mid or upper ranges; thus, future testing is needed to establish the reach of the training's effectiveness.

5.4 Future Directions

In Chapter 4, I examined how to improve subjective well-being and lower psychological stress by training or active intervention; but subjective well-being and stress can also be improved by protecting them from being harmed by the deleterious effects of conditions such as depression, rumination, anxiety, or excessive public self-

consciousness. In almost all these instances, one processes information in an overly negative fashion, preoccupies oneself with negative, repetitive thinking, and has a hard time extracting oneself from the negative thoughts (Gotlib & Joormann, 2010; Nolen-Hoeksema et al., 2008). In short, when in these negative states, one is showing a lack of quiet ego characteristics. This also suggests that training on the quiet ego may psychologically shield one from falling into or slipping further in these negative states. This idea can be tested by first examining whether the quiet ego is associated (negatively) with depression, rumination, anxiety, and public self-consciousness. If so, the second step is to test whether empirical training would alleviate the symptoms of these conditions.

Another research avenue is to further examine the quiet ego with respect to positive psychology constructs such as gratitude, altruism, tolerance, or humility as well as their behavioral implications (Campbell & Buffardi, 2008; Exline, 2008). As I have argued in the Introduction and have shown in Chapter 4 with respect to flourishing, these positive qualities are likely the consequences of the quiet ego, i.e., manifestations of the quiet-ego-way of construing the relationship of the self to others. As such, this can be tested using an experimental framework that examines whether manipulating the quiet ego would result in development in these characteristics and whether the resultant development would lead to any changes in behavior.

Another arena in which the quiet ego concept may prove particularly useful is the organizational context. As Huffman et al (2015) pointed out that the mindfulness concept of being nonjudgmental, accepting, and presently focused runs counter to the Western ideology of being judgmental, self-interested, and future focused and that mindfulness

programs are usually lengthy and costly to implement widely in organizations. Hence, a concept that is more ideologically compatible and a training program that is relatively short and less costly would better suit the needs of organizations to help employees "think, feel, and behave less defensively and more compassionately toward themselves and others" (Huffman et al., 2015, p. 661). To this end, the quiet ego concept and its training program are well-suited as the concept emphasizes transcending excessive self-interest (i.e., not completely squashing the ego) to achieve a balance between self and others' interests as well as to cultivate one's long-term eudaimonic well-being (Wayment, Bauer, & Sylaska, 2015). In an organizational context, this would mean less peer-competition, more collaboration, improved collegial relationship and synergy, clear conceptual understanding of others' needs and competencies, as well as a healthier work-life balance.

5.5 Conclusions

Though a noisy, narcissistic ego can be exhilarating and intoxicating in the short-run, it is self-defeating in the long-run; whereas a quiet ego may feel bland and mundane in the short-run, it is clearly a boon to the self and to society in the long run (Campbell & Buffardi, 2008). It is to the spirit of discovering and exploring the salutary effects of the quiet ego was this dissertation devoted. It examined the quiet ego's factor structure in multiple samples, investigated its construct validity in the domains of self-perception, other-perception, and emotional intelligence, assessed its beneficial effects on well-being, flourishing, and interpersonal relations. In doing so, the work integrated the quiet ego literature with the literatures of self-concept clarity, Theory of Mind, and emotional

intelligence, thereby contributing to the development and refinement of the construct and

its results may have implications in mental health as well as organizational research.

APPENDIX A

THE QUIET EGO SCALE

Assessed on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree)

1. I think it is important to have new experiences that challenge how you think about yourself and the world.

2. I find myself doing things without paying much attention.*

3. I feel a connection to all living things.

4. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

5. For me, life has been a continuous process of learning, changing, and growth.

6. I do jobs or tasks automatically, without being aware of what I'm doing.*

7. I feel a connection with strangers.

8. When I'm upset at someone, I usually try to put myself in his or her shoes for a while.

9. I have the sense that I have developed a lot as a person over time.

10. I rush through activities without being really attentive to them.*

11. I sometimes find it difficult to see things from another person's point of view.*

12. I feel a connection to people of other races.

13. I try to look at everybody's side of a disagreement before I make a decision.

14. When I think about it, I haven't really improved much as a person over the years.*

* Reverse-coded item

APPENDIX B

SELF-CONCEPT CLARITY SCALE

Assessed on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree)

1. My beliefs about myself often conflict with one another.*

2. On one day I might have one opinion of myself and on another day I might have a different opinion.*

3. I spend a lot of time wondering about what kind of person I really am.*

4. Sometimes I feel that I am not really the person that I appear to be.*

5. When I think about the kind of person I have been in the past, I'm not sure what I was really like.*

6. I seldom experience conflict between the different aspects of my personality.

7. Sometimes I think I know other people better than I know myself. *

8. My beliefs about myself seem to change very frequently.*

9. If I were asked to describe my personality, my description might end up being different from one day to another day.*

10. Even if I wanted to, I don't think I could tell someone what I'm really like.*

11. In general, I have a clear sense of who I am and what I am.

12. It is often hard for me to make up my mind about things because I don't really know what I want.*

* Reverse-coded item

SOCIAL-PERCEPTUAL TOM (READING THE MIND IN THE EYES TEST)

Instructions: For each set of eyes, choose and circle which word best describes what the person in the picture is thinking or feeling. You may feel that more than one word is applicable but please choose just one word, the word which you consider to be most suitable. Before making your choice, make sure that you have read all 4 words. You should try to do the task as quickly as possible but you will not be timed.

SAMPLE questions (36 questions in total):

playful   comforting

irritated   bored

aghast   fantasizing

impatient   alarmed

SOCIAL-COGNITIVE TOM (FAUX PAS TEST)

Instructions: You are going to read some brief stories and be asked some questions about it.

SAMPLE stories (20 stories in total):

Story 1. Vicky was at a party at her friend Oliver's house. She was talking to Oliver when another woman came up to them. She was one of Oliver's neighbours. The woman said, "Hello," then turned to Vicky and said, " I don't think we've met. I'm Maria, what's your name?" "I'm Vicky."

"Would anyone like something to drink?" Oliver asked.

1. Did anyone say something they shouldn't have said or something awkward?

If yes, ask:

2. Who said something they shouldn't have said or something awkward?

3. Why shouldn't he/she have said it or why was it awkward?

4. Why do you think he/she said it?

5. Did Vicky and Maria know each other?

6. How do you think Vicky felt?

Control questions:

7. In the story, where was Vicky?

8. Who was hosting the party?

Story 2. Helen's husband was throwing a surprise party for her birthday. He invited Sarah, a friend of Helen's, and said, "Don't tell anyone, especially Helen." The day before

the party, Helen was over at Sarah's and Sarah spilled some coffee on a new dress that was hanging over her chair.

"Oh!" said Sarah, "I was going to wear this to your party!"

"What party?" said Helen.

"Come on," said Sarah, "Let's go see if we can get the stain out."

1. Did anyone say something they shouldn't have said or something awkward?

If yes, ask:

2. Who said something they shouldn't have said or something awkward?

3. Why shouldn't he/she have said it or why was it awkward?

4. Why do you think he/she said it?

5. Did Sarah remember that the party was a surprise party?

6. How do you think Helen felt?

<u>Control question</u>:

7. In the story, who was the surprise party for?

8. What got spilled on the dress?

SITUATIONAL TEST OF EMOTIONAL MANAGEMENT - BRIEF

Instructions: In this test, you will be presented with a few brief details about an emotional situation and asked to choose from four responses the most effective course of action to manage both the emotions the person is feeling and the problems they face in that situation. Although more than one course of action might be acceptable, you are asked to choose what you think the most effective response for that person in that situation would be. Remember, you are not necessarily choosing what you would do, or the nicest thing to do, but choosing the most effective response for that situation.

SAMPLE questions (18 in total):

1. Lee's workmate fails to deliver an important piece of information on time, causing Lee to fall behind schedule also. What action would be the most effective for Lee?

(a) Work harder to compensate.

(b) Get angry with the workmate.

(c) Explain the urgency of the situation to the workmate.

(d) Never rely on that workmate again.

2. Rhea has left her job to be a full-time mother, which she loves, but she misses the company and companionship of her workmates. What action would be the most effective for Rhea?

(a) Enjoy being a full-time mom.

(b) Try to see her old workmates socially, inviting them out.

(c) Join a playgroup or social group of new mothers.

(d) See if she can find part time work.

3. Pete has specific skills that his workmates do not and he feels that his workload is higher because of it. What action would be the most effective for Pete?

(a) Speak to his boss about this.

(b) Start looking for a new job.

(c) Be very proud of his unique skills.

(d) Speak to his workmates about this.

4. Mario is showing Min, a new employee, how the system works. Mario's boss walks by and announces Mario is wrong about several points, as changes have been made. Mario gets on well with his boss, although they don't normally have much to do with each other. What action would be the most effective for Mario?

(a) Make a joke to Min, explaining he didn't know about the changes.

(b) Not worry about it, just ignore the interruption.

(c) Learn the new changes.

(d) Tell the boss that such criticism was inappropriate.

APPENDIX F

TRAIT EMOTIONAL INTELLIGENCE QUESTIONNAIRE - SHORT FORM

Assessed on a 7-point scale from 1 (completely disagree) to 7 (completely agree)

1. Expressing my emotions with words is not a problem for me.	1	2	3	4	5	6	7
2. I often find it difficult to see things from another person's viewpoint. *	1	2	3	4	5	6	7
3. On the whole, I'm a highly motivated person.	1	2	3	4	5	6	7
4. I usually find it difficult to regulate my emotions. *	1	2	3	4	5	6	7
5. I generally don't find life enjoyable. *	1	2	3	4	5	6	7
6. I can deal effectively with people.	1	2	3	4	5	6	7
7. I tend to change my mind frequently. *	1	2	3	4	5	6	7
8. Many times, I can't figure out what emotion I'm feeling. *	1	2	3	4	5	6	7
9. I feel that I have a number of good qualities.	1	2	3	4	5	6	7
10. I often find it difficult to stand up for my rights. *	1	2	3	4	5	6	7
11. I'm usually able to influence the way other people feel.	1	2	3	4	5	6	7
12. On the whole, I have a gloomy perspective on most things. *	1	2	3	4	5	6	7
13. Those close to me often complain that I don't treat them right. *	1	2	3	4	5	6	7
14. I often find it difficult to adjust my life according to the circumstances. *	1	2	3	4	5	6	7
15. On the whole, I'm able to deal with stress.	1	2	3	4	5	6	7
16. I often find it difficult to show my affection to those close to me. *	1	2	3	4	5	6	7
17. I'm normally able to "get into someone's shoes" and experience their emotions.	1	2	3	4	5	6	7
18. I normally find it difficult to keep myself motivated. *	1	2	3	4	5	6	7
19. I'm usually able to find ways to control my emotions when I want to.	1	2	3	4	5	6	7
20. On the whole, I'm pleased with my life.	1	2	3	4	5	6	7
21. I would describe myself as a good negotiator.	1	2	3	4	5	6	7
22. I tend to get involved in things I later wish I could get out of. *	1	2	3	4	5	6	7
23. I often pause and think about my feelings.	1	2	3	4	5	6	7
24. I believe I'm full of personal strengths.	1	2	3	4	5	6	7
25. I tend to "back down" even if I know I'm right. *	1	2	3	4	5	6	7
26. I don't seem to have any power at all over other people's feelings. *	1	2	3	4	5	6	7
27. I generally believe that things will work out fine in my life.	1	2	3	4	5	6	7
28. I find it difficult to bond well even with those close to me. *	1	2	3	4	5	6	7
29. Generally, I'm able to adapt to new environments.	1	2	3	4	5	6	7
30. Others admire me for being relaxed.	1	2	3	4	5	6	7

* Reverse-coded item

APPENDIX G

GROWTH MOTIVATION INDEX

Assessed on a 7-point scale from 1 (never), 4 (periodically), to 7 (always)

1. I ask myself ''what if…'' questions that place me in others' shoes, such as ''What would I think or feel in this situation if I were of a different race or ethnicity?''

2. I actively seek new perspectives on how to live my life, even if these new perspectives mean I've been wrong.

3. I ask people what they think about current issues so that I can understand other points of view.

4. I seek new experiences as a way to know myself and others better, not just to feel excitement.

5. I consciously think about how I fit into my society and culture, how they have influenced me, and what I might contribute to them.

6. I try to form my personal goals in life around my deeper interests.

7. I strive to make my relationships better in the future.

8. I strive to create a happy and meaningful life.

PSYCHOLOGICAL WELL-BEING

Assessed on a 6-point scale from 1 (completely disagree) to 6 (completely agree)

1. I like most parts of my personality.*

2. When I look at the story of my life, I am pleased with how things have turned out so far.*

3. Some people wander aimlessly through life, but I am not one of them.*

4. The demands of everyday life often get me down.

5. In many ways I feel disappointed about my achievements in life.

6. Maintaining close relationships has been difficult and frustrating for me.

7. I live life one day at a time and don't really think about the future.

8. In general, I feel I am in charge of the situation in which I live.*

9. I am good at managing the responsibilities of daily life.*

10. I sometimes feel as if I've done all there is to do in life.

11. For me, life has been a continuous process of learning, changing, and growth.*

12. I think it is important to have new experiences that challenge how I think about myself and the world.*

13. People would describe me as a giving person, willing to share my time with others.*

14. I gave up trying to make big improvements or changes in my life a long time ago.

15. I tend to be influenced by people with strong opinions.

16. I have not experienced many warm and trusting relationships with others.

17. I have confidence in my own opinions, even if they are different from the way most other people think.*

18. I judge myself by what I think is important, not by the values of what others think is important.*

* Reverse-coded item

APPENDIX I

SELF-LIKING / SELF-COMPETENCE SCALE

Assessed on a 5-point scale from 1 (Strongly disagree) to 5 (Strongly agree)

1. I tend to devalue myself.*

2. I am highly effective at the things I do.

3. I am very comfortable with myself.

4. I am almost always able to accomplish what I try for.

5. I am secure in my sense of self-worth.

6. It is sometimes unpleasant for me to think about myself.*

7. I have a negative attitude toward myself.*

8. At times, I find it difficult to achieve the things that are important to me.*

9. I feel great about who I am.

10. I sometimes deal poorly with challenges.*

11. I never doubt my personal worth.

12. I perform very well at many things.

13. I sometimes fail to fulfill my goals.*

14. I am very talented.

15. I do not have enough respect for myself.*

16. I wish I were more skillful in my activities.*

Self-Competence Items: 2, 4, 8, 10, 12, 13, 14, 16

Self-Liking Items: 1, 3, 5, 6, 7, 9, 11, 15

* Reverse-coded item

APPENDIX J

SOCIAL PROVISIONS SCALE

Assessed on a 4-point scale from 1 (strongly disagree) to 4 (strongly agree)

1. There are people I know will help me if I really need it.

2. I do not have close relationships with other people.*

3. There is no one I can turn to in times of stress.*

4. There are people who call on me to help them.

5. There are people who like the same social activities I do.

6. Other people do not think I am good at what I do.*

7. I feel responsible for taking care of someone else.

8. I am with a group of people who think the same way I do about things.

9. I do not think that other people respect what I do.*

10. If something went wrong, no one would help me.*

11. I have close relationships that make me feel good.

12. I have someone to talk to about decisions in my life.

13. There are people who value my skills and abilities.

14. There is no one who has the same interests and concerns as me.*

15. There is no one who needs me to take care of them.*

16. I have a trustworthy person to turn to if I have problems.

17. I feel a strong emotional tie with at least one other person.

18. There is no one I can count on for help if I really need it.*

19. There is no one I feel comfortable talking about problems with.*

20. There are people who admire my talents and abilities.

21. I do not have a feeling of closeness with anyone.*

22. There is no one who likes to do the things I do.*

23. There are people I can count on in an emergency.

24. No one needs me to take care of them.*

* Reverse-coded item

APPENDIX K

THE FIVE FACET MINDFULNESS SCALE

Assessed on a 5-point scale from 1 (never or very rarely true) to 5 (very often or always true)

Non reactivity to inner experience

1. I perceive my feelings and emotions without having to react to them.

2. I watch my feelings without getting lost in them.

3. In difficult situations, I can pause without immediately reacting.

4. when I have distressing thoughts or images, I am able just to notice them without reacting.

5. when I have distressing thoughts or images, I feel calm soon after.

6. when I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.

7. when I have distressing thoughts or images, I just notice them and let them go.

Observing/noticing/attending to sensations/perceptions/thoughts/feelings

1. When I'm walking, I deliberately notice the sensations of my body moving.

2. When I take a shower or a bath, I stay alert to the sensations of water on my body.

3. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.

4. I pay attention to sensations, such as the wind in my hair or sun on my face.

5. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.

6. I notice the smells and aromas of things.

7. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.

8. I pay attention to how my emotions affect my thoughts and behavior.

Acting with awareness/automatic pilot/concentration/nondistraction

1. I find it difficult to stay focused on what's happening in the present.*

2. It seems I am "running on automatic" without much awareness of what I'm doing.*

3. I rush through activities without being really attentive to them.*

4. I do jobs or tasks automatically, without being aware of what I'm doing.*

5. I find myself doing things without paying attention.*

6. When I do things, my mind wanders off and I'm easily distracted.*

7. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.*

8. I am easily distracted.*

Describing/labeling with words

1. I'm good at finding the words to describe my feelings.

2. I can easily put my beliefs, opinions, and expectations into words.

3. It's hard for me to find the words to describe what I'm thinking.*

4. I have trouble thinking of the right words to express how I feel about things.*

5. When I have a sensation in my body, it's hard for me to describe it because I can't find the right words.*

6. Even when I'm feeling terribly upset, I can find a way to put it into words.

7. My natural tendency is to put my experiences into words.

8. I can usually describe how I feel at the moment in considerable detail.

Nonjudging of experience

1. I criticize myself for having irrational or inappropriate emotions.*

2. I tell myself that I shouldn't be feeling the way I'm feeling.*

3. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.*

4. I make judgments about whether my thoughts are good or bad.*

5. I tell myself I shouldn't be thinking the way I'm thinking.*

6. I think some of my emotions are bad or inappropriate and I shouldn't feel them.*

7. I disapprove of myself when I have irrational ideas.*

8. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.*

* Reverse-coded item

APPENDIX L

SATISFACTION WITH LIFE SCALE

Assessed on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree)

In most ways my life is close to my ideal.

The conditions of my life are excellent.

I am satisfied with my life.

So far I have gotten the important things I want in life.

If I could live my life over, I would change almost nothing.

APPENDIX M

POSITIVE & NEGATIVE AFFECT SCHEDULE

Assessed on a 5-point scale from 1 (Very Slightly or Not at All) to 5 (Extremely);

indicate to what extent you have felt this way over the past week.

1. Interested
2. Distressed
3. Excited
4. Upset
5. Strong
6. Guilty
7. Scared
8. Hostile
9. Enthusiastic
10. Proud
11. Irritable
12. Alert
13. Ashamed
14. Inspired
15. Nervous
16. Determined
17. Attentive
18. Jittery
19. Active
20. Afraid

APPENDIX N

PERCEIVED STRESS SCALE

Assessed on a 5-point scale from 0 (Never) to 4 (Very often)

1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?

3. In the last month, how often have you felt nervous and "stressed"?

4. In the last month, how often have you felt confident about your ability to handle your personal problems?*

5. In the last month, how often have you felt that things were going your way?*

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

7. In the last month, how often have you been able to control irritations in your life?*

8. In the last month, how often have you felt that you were on top of things?*

9. In the last month, how often have you been angered because of things that were outside of your control?

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

* Reverse-coded item

APPENDIX O

MENTAL HEALTH CONTINUUM-SHORT FORM

Assessed on a 6-point scale from 0 (Never) to 5 (Every Day*)*

During the past month, how often did you feel …

1. happy

2. interested in life

3. satisfied with life

4. that you had something important to contribute to society

5. that you belonged to a community (like a social group, your school, or your

neighborhood)

6. that our society is a good place, or is becoming a better place, for all people

7. that people are basically good

8. that the way our society works made sense to you

9. that you liked most parts of your personality

10. good at managing the responsibilities of your daily life

11. that you had warm and trusting relationships with others

12. that you had experiences that challenged you to grow and become a better person

13. confident to think or express your own ideas and opinions

14. that your life has a sense of direction or meaning to it

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