TO THINE OWN SELF BE TRUE:

THE LINKS BETWEEN PSYCHOLOGICAL ADJUSTMENT AND EXPRESSIVE

ACCURACY

by

JACQUELINE LAUREN HUMAN

B.A., University of British Columbia, 2007

M.A., University of British Columbia, 2009

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE STUDIES

(Psychology)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

August 2013

© Jacqueline Lauren Human, 2013

Abstract

Well-adjusted, happy people appear to be judgeable: their personalities tend to be seen more accurately than the personalities of less adjusted individuals (Colvin, 1993a, 1993b). The mechanisms behind this effect, however, are not well understood. One possibility is that welladjusted individuals are not more judgeable at all; instead, they may have greater self-knowledge that makes them appear to be more easily understood. Studies 1 and 2 address this question by utilizing trait observability to disentangle self-knowledge from judgeability. Across these two round-robin studies of new acquaintances, well-adjusted individuals were seen with greater distinctive self-other agreement, but more so on low rather than highly observable traits. Thus, well-adjusted individuals provide new acquaintances with greater information regarding their less observable traits, enhancing others' knowledge and thus distinctive self-other agreement. In sum, these studies indicate that well-adjusted individuals are indeed more judgeable. But how does adjustment facilitate judgeability? Across two video perceptions studies (Studies 3 and 4), I examined several potential mechanisms through which adjustment could promote judgeability at three stages of the Realistic Accuracy Model (RAM; Funder, 1995): 1) cue relevance, 2) cue availability, and 3) cue detection. In both studies, well-adjusted individuals were more judgeable because they provided others with more relevant cues: specifically, well-adjusted individuals behaved more in line with their distinctive personalities, which in turn led them to be seen more accurately. In contrast, neither cue availability nor detection could sufficiently account for the link between adjustment and judgeability. In sum, well-adjusted individuals are more judgeable because to their own selves, they are true.

Preface

I am the primary contributor and author of the work presented in this dissertation. I was responsible for study design, data collection, data analysis, and manuscript writing and preparation. Additional contributions for each chapter are listed below.

Chapter 1: Introduction

Components of this chapter have been published. Human, L. J., & Biesanz, J. C. (2013). Targeting the good target: An integrative review of the characteristics and consequences of being accurately perceived. *Personality and Social Psychology Review, 17*, 248-272. doi: 10.1177/1088868313495593. I am the primary author of this chapter; J. Biesanz made

intellectual contributions.

Chapter 2: Are Well-Adjusted Individuals Open Books? Disentangling Judgeability from Self-Knowledge

A version of this chapter has been published. Human, L. J., & Biesanz, J. C. (2011a). Target adjustment and self-other agreement: Utilizing trait observability to disentangle judgeability and self-knowledge. *Journal of Personality and Social Psychology*, *101*, 202 - 216.

doi:10.1037/a0023782. I developed the research question, conducted and supervised data collection, was primarily responsible for data analysis, and prepared the manuscript. J. Biesanz assisted with study design and data analysis, provided intellectual contributions, and edited the manuscript.

The data utilized in this chapter, and subsets of it, have also been utilized in other published work investigating different theoretical questions. Biesanz, J. C. (2010). The social accuracy model of interpersonal perception: Assessing individual differences in perceptive and expressive accuracy. *Multivariate Behavioral Research*, *45*, 853-885. Chan, M., Rogers, K. H., Parisotto, K.

L., & Biesanz, J. C. (2010). Forming first impressions: The role of gender and normative accuracy in personality perception. *Journal of Research in Personality, 45,* 117-120. Human, L. J., & Biesanz, J. C. (2011b). Through the looking glass clearly: Accuracy and assumed similarity in well-adjusted individuals' first impressions. *Journal of Personality and Social Psychology, 100,* 349-364.

Chapter 3: Why are Well-adjusted Individuals Open Books? Examining Mechanisms

A version of this chapter has been submitted for publication. Human, L. J., Biesanz, J. C., Finseth, S., Pierce, B, & Le, M. (*under review*). To thine own self be true: Psychological adjustment promotes judgeability via personality-behavior congruence. I developed the research question, supervised data collection, was primarily responsible for data analysis, and prepared the manuscript. J. Biesanz assisted with study design and data analysis, provided intellectual contributions, and edited the manuscript. S. Finseth and B. Pierce assisted with study set-up and data collection.

Chapter 4: General Discussion

I am the primary author of this chapter.

The research presented in this dissertation was approved by the UBC Behavioral Research Ethics Board, under certificate numbers H06-03996, H08-01840, H07-00030, H10-03360, and H09-00513 and was supported by two Standard Research Grants from the Social Sciences and Humanities Research Council to Dr. Jeremy Biesanz.

Table of Contents

Abstractii
Prefaceiii
Table of Contents
List of Tablesix
List of Figuresx
Acknowledgements xi
Chapter 1: Introduction1
1.1 Defining Judgeability2
1.1.1 Distinctive Expressive Accuracy
1.1.2 The Realistic Accuracy Model
1.2 Importance of Judgeability5
1.3 Measuring Accuracy
1.4 Psychological Adjustment7
1.5 Psychological Adjustment and Judgeability7
1.6 Overview of the Dissertation
Chapter 2: Are Well-Adjusted Individuals Open Books? Disentangling Judgeability from
Self-Knowledge10
2.1 Self-Knowledge11
2.1.1 Self-Knowledge and Psychological Adjustment
2.1.2 Measuring Self-Knowledge

2.2 Trait Observability	13
2.2.1 Current State of Knowledge: Target Adjustment, Observability, and Agreemen	t 15
2.2.2 Expected Results for the Self-Knowledge Explanation	17
2.2.3 Expected Results for the Judgeability Explanation	19
2.2.4 Expected Results for Dual Self-Knowledge and Judgeability Explanations	21
2.3 Summary	21
2.4 Study 1	22
2.4.1 Method	22
2.4.2 Results	
2.5 Study 2	35
2.5.1 Method	35
2.5.2 Results	37
2.6 Discussion	39
2.6.1 Judgeability and Adjustment	40
2.6.2 Self-Knowledge and Adjustment	41
2.6.3 Summary	42
Chapter 3: Why are Well-adjusted Individuals more Judgeable? Examining Potentia	al
Mechanisms	43
3.1 Cue Relevance	44
3.2 Cue Availability	49
3.3 Cue Detection	49
3.4 Summary and Overview of Hypotheses	50
3.5 Study 3	

3.5.1 Method	
3.5.2 Results	
3.5.3 Discussion	
3.6 Study 4	
3.6.1 Method	
3.6.2 Results and Discussion	
3.7 Summary and Discussion	
3.7.1 Mechanism 1: Personality-Behavior Congruence	
3.7.2 Mechanism 2: Internally-Relevant Information	
3.7.3 Mechanism 3: Information Quantity	
3.7.4 Mechanism 4: Attention	
3.7.5 Summary and Conclusions	
Chapter 4: General Discussion	
4.1 Summary of Results	
4.1.1 Judgeability vs. Self-knowledge	
4.1.2 Mechanisms	
4.2 Integration	
4.3 Implications	
4.3.1 Psychological Adjustment	
4.3.2 How to Improve Judgeability	
4.3.3 Benefits of Judgeability	
4.4 Limitations	
4.4.1 Methodological	

Bibliography	
4.5 Final Conclusion	
4.4.3 Generalizability	
4.4.2 Alternative Explanations	

List of Tables

Table 1. Associations between distinctive self-other agreement and adjustment at low, mean, and
high levels of trait observability, and the test of the 3-way interaction in Studies 1 and 230
Table 2. Associations of proposed verbal information-based mechanisms with target adjustment
and target distinctive accuracy slopes in Studies 3 and 4

List of Figures

Figure 1. Summary of previously published findings of the effects of target adjustment and trait
observability on self-other agreement16
Figure 2. Theoretical models of the relationship between target adjustment and expressive
accuracy (distinctive self-other agreement for a target) moderated by trait observability 18
Figure 3. The relationship between target adjustment and distinctive self-other agreement
moderated by trait observability in Studies 1 and 2
Figure 4. Potential mechanisms linking target psychological adjustment and expressive accuracy
based upon the realistic accuracy model (RAM; Funder, 1995)
Figure 5. The social accuracy model of interpersonal perception extended to include the
mediating role of target behavior
Figure 6. The association between perceiver attention and distinctive accuracy at high, mean, and
low levels of target psychological adjustment in Study 3
Figure 7. The association between target psychological adjustment and personality-behavior
congruence in Study 478

Acknowledgements

Conducting the research within this dissertation and putting it all together has been a very rewarding experience. There have certainly been challenges along the way, but the people around me have made even the most stressful times manageable and have really made this an enjoyable experience overall.

I would first like to extend my gratitude to my advisor, Dr. Jeremy Biesanz, for being such an incredible mentor and collaborator over the past 8 years – guiding me all the way from my first undergraduate statistics course to this last step in my PhD. I greatly appreciate the wonderful mix of support and freedom you have given me over the years. I would also like to thank Dr. Elizabeth Dunn, my informal but nevertheless instrumental co-mentor, for providing me with incredibly insightful feedback and guidance, also since my undergraduate years. I am also thankful to Drs. Edith Chen and Greg Miller for more recently providing me with invaluable mentorship as I begin to make critical transitions in my research and career. Finally, I would like to thank Drs. Anita DeLongis, Del Paulhus, and Jessica Tracy for their always thoughtful and helpful feedback over the years, on my research and much more.

This journey was made all the more enjoyable because of the support and friendship of many amazing people in the department. Thank you to my Social Accuracy Lab-mates, past and present, especially Meanne Chan, Kate Rogers, and Damian Murray, and my cohort members – you have all been fantastic friends over the years.

Lastly, I am very grateful to have such wonderful family and friends outside of the department who have helped me maintain work-life balance throughout this process. To my parents, Penny and Derek, thank you for always being so supportive and encouraging. To my siblings and siblings-in-law, Gavin & Vicky and Andrea & Tyler – your friendship means the

world to me. To my nephew Ewan, thank you for always putting a smile on my face. Finally, to my husband-to-be, Alex, thank you for being so genuinely caring and invested in my work, and so excellent at making sure I also have fun.

The research presented in this dissertation was supported by a Social Sciences and Humanities Research Council (SSHRC) Joseph Armand-Bombardier Canada Graduate Scholarship – Doctoral and a Four-Year-Fellowship from the University of British Columbia. Additional funding was provided by SSHRC grants given to Dr. Jeremy C. Biesanz.

Chapter 1: Introduction¹

In 1937, Gordon Allport asked the question, "Who are these people?" (pg. 443), referring to people who are judgeable: transparent, open people, whose personalities, such as how kind, sociable, and organized they are, are easy to understand. Judgeable people play an important role in impacting the ultimate accuracy of interpersonal impressions (e.g., Biesanz, 2010; Zaki, Bolger, & Oschner, 2008). In turn, being judgeable may also have important personal and social consequences for the judged individual. Unfortunately, over 70 years later, despite some very interesting and important findings regarding judgeability, there still is not a clear answer to the questions of who these people are or why it is that they are more judgeable. The current dissertation hopes to fill in some of these holes by more deeply examining one characteristic that may play a critical role in judgeability: psychological adjustment. To this end, I will first discuss the importance of and define judgeability, and consider the role of psychological adjustment in judgeability (Chapter 1). I will then discuss and present two studies that examine whether the a target's psychological adjustment promotes more accurate first impressions and whether this is a result of greater judgeability or greater self-knowledge (Chapter 2). Next, I will present two studies that examine the specific mechanistic pathways through which psychological adjustment may promote more accurate first impressions (Chapter 3). Finally, I will conclude by integrating the findings of each of these studies and discussing the broader implications of this research

¹ Components of this chapter have been published. Human, L. J., & Biesanz, J. C. (2013). Targeting the good target: An integrative review of the characteristics and consequences of being accurately perceived. *Personality and Social Psychology Review, 17*, 248-272. doi: 10.1177/1088868313495593.

(Chapter 4).

1.1 Defining Judgeability

Colvin (1993a) defines judgeable people as "those who are open and knowable versus those who are closed and enigmatic" (pg. 861). This quality is also termed being a "good target" (Funder, 1995). Good targets tend to be high in "expressive accuracy" (Human, 2009), expressing themselves to others in a manner that enables others to perceive them accurately. Colvin (1993a, 1993b) has established judgeability as a stable individual difference, demonstrating convergent validity among multiple indices of judgeability (1993b) and temporal stability (1993a).

1.1.1 Distinctive Expressive Accuracy

In particular, this dissertation will focus on *distinctive* expressive accuracy or judgeability: the extent to which targets' unique, differentiating characteristics are accurately understood (Biesanz, 2010; Cronbach, 1955; Furr, 2008). Distinctive accuracy refers to understanding the target's unique profile of traits, and, equivalently, how the target differs from other people and the average person on a specific trait (see Biesanz & Human, 2010; Kenny & Winquist, 2001). For example, Jack is very energetic (a 6 out of 7) but not very forgiving (a 3 out of 7), while Joe is less energetic (a 5 out of 7) but more forgiving (a 4 out of 7). If Jack and Joe are both high in distinctive expressive accuracy, Jill should be able to tell that both Jack and Joe

Importantly, distinctive expressive accuracy controls for normative expressive accuracy, which refers to being seen as similar to the average person (Biesanz, 2010; Cronbach, 1955; Furr, 2008). That is, if most people tend to be more energetic than forgiving (e.g., if people on

average score 5 and 4 out 7, respectively), then Jill may see Jack in this manner simply because she rates Jack as similar to what the average person is like, rather than because she understands that Jack does indeed possess this specific ordering of traits. Thus, to assess distinctive expressive accuracy, the normative mean for each item is subtracted out from both the target's standing on the trait and the perceiver's impression. Thus, Jack would actually score 1 on energetic (6-5) and -1 on forgiving (3-4). In turn, if Jill rates Jack as a 7 on energetic and a 4 on forgiveness, her distinctive ratings (2 and 0, respectively) do capture her understanding that Jack is more energetic than forgiving and than the average person. However, because Jill rated Jack to be just as forgiving as the average person, her ratings do not capture that Jack is less forgiving than the average person.

Given that the normative personality profile is very positive on average (Borkenau & Zaltauskas, 2009; Edwards, 1957), being seen with normative accuracy can imply being seen positively. As well-adjusted individuals do tend to be more normative (Wood, Gosling, & Potter, 2007) and possess more positive personality traits (Emmons & Diener, 1985), it is important to control for normative expressive accuracy to determine whether well-adjusted individuals' judgeability is derived from being seen in line with their distinctive traits or simply as more similar to the normative, positive personality profile. Of note, previous work suggests that well-adjusted individuals' expressive accuracy is primarily a result of distinctive accuracy (Colvin, 1993b), making distinctive expressive accuracy the primary focus of the current studies. Thus, throughout the manuscript the general terms expressive accuracy and judgeability are used interchangeably with the more precise term distinctive expressive accuracy; I will explicitly note when I am discussing normative expressive accuracy.

1.1.2 The Realistic Accuracy Model

One useful way of defining judgeability more specifically is to consider the role that the target plays in the realistic accuracy model (RAM; Funder, 1995, 1999). RAM, a descendent of Brunswik's Lens Model (1956), outlines the four stages that need to be met in order for an accurate impression to be formed. Specifically, 1) relevant cues must be made 2) available to perceivers, who must then 3) detect and 4) appropriately utilize these cues. Note that RAM is a process model of how accurate impressions come to be formed in general – it is not a model of judgeability. However, RAM does help to shed light on the more ways in which people may be judgeable. That is, judgeable people can be defined as those who facilitate one or more of these stages, thereby enhancing the overall accuracy of impressions. Targets likely play the strongest role and have the most control over the first two stages, which reflect what type and how much information they provide to others. It is also possible, however, that targets could indirectly impact the latter stages by affecting perceiver behavior and cognition. That is, a judgeable individual may be someone who emits more *relevant* cues, enhances the sheer *availability* of information, promotes greater perceiver cue *detection*, and/or facilitates the perceiver's appropriate *utilization* of cues. RAM will be drawn upon heavily in Chapter 3 when the specific routes through which target adjustment may influence judgeability are examined.

One critical feature of RAM is that it is multiplicative in nature, rather than additive. That is, the utility of each successive stage is dependent on the success of previous stage. For example, facilitating the detection of cues does little good if cues are not available or relevant. Thus, at a minimum, good targets must make at least some relevant cues available, and their greater judgeability then comes from providing more than the bare minimum of relevant or available cues, and/or facilitating cue detection and availability. This aspect of RAM suggests

that the target play a very important role in influencing the accuracy of impressions, given that the target has the most direct influence on the earlier, more consequential stages of accurate person perception.

1.2 Importance of Judgeability

Along with Allport's (1937, 1961) and Colvin's (1993a, 1993b) attempts at drawing attention to the topic of judgeability, Funder also highlights the "good target" (1995, 1999) by designating it one of the four main categories of factors that can facilitate accurate impressions, along with "good judges", "good information", and "good traits". However, despite these attempts to define and focus research on the good target, it is the good judge, one who is particularly skilled at understanding others, who has received the bulk of empirical attention (for reviews see Funder, 1999; Hall & Bernieri, 2001; Ickes, 1997). Interestingly, within the realm of personality perception at least, there are indications that there are relatively few individual differences in the ability to judge others accurately (Biesanz, 2010; Human & Biesanz, 2011b, 2012). This lack of individual differences may help to explain why it has been so difficult to identify consistent moderators of being a good judge (Kenny, 1994).

In contrast, there is evidence of there being far more individual differences in judgeability (Biesanz, 2010). That is, some individuals' personalities, such as how talkative, reliable, and kind they are, are generally accurately understood by others, while other people are much more difficult to understand. Further, individual differences in judgeability impact whether perceivers are able to form accurate impressions of targets' current thoughts and feelings (Gesn & Ickes, 1999; Marangoni, Garcia, Ickes, & Teng, 1995; Snodgrass, Hecht, & Ploutz-Snyder, 1998; Thomas & Maio, 2008; Zaki et al., 2008; but see Thomas & Fletcher, 2003). For instance, more empathic perceivers are better able to infer targets' emotions only when the targets are

sufficiently expressive (Zaki et al., 2008). Thus, although research has typically focused more on perceivers than targets, the target appears to play at least as important, if not more important, a role in influencing the accuracy of interpersonal impressions.

1.3 Measuring Accuracy

In order to determine if an individual is accurately understood, we need some way of assessing how accurate the perceivers' impressions are. Measuring the accuracy of personality impressions draws upon the logic of construct validation (Cronbach & Meehl, 1955), and multitrait multi-method approaches (Campbell & Fiske, 1959), in which the personality judgment is viewed as a construct we attempt to validate by comparing it to an indicator of the individual's true standing on a trait. This "realistic accuracy approach" (Funder, 1995, 1999) thus requires comparing perceivers' judgments to an accuracy validation measure, which is meant to reflect as closely as possible the "truth", or correct judgment. One common accuracy validation measure is the target's own self report of his or her personality, termed self-other agreement (Funder & Colvin, 1997). However, as will be elaborated upon in Chapter 2, given that the self may not always be able (e.g., Dunning, Heath, & Suls, 2004) or willing (Paulhus, 1984) to provide an accurate self-report, it is preferable to take a multi-method approach, using multiple validation measures for what a person is like, such as behaviors (Vazire & Mehl, 2008), close-others' perspectives (Colvin, 1993a, 1993b), and/or ratings by an expert panel of judges (e.g., John & Robins, 1994). Even though any given measure may have flaws, combined these sources should provide a realistic picture of what a person is like. For example, if perceivers' ratings generally converge with a target's self-report and their close peer's report, the target's personality can be said to be judgeable, realistically speaking.

1.4 Psychological Adjustment

In the current dissertation, psychological adjustment is defined broadly, encompassing both hedonic well-being (e.g., happiness, a positive appraisal of one's life; Kahneman, Diener, & Schwartz, 1999), and eudaimonic well-being (e.g., a meaningful life and satisfying relationships; Keyes, Schmotkin, & Ryff, 2002; Ryan & Deci, 2001; Waterman, 1993). Of note, despite this theoretical distinction, hedonic and eudaimonic aspects of adjustment have been shown to have similar empirical correlates and outcomes (e.g., Kashdan, Biswas-Diener, & King, 2008; Nave, Sherman, & Funder, 2008; Ryan & Deci, 2001), indicating that these different aspects of adjustment may in practice function as a rather unified whole. Whether the specific facets of adjustment relate to judgeability in a similar manner will be explored in Chapter 2 by examining the relationship between each specific adjustment indicator and judgeability separately.

1.5 Psychological Adjustment and Judgeability

Judgeability is argued to be associated with psychological adjustment; specifically, the personalities of individuals who possess ego-resiliency and positive personality traits, such as extraversion and agreeableness, are more accurately understood by close others and trained examiners (Colvin, 1993a, 1993b). Further, adolescent psychological adjustment is a pre-cursor to judgeability in young adulthood, suggesting that adjustment plays a causal role in facilitating judgeability (Colvin, 1993a).

It remains unclear, however, whether well-adjusted individuals are also seen more accurately in first impressions. That is, does adjustment promote judgeability immediately, or is longer acquaintance required? Despite arguments that this is a process that is likely to emerge over long-term acquaintance (Colvin, 1993a), there is some preliminary evidence that adjustment does indeed promote judgeability in first impressions. For instance, more sociable, outgoing

individuals' levels of agreeableness and extraversion are better understood in zero-acquaintance situations, where perceivers merely sit in the same room with targets but do not interact (Ambady, Hallahan, & Rosenthal, 1995). Accuracy in this study was defined as self-other agreement. Furthermore, individuals whose nonverbal behavior is more accurately understood, assessed by both behavioral measures (i.e., ability to successfully pose facial expression) and self-reports, tend to possess more positive personality traits (Riggio & Riggio, 2002) and are viewed by others as more likable and attractive (Friedman, Riggio, & Casella, 1988; Larrance & Zuckerman, 1981; Riggio & Friedman, 1986). Although these studies did not examine the naturalistic getting-acquainted process and utilized indirect measures of adjustment, they do provide initial evidence that adjustment is associated with judgeability even after brief exposure.

1.6 Overview of the Dissertation

Each of the following studies will more directly address whether adjustment is associated with accuracy in first impressions, before examining deeper mechanistic questions. Specifically, Studies 1 and 2 will first examine whether well-adjusted individuals are seen with greater accuracy in face-to-face impressions, and then examine whether the source of this greater accuracy is indeed well-adjusted individuals' greater judgeability, or if it could instead be a result of well-adjusted target's greater self-knowledge (Chapter 2). Next, Studies 3 and 4 will examine whether well-adjusted individuals are also seen more accurately when first impressions are based upon video taped interviews, in order to examine the precise mechanisms through which greater adjustment could promote more accurate impressions (Chapter 3). As such, the proposed mechanisms linking greater adjustment to judgeability will be described in depth in Chapter 3. The dissertation will conclude by summarizing and integrating the findings across

these two sets of studies and considering the implications and future steps for this line of research (Chapter 4).

Chapter 2: Are Well-Adjusted Individuals Open Books? Disentangling Judgeability from Self-Knowledge²

As discussed in Chapter 1, there is evidence that well-adjusted individuals are seen more accurately by close others (Colvin, 1993a, 1993b). It remains unclear, however, whether welladjusted individuals personalities are more accurately understood in first impressions. Furthermore, even if well-adjusted individuals are seen more accurately by new acquaintances and close others, it is possible that this is not due to greater judgeability, but instead due to greater self-knowledge. This alternative explanation, that greater self-knowledge may be responsible for the more accurate impressions of well-adjusted individuals will be discussed

² A version of this chapter has been published. Human, L. J., & Biesanz, J. C. (2011a). Target adjustment and self-other agreement: Utilizing trait observability to disentangle judgeability and self-knowledge. *Journal of Personality and Social Psychology*, *101*, 202 - 216. doi:10.1037/a0023782. The data utilized in this chapter have also been utilized in other published work investigating different theoretical questions. Biesanz, J. C. (2010). The social accuracy model of interpersonal perception: Assessing individual differences in perceptive and expressive accuracy. *Multivariate Behavioral Research*, *45*, 853-885. Chan, M., Rogers, K. H., Parisotto, K. L., & Biesanz, J. C. (2010). Forming first impressions: The role of gender and normative accuracy in personality perception. *Journal of Research in Personality*, *45*, 117-120. Human, L. J., & Biesanz, J. C. (2011b). Through the looking glass clearly: Accuracy and assumed similarity in well-adjusted individuals' first impressions. *Journal of Personality and Social Psychology*, *100*, 349-364.

below, and then a solution for how to disentangle judgeability from self-knowledge will be presented. Two studies will then be presented that first directly examine whether well-adjusted individuals are more accurately understood in a face-to-face first impressions context, and then tease apart whether greater accuracy can be attributed to well-adjusted individuals' greater judgeability or self-knowledge.

2.1 Self-Knowledge

Importantly, if well-adjusted individuals are viewed with greater accuracy, especially when indexed as self-other agreement as is often the case, this does not necessarily imply that these individuals are judgeable, or are actually enabling others to form a more accurate impression. That is, there is an alternative route to enhancing self-other agreement that may have little impact on others' impressions: self-knowledge.

2.1.1 Self-Knowledge and Psychological Adjustment

Although much research suggests that people generally hold positively biased self-views (e.g., Dunning, Heath, & Suls, 2004), and that well-adjusted individuals may be especially prone to such a bias (e.g., Taylor & Brown, 1988; Taylor, Lerner, Sherman, Sage, & McDowell, 2003), more traditionally, well-adjusted individuals have been argued to possess greater self-knowledge (e.g., Jahoda, 1958; Rogers, 1961). Indeed, despite arguments for an adaptive role of positively biased self-views (Taylor & Brown, 1988), there is also evidence that a distorted, enhanced sense of self is associated with mal-adjustment (Colvin, Block, & Funder, 1995; John & Robins, 1994; Kurt & Paulhus, 2008; Paulhus, 1998; Robins & Beer, 2001; Robins & John, 1997). Additionally, the "positive bias" or self-enhancement many individuals appear to report is often

verified by close others (Block, 1965; Uziel, 2010). Nonetheless, the current research is focused

on the *accuracy* of perceptions, which can in fact operate independently of bias (Fletcher, 2002; Funder & Colvin, 1997; Gagné & Lydon, 2004; Kenny & Acitelli, 2001; Kenny et al., 2007). Thus, it is possible that even if well-adjusted individuals view themselves with a positive bias, they may still be able to hold accurate self-perceptions. That is, one can think they are more energetic and forgiving than they really are, reflecting positive self-bias, but recognize that they are more energetic than forgiving, reflecting self-knowledge. Indeed, focusing on accuracy, there is initial evidence to suggest well-adjusted individuals have greater self-knowledge (Vogt & Colvin, 2005) and, relatedly, greater self-concept clarity (Campbell, 1990) than less adjusted individuals.

Because people are generally able to form accurate first impressions (Funder & West, 2003; Hall, Andrzejewski, Murphy, Schmid Mast, & Feinstein, 2008), if well-adjusted individuals possess greater self-knowledge they could also enhance self-other agreement by bringing the self's perceptions more in line with others' perceptions. Thus, well-adjusted individuals may agree more with others regarding their personalities because they more accurately understand themselves, rather than because others more accurately understand themselves, rather than because others more accurately understand themselves, rather than because others more accurately understand them. For instance, Jill may be able to form an equally accurate impression about Jack's and Joe's levels of energy but agree more with Jack because Jack better understands himself than Joe does. Of course, in the case of well-adjusted individuals, both judgeability and self-knowledge could be at play, simultaneously enhancing self-other agreement, but past research provides little insight into whether one or both of these processes are involved. Indeed, because self-other agreement can be interpreted as either judgmental accuracy on the part of the other or as self-knowledge on the part of the self, it is unclear whether adjustment fosters self-other agreement through judgeability, self-knowledge, or both.

2.1.2 Measuring Self-Knowledge

Most frequently, self-other agreement has been used as an indicator of accuracy, as a target's self-report is argued to be a realistic, knowledgeable indicator of what a person is like (Funder, 1999; Funder & Colvin, 1997). An alternative perspective, however, is that personality is reputational in nature and therefore should be defined by the social consensus of what a person is like (e.g., Kruglanski, 1989). Such a perspective is likely to conceptualize self-other agreement as an indicator of self-knowledge rather than other-knowledge, because the other's point of view is considered the benchmark against which the self's perceptions are compared. Indeed, a vast social psychological literature has demonstrated the weaknesses of self-knowledge (e.g., Dunning, 2005; Paulhus, 1984; Wilson, 2002; Wilson & Dunn, 2004), casting doubt on the validity of the self's perspective. However, rather than arguing that the self or the other is "right", we may instead want to consider *when* the self or the other may be more "right". For instance, recent research has documented that the self and others have unique perspectives that independently predict a target's behavior (Vazire & Meehl, 2008). Further, Vazire's (2010) selfother knowledge asymmetry model (SOKA) posits that this asymmetry is predictable: although the self may lack insight in some domains, the self's knowledge is likely superior in other domains. The current research will take advantage of this predictable self-other knowledge asymmetry to begin disentangling whether adjustment facilitates accuracy, and self-other agreement in particular, via judgeability or self-knowledge.

2.2 Trait Observability

Not all traits are created equal: traits differ from one another meaningfully on a number of dimensions. One way to tease judgeability and self-knowledge apart is to take a more nuanced approach where one considers what types of traits the self and others are agreeing about in self-

other agreement. Studies 1 and 2 will focus on the characteristic of trait observability, which refers to how visible the trait is to outside observers (Funder & Dobroth, 1987). For instance, some behaviors are readily and quickly observable through an individual's overt behaviors, such as talkativeness and energy level, while other traits are less observable – taking longer to manifest behaviourally or potentially remaining largely within a person's subjective experience, such as forgiveness and anxiety. Perhaps not surprisingly, self-other agreement tends be higher for more observable traits, such as extraversion (Funder & Dobroth, 1987; John & Robins, 1993; Kenrick & Stringfield, 1980; Watson, Hubbard, & Weise, 2000), and behavioural acts (Gosling, John, Craik, & Robins, 1998; Ozer & Buss, 1991) compared to less observable traits, such as neuroticism. Note that trait observability is essentially unrelated to social desirability (Gosling et al., 1998; Ellis, Simpson, & Campbell, 2002). Some traits, positive or negative, simply have stronger behavioral manifestations than others, and these are easier for others to obtain information about and thus form accurate impressions.

Notably, others, compared with the self, are argued to be more accurate judges of highly observable traits because these traits have clear behavioral manifestations and are more salient from an external perspective (Robins & John, 1997; Vazire, 2010; White & Younger, 1988). Meanwhile, the self is argued to be a more accurate judge of low observability traits than others, not only because others have limited access to these traits but also because they are more salient to the self and so likely receive more attention and consideration. Thus, if forced to choose a perspective, the self could be considered "right" in judgments of less visible traits, while others could be considered "right" in judgments of another's less visible traits, particularly with longer term acquaintance, and the self might be more accurate than others about

their highly visible traits in some instances, such as when situational pressures strongly influence one's external behavior. However, in the current studies, the self's judgment of their less visible traits is likely more accurate than brand new acquaintances' judgments. Further, in the current studies, the situation is "weak" in that participants are given minimal instructions and thus are able to behave quite freely; therefore others should have access to behavior that is diagnostic of the self's more visible personality traits. In turn, this proposed asymmetry in knowledge for high and low observability traits (Vazire, 2010) provides leverage into understanding whether it is well-adjusted individuals' judgeability or self-knowledge that impacts self-other agreement.

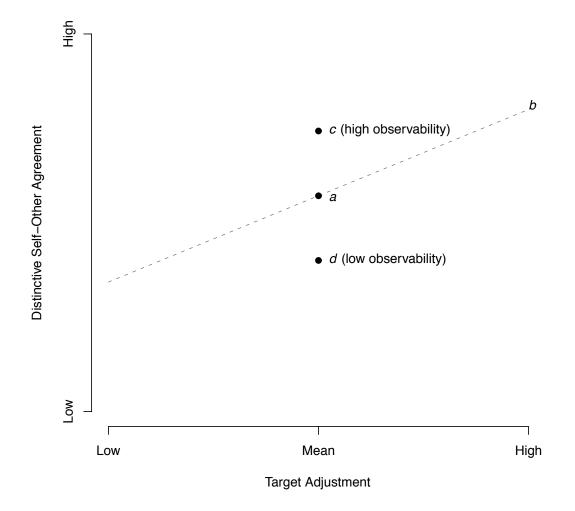
2.2.1 Current State of Knowledge: Target Adjustment, Observability, and

Agreement

To begin, consider Figure 1, which summarizes the current state of knowledge regarding the associations between target adjustment, trait observability, and self-other agreement. Point a is the average level of self-other agreement across observability and target adjustment – the grand mean or *centercept* (Wainer, 2000). There is evidence that, on average across traits, psychological adjustment is associated with greater self-other agreement (line b), at least for long-term acquaintances (e.g., Colvin, 1993b). The current research will examine whether this extends to first impressions. There is also evidence that, on average across levels of target adjustment, self-other agreement is greater for high (point c) compared with low observability traits (point d; e.g., Funder & Dobroth, 1980). But what is the association between adjustment and self-other agreement at different levels of trait observability? The answer depends on whether adjustment enhances self-other agreement via judgeability or self-knowledge. This is illustrated in Figures 2A, B, and C, which all present different theoretical models of how target adjustment and trait observability may interact in predicting self-other agreement. Note that these

figures are identical to Figure 1 with the only difference being the slope of the lines for high and low observability.

Figure 1. Summary of previously published findings of the effects of target adjustment and trait observability on self-other agreement.



Note. The differences in self-other agreement across points *a*, *c*, and *d* reflect the main effect of trait observability averaged across levels of target adjustment. The slope of line *b* reflects the effect of target adjustment on self-other agreement averaged across levels of trait observability. © Journal of Personality and Social Psychology, 2011, by permission.

2.2.2 Expected Results for the Self-Knowledge Explanation

If target adjustment fosters self-other agreement via self-knowledge, then adjustment should be most strongly related to self-other agreement on high observability traits (Figure 2A). Others are generally able to form quite accurate first impressions of targets' high observability traits (Funder & West, 2003; Hall et al., 2008), although agreement is certainly not perfect or at a maximum. For instance, the self-other agreement correlations on extraversion, arguably the most observable and most accurately judged trait, are significant even in zero-acquaintance impressions (e.g., r = .37; Beer & Watson, 2008), but still improve with greater acquaintance (Biesanz, West, & Millevoi 2007; Watson et al., 2000). Thus, there is certainly room for improvement in the accuracy of first impressions on highly observable traits. Self-knowledge, we argue, is one likely potential way to improve this agreement, as it should bring the self's perspective more in line with the accurate impressions formed by others. In fact, the self has even been argued to be less knowledgeable about highly observable traits compared to others because of the self's unique perspective (Vazire, 2010) – individuals are more focused on their internal experiences, which may result in less attention to one's external behaviors and an overweighting of internal manifestations. As such, one's perceptions of more external behaviors may be less accurate relative to others who may have a clearer external perspective. In turn, improving one's self-knowledge on more observable traits should enhance self-other agreement in first impressions.

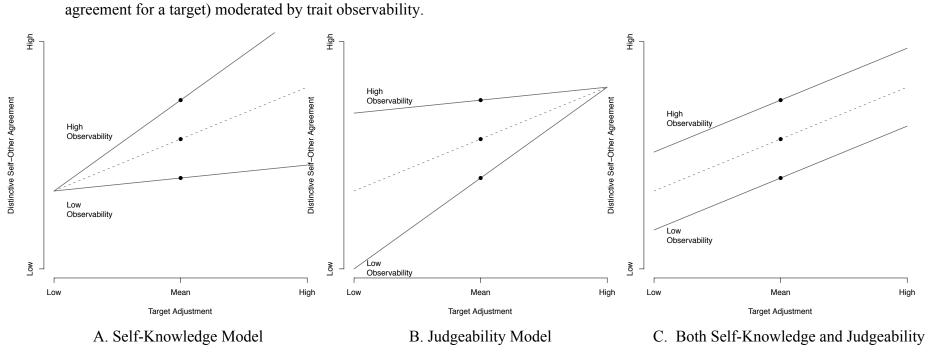


Figure 2. Theoretical models of the relationship between target adjustment and expressive accuracy (distinctive self-other

Note. Dashed lines represent the relationship between target adjustment and expressive accuracy on average across levels of trait observability (line *b* in Figure 1); Plotted points represent the main effect of trait observability averaged across levels of target adjustment (points *a*, *c*, and *d* in Figure 1). Both dashed lines and plotted points are identical for all three theoretical models and correspond to that presented in Figure 1. \bigcirc Journal of Personality and Social Psychology, 2011, by permission.

In contrast, given that others have a more difficult time accurately perceiving targets' low observability traits, then an improvement in one's self-knowledge on such traits may not aid selfother agreement. Indeed, self-knowledge on less observable traits would only be useful if the target makes that information more available as well (that is, is also judgeable). If selfknowledge alone is driving self-other agreement, there should be a weak or nonexistent relationship between adjustment and self-other agreement for low observability traits. For instance, if others can readily perceive how energetic Jack is and Jack also understands how energetic he is, then there will be high self-other agreement on this trait. Even without revealing more information, enhancing one's self-knowledge on highly observable traits should improve agreement with others. However, even if Jack has a perfect understanding of how forgiving he is, he will not necessarily agree with others about his standing on this trait because others will have minimal access to this information, particularly in first impressions. In sum, at the extremes, if adjustment only enhances self-other agreement for high observability traits.

2.2.3 Expected Results for the Judgeability Explanation

If target adjustment fosters self-other agreement via judgeability, then adjustment should be most strongly related to self-other agreement on low observability traits as illustrated in Figure 2B. Although low observability traits are by definition less visible to others, targets can behave in ways to make them more visible, whether by "leaking" subtle behavioural cues or by verbally providing others with more information about their status on these traits. If welladjusted individuals are judgeable, providing others with more information, then additional information on low observability traits should enhance self-other agreement. In contrast, high observability traits are by definition already visible – although targets could try to provide

additional or more reliable information, it may not be that helpful as others are already able to form rather accurate impressions about these traits. Thus, if adjustment enhances self-other agreement through the provision of information, there is likely to be a minimal association between adjustment and self-other agreement for high observability traits.

Consider Jack - regardless of how judgeable Jack is, he will provide others with sufficient information on how energetic he is because this trait has clear behavioral manifestations. In contrast, being judgeable will enable others to form a more accurate impression of his tendency to forgive others. Less judgeable individuals will primarily keep information regarding less visible traits to themselves – their tendency to forgive others may emerge only over the long term or may never manifest beyond their own subjective experience of it. Jack, however, being judgeable, will likely exhibit his forgiveness more obviously, through behavioural cues or by more readily disclosing his private thoughts and feelings with others. At the extreme then, if adjustment only enhances self-other agreement by improving others' knowledge, or via judgeability, then adjustment will only be associated with self-other agreement for low observability traits.

Note that judgeability may be associated with highly observable traits in some cases. For instance, Ambady et al. (1995) found some evidence that more judgeable targets were seen with greater self-other agreement on the trait of extraversion in zero-acquaintance situations. Thus, perhaps when information is very low, such as when one does not even speak to the target, judgeability will benefit self-other agreement on high observability traits. However, in face-to-face interactions, where more information is readily available to others, high observability traits should be relatively accessible regardless of judgeability, but the accuracy of impressions on low observability traits should benefit from greater judgeability. To date, no work appears to have

examined whether some traits benefit more than others from a target's judgeability in face-toface interactions, a gap that the present research will begin to fill.

2.2.4 Expected Results for Dual Self-Knowledge and Judgeability Explanations

Finally, adjustment may be related to both self-knowledge and judgeability simultaneously. Both self-knowledge and judgeability can co-exist and are not theoretically incompatible – Jack may better understand himself and better convey that information to others. As depicted in Figure 2C, if both processes occur at relatively equal levels then the slopes of the relationship between psychological adjustment and self-other agreement will be parallel for both high and low observability traits. That is, if judgeability and self-knowledge are equally important, there will not be a differential relationship between adjustment and self-other agreement across different levels of trait observability.

2.3 Summary

Overall, the judgeability vs. self-knowledge accounts make very different predictions regarding the relationship between adjustment and self-other agreement at different levels of trait observability. Both the self-knowledge model and the judgeability model posit that observability moderates the relationship between target adjustment and self-other agreement. The critical feature of these models is that the nature of the predicted interactions are completely different between these two accounts and, in fact, fully opposite.³ Thus examining trait observability

³ If higher levels of target adjustment and observability are coded as larger values (i.e., in the positive direction), then self-knowledge predicts an positive interaction between target

provides critical insight into the mechanisms through which target adjustment is associated with self-other agreement. To examine these mechanisms, two round-robin studies involving naturalistic first impressions will first examine the role of psychological adjustment in first impressions, predicting that well-adjusted individuals will be seen with greater self-other agreement than less adjusted individuals by new acquaintances. Next, by examining the associations between adjustment and self-other agreement for low vs. high observability traits, the extent to which self-other agreement is more a function of judgeability or self-knowledge will be explored.

2.4 Study 1

2.4.1 Method

Overview

Previously unacquainted participants came to the lab in groups and interacted with one another in a round-robin design, where each participant met with every other participant individually for three minutes. Participants were asked to "Introduce yourself, and try to get to know one another". After each interaction, participants separated and provided a personality assessment of the person they had just met with, before moving on to meet with the next participant. Participants also provided self-reports on the same personality measures, completed a number of adjustment measures, and provided contact information for a parent or guardian and two peers so that these close informants could complete personality questionnaires about the participant.

adjustment and observability in predicting self-other agreement whereas judgeability predicts a negative interaction.

Participants

In total, 273 undergraduates (199 females, 74 males, $M_{age} = 20.90$, SD = 4.15) at the University of British Columbia (UBC) participated in 44 groups of 3 – 12 members (Median = 6), receiving either \$20 or two extra course credits as compensation. The majority of participants reported being of either East Asian (57%) or Caucasian (31%) descent, and the remaining 12% of participants reported a variety of ethnic backgrounds (such as Middle Eastern and South American).

Measures

Personality Measures and Observability Coding. Participants provided self- and other personality ratings on a 21-item abbreviated version of the Big Five Inventory (BFI; John & Srivastava, 1999), using a 1 (*disagree strongly*) to 7 (*agree strongly*) rating scale.⁴ Three additional items were included to assess intelligence: "Is bright", "Gets good grades", and "Is intelligent". Each item was categorized as either low or high observability following Campbell (2005), who had 122 participants rate the observability of 32 traits and then categorized 19 of these traits as either high or low observability. All of the 24 items used in the current study map on conceptually to traits categorized as either high or low in observability. For example, items related to extraversion, such as "Is full of energy," and intellectual ability, such as "Is bright," were coded as high observability while items related to neuroticism, such as "Remains calm in

⁴ The 21 items correspond to items 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 21, 26, 31, 34, 36, and 38 of the original 44-item BFI presented in John and Srivastava (1999).

tense situations," and some aspects of conscientiousness, such as "Does a thorough job," and agreeableness, such as "Has a forgiving nature," were coded as low observability.⁵

Informant Ratings. Participants were also asked to provide the contact information of two peers and a parent or guardian so that we could obtain personality assessments of the participants by close informants. All informants were mailed or emailed the same personality questionnaire as completed by participants to fill out about the participants. A total of 161 complete parental reports (59%) were returned, while 178 (65%) of participants had at least one peer report. Combined, 218 (80%) participants had at least one informant report (one peer or parent) to be used in analyses examining close informant – new acquaintance agreement (informant-other agreement).

Adjustment. All participants completed Rosenberg's (1965) Self-Esteem Scale (M = 5.38, SD = 1.01, $\alpha = .88$) and the Satisfaction with Life Scale (M = 4.80, SD = 1.27, $\alpha = .86$; Diener, Emmons, Larsen, & Griffin, 1985), while a subset (n = 156) also completed the Positive

⁵ Observability ratings from 121 independent raters (UBC undergraduate students) were also collected, which mapped on very well to the dichotomy. The only exception was that the raters on average perceived traits related to intelligence (e.g., "Is intelligent", "Receives good grades") as less observable, while we had categorized these as highly observable. However, there is strong empirical evidence that intelligence is in fact highly observable with minimal acquaintance (e.g., Borkenau & Liebler, 1993) and for these analyses a trait's actual observability is more important that the perception of its observability. Nonetheless, the general pattern of results we will present using our dichotomy were replicated using these continuous ratings.

Relations with Others subscale of the Psychological Well-Being scale (M = 5.35, SD = .84, $\alpha = .86$; Ryff, 1989), all on a 1 (*disagree strongly*) to 7 (*agree strongly*) rating scale, and the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), on a 0 (*none*) – 3 (*all of the time*) scale that is summed to form the total score (M = 15.24, SD = 10.05, $\alpha = .91$).

Analytical Model and Approach

The current research utilizes the *social accuracy model* of interpersonal perception (SAM; Biesanz, 2010) to assess distinctive self-other agreement (see also Cronbach, 1955; Furr, 2008). Recall that distinctive accuracy or self-other agreement refers to agreement regarding the specific target's unique characteristics, those that differentiate the target from others and from the average person. Distinctive agreement has two interpretations: (1) the differentiation of targets' self-reported profiles of traits from the normative (i.e., mean) self-report or, equivalently, (2) the differentiation of a given target's self-reported level on a trait from other targets' self-reported trait levels. For additional insight into the relationship between profile analyses and how they correspond to the average trait-level analysis, see Kenny and Winquist (2001, pp. 275-278) and Biesanz and Human (2010, *online supplemental appendix*).

The social accuracy model also assesses normative agreement, the extent to which the perceiver views a target as similar to the normative or average personality profile. By simultaneously examining distinctive and normative self-other agreement, the current research is able to directly assess the extent to which new acquaintances agree with well-adjusted individuals' self-reported unique, differentiating traits or their normative, positive traits.

The associations between target adjustment and distinctive and normative agreement were estimated with a multilevel model utilizing *R*'s lme4 package (R Development Core Team, 2009; Bates & Sarkar, 2007) following the social accuracy modeling procedures outlined by

Biesanz (2007, 2010; see also Biesanz & Human, 2010, Human & Biesanz, 2011b, for empirical examples). In brief, the social accuracy model analyzes the *unstandardized* regression equation

$$Y_{ijk} = \beta_{0ij} + \beta_{1ij}TSelf_{jk} + \beta_{2ij}Mean_k + \varepsilon_{ijk}$$
(1)

where Y_{ijk} is perceiver *i*'s rating of target *j* on item *k*, *TSelf_{jk}* is target *j*'s self-report on item *k*, and *Mean_k* is the mean self-report on item *k*. For the perceiver *i* – target *j* dyad, the estimated regression coefficient β_{0ij} is the intercept (predicted rating when *TSelf_{jk}*=0 and *Mean_k*=0). The unstandardized coefficient β_{1ij} represents distinctive self-other agreement for perceiver *i* with target *j* – the level of self-other agreement after holding constant *Mean_k*. In other words, β_{1ij} is the level of self-other agreement for the perceiver *i*-target *j* dyad across the 24 assessed personality items holding constant and controlling for the average person's self-reported personality profile. Finally, β_{2ij} is the estimated level of normative agreement for perceiver *i* with target *j* – the correspondence between the perceiver's ratings and the average person's self-reported profile after partialling target *j*'s self-report.

In the social accuracy model this basic two-predictor unstandardized regression equation is estimated for each perceiver-target dyad. Following the general logic of Kenny's social relations model (1994), main effects for perceivers (averaged across targets) and targets (averaged across perceivers) are estimated as well as the residual or interaction term utilizing a crossed-random effects multilevel model. Of note, these main effects and interaction terms represent unstandardized regression slopes. For instance, the distinctive accuracy slope for perceiver *i* with target *j*, $\beta_{1ij} = \beta_{10} + u_{1i} + u_{1j} + u_{1(ij)}$, where u_{1j} represents target *j*'s distinctive accuracy effect averaged across perceivers.⁶ This latter equation represents the traditional Level 2 equation where target (or perceiver or dyadic) variables may be introduced as potential moderator variables (e.g., $\beta_{1ij} = \beta_{10} + \beta_{11}Adj_j + u_{1i} + u_{1j} + u_{1(ij)}$ where Adj_i is target *j*'s level of adjustment). In the following analysis, we include targets' adjustment levels in as a moderator of the distinctive self-other and normative agreement slopes to determine whether those who are better adjusted are seen with more distinctive self-other agreement and more normatively.

In order to examine the role of observability in the present model, the observability of trait item k (*Obs_k*; dummy coded, 0 = low observability, 1 = high observability) is introduced as a potential moderator as well within equation (1). Specifically,

$$Y_{ijk} = \beta_{0ij} + \beta_{1ij} TSelf_{jk} \times Obs_k + \beta_{2ij} Mean_k \times Obs_k + \varepsilon_{ijk}$$
(2)

Within the context of equation (2), the unstandardized regression coefficient β_{11} represents the effect of three-way interaction term of $TSelf_{jk} \times Obs_k \times Adj_j$ predicting perceiver ratings and is the primary regression coefficient of interest. Specifically, it represents the interaction of target adjustment and trait observability in predicting self-other agreement. As such, a positive interaction would indicate that well-adjusted individuals are viewed with greater self-other agreement on high observability traits – this would suggest that adjustment fosters greater self-knowledge, which then enhances self-other agreement. In contrast, a negative three-

⁶ It is also possible to model random effects for the average distinctive and normative agreement effect for each group to account for the potential dependence among groups, as well as model the dyad-specific effects unique to each perceiver-target pair (i.e., the distinctive and normative agreement not accounted for by their perceiver and target main effects). Modeling such random effects in the following analyses led to no significant differences in the results.

way interaction would indicate that well-adjusted individuals are viewed with greater self-other agreement on low observability traits – this would suggest that adjustment fosters greater judgeability on less visible traits, which then enhances self-other agreement.⁷

2.4.2 Results

Mean Levels of Self-Other Agreement associations with Adjustment

On average, participants demonstrated significant levels of distinctive self-other agreement, b = .08, z = 5.82, p < .0001, and normative agreement, b = .93, z = 34.96, p < .0001. Thus, perceivers and targets agreed about the targets' unique, differentiating traits, and targets on average were viewed highly normatively and positively. Were well-adjusted individuals viewed with greater distinctive self-other agreement and normative agreement? Of note, well-adjusted individuals were indeed viewed by new acquaintances with greater distinctive self-other agreement than less adjusted individuals, all |z|s > 1.99 (see Table 1, second column, which represents the relationship between target adjustment and self-other agreement averaged across levels of observability), but were not viewed as more normative, |z|s < 1.29. Thus, in line with Figure 1, line *b*, on average across all traits, well-adjusted individuals were seen more in line with their unique self-reported characteristics than less adjusted individuals (see Figure 3A,

⁷ The social accuracy modeling procedures also enable the assessment of assumed similarity – the extent to which the perceiver views the target as similar to the self (see Human & Biesanz, 2011b). It is plausible that perceivers may be more inclined to view well-adjusted targets as similar to themselves and thus, if there does indeed exist some real similarity, achieve greater levels of self-other agreement via greater assumed similarity. Nevertheless, all the results we report in Chapters 2 and 3 held controlling for this potential influence of assumed similarity.

dashed line). These findings held controlling for perceiver and target gender and ethnicity; indeed, perceiver and target gender and ethnicity were not significantly associated with distinctive self-other agreement, all |z|s < 1.73.

Adjustment Measure	Distinctive Agreement at			Test of 3-way
	High	Mean	Low	Interaction
	Observability			
	d	d	d	Ζ
Study 1 (N=273)				
Self-esteem	.44**	.60**	.77**	-3.93**
Well-being	.30*	.43*	.56**	-2.95**
Depression (reversed)	.58**	.59**	.60**	-0.22
Relationship Well-being	.09	.32*	.55**	-3.96**
Study 2 (N=107)				
Self-esteem	.39*	.61**	.83**	-3.84**
Well-being	.41*	.52**	.63**	-1.90†
Depression (reversed)	.43*	.53**	.63**	-1.55
Relationship Well-being	.26	.39*	.52*	-2.21*
Autonomy	.42*	.53**	.64**	-1.86†
Mastery	.52**	.74**	.95**	-3.53**
Personal Growth	.03	.24	.50*	-4.12**
Purpose in Life	.17	.45*	.72**	-4.36**
Self-acceptance	.51*	.63**	.74**	-2.02*

Table 1. Associations between distinctive self-other agreement and adjustment at low, mean, and high levels of trait observability, and the test of the 3-way interaction in Studies 1 and 2.

Note. The increasing effect sizes from high to low trait observability and significant, negative 3way interactions demonstrate that target adjustment is more strongly associated with distinctive self-other agreement on low compared with high observability traits. Standardized effect sizes, *d*, were calculated as the change in the respective slope for a 2 standard deviation change in the measure of adjustment divided by the random effect standard deviation for that slope, τ (see Gelman, 2008). $\dagger p < .10$, * *p* < .05, ** *p* <.01. © Journal of Personality and Social Psychology, 2011, by permission.

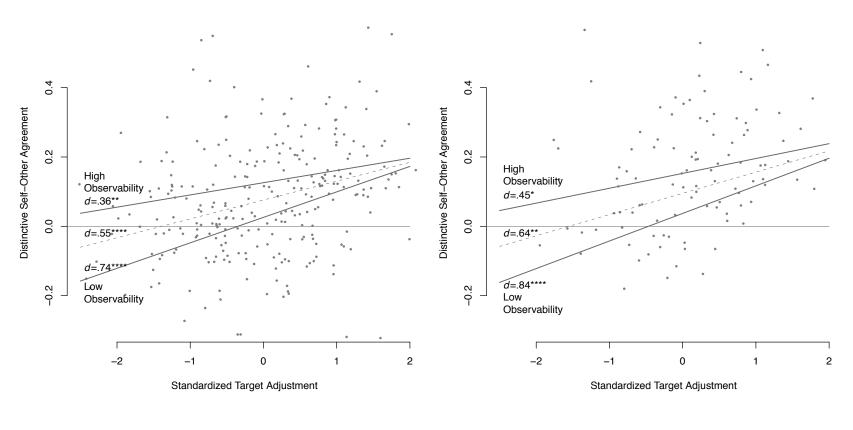


Figure 3. The relationship between target adjustment and distinctive self-other agreement moderated by trait observability

in Studies 1 and 2.

A. Study 1 (*N*=273)

B. Study 2 (*N*=107)

Note. Target adjustment is a composite of self-esteem, relationship well-being, and subjective well-being. Plotted points represent empirical Bayes estimates of target main effect distinctive self-other agreement slopes averaged across perceivers. © Journal of Personality and Social Psychology, 2011, by permission.

Self-Other Agreement and Trait Observability

To better interpret the meaning of this association between psychological adjustment and distinctive self-other agreement, we now examine the role of trait observability. In line with previous research, distinctive self-other agreement was significantly greater for high than low observability traits, b = .10, z = 10.93, p < .0001, indicating that perceivers and targets agreed more about the targets' standing on more observable traits, consistent with Figure 1 (points *c* and *d*). Incidentally, normative agreement was marginally greater for low rather than high observability traits, b = .03, z = -1.89, p < .10. This is perhaps not surprising given that it is more difficult to form distinctive impressions on less observable traits, and thus normative information may be used here to fill in the gaps.

Distinctive Self-Other Agreement, Trait Observability, and Adjustment

High Trait Observability. How does target adjustment moderate the association between trait observability and distinctive self-other agreement? First, for highly observable traits, psychological adjustment was significantly and positively associated with greater self-other agreement for all adjustment measures except relationship well-being, b = .01, z = .54, p = .59 (see Table 1, column 1). Thus, well-adjusted individuals may indeed possess greater self-knowledge than less adjusted individuals, which would facilitate this greater self-other agreement on highly observable traits. Whether self-knowledge truly drives well-adjusted individuals' greater self-other agreement, however, depends on how strongly adjustment is linked to self-other agreement on low observability traits.

Low Trait Observability. Well-adjusted individuals were also viewed with significantly greater self-other agreement than less-adjusted individuals on their less observable traits, all |z's | > 3.20 (see Table 1, column 3). Thus, well-adjusted individuals also appear to have made their

less observable traits more available to others. Critically, in full support of the judgeability, rather than self-knowledge, account, there was a significant, negative three-way interaction between adjustment, self-other agreement and observability, which emerged for each adjustment measure except depression (see Table 1, column 4). This interaction indicates that psychological adjustment is more strongly associated with distinctive self-other agreement for low than high observability traits. Note the great similarity between the theoretical figure for the judgeability account (Figure 2B) and the empirical figure for these data (Figure 3A). Thus, well-adjusted individuals were seen with greater self-other agreement than less adjusted individuals on low compared with high observability traits.⁸

A closer look at Figure 3A reveals that well-adjusted individuals were seen with essentially equivalent levels of self-other agreement on both their high and low observability traits. That is, well-adjusted individuals' less visible levels of forgiveness are seen just as accurately as their directly observable energy level or talkativeness. In contrast, self-other agreement was far lower regarding maladjusted individuals low observability traits compared to their high observability traits. In fact, maladjusted individuals' less observable traits were actually seen somewhat inaccurately – perhaps these individuals provide little and even potentially misleading information, leaving new acquaintances with apparently inaccurate impressions. Overall, this pattern of results is most consistent with the judgeability explanation

⁸ An unexpected three-way interaction between adjustment, trait observability, and normative self-other agreement emerged for roughly half of the adjustment measures in Studies 1 and 2 such that well-adjusted individuals were seen as more normative on their high rather than low observability traits compared with less adjusted individuals.

for the association between adjustment and self-other agreement: well-adjusted individuals enable others to form more accurate impressions by providing others with more information on their less visible traits.

Informant-Other Agreement, Trait Observability, and Adjustment

Trait Observability. Do new acquaintances really see well-adjusted individuals' less visible traits more accurately, or are they just agreeing more with their biased self-views? In order to obtain another perspective about the participants' personalities, informant-other agreement can be examined – how well do new acquaintances' impressions map on to close others' impressions of the participants? On average, new acquaintances demonstrated significant levels of distinctive agreement with participants' close informants, b = .17, z = 10.84, p < .0001, as well as high normative agreement, b = .89, z = 32.27, p < .0001. Thus, perceivers agreed with informants' perceptions of the targets' unique, differentiating traits, even more so than they did with the participants themselves (perhaps reflecting the greater overlap in others' perspectives compared to the self's perspective). As with self-other agreement, informant-other distinctive agreement was significantly higher for more observable traits, b = .04, z = 7.12, p < .0001. Thus, new acquaintances agree more with close others' assessments of individuals' observable traits than their less observable traits.

Adjustment. Were well-adjusted individuals viewed with greater distinctive informantother agreement? Distinctive informant-other agreement was greater for those higher in selfesteem and lower in depression, all |z|s > 2.50, but not for those higher in well-being or relationship well-being, |z|s < 1.44. Of note, parallel to the self-other agreement analyses, the same significant, negative three-way interaction between adjustment, informant-other agreement and observability emerged for each adjustment measure, |z|s > 2.50. Thus, adjustment was more

significantly related to informant-other agreement on low compared with high observability traits. Indeed, informant-other distinctive agreement on low observability traits was significantly higher for well- compared to less adjusted individuals, all |z|s > 2.10. Conversely, there were no significant differences in informant-other distinctive agreement on high observability traits between more and less adjusted individuals, all |z|s < .42. In sum, new acquaintances and close informants agree more about well-adjusted individuals' distinctive personality traits because well-adjusted individuals make their less observable traits more available to others. These results help address concerns that utilizing self-reports in the agreement measure introduces bias and provide further support for the judgeability account.

2.5 Study 2

Overall, Study 1 provided initial evidence that adjustment is related to greater self-other agreement via judgeability rather than self-knowledge. However, despite the consistency of these effects across both self-other and informant-other agreement, and the different adjustment measures in the current study, most of the adjustment measures in Study 1 were hedonic in nature. Further, given that we are investigating a two-way interaction predicting a slope (self-other agreement), it is especially important to replicate this effect with an additional sample and more adjustment measures. Thus, Study 2 was conducted to replicate these results with a broader range of adjustment measures, with a focus on including more eudaimonic adjustment measures.

2.5.1 Method

Overview

Parallel to Study 1, participants engaged in a round-robin design, meeting with and then providing personality assessments of every other member of the group. Participants again

provided self-reports of their personalities, contact information for two peers and a parent, and completed a broader range of psychological adjustment than that of Study 1.

Participants

In total, 107 undergraduates (79 female, 28 male; $M_{age} = 20.16$, SD = 3.56) at the University of British Columbia participated in 12 groups of 7 – 11 (Median = 8.5). Participants were compensated with either \$20 or 2 extra course credits. Once again, the vast majority of participants reported being of primarily East Asian (56%) or Caucasian (35%) descent, while 14% participants reported a variety of different ethnic backgrounds and one participant did not report their ethnic background.

Measures

Personality Measures and Observability Coding. Self- and other personality ratings were again made on a 24-item version of the BFI (John & Srivastava, 1999), on a 1 (*disagree strongly*) to 7 (*agree strongly*) rating scale. The items and observability categorization are identical to Study 1.

Informant Reports. Following the same procedure for obtaining peer and parent reports as Study 1, 59 complete parental reports (55%) were returned, while 81 (76%) of participants had at least one peer report. In total, 91 (85%) of participants had at least one informant report to utilize for the informant-other agreement analyses.

Adjustment. Participants completed the same adjustment measures as in Study 1, namely Rosenberg's (1965) Self-Esteem scale (M = 5.43, SD = 1.02, $\alpha = .91$), the Satisfaction with Life Scale (M = 4.77, SD = 1.15, $\alpha = .82$; Diener et al., 1985), the Center for Epidemiological Studies Depression Scale (M = 14.20, SD = 8.19, $\alpha = .85$; CES-D; Radloff, 1977) and the Positive Relations with Others subscale of Ryff's (1989) Personal Well-Being Scale (M = 5.44, SD = .86, α =.87; Ryff, 1989), and in an effort to include more eudaimonic well-being measures, the remaining subscales from this measure were also included, specifically, Autonomy (*M* = 4.48, *SD* = .87, α =.88), Mastery (*M* = 4.78, *SD* = .85, α =.87), Personal Growth (*M* = 5.82, *SD* = .70, α =.88), Purpose in Life (*M* = 5.25, *SD* = .90, α =.88), and Self-Acceptance (*M* = 5.09, *SD* = .99, α =.92).

2.5.2 Results

Mean Levels of Self-Other Agreement associations with Adjustment

Once again, participants demonstrated significant levels of distinctive self-other agreement, b = .10, z = 4.86, p < .0001, and normative agreement, b = .94, z = 22.94, p < .0001, at levels comparable to Study 1. Further, well-adjusted individuals were again viewed by new acquaintances with greater distinctive self-other agreement than less adjusted individuals, all |z|s> 1.98, except for personal growth, b = .03, z = 1.21, p = .23 (see Table 1, second column), but were not viewed as more normative, all |z|s < 1.69. Once again, all effects held controlling for perceiver and target gender and ethnicity, and neither perceiver or target gender or ethnicity were significantly associated with distinctive accuracy, all |z|s < 1.91. Overall, the various specific indicators of psychological adjustment show a very consistent pattern of associations with judgeability, suggesting that it is psychological adjustment more generally, rather than a specific aspect of adjustment, that is related to judgeability.

Distinctive Self-Other Agreement, Trait Observability, and Adjustment

Self-Other Agreement and Trait Observability. As in Study 1, distinctive self-other agreement was significantly greater for high compared with low observability traits, b = .13, z = 9.89, p < .0001. Normative agreement was not significantly different for high compared with low observability traits, b = .01, z = .65, ns.

High Observability Traits. Examining distinctive self-other agreement for high observability traits, there was once again a positive association between target adjustment and self-other agreement that was significant for the majority of adjustment measures (see Table 1, column 1). Again partially supporting the self-knowledge account, well-adjusted individuals were viewed with somewhat greater self-other agreement on their highly observable traits, compared with less adjusted individuals.

Low Observability Traits. Notably, replicating Study 1, well-adjusted individuals were viewed with significantly greater self-other agreement than less adjusted individuals on their less observable traits, all |z's| > 2.41. Once again, well-adjusted individuals have made their less observable traits more available to others. In full support of the judgeability account and in line with Study 1, there was a significant, negative three-way interaction between adjustment, self-other agreement and observability for the majority of adjustment measures (see Table 1, column 4). That is, self-other agreement was more strongly related to adjustment on low compared with high observability traits in a manner that was remarkably similar to that observed in Study 1 (see Figure 3B). Thus, once again this pattern of results supports the judgeability account of the association between target adjustment and self-other agreement: well-adjusted individuals primarily enable others to form more accurate impressions of them by providing others with more information.

Informant-Other Agreement, Trait Observability, and Adjustment

Trait Observability. Once again, we examined the associations between psychological adjustment, trait observability and informant-other agreement. On average, new acquaintances demonstrated significant levels of distinctive agreement with participants' close informants, b = .18, z = 7.26, p < .0001, as well as high normative agreement, b = .87, z = 20.95, p < .0001.

Further, informant-other distinctive agreement was again significantly higher for more observable traits, b = .05, z = 7.52, p < .0001.

Adjustment. Were well-adjusted individuals viewed with greater distinctive informantother agreement? New acquaintances agreed more with informants' perceptions for those low in depression and high in autonomy, mastery, and purpose in life, all |z| > 2.01, but not for those high in self-esteem, well-being, relationship well-being, growth, and self-acceptance, $|z| \le 1.52$. Critically, the significant, negative three-way interaction between adjustment, informant-other agreement and observability emerged again for the majority of adjustment measures, |z| > 2.50, with the exception of marginal effects for self-esteem, relationship well-being, and depression, |z|s < 1.87. Thus, adjustment was more strongly related to greater informant-other agreement on low compared with high observability traits. Indeed, well-adjusted individuals were seen with significantly greater informant-other distinctive agreement than less adjusted individuals on their low observability traits for all adjustment measures, |z| > 2.10, except for a marginal effect on self-esteem, b = .04, d = .44, z = 1.94, p = .05, and no effect on relationship well-being, b = .09, d = .10, z = .04, p = .97. Conversely, well-adjusted individuals were seen with no greater informant-other distinctive agreement than less-adjusted individuals on high observability traits across all of the adjustment measures, $|z| \le 1.56$, although autonomy was trending, b = .05, d =.44, z = 1.89, p < .06. Once again, new acquaintances and close informants agree more about well-adjusted individuals distinctive personality traits because well-adjusted individuals make their less observable traits more available to others.

2.6 Discussion

Psychological adjustment is indeed associated with greater self-other agreement in first impressions. That is, after just several minutes of interaction, new acquaintances agreed more with well-adjusted individuals regarding their profile of unique self-reported traits (e.g., whether they were more energetic than forgiving) and were better able to differentiate among welladjusted than less adjusted individuals (e.g., understanding which targets were more energetic and forgiving than others). Where did this enhanced agreement come from? Were well-adjusted individuals more judgeable, allowing others to form more accurate impressions of them, or were they more accurate self-judges, better aligning their self-perceptions with others? The current results are most consistent with the judgeability account that posits that well-adjusted individuals are more accurately understood by others, promoting self-other agreement.

2.6.1 Judgeability and Adjustment

Specifically, it was primarily agreement on well-adjusted individuals' less observable traits, such as their tendency to forgive, rather than agreement on their more observable traits, such as energy level, that drove the greater levels of self-other agreement for well- compared with less-adjusted individuals. Indeed, well-adjusted individuals were seen with comparable levels of self-other agreement on both highly and less visible traits, suggesting that ample relevant information was available to and utilized by others on both types of traits. Such a finding suggests that it is no longer necessary to argue that the self is more "right" regarding less observable traits when the target is well-adjusted – both perspectives are now equally right regardless of the trait's observability because well-adjusted individuals provide others with ample information and/or perceivers are appropriately utilizing on less observable traits, eliminating the self-other knowledge asymmetry on such traits.

In contrast, less adjusted individuals were seen with far less self-other agreement on their low compared to high observability traits. Here I maintain that the self (and their close informants) is "right" when it comes to these less observable traits and that it is perceivers who

are inaccurate because information on these less observable traits was not available to and/or not detected and utilized by others. To facilitate agreement on less observable traits, one must be judgeable or high in expressive accuracy, a quality that less adjusted individuals tend not to possess. Thus, judgeability is not only "a phenomenon that emerges in the context of lengthy interpersonal relationships" (Colvin, 1993b, pp. 861), but it also emerges during initial acquaintance. In sum, well-adjusted individuals' judgeability is critical to enhancing greater self-other agreement in first impressions.

2.6.2 Self-Knowledge and Adjustment

To a lesser extent, well-adjusted individuals were also seen with greater self-other agreement on their highly observable traits, such as energy level, talkativeness, and intelligence, compared with less adjusted individuals. This suggests that well-adjusted individuals also have somewhat greater self-knowledge, which helps bring their self-impressions more in line with others', partially promoting self-other agreement, although playing a much weaker role than judgeability. Self-knowledge may, however, play an indirect role in promoting self-other agreement by facilitating judgeability. Specifically, knowing oneself better may enable one to more effectively communicate one's personality to others (e.g., Cheek, 1982; Colvin, 1993b). Overall, self-knowledge did not have as strong of a direct effect on self-other agreement as judgeability, but it likely stills plays an important, if indirect, role in self-other agreement.

2.6.3 Informant-Other Agreement

Importantly, the judgeability effect was replicated with informant-other agreement. That is, there was a general tendency for close informants and new acquaintances to agree more about the personalities of well-adjusted individuals, but, as with self-other agreement, this effect was primarily driven by enhanced agreement about well-adjusted individuals' less observable traits.

These findings provide further support for the judgeability hypothesis, that well-adjusted individuals are better understood by others, rather than that they have greater self-knowledge. Indeed, it is difficult to argue that self-knowledge could play a strong role in informant-other agreement, where the self's knowledge is not even directly involved in the assessment of agreement. Further, utilizing informant-other agreement helps rule out additional alternative explanations. For instance, it is possible that those who report high adjustment are in fact self-enhancing and manage to convince new acquaintances that they possess more positive personality traits than they actually do (e.g., Paulhus, 1998), inflating self-other agreement. However, if the self, close informants, and new acquaintances all agree more about well-adjusted individuals' personality traits (and particularly about their low observability traits which are no more socially desirable than highly observable traits), it is difficult to argue that all perspectives are wrong or falling prey to a positivity bias. Instead, the most parsimonious explanation is that new acquaintances agree more with well-adjusted individuals' self- and informant-reported characteristics because well-adjusted individuals are more judgeable.

2.6.3 Summary

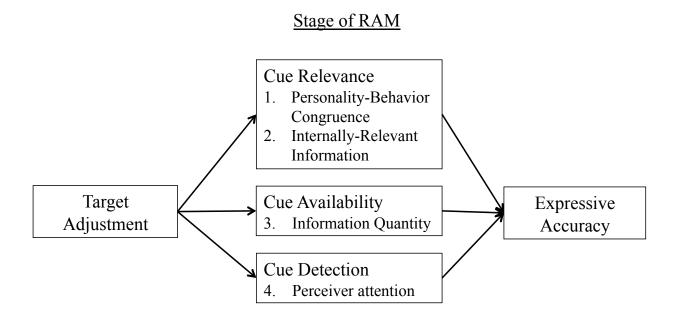
Overall, well-adjusted individuals' unique, differentiating characteristics are better understood by new acquaintances compared with less adjusted individuals. Furthermore, this greater self-other agreement appears to be primarily driven by well-adjusted individuals greater judgeability. Specifically, well-adjusted individuals enable others access to their less observable, internal traits, thereby improving self-other agreement. To a lesser extent, well-adjusted individuals' more accurate self-knowledge of their more observable traits also partially facilitates greater self-other agreement. In sum, although well-adjusted individuals are in part good selfjudges, it is their greater judgeability that most strongly contributes to accurate first impressions.

Chapter 3: Why are Well-adjusted Individuals more Judgeable? Examining Potential Mechanisms⁹

The studies reported in Chapter 2 provide strong evidence that well-adjusted individuals are seen more accurately in first impression situations, and helped to rule out the alternative explanation that this is driven by greater self-knowledge. Thus, well-adjusted individuals do indeed appear to be more judgeable than less adjusted individuals. The question remains, however, as to *how* psychological adjustment enhances judgeability. Psychological adjustment could enhance judgeability through a variety of different mechanisms. Specifically, drawing upon the stages of the Realistic Accuracy Model (RAM; Funder, 1995), as described in Ch. 1, well-adjusted individuals may be more judgeable because they make more *relevant* cues *available* for perceivers to *detect* and/or then appropriately *utilize* (see Figure 4). Each of these possibilities is discussed below.

⁹ A version of this chapter has been submitted for publication. Human, L. J., Biesanz, J. C., Finseth, S., Pierce, B, & Le, M. (*under review*). To thine own self be true: Psychological adjustment promotes judgeability via personality-behavior congruence.

Figure 4. Potential mechanisms linking target psychological adjustment and expressive accuracy based upon the realistic accuracy model (RAM; Funder, 1995).



3.1 Cue Relevance

Mechanism 1. Personality-Behavior Congruence

Well-adjusted individuals may be particularly likely to provide more *relevant* cues to others because they have better integrated, coherent personalities. Personality coherence refers to the extent to which one's personality follows a lawful organization or patterning within an individual (Allport, 1937; Cervone & Shoda, 1999). Personality coherence may manifest as more consistent expression of personality across different situations (Fleeson, 2001) and roles (Donahue, Robins, Roberts, & John, 1993) and more stable personality expression over time (Biesanz, West, & Graziano, 1998). Another indicator of personality coherence is personalitybehavior congruence, or the extent to which one's personality predicts one's behaviour in a given situation or across multiple situations (Sherman, Nave, & Funder, 2012).

Personality Coherence and Accuracy. The various manifestations of personality coherence are in turn likely to promote judgeability. For example, in long-term relationships, where interaction partners have the opportunity to observe the target in different situations and at different time points, consistent and stable personality expression should result in the expression of more personality-relevant cues, thereby enabling others to form more accurate impressions (see Colvin, 1993b). Indeed, personality stability and consistency have been linked to greater self-close other agreement in a variety of studies (Baird, Le, & Lucas, 2006; Bem & Allen, 1974; Biesanz, Graziano, & West, 1998; Biesanz & West, 2000; Cheek, 1982; Kenrick & Stringfield, 1980; Zuckerman et al., 1988; Zuckerman, Bernieri, Koestner, & Rosenthal, 1989; but see Chaplin & Goldberg, 1984; Paunonen & Jackson, 1985). Furthermore, Colvin (1993b) found that an indicator of personality-behavior congruence, indexed by the correspondence between peer ratings of a target's personality and ratings of a target's behavior during an interview, was significantly associated with indicators of judgeability, including self-peer and peer-peer agreement. In fact, Colvin used this indicator of personality-behavior congruence as part of a composite measure of judgeability. However, personality-behavior congruence may not only be an indicator of judgeability, it may in fact be a mechanism that links psychological adjustment to greater judgeability.

Thus far, personality coherence has only been linked to greater judgeability within close relationship contexts. However, personality coherence should also promote judgeability in first impressions. That is, greater personality coherence should mean that an individual's behavior in any given situation (e.g., how talkative he or she is) is a more a reliable indicator of that individual's personality in general (e.g., how talkative he or she usually tends to be). Thus, if well-adjusted individuals have more coherent personalities and therefore behave more

consistently, and more in line with their broader personalities, this could certainly help to facilitate their judgeability in first impressions as well.

Personality Coherence and Adjustment. Do well-adjusted individuals have more coherent personalities? Having a coherent, well-integrated sense of self has long been considered a hallmark of being a mature and well-adjusted individual (Block, 1961; Rogers, 1961) and there is empirical evidence that well-adjusted individuals have more coherent personalities. For example, well-adjusted individuals report being more consistent across different social roles (Block, 1961; Campbell, 1990; Diehl & Hay, 2007, 2010; Donahue et al., 1993; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997; Suh, 2002), in different social situations (Erickson, Newman, & Pincus, 2009; McReynolds, Altrocchi, & House, 2000; Sherman, Nave, & Funder, 2010), with different interaction partners (Clifton & Kuper, 2011), and over time (Human, Biesanz, Miller et al., 2012). Note, however, it has been argued that at least some of these effects may be due to statistical artifacts (Baird, Le, & Lucas, 2006).

The links between adjustment and personality coherence are further complicated when the roles of distinctive vs. normative personality coherence are considered. For instance, recent work has found that although well-adjusted individuals tend to behave more in line with their personalities in different social situations, they do not necessarily behave more in line with their distinctive personality traits; instead, they are more likely to behave in line with the normative personality profile (Sherman, Nave, & Funder, 2012). Further, people in general report feeling more authentic when they behave in line with the normative (and positive) personality profile, than when they behave in line with their own distinctive traits (Fleeson & Wilt, 2010). Thus, if well-adjusted individuals' greater personality coherence manifests as greater normative personality-behavior congruence or consistency, this may not actually promote greater

distinctive expressive accuracy. Instead, for personality coherence to facilitate distinctive expressive accuracy, well-adjusted individuals should behave more in line with their distinctive personality traits. Thus, the present studies examined whether well-adjusted individuals exhibit greater personality-behavior congruence in getting-acquainted settings, and if such personality coherence in turn explains well-adjusted individuals greater judgeability in first impressions. *Mechanism 2: Internally-Relevant Information*

Internally Relevant Information and Accuracy. Well-adjusted individuals may also provide more relevant information by providing higher quality verbal information that is more revealing of their personalities. Not all information is created equal: some information is much more diagnostic of one's personality than other information (e.g., Andersen, 1984; Letzring, Wells, & Funder, 2006). For example, discussing one's thoughts and feelings, rather than behaviors and actions, is associated with greater distinctive accuracy (Andersen, 1984). This finding is in line with research showing that it is easier to form accurate impressions about more readily observable personality traits (e.g., talkativeness, intelligence) than less observable traits (e.g., anxiety, thoughtfulness; Funder & Dobroth, 1987; Kenrick & Stringfield, 1980; John & Robins, 1993). These less observable traits are more difficult to judge because they are primarily experienced within a person and often not, or only minimally, expressed externally. Thus, talking more about one's internal experiences, such as one's thoughts and feelings, should improve others' accuracy. Indeed, as we saw in Chapter 2, well-adjusted individuals are primarily seen more accurately than less adjusted individuals on their less observable traits. As such, it is possible that this is because they provide others with more internally-relevant information.

Internally Relevant Information and Adjustment. Are well-adjusted individuals more likely to express their internal thoughts and feelings? There is some very preliminary evidence to

suggest this may be true. Disclosure or expression of emotional or distressing experiences is related to better psychological and physical health (Smyth, 1998; Pennebaker, 1997). In particular, the use of more positive emotion words and moderate use of negative emotion words are associated with improving physical health (Pennebaker, Mayne, & Francis, 1997). Further, the use of cognitive processing words, such as causal (because, reason) and insight (understand, realize) words, which are argued to be indicative of constructing a more coherent story, are also associated with improving health (Pennebaker et al., 1997). It is possible that such emotion expression and cognitive coherence not only promotes psychological and physical health, but that well-adjusted individuals are also more likely to use such words in their daily lives.

Furthermore, well-adjusted individuals tend to tell more coherent life stories (Baerger and McAdams, 1999). According to Baerger and McAdams (1999), life story or narrative coherence is composed of four different components: a) placing a story in *context*, b) following a logical story *structure*, c) conveying the evaluative or *emotional significance* of the events, and d) *integrating* the information so as to convey the meaning of the experience described within the context of the larger life story. The latter two components, conveying the emotional significance of the experience and engaging in integration and meaning-making, map on well to the emotional expression and coherence argued to be beneficial for health (Pennebaker, 1997; Pennebaker et al., 1997). In turn, disclosing such information to others is likely to provide others with more internally-relevant information about a person, thereby facilitating judgeability. That is, discussing the emotionally relevant aspects of an experience and attempting to make meaning out of the experience is likely to provide others with information that is typically more internal to a person – their feelings and thoughts about an experience, rather than just the facts. Thus, it is plausible that well-adjusted individuals provide others with more internally-relevant verbal

information, which in turn provides others with more relevant cues, enabling more accurate perceptions of their personalities.

3.2 Cue Availability

Mechanism 3: Information Quantity

Target psychological adjustment may also promote expressive accuracy by enhancing the overall *availability* of cues. Psychological adjustment, particularly the positive affect component, is associated with greater extraversion (Lucas, Diener, Grob, Suh, & Shao, 2000). In turn, extraversion and greater social ease could lead well-adjusted individuals to provide others with more information (e.g., Letzring, 2008). That is, if Jack's extraversion and social skills enable him to feel comfortable in initial interactions, he is likely to provide more information to others, talking longer and speaking more words, for instance. In turn, greater information quantity enhances accuracy (Biesanz et al., 2007; Blackman & Funder, 1998). Thus, well-adjusted individuals may provide perceivers with a greater quantity of information upon which to base their impressions, thereby enhancing accuracy.

3.3 Cue Detection

Mechanism 4: Perceiver Attention.

Well-adjusted individuals may also facilitate perceivers' cue *detection* and perhaps even *utilization*, enhancing the accuracy of first impressions. Specifically, the social skills and likability of well-adjusted individuals may garner more attention from perceivers and motivate them to understand such targets better. Indeed, individuals who report more meaning in life, one indicator of psychological adjustment, are rated as more interpersonally appealing (Stillman, Lambert, Fincham, & Baumeister, 2011), which is likely to elicit more attention from others.

Further, the more confident, positive, and involved behaviors of positive self-presenters (Human, Biesanz, Parisotto, & Dunn, 2012) are associated with receiving more attention; perhaps well-adjusted individuals are likely to behave in a similarly positive manner, thus also receiving greater attention. In turn, greater perceiver attention (Human, Biesanz, Parisotto, & Dunn, 2012; Lorenzo, Biesanz, & Human, 2010) and motivation (Biesanz & Human, 2010) result in more accurate impressions. Thus, if Jack is likeable and enjoyable to talk with, Jill may pay closer attention to him, listening more closely to him and picking up more of the verbal and behavioral information he emits. Jill may also be more motivated to understand Jack, and therefore invest more cognitive resources into accurately utilizing the cues he emits.

On the other hand, there is also evidence that negative characteristics elicit more attention from others. In line with the "bad is stronger than good" argument (Baumeister, Bratslavsky, Fikenauer, & Vohs, 2001), negative information tends to be more salient and thereby receive more attention and processing than positive information (Skowronski & Carlston, 1989). Thus, to the extent that mal-adjusted individuals provide more negative information in social interactions than well-adjusted individuals, they may in fact receive more attention and processing, which could in turn facilitate accurate impressions. As a result, it is unclear what role perceiver attention, and thereby cue detection and utilization, play in the links between psychological adjustment and expressive accuracy.

3.4 Summary and Overview of Hypotheses

Overall, there are theoretical reasons to believe that psychological adjustment could promote expressive accuracy at each of the stages of the realistic accuracy model. That is, well-adjusted individuals may enhance accuracy by making more *relevant* cues more *available* to

others, and/or by eliciting greater cue *detection* and *utilization* (see Figure 4). Specifically, the proposed mechanisms that will be examined in Studies 3 and 4 are as follows:

Proposed mechanism #1: Well-adjusted individuals exhibit more *personality-behavior congruence*, thereby providing others with more relevant cues, enhancing expressive accuracy.

Proposed mechanism #2: Well-adjusted individuals provide others with more *internallyrelevant information* about their personalities, thereby providing others with more relevant cues, enhancing expressive accuracy.

Proposed mechanism #3: Well-adjusted individuals provide others with a greater *quantity of information*, thereby enhancing the availability of cues, enhancing expressive accuracy.

Proposed mechanism #4: Well-adjusted individuals elicit more *attention* from perceivers, thereby eliciting greater cue detection and utilization, enhancing expressive accuracy.

In sum, well-adjusted individuals may be open books because they provide better information, more information, or more interesting information. Across two video perceptions studies, we first examined whether well-adjusted individuals are perceived more accurately in this social context, and then examined the role of each of these proposed mechanisms in linking psychological adjustment and distinctive expressive accuracy.

3.5 Study 3

3.5.1 Method

Targets

A total of 85 undergraduates served as targets in this video perception study. Alone in a laboratory testing room, targets were given 5-mintes to answer a series of basic getting-acquainted questions provided on cue cards while being videotaped by a web-camera. Two questions were selected for the personality impressions: "*List two or three interests*" and "*What are you passionate about*?" While being videotaped, targets were unaware that their videos

would be used as stimuli in future studies. Once the study was complete, targets were fully debriefed and given the option to have their video deleted, without a deduction in their compensation. A total of 13 of the 85 targets who originally participated in the study opted to have their video deleted, resulting in the 72 targets who ultimately served as video stimuli (52 female, 20 males; $M_{age} = 22$, SD = 5.66). The majority of targets reported being of primarily East Asian (46%) or Caucasian descent (39%); the remaining 16% of targets reported a variety of different ethnic backgrounds. All targets received either \$10 or 1 extra course credit for their participation.¹⁰

Personality measures. All targets completed self-report personality ratings on the Big Five Inventory (John & Srivastava, 1999) plus the three items assessing perceived intelligence (e.g., "*Is bright*") described in Study 1, all on 1 (*strongly disagree*) to 7 (*strongly agree*) scales. Targets were also asked to provide the contact information of two peers and a parent or guardian so that we could obtain personality assessments of the participants by close informants. All informants were mailed or emailed the same personality questionnaire as completed by participants. At least one informant report was available for 57 targets (79%). All available informant reports were combined with the targets' own self-reports to serve as a composite accuracy validation measure.

Adjustment. Target adjustment was measured with Rosenberg's (1965) Self-Esteem Scale (M = 5.41, SD = .84), the Satisfaction with Life Scale (Diener et al., 1985; M = 4.97, SD = 1.07),

¹⁰ This study also involved an experimental manipulation, such that targets were randomly assigned to one of two self-presentation conditions or a control condition. This experimental manipulation had no effect on the presented results.

the Positive Relations with Others Scale (Ryff, 1989; M = 5.14, SD = .73), all on 1 (*strongly disagree*) to 7 (*strongly agree*) scales. Targets also completed the Center for Epidemiologic Studies Depression scale (CES-D; Radloff, 1977) on a 0 (*rarely or never*) to 3 (*most of the time or always*) scale, summed (M = 14.56, SD = 7.95). Given the results from Chapter 2, which demonstrated that both hedonic and eudaimonic aspects of psychological adjustment were associated with judgeability, and recent findings that these different components of well-being tend to be indistinguishable in empirical research (Nave, Sherman, & Funder, 2008; Kashdan, Biswas-Diener, & King, 2008), I report the results with a standardized composite adjustment measure ($\alpha = .87$) for ease of presentation. In general, the results with each individual component of well-being were very consistent with the composite, although important exceptions will be noted.

Perceivers

A total of 131 undergraduates (99 females, 32 males; $M_{age} = 21$, SD = 5.55) participated as perceivers in exchange for two extra course credits. In groups of 14 – 18, perceivers viewed videotapes of a subset of 18 targets from the larger pool of 72 targets. A randomization procedure, whereby each target appeared in two different sets of videos, ensured that each target was viewed by two groups of participants; each target was therefore viewed by 28 – 36 perceivers.

Personality ratings. Perceivers' rated each target's personality on an abbreviated 21-item version of the Big Five Inventory (John & Srivastava, 1999) plus the three perceived intelligence items discussed above, on 1 (*strongly disagree*) to 7 (*strongly agree*) scales.

Proposed Mechanisms

Mechanism 1: Personality-Behavior Congruence

A separate group of 120 coders also rated the extent to which a variety of behaviors were characteristic of each target on a 24-item behavioral questionnaire designed to map on to the 24-item version of the BFI that perceivers made personality ratings on. The behavioral questionnaire was modeled after the Riverside Behavioral Q-Sort (Funder, Furr, & Colvin, 2000), which was designed for coding global rather than molecular behaviors during dyadic interactions. For example, we matched the following BFI items with the corresponding behavioral items: "*Is full of energy*" with "*Was energetic during the interview*"; "*Tends to find fault with others*" with "*Discussed others faults and shortcomings*"; "*Does a thorough job*" with "*Answered the questions thoroughly*"; "*Is intelligent*" with "*Exhibited a high degree of intelligence*".¹¹ All ratings were made on a 1 (*not at all or negatively characteristic*) to 7 (*highly characteristic*) scale. When rating behaviors, coders were explicitly told:

"We are trying to characterize fairly directly the behavior that can be seen on the videotape. So, as much as possible, avoid drawing inferences about the characteristics or intentions of the subjects that are not directly visible. Direct statements of feelings such as forgiveness, anxiety, or confidence should be taken at face value, and such feelings should not be inferred in the absence of direct statements or other visible evidence."

Furthermore, coders' behavioral ratings were based on a different segment of the video clips than perceivers' personality impressions. Specifically, coders viewed the targets answering the questions, "*What are the three things for which you are the most thankful for and why*?" and

¹¹ The full list of behavior items are available upon request.

"Discuss some major decisions or choices you have faced in your life". One target did not answer these two questions prior to the five-minute time limit, and was therefore not included in the personality-behavior congruence analyses. Coders' ratings of targets' behaviors were averaged to index each target's behavior on each of the 24 items. As such, we were able to assess targets' personality-behavior congruence by examining the extent to which targets' personalities (as reported by the self and, where possible, informant reports) predicted their behaviors, as rated by coders.

Mechanism 2: Internally-relevant Information

The degree to which well-adjusted individuals provided more internally-relevant information was assessed by having perceivers rate the extent to which targets "discussed their thoughts and feelings" on a 1 (strongly disagree) to 7 (strongly agree) scale (M = 4.39; SD =1.53). To more concretely quantify the extent to which targets provided internal information, the Linguistic Inquiry and Word Count program (LIWC; Pennebaker, Booth, & Francis, 2007) was used to code for words relevant to internal thoughts and feelings. Specifically, LIWC coded for the percentage of positive (M = 10.36, SD = 3.39) and negative (M = .34, SD = .58) emotion words, as these words might reveal the targets' affective responses to the experiences described. LIWC was also used to examine the percentage of causation words (e.g., because, effect; M =1.32, SD = 1.14), and insight words (e.g., think, know; M = 1.74, SD = 1.71), as these words might reveal the deeper thoughts underlying targets' answers.

Mechanism 3: Information quantity

Information quantity was coded for by using LIWC to assess the total number of words (M = 167.14, SD = 111.81) and words per sentence (M = 18.35, SD = 6.67), and the percentage of dictionary words (M = 94.59, SD = 2.60).

Mechanism 4: Attention

To assess attention, perceivers rated the extent to which each target "held my attention throughout most of the clip" (M=4.57, SD = 1.58) and "was engaging and interesting" (M= 4.09, SD = 1.64), both on a 1 (strongly disagree) to 7 (strongly agree) scale. ¹² To examine whether target adjustment was associated with being more attention getting and engaging, we took the average of all available perceiver ratings on these items (i.e., assessing target main effects). However, when examining the extent to which perceiver attention and engagement were associated with distinctive accuracy in the multilevel model framework, we subtracted perceiver and target main effects from the raw ratings, creating a unique dyadic indicator of attention that varied across perceivers and targets.¹³

Analytical Model and Approach

Distinctive and normative accuracy were again estimated with a multilevel model utilizing *R*'s lme4 package (R Development Core Team, 2009; Bates & Sarkar, 2007) following the social accuracy modeling procedures (Biesanz; 2010). As in Studies 1 and 2, we examined

¹² In Studies 3 and 4, perceivers also rated how much they liked and how physically attractive they found each target on 1 - 7 scales. In general, greater liking and perceived attractiveness operated in the same way as perceiver attention and thus only the results for perceiver attention are reported.

¹³ Note that the associations between distinctive accuracy and perceiver and target attention main effects were generally consistent with the effects of unique dyadic attention. That is, each form of attention (generally paying attention to others, being generally paid attention to, or paying attention to a specific target) are each associated with distinctive accuracy in a similar manner.

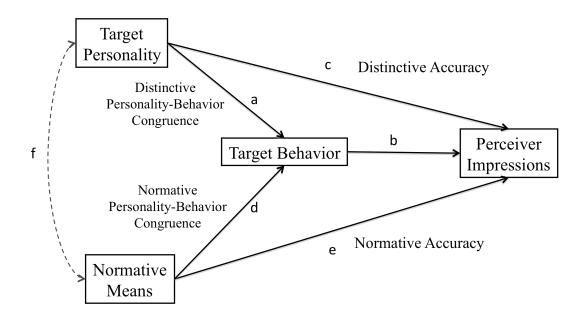
whether target psychological adjustment was associated with distinctive and normative expressive accuracy by including target adjustment as a moderator of the distinctive and normative accuracy slopes. We examined the associations between the proposed mechanisms and distinctive accuracy in the same fashion, with the exception of mechanism #1 (personalitybehavior congruence), which we examined by building on the social accuracy model as depicted in Figure 5, and elaborated upon in the results section below. To examine how each of these mechanisms was associated with psychological adjustment, we conducted regular regression analyses with target adjustment as predictors of the proposed mechanisms, as these are all person-level variables. All variables were grand-mean centered prior to analyses.

3.5.2 Results

Mean Levels of Accuracy and Associations with Adjustment

On average, perceivers viewed the targets with significant levels of distinctive accuracy, b = .17, z = 6.35, p < .0001, and normative accuracy, b = .58, z = 13.07, p < .0001. Furthermore, targets who scored higher on the composite standardized adjustment measure were seen more accurately than less adjusted individuals, interaction b = .09, d = .81, z = 2.85, p < .01. Well-adjusted individuals were not seen with greater normative accuracy, interaction b = .00, d = .03, z = .11, p = .91. The effects held controlling for perceiver and target gender and ethnicity, and neither gender nor ethnicity were significantly associated with distinctive accuracy, all |z|s < 1.84. Thus, well-adjusted individuals are also seen with greater distinctive accuracy in videobased impressions.

Figure 5. The social accuracy model of interpersonal perception extended to include the mediating role of target behavior.



Potential Mechanisms

Mechanism 1: Personality-Behavior Congruence

Are well-adjusted individuals seen more accurately because they behave more in line with their personalities than less adjusted individuals? To address this question, we first examined the potential mediating role of target behavior in impression formation. That is, we examined whether targets' distinctive personalities predicted their behaviors during the video clip (path a, Figure 5), which in turn predicted perceivers' impressions (path b, Figure 5), thereby enhancing overall distinctive accuracy (path c, Figure 5). Although this is correlational research, and therefore mediation can not be established definitively, as an initial step we examined whether the data are consistent with mediation. In all analyses, we also controlled for normative accuracy/congruence by including the normative means on each item in all applicable models (paths d and e, Figure 5). Thus, we are focusing on the associations between distinctive expressive accuracy and distinctive personality-behavior congruence.

The Mediating Role of Behavior. Before examining the role of adjustment, we first examined whether targets' behaviors mediated the association between target personalities and perceiver impressions. That is, do perceivers' impressions correspond with targets' personalities because perceivers rely on targets' personality-relevant behaviors to form impressions? On average, as we would hope, targets' distinctive personality traits significantly predicted their behavior during the video clip, b = .25, z = 6.67, p < .0001 (path *a*, Figure 5). In turn, targets' distinctive behaviors were a strong and significant predictor of perceivers' impressions, b = .33, z = 12.39, p < .0001 (path *b*, Figure 5), even though the behavior and personality ratings were based on different segments of the videos. Thus, perceivers relied heavily upon targets' observable behaviors when forming impressions of their personalities.

Further, the direct effect from targets' personalities to perceivers' impressions was slightly reduced when controlling for targets' behaviors, b = .12, z = 5.10, p < .0001 (path c), whereas targets' behaviors remained a very strong and significant predictor of perceivers' impressions controlling for the direct effect of targets' personalities on impressions, b = .28, z = 10.71, p < .0001 (path b). Indeed, reliance on targets' behaviors did partially mediate the effect from targets' personalities to perceivers' impressions, indirect effect partial posterior p < .001 (path a*b, Figure 5; see Biesanz, Falk, & Savalei, 2010; Falk & Biesanz, 2012).¹⁴ Thus, if well-

¹⁴ In multilevel models the covariance between the random slopes across targets for path *a* and path *b* influences the distribution of the indirect effect (e.g., see Kenny & Bolger, 2003). As this correlation was small in the present studies (mean r = -.16), we considered this sufficiently small

adjusted individuals do indeed behave more in line with their personalities than less adjusted individuals, this would help to account for why well-adjusted individuals are in turn seen more in line with their personalities.

Distinctive Personality-Behavior Congruence & Adjustment. To examine if well-adjusted individuals are seen more in line with their distinctive personalities because they behave more in line with their distinctive personalities, we examined whether the strength of the mediating role of behavior is conditional upon the target's level of psychological adjustment (for more detail on conditional indirect effects and moderated mediation see Muller, Judd, & Yzerbyt, 2005; Preacher, Rucker, & Hayes, 2007). Specifically, we examined whether well-adjusted individuals exhibit greater personality-behavior congruence by including target psychological adjustment as a moderator of the association between target personalities predicting target behaviors (i.e., does target adjustment moderate path *a*, Figure 5?).

Well-adjusted individuals did behave significantly more in line with their personalities than less adjusted individuals, interaction b = .11, d = .75, z = 2.50, p < .05 (moderating path *a*). Furthermore, targets' behaviors continued to significantly and strongly predict perceivers' impressions after controlling for the moderating effect of adjustment on distinctive accuracy, on average across targets, b = .28, z = 10.89, p < .0001 (path *b*). Finally, target adjustment did not as

to warrant the use of the partial posterior *p*-value which assumes, under current implementations, that this correlation is 0. Note that (a) Kenny & Bolger's approach represents a multilevel model generalization of Sobel's test for mediation which has a substantially lower Type I error rate and consequently dramatically lower power than alternative methods for examining mediation, and (b) *all* inferential methods for examining mediation are approximations.

strongly moderate distinctive accuracy when target personality-behavior congruence was accounted for, interaction b = .06, d = .54, z = 2.19, p < .05 (moderating path c). Thus, on average, achieving accurate personality impressions was mediated through the use of behavioral information, but this effect was partially conditional on target adjustment such that well-adjusted individuals' behavioral cues were more diagnostic of their distinctive personality traits, likely contributing to why they are seen with greater distinctive accuracy.

Note that target adjustment did not significantly moderate the extent to which target behavior predicted personality impressions, interaction b = -.02, d = -.20, z = -.50, p = .62(moderating path *b*). That is, perceivers were not significantly more likely to utilize welladjusted individuals' behavioral cues than they were to utilize less adjusted individuals behavioral cues when forming personality impressions.

Overall then, these results are consistent with moderated mediation, such that the mediated pathway from targets' distinctive personalities to behaviors to perceivers' impressions was stronger for well-adjusted individuals compared with less adjusted individuals, thereby enhancing the overall agreement between targets' distinctive personalities and perceivers' impressions. Specifically, the distinctive personalities of well-adjusted targets (1 *SD* above the mean in adjustment) significantly predicted their behaviors during the video clip, b = .36, z = 6.27, p < .05 (path *a*), and these behaviors in turn significantly predicted perceivers' impressions, b = .32, z = 8.02, p < .001 (path *b*). In contrast, the distinctive personalities of less adjusted targets (1 *SD* below the mean in adjustment) were not as strong of a predictor of their behaviors during the video clip, b = .13, z = 2.14, p < .05 (path *a*), and yet these behaviors did just as strongly predict perceivers' impressions, b = .35, z = 8.40, p < .001 (path *b*). Thus, even though less adjusted individuals do not behave as much in line with their distinctive personality traits as

well-adjusted individuals, perceivers still use these less relevant cues to the same extent that they use well-adjusted individuals' more relevant cues. In sum, there is initial support that targets' distinctive expressive accuracy is a result of their greater distinctive personality-behavior congruence.

Normative Personality-Behavior Congruence & Adjustment. What about the role of normative personality-behavior congruence? The normative personality profile did strongly and significantly predict targets' behaviors, b = .29, z = 6.90, p < .0001 (path *d*, Figure 5). Thus, targets on average did tend to behave in line with the normative personality profile. Furthermore, well-adjusted individuals did behave significantly more in line with the normative personality profile than less adjusted individuals, interaction b = .13, d = .72, z = 2.40, p < .05 (i.e., target adjustment moderates path *d*). Thus, well-adjusted individuals behaved more in line with both the normative personality profile and with their own distinctive personality traits compared with less adjusted individuals. It is somewhat surprising then, that well-adjusted individuals were not viewed as more normative than less adjusted individuals.

Mechanism 2: Internally-Relevant Information

In addition to greater personality-behavior congruence, did well-adjusted individuals provide higher quality verbal information? Specifically, did they reveal more information about their internal thoughts and feelings that would promote accuracy? Although discussing one's thoughts and feelings was significantly associated with greater distinctive accuracy, interaction *b* = .01, d = 1.53, z = 3.02, p < .01, well-adjusted individuals were not rated by perceivers as discussing their thoughts and feelings more than less adjusted individuals, b = .12, d = .21, t(70)= .86, p = .39 (see Table 2). The LIWC analyses also revealed that well-adjusted individuals did not use significantly more positive emotion, negative emotion, insight, or causal words compared with less adjusted individuals, all ps > .38 (see Table 2). Furthermore, none of these categories of words were significantly associated with greater distinctive accuracy, all ps > .24. Thus, these data do not support the hypothesis that well-adjusted individuals provide more internally-relevant verbal information, and there is mixed evidence regarding whether such information in turn facilitates accuracy.

Mechanism	Adjustment		Accuracy	
	b (se)	d	b (se)	d
Study 3				
2. Internally-Relevant Information				
Discussed thoughts and feelings	.11 (.133)	.20	.10** (.006)	1.53
Positive emotion	.40 (.500)	19	00 (.008)	08
Negative emotion	08 (.086)	21	04 (.046)	22
Insight	.04 (.253)	.04	02 (.016)	28
Causal	.06 (.169)	.09	.01 (.024)	.06
3. Information Quantity				
Total words	-15.80 (16.46)	23	.00 (.000)	.14
Words per sentence	1.00 (.981)	.24	.00 (.004)	.05
Percentage of dictionary words	16 (.385)	10	01 (.010)	19
Study 4				
2. Internally-Relevant Information				
Positive affect words	.48* (.197)	.71*	03 (.031)	27
Negative affect words	08 (.162)	15	03 (.040)	24
Insight words	.09 (.298)	.09	.02 (.022)	.33
Causal words	.19 (.166)	.35	.11** (.035)	.88**
Integration	03 (.227)	04	.02 (.029)	.21
Affective tone	04 (.229)	06	.02 (.029)	.21
Meaning	04 (.143)	08	.03 (.046)	.21
3. Information Quantity				
Total words	86.52 (54.59)	.48	.00† (.000)	.54†
Words per sentence	.46 (1.61)	.09	.01* (.004)	.75*
Percentage of dictionary words	34 (.382)	27	.04* (.016)	.67*

Table 2. Associations of proposed verbal information-based mechanisms with target adjustment and target distinctive accuracy slopes in Studies 3 and 4.

Note. Standardized effect sizes, *d*, were calculated as the change in standard deviations in the outcome variable for a 2 standard deviation change in the predictor variable (see Gelman, 2008). p < .10, p < .05, p < .01.

Mechanism 3: Information quantity

None of the indices of information quantity, namely total words, words per sentence, and percentage of dictionary words, were significantly associated with target adjustment, all ps > .31 (see Table 2). Nor was providing others with more verbal information significantly associated with greater distinctive accuracy, all |ps| > .43 (see Table 2). Thus, well-adjusted individuals did not provide others with a higher quantity of verbal information, nor was more verbal information associated with greater accuracy in this study.

Mechanism 4: Attention

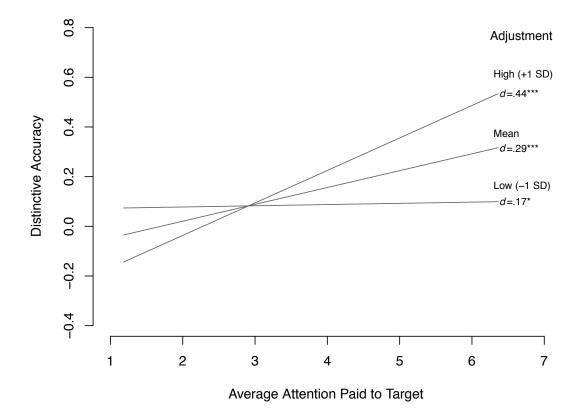
Finally, were well-adjusted individuals seen more accurately because they elicited more attention from perceivers, in turn potentially promoting cue detection and utilization? Well-adjusted individuals were rated as marginally better able to hold perceivers' attention, b = .23, d = .41, t(70) = 1.73, p < .10, but they were not rated as significantly more engaging and interesting than less adjusted individuals, b = .13, d = .18, t(70) = .77, p = .44. Of note, the more attention-getting and engaging a perceiver rated a specific target, the more accurately they perceived them, interaction b = .02, d = .29, z = 6.21, p < .0001, and interaction b = .01, d = .16, z = 3.17, p < .0001, respectively. Thus, the data appear to be partially consistent with the hypothesis that well-adjusted individuals elicit more attention, thereby enhancing how accurately they are perceived. However, the direct effect from target adjustment to distinctive accuracy remained significant and did not reduce very much when controlling for how much attention perceivers on average paid to the targets, b = .09, d = .82, z = 2.85, p < .01, or how engaging the

perceivers viewed the targets, b = .09, d = .81, z = 2.83, p < .01. Thus, it is unclear whether eliciting perceiver attention is a mechanism through which adjustment promotes expressive accuracy, or an independent pathway that simultaneously promotes accuracy.

Of note, there was a significant positive interaction between adjustment and attention predicting distinctive accuracy, interaction b = .01, z = 2.89, p < .01, as well as between adjustment and engagement predicting distinctive accuracy, interaction b = .01, z = 2.54, p < .01(see Figure 6). Specifically, if a perceiver paid more attention to a specific target, they perceived that target more accurately when the target was well-adjusted (target adjustment 1 SD above the mean), b = .03, d = .44, z = 6.01, p < .0001, than if that target was less adjusted (target adjustment 1 SD below the mean), b = .01, d = .17, z = 2.75, p < .05. Thus, the benefits to accuracy that appear to come from paying more attention to a target are greater for well-adjusted relative to less adjusted targets.

Does this greater attention to well-adjusted individuals promote accuracy because perceivers detect more behavioral cues when they pay more attention to targets? That is, does perceiver attention moderate path *b* of the model (see Figure 5)? Yes, greater perceiver attention and engagement did significantly moderate the extent to which targets' behaviors predicted perceivers' personality impressions, interaction b = .04, d = .80, z = 8.67, p < .0001, and, b = .04, d = .86, z = 8.92, p < .0001, respectively.

Thus, target adjustment is related to greater personality-behavior congruence (path a), suggesting that well-adjusted individuals provide more relevant information, while perceiver attention is related to greater detection and/or utilization of behavioral information (path b), helping to elucidate the nature of the interaction between adjustment and attention predicting greater distinctive accuracy: because well-adjusted individuals provide more relevant behavioral cues, paying more attention to them enhances distinctive accuracy because it enhances the extent to which the perceiver then detects and utilizes those cues. The fact that perceiver attention does not enhance distinctive accuracy for less adjusted targets nicely illustrates the multiplicative nature of the realistic accuracy model (Funder, 1995): paying more attention to targets, and thereby enhancing cue detection and utilization, is only beneficial to the extent that the previous stages of RAM, cue relevance and availability, are met. Because less adjusted individuals provide less relevant cues, paying more attention to them is not as beneficial for distinctive accuracy. *Figure 6.* The association between perceiver attention and distinctive accuracy at high, mean, and low levels of target psychological adjustment in Study 3.



Note. A distinctive accuracy score for each of the 72 targets was estimated by saving the regression coefficient for each target's distinctive personality predicting perceivers' impressions. Perceiver attention was calculated as the average amount that each perceiver paid to each target (target main effect of attention). SD = standard deviation.

3.5.3 Discussion

Of all of the proposed mechanisms, providing more relevant cues was the most strongly supported mechanism through which psychological adjustment is likely to promote expressive accuracy. That is, well-adjusted individuals were significantly more likely to behave in line with their distinctive personalities, and these behaviors in turn strongly influenced perceivers' impressions. Well-adjusted individuals were also rated as more attention-getting, and attention was in turn associated with being seen more accurately – yet this link with attention did not account for the associations between adjustment and expressive accuracy. Interestingly, there was a significant three-way interaction between adjustment, attention, and accuracy such that paying more attention to well-adjusted individuals was not associated with greater accuracy. This finding further reinforces that well-adjusted individuals are likely providing more relevant cues to others: if you pay attention and pick up those cues, you are likely to form a more accurate impression.

Study 3 provides very promising initial insight into why well-adjusted individuals are more judgeable; Study 4 was designed to replicate and extend these results in several ways. First, in Study 3, personality-behavior congruence was examined on the modified 24-item BFI that perceivers used to rate targets' personalities. To broaden the range and generalizability of our examination of personality-behavior congruence, Study 4 had separate coders rate both personality and behavior on the full 47-item BFI that targets completed. Second, in Study 3, we attempted to assess the role of emotional expression and cognitive coherence with targets who were answering very basic getting-acquainted questions, which may not have enabled much expression of such information. Therefore, in Study 4, we used a separate set of targets

answering more emotionally and personally significant questions and in greater detail. Finally, in Study 4 we expanded our coding of verbal cue relevance by examining narrative coherence at a broader, more gestalt level, in addition to the concrete, word count level examined in Study 3. Specifically, in Study 4, in addition to the word count analyses, we had a separate group of coders rate the videos for the broader constructs of narrative coherence and meaning-making.

3.6 Study 4

3.6.1 Method

Targets

A total of 47 undergraduates served as targets in this video perceptions study. Targets were interviewed while being videotaped, and were aware that the videos were being collected for the purpose of showing future participants in personality assessment studies. Specifically, targets were first asked to read a number of newspaper headlines from the New York Times aloud to the camera. Targets then answered a number of personal questions, two of which were selected for this study: "*Discuss some major decisions or choices you have faced in your life*" and "*Describe any major conflicts you have dealt with*". Targets received \$30 for their participation and were given the option to have their video deleted after the interview without compensation loss. Three of the original 47 participants elected to do so leaving 44 participants to serve as targets (37 female, 7 males; $M_{age} = 22$, SD = 4.02). The majority of targets reported being of primarily East Asian descent (66%); 18% reported being of Caucasian descent and 16% reported having one of several other ethnic backgrounds.

Personality measures. All targets once again completed self-report personality ratings on the 44-item Big Five Inventory (BFI; John & Srivastava, 1999) plus the three intelligence items. Following the same procedure for obtaining peer and parent reports as in the previous studies, 40

targets had at least one informant report. As in Study 3, the accuracy validation measure was a composite of the self-reports and all available informant-report data.

Adjustment. Target adjustment was again measured with Rosenberg's (1965) Self-Esteem Scale (M = 5.31, SD = 1.27), the Satisfaction with Life Scale (Diener et al., 1985; M = 4.67, SD = 1.27), and the Positive Relations with Others Scale (Ryff, 1989; M = 5.35, SD = .94), all on 1 (*strongly disagree*) to 7 (*strongly agree*) scales. Targets again also completed the Center for Epidemiologic Studies Depression scale (CES-D; Radloff, 1977) on a 0 (*rarely or never*) to 3 (*most of the time or always*) scale, summed (M = 15.20, SD = 11.4). Once again, we standardized and then averaged targets' scores on each measure to create an overall composite adjustment measure ($\alpha = .85$).

Perceivers

A total of 165 undergraduates and community members (98 females, 65 males, 2 unknown; $M_{age} = 22$, SD = 5.95) participated as perceivers in this study in exchange for extra course credits or \$20. In groups of 11 - 18, perceivers viewed videotapes of a subset of 11 targets from the larger pool of 44 targets. A randomization procedure, whereby each target appeared in two different sets of videos, ensured that each target was viewed by two groups of participants; each target was therefore viewed by 22 – 36 perceivers.

Personality Ratings. Participants rated each target's personality on an abbreviated 21item version of the Big Five Inventory (John & Srivastava, 1999) plus the three intelligence items in the previous studies.

Proposed Mechanisms

Mechanism 1: Personality-Behavior Congruence

In order to assess personality-behavior congruence, in groups, a separate set of 65 coders viewed subsets of 11 targets, and were randomly assigned to rate either the targets' personalities (N = 35) or behaviors (N = 30).¹⁵ In order to assess personality-behavior congruence for a large range of personality traits, personality ratings were made on the full 44-item BFI plus the three intelligence items that targets and their informants had completed. Behavior ratings were made on a corresponding 47-item behavior assessment questionnaire that was designed to have each item map on to each of the 47 items on the modified BFI (drawing upon the RBQ as a template for constructing behavioral items, see Study 3 above for example items). Personality and behavior coders rated the same segments of the videos as one another and as perceivers.

¹⁵ Note that all the results reported below hold using this sample of coders who rated the full 47item BFI, with the exception that the 3-way interaction between unique dyadic perceiver attention and adjustment predicting distinctive accuracy did not quite reach significance, interaction b = .01, z = 1.52, p = .13. This weaker effect was likely due to the smaller number of perceivers in this sample (N = 35 vs. N = 165), therefore resulting in a less reliable assessment of unique dyadic attention. Nevertheless, the perceiver main effect indicator of attention did significantly interact with adjustment to predict greater distinctive accuracy, 3-way interaction b= .04, z = 4.05, p < .001, supporting the general finding that paying more attention to welladjusted individuals is associated with greater accuracy. Thus, the general pattern of results are the same when impressions were based upon the full 47-item BFI or the 24-item version of the BFI. When rating behavior, coders were given the same instructions as in Study 3:

"We are trying to characterize fairly directly the behavior that can be seen on the videotape. So, as much as possible, avoid drawing inferences about the characteristics or intentions of the subjects that are not directly visible. Direct statements of feelings such as forgiveness, anxiety, or confidence should be taken at face value, and such feelings should not be inferred in the absence of direct statements or other visible evidence."

When rating personality, coders were explicitly told to:

"Try to infer, based on the video you just viewed, how you think that person generally is in their daily life. Do not feel limited to making ratings based just on this situation or what you directly observed. Instead, try to apply this information to what this person is like in general."

This approach enabled us to assess personality-behavior congruence across a wider range of personality trait items than in Study 3. Coders' ratings of targets' behaviors were averaged to index each target's behavior on each of the 47 items.

Mechanism 2: Internally-relevant verbal information

As in Study 3, the extent to which targets provided more internally-relevant verbal information was assessed with LIWC by coding for the percentage of positive (M = 3.57, SD = 1.16) and negative (M = 1.14, SD = .87) emotion words to reflect emotion processes, and the percentage of causation (M = 2.04, SD = .93) and insight words (M = 3.77, SD = 1.64) to reflect cognitive processing and coherence.

In addition, a separate set of 65 coders rated subsets of the targets for broader indicators of cognitive and emotion processing. Specifically, following Baerger and McAdams' approach (1999), the coders rated the evaluative tone (M = 4.39; SD = 1.26) and integration (M = 4.20; SD

= 1.25) components of narrative coherence on 1 (*very low*) to 7 (*very high*) scales. Coders also rated the degree of meaning-making on a 0 (*No explanation of the meaning of the event*) to 3 (*Evidence of a specific emotional, psychological or relationship insight*) scale (M = 1.82; SD = .79; see McLean & Breen, 2009). The coders demonstrated considerable inter-rater agreement (*ICCs*: .93 – 97).

Mechanism 3: Information quantity

Information quantity was again coded for with LIWC by the total number of words (M = 387.60, SD = 309.35), words per sentence (M = 23.10, SD = 8.88), and the percentage of dictionary words (M = 95.62, SD = 2.12).

Mechanism 4: Attention

To assess attention, the full set of 165 perceivers rated the extent to which each target *"held my attention throughout most of the clip"* (M = 4.68, SD = .77) and "*was engaging and interesting*" (M = 4.27, SD = .98), both on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Once again, we examined whether well-adjusted individuals were more attention-getting by taking the average of all available perceiver ratings for each target, and we examined whether attention was associated with impressions by examining unique dyadic attention (subtracting out perceiver and target main effects).

3.6.2 Results and Discussion

On average, perceivers viewed the targets with significant levels of distinctive accuracy, b = .18, z = 5.12, p < .0001, and normative accuracy, b = .40, z = 7.36, p < .0001. Furthermore, targets who scored higher on the composite standardized adjustment measure were once again seen with significantly greater distinctive accuracy than less adjusted individuals, interaction b =.10, d = .71, z = 2.48, p < .05, but not with significantly greater normative accuracy, interaction b = -.08, d = -.46, z = -1.27, p = .20. These effects held controlling for perceiver and target gender and ethnicity, and neither gender nor ethnicity were significantly associated with greater distinctive accuracy, all |z|s < .40.

Proposed Mechanisms

Mechanism 1: Personality-Behavior Congruence

Were well-adjusted individuals seen more accurately because they behaved more in line with their distinctive personalities than less adjusted individuals? Using the exanded personalitybehavior congruence measures, we once again examined whether 1) target behaviors mediated the association between targets' personalities and perceivers' impressions, and 2) then examined whether this mediating role of target behavior is conditional on (i.e. moderated by) target psychological adjustment (see Muller et al., 2005; Preacher et al., 2007).

Note that the mediational analyses are based upon the full 44-item BFI plus three intelligence items, rather than the 24-item version perceivers completed. Thus, we first ensured that the basic results were similar with this different set of items. Indeed, targets' distinctive personality profiles continued to significantly predict perceivers' impressions on the full 47-item BFI, b = .19, z = 5.79, p < .0001, and psychological adjustment significantly moderated these overall levels of accuracy, interaction b = .09, d = .94, z = 2.69, p < .01.

The mediating role of behavior. First, did targets' personalities again significantly predict their behaviors on the 47 item BFI-linked behavior questionnaire (path *a*, Figure 5), controlling for normative congruence (path *d*, Figure 5)? On average, we again found that targets' distinctive personality traits did significantly predict their behaviors during the video clip, b = .18, z = 4.50, p < .0001 (path *a*, Figure 5). In turn, targets' distinctive behaviors were a significant predictor of

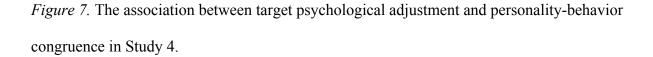
perceivers' impressions, b = .37, z = 9.33, p < .0001 (path *b*, Figure 5). Thus, perceivers relied heavily upon targets' observable behaviors when forming impressions of their personalities.

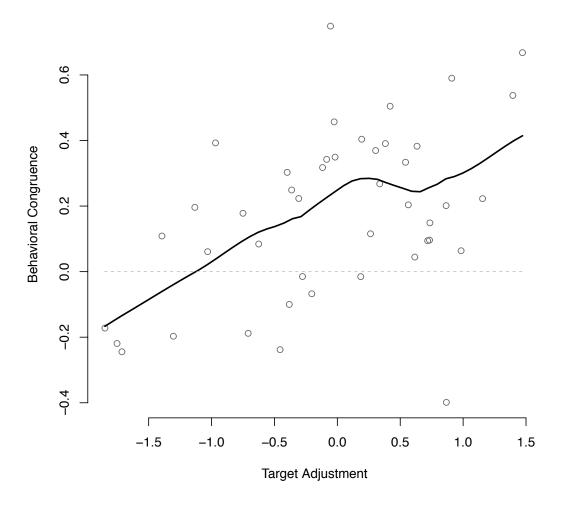
Further, the direct effect from targets' distinctive personalities to perceivers impressions was reduced when accounting for the role of targets' behaviors, b = .14, z = 5.63, p < .0001 (path c, Figure 5), while targets' behaviors remained just as significant of a predictor of perceivers' impressions controlling for targets' personalities, b = .32, z = 8.47, p < .0001 (path b). As might be expected then, there was a significant indirect effect of targets' personalities on perceivers' impressions via targets' behaviors, indirect effect partial posterior p < .001 (paths a*b, Figure 5; Biesanz et al., 2010; Falk & Biesanz, 2012). Thus, if well-adjusted individuals do behave more in line with their distinctive personalities than less adjusted individuals, this would lend further support to the hypothesis that well-adjusted individuals are seen more in line with their personalities because of greater personality-behavior congruence.

Distinctive personality-behavior congruence & adjustment. Did well-adjusted individuals exhibit greater personality behavior-congruence when assessed on the full 47-item BFI? As in Study 3, well-adjusted individuals did indeed behave significantly more in line with their distinctive personality traits than less adjusted individuals, interaction b = .14, d = .56, z = 3.47, p < .0001 (i.e., target adjustment significantly moderated path a, Figure 5). In fact, as can be seen in Figure 7, mal-adjusted individuals' personalities were not a very good predictor of how they behaved in the interaction, as the distinctive personalities of targets who were 1 *SD* below the mean in adjustment did not significantly predict their behaviors, b = .04, z = .71, p = .48. In contrast, well-adjusted individuals' distinctive personalities (1 *SD* above the mean) were a strong predictor of their behaviors, b = .32, z = 5.88, p < .001. Note that, as in Study 3, target adjustment did not significantly moderate how strongly target behaviors predicted perceivers'

impressions, interaction b = -.01, d = -.17, z = -.36, p = .72 (i.e., target adjustment does not moderate path b). Thus, even though less adjusted targets' behaviors are not very diagnostic of their personalities, perceivers still rely heavily upon these behaviors to inform their impressions, thereby resulting in less accurate personality impressions about mal-adjusted relative to welladjusted individuals.

In turn, targets' behaviors continued to significantly predict perceivers' impressions after controlling for well-adjusted individuals' greater personality-behavior congruence, b = .32, z = 8.32, p < .0001 (path b), and adjustment was not as strong of a moderator of distinctive accuracy once personality-behavior congruence was controlled for, interaction b = .05, d = .56, z = 2.12, p < .05 (moderating path c). In sum, replicating and extending the preliminary findings in Study 3 with a broader range of personality traits and separate personality and behavior ratings, we found further support that targets' distinctive expressive accuracy can be at least partly explained by their greater distinctive personality-behavior congruence.





Note. A behavioral congruence score for each of the 44 targets was estimated by saving the regression coefficient for each target's personality predicting their behavior during the interview (path *a*, Figure 5). The plotted curve is the nonparametric loess relationship (smoothing parameter = .85, polynomial = 1).

Normative personality-behavior congruence & adjustment. Examining the role of normative personality-behavior congruence, we again found that the normative personality profile significantly predicted targets' behaviors, b = .23, z = 3.93, p < .0001 (path *d*, Figure 5). However, in contrast to Study 3, well-adjusted individuals did not behave more in line with the normative personality profile relative to less adjusted individuals, interaction b = -.06, d = -.32, z = -.87, p = .38 (i.e., target adjustment did not moderate path *d*).

Mechanism 2: Internally-Relevant Information

Word Count Analyses. In this study, well-adjusted individuals did use significantly more positive emotion words, b = .48, d = .71, t(42) = 2.44, p < .05, but, as in Study 3, well-adjusted individuals did not use significantly more negative emotions words, insight words, or causal words. In turn, the use of positive emotion, negative emotion, and insight words were not significantly associated with greater accuracy, all ps > .29 (see Table 2). However, the use of causal words did significantly predict greater distinctive accuracy, b = .11, d = .88, z = 3.12, p < .01.

Of note, even though the use of causal words was not significantly associated with the adjustment composite, using causal words was marginally associated with higher target self-esteem, b = .19, d = .53, t(42) = 1.79, p < .10, and lower target depression, b = -.43, d = -.53, t(42) = -1.77, p < .10. Further, greater use of causal words continued to significantly moderate distinctive accuracy after controlling for self-esteem and depression, all ps < .05, while target self-esteem no longer significantly moderated distinctive accuracy when controlling for causal words, interaction b = .04, d = .40, z = 1.39, p = .16, and depression did not as strongly moderate distinctive accuracy when controlling for causal words, interaction b = ..12, d = -.59, z = -2.14, p < .05. For comparison, without controlling for causal words, both self-esteem and depression

significantly moderated distinctive accuracy, b = .06, d = .61, z = 2.03, p < .05, and b = -.16, d = -.77, z = -2.73, p < .01, respectively. Thus, there is very preliminary support for the hypothesis that well-adjusted individuals may also be seen more accurately because they provide more internally-relevant information, specifically, more causal words.

Broader Coding. Were the broader internally-relevant information indicators related to adjustment and accuracy? Well-adjusted individuals did not exhibit greater evaluative tone, integration, or express greater meaning-making, all ps > .79 (see Table 2). Furthermore, none of these constructs were in turn associated with more accurate impressions, all ps > .65. Thus, neither specific nor broad indicators of the provision of more internally relevant information account for the associations between adjustment and expressive accuracy.¹⁶

Mechanism 3: Information Quantity

In contrast to Study 3, providing greater information was generally associated with more distinctively accurate impressions. Specifically, speaking more words per sentence and a greater percentage of dictionary words were significantly associated with greater distinctive accuracy,

¹⁶ Two trained research assistants also coded the videos for integrative complexity (*ICC* = .88), which is a measure of information processing style, assessing the extent to which individuals differentiate between ideas when considering issues and then integrate these differing perspectives (e.g., Suedfeld & Rank, 1976). Targets on average demonstrated some differentiation and little to no integration when discussing major decisions and conflicts in their lives, but there was considerable variation between targets (M = 2.30; SD = 1.11). Integrative complexity was not significantly associated with either distinctive accuracy or target psychological adjustment, all ps > .33.

and total overall words were marginally associated with greater distinctive accuracy, all ps < .10 (see Table 2). However, none of these indices of information quantity were significantly associated with adjustment, all ps > .37, although total word count was trending towards marginal, b = 86.52, d = .48, t(42) = 1.59, p = .12.¹⁷ Nevertheless, controlling for target adjustment, the association between total word count and distinctive accuracy weakened, b = .0001, d = .39, z = 1.30, p = .19, while adjustment remained a significant moderator of distinctive accuracy controlling for word count, b = .09, d = .75, z = 2.12, p < .05. Thus, sheer information quantity does not appear to account for the links between adjustment and expressive accuracy either.

Mechanism 4: Attention

On average, well-adjusted targets were not rated as significantly more attention-getting, b = -.16, d = -.34, t(42) = -1.13, p = .26, or engaging, b = -.21, d = -.36, t(42) = -1.18, p = .25. However, once again, if a perceiver found a specific target to be more attention-getting or engaging, they did tend to view that specific individual with significantly greater accuracy,

¹⁷ Note that the substantial difference in the unstandardized effects for adjustment predicting word count, b = 86.52, t(42) = 1.59, p = .12, and word count moderating distinctive accuracy, b =.0002, z = 1.78, p < .10, is a function of the large differences in the scaling and range of these variables. Thus, a one unit increase in adjustment is associated with speaking 85.52 more words, but this is only approaching marginal significance because the mean number and range of total words spoken is so large (M = 387.60, SD = 309.35). In contrast, speaking one more word is associated with only a .0001 increase in distinctive accuracy, but this is marginally significant because the mean and range of distinctive accuracy slopes is very small (M = .18; SD = .23).

interaction b = .03, d = .39, z = 7.81, p < .0001, and, b = .04, d = .43, z = 8.56, p < .0001, respectively. Of note, perceiver attention and target psychological adjustment did once again significantly interact to predict greater distinctive accuracy, interaction b = .04, z = 7.08, p < .0001, as did perceiver engagement and target adjustment, interaction b = .05 z = 9.63, p < .0001. Specifically, if a perceiver found a well-adjusted target to be more attention-getting (target adjustment 1 SD above the mean), they viewed that target with significantly higher levels of accuracy, b = .07, d = .96, z = 10.84, p < .0001. In contrast, finding a less-adjusted individual to be more attention-getting (target adjustment 1 SD below the mean) was actually marginally related to lower accuracy, b = -.01, d = -.14, z = -1.72, p < .10. This again suggests that information plays an important role in the link between adjustment and judgeability.

As in Study 3, we examined the role of perceiver attention within the behavioralcongruence mediational model to determine whether greater perceiver attention enhances the use of behavioral information (moderating path *b*, Figure 5), in turn enhancing the accuracy of impressions, especially for well-adjusted individuals who provide more relevant behavioral information. Greater perceiver attention and engagement did significantly moderate the extent to which targets' behaviors predicted perceivers' personality impressions, interaction b = .02, d =.29, z = 2.37, p < .05, and, b = .02, d = .32, z = 2.63, p < .0001, respectively. In sum, paying more attention to well-adjusted individuals appears to be promote accuracy because of greater reliance on the more personality-congruent behaviors that well-adjusted individuals engage in.

Once again, paying more attention to less adjusted individuals does not enhance distinctive accuracy, further emphasizing the multiplicative nature of the realistic accuracy model (Funder, 1995): successful achievement of the earlier stages (e.g., providing more relevant cues) is necessary for the facilitation of the latter stages (e.g., enhancing cue detection) to improve accuracy. Given that less adjusted individuals provide less relevant information, paying more attention to less adjusted individuals is not as helpful for enhancing distinctive accuracy.

3.7 Summary and Discussion

Overall, across two video-perceptions studies of first impressions, well-adjusted individuals were seen more accurately than less adjusted individuals. This replicates and extends the findings in Chapter 2 and previous research that has found that well-adjusted individuals are seen more accurately by close others (Colvin, 1993a, 1993b). Thus, well-adjusted individuals are easier to understand even when perceivers do not interact with them directly; well-adjusted targets' greater expressive accuracy emerges in relatively brief videotaped interviews.

More importantly, however, these studies shed light on *why* well-adjusted individuals are so easy to understand. Specifically, well-adjusted individuals tend to behave more in line with their distinctive personality traits than less adjusted individuals. In turn, perceivers heavily rely on the behavioral information that targets' provide. As a result, well-adjusted individuals are seen much more in line with their distinctive personalities than less adjusted individuals. Thus, well-adjusted individuals are more judgeable because they provide more relevant cues to others, primarily facilitating the first stage of the realistic accuracy model. Well-adjusted individuals' judgeability is further amplified when perceivers pay attention to them, thereby facilitating the cue detection and utilization stages of RAM by making use of the more relevant information that well-adjusted targets emit. These findings have implications not only for the role of psychological adjustment in impression formation, but also for the nature of psychological adjustment and impression formation more generally.

3.7.1 Mechanism 1: Personality-Behavior Congruence

The finding that psychological adjustment is associated with greater personality-behavior congruence is in line with the long-standing idea that personality congruence is a critical feature of psychological adjustment and maturity (Block, 1961; Rogers, 1961), and with much related empirical research (Clifton & Kuper, 2011; Diehl & Hay, 2007, 2010; Donahue et al., 1993; Erickson et al., 2009; McReynolds et al., 2000; Sheldon et al., 1997; Sherman et al., 2010). However, this finding is less consistent with recent work finding that adjustment and authenticity are associated with behaving in a normative manner, rather than in line with one's distinctive personality profile (Sherman et al., 2012; Fleeson & Wilt, 2010). For example, Sherman et al. (2012) found that although well-adjusted individuals were more likely to report overall personality-behavior congruence in their daily lives, they did not report greater levels of distinctive personality-behavior congruence. Thus, well-adjusted individuals' greater overall personality-behavior congruence was attributed to behaving more in line with the normative personality profile. Although well-adjusted individuals did behave more in line with the normative profile in Study 3, which is consistent with this previous research, in both Studies 3 and 4, well-adjusted individuals were also more likely to behave in line with their distinctive personality traits.

Why the discrepancy? One possibility is the differing social settings. In Sherman et al.'s study, behaviors were assessed in four different situations in daily life. In contrast, in our studies, behaviors were assessed only in an interview-type situation, where targets, either alone in a room or with an interviewer, were answering personal questions about themselves. Thus, it may be that well-adjusted individuals are particularly likely to allow their more distinctive selves to come through in settings where they are focused on a task relevant to expressing oneself. Note,

however, that in Study 3 targets were not aware others would view their videotape. Thus, knowledge that others will be forming an impression of the self does not seem to be a necessary component for distinctive personality-behavior congruence to emerge for well-adjusted individuals.

Another possible reason for the differing findings is that the behavior ratings in Sherman et al.'s (2012) study were based on self-reports and recall, rather than directly observed by outside observers. Perhaps well-adjusted individuals tend to better recall the more normative components of their behavior, compared with the more distinctive components. A critical avenue for future research will be to examine the associations between adjustment and distinctive vs. normative personality-behavior congruence in different types of situations and with different behavior ratings methods.

The fact that personality-behavior congruence was in turn linked to forming more accurate impressions is in line with previous research that has found other indices of personality coherence to be linked to more accurate impressions in close relationships (Baird et al., 2006; Bem & Allen, 1974; Biesanz et al., 1998; Biesanz & West, 2000; Cheek, 1982; Kenrick & Stringfield, 1980; Zuckerman et al., 1988; Zuckerman et al., 1989). However, to our knowledge, this is the first study to show that personality coherence is associated with more accurate first impressions. This is interesting given that personality coherence, and the corresponding consistency and stability that go along with it, would seem most likely to promote accurate impressions where continued, long-term observation of behavior is possible (e.g., Colvin, 1993b). These findings suggest, then, that personality coherence can result in immediate benefits to the accuracy of impressions.

Furthermore, this is the first study to directly examine personality coherence as a mediating link between psychological adjustment and expressive accuracy. Although this is a correlational study, and therefore mediation can not be definitively established, these results are consistent with the argument that greater psychological adjustment does indeed promote judgeability in first impressions via greater personality coherence. It is likely, but remains to be empirically tested, that personality coherence also underlies the associations between psychological adjustment and greater judgeability in closer relationships.

3.7.2 Mechanism 2: Internally-Relevant Information

Somewhat surprisingly, the provision of more internally relevant information, such as more emotion and cognitive processing words, was not consistently linked to either psychological adjustment or greater distinctive accuracy. In Study 3, targets who were rated as discussing their thoughts and feelings to a greater extent did tend to be viewed with greater distinctive accuracy, but well-adjusted individuals were not more likely to discuss their thoughts and feelings. There were no significant associations among the emotion, causal, or insight words with either distinctive accuracy or adjustment. One possible reason for the lack of significant effects in Study 3 could be because targets were answering very basic getting-acquainted questions (e.g., *List two or three interests*) and the answers in turn were quite brief. In Study 4, which involved more in depth questions, well-adjusted individuals were more likely to use more positive emotion words when discussing major decisions and conflicts in their lives, in line with previous findings that the use of positive emotions words is associated with betting coping and health (Pennebaker et al., 1997). However, the use of positive emotion words did not promote accuracy.

The only type of words that were significantly associated with greater distinctive accuracy in Study 4 were causal words. That is, targets who used more explanatory words (e.g., *because* and *reason*) were seen more accurately. Interestingly, although the overall psychological adjustment indicator was not significantly associated with using more causal words, targets who were higher in self-esteem and lower in depression were marginally significantly more likely to use causal words. Thus, it is possible that certain aspects of adjustment do promote more coherent, integrated narratives, which in turn promote accuracy. However, this is a very tentative suggestion given the null results for the other narrative coherence indicators in both studies. Nevertheless, this is an interesting finding that would perhaps be best followed up in even more emotionally-relevant contexts, where emotional and cognitive expression would be greater and, in turn, individual differences in emotional expression and coherence would be more likely to emerge. Overall, in basic getting-acquainted situations, well-adjusted individuals do not appear to be more accurately perceived because they provide more internally-relevant information, although this mechanism warrants further investigation in other contexts.

3.7.3 Mechanism 3: Information Quantity

Well-adjusted individuals showed no significant tendency to provide more information in either Study 3 or 4, as indexed by speaking more words in total, more dictionary words, or a greater number of words per sentence. Thus, it does not appear that well-adjusted individuals' greater extraversion or social ease leads them to provide a greater quantity of verbal information, at least in the current social settings.

Providing more information was significantly associated with forming more accurate impressions in Study 4, in line with previous research (Biesanz et al., 2007; Blackman & Funder, 1998). Providing more information was not significantly associated with greater accuracy in

Study 3, perhaps because of the generally shorter length and variability in the interviews. Again, this difference may be a result of the more superficial informational content in Study 3, which is likely to result in generally shorter responses and less variability. Nevertheless, in neither study was there evidence that well-adjusted individuals are seen more accurately because they make more information available to others.

3.7.4 Mechanism 4: Attention

Well-adjusted individuals were rated as more attention-getting in Study 3, and receiving more attention was associated with more accurate impressions in both studies, in line with previous research (Human, Biesanz, Parisotto, & Dunn, 2012; Lorenzo et al., 2010). However, in Study 3, being attention-getting did not appear to account for well-adjusted individuals' tendency to be seen more accurately. Nor was there any evidence to support this mechanistic link in Study 4, where well-adjusted individuals were not rated as more attention-getting, but were still seen more accurately.

Interestingly, the results with attention did further support the cue relevance explanation for well-adjusted individuals' judgeability. Specifically, in both studies, there was a significant positive interaction between adjustment and attention predicting distinctive accuracy, such that paying more attention to targets enhanced accuracy more for well-adjusted than mal-adjusted targets. This finding indicates that well-adjusted individuals do provide others with more relevant information that, if detected, promotes more accurate impressions. In contrast, paying more attention to less adjusted individuals does not buy perceivers any additional accuracy, suggesting that less adjusted individuals do not emit as relevant cues. These findings are in line with the multiplicative nature of RAM (Funder, 1995), highlighting that facilitating the cue

detection and utilization stages of RAM is only useful if the cues that are provided are relevant to the target's personality.

At present, it appears that this more relevant information is the greater personalitybehavior congruence that well-adjusted targets exhibit. Indeed, in both Studies 3 and 4, we found that paying more attention to targets was associated with making greater use of their behavioral information when forming impressions. In turn, because well-adjusted individuals' behavioral cues are more in line with their distinctive personalities, perceivers were then able to form more distinctively accurate impressions. In sum, in some situations well-adjusted individuals may elicit more attention from others, and while this may help to further aid their judgeability, it does not account for it. Nevertheless, it is possible that perceivers are not fully aware of whom they are paying more attention to, making it important for future research to examine alternative indicators of attention, such as eye trackers or observer ratings.

3.7.5 Summary and Conclusions

Overall, the only consistent link between psychological adjustment and the proposed mechanisms underlying expressive accuracy was at the cue relevance stage of RAM, in the form of greater personality-behavior congruence. Note, however, that personality-behavior congruence did not fully account for the association between adjustment and expressive accuracy, indicating that the future research should continue to examine the sources of welladjusted individuals' greater expressive accuracy. The role of internally-relevant information and narrative coherence was less consistent, but there were some hints that this type of cue relevance could also play a role, making this another interesting topic for further research. In contrast, the cue availability and detection phases did not have strong or consistent enough associations with psychological adjustment to lend much support to those potential mechanisms.

In general, however, the RAM model was supported, as greater cue relevance,

availability, and detection were all associated with more accurate impressions in at least one of the two studies. Thus, just because well-adjusted individuals appear to be seen more accurately primarily because of greater personality-behavior congruence, it is still possible for people to enhance their judgeability through other means. Assuming the provision of at least some relevant information, providing more of it or eliciting others' attention are ways of further enhancing one's judgeability. Interestingly, eliciting others' attention is not as hard as it may seem, as simply trying to make a good impression on others is one simple way to be seen as more engaging and in turn more accurately (Human, Biesanz, Parisotto, & Dunn, 2012). A fuller understanding of judgeability will require understanding what other characteristics of a target facilitate each of these stages of accurate perception.

Conclusion

Why is it that well-adjusted individuals are such open books? It appears to be because the information provided on any given page is very relevant to the overall story, or personality, of the individual – that is, well-adjusted individuals provide better information. Specifically, well-adjusted individuals are more likely to behave in line with their distinctive personality traits than less adjusted individuals, demonstrating greater distinctive personality-behavior congruence. Furthermore, when their story is also more interesting and engaging, well-adjusted individuals are seen even more accurately because the more relevant information that they provide is more likely to be detected and utilized. However, well-adjusted individuals were not in general rated as more attention-getting, nor did they provide more information. Nevertheless, each pathway – cue relevance, availability, and detection – does promote judgeability and could be utilized by those wishing to be more accurately perceived. Being seen accurately, in turn, is likely to carry

many individual and interpersonal benefits for the target. In sum, well-adjusted individuals are seen more accurately because to their own selves, they are true.

Chapter 4: General Discussion

Overall, across four studies and two different first impression paradigms, well-adjusted individuals' unique, differentiating characteristics were better understood than less adjusted individuals' personalities. That is, after just several minutes of face-to-face interaction or viewing brief videoclips, perceivers agreed more with well-adjusted individuals and those who know them well regarding their unique profile of self-reported traits (e.g., whether they were more energetic than forgiving) and were better able to differentiate among well-adjusted than less adjusted individuals (e.g., understanding which targets were more energetic and forgiving than others). Furthermore, Studies 1 and 2 demonstrated that this greater accuracy is indeed due to greater target judgeability, rather than greater target self-knowledge. Studies 3 and 4 then examined why it is that well-adjusted individuals are more judgeable, finding evidence that well-adjusted individuals behave more in line with their personalities, in turn providing others with more relevant information and enhancing accuracy. These findings and their implications are discussed in more detail below.

4.1 Summary of Results

4.1.1 Judgeability vs. Self-knowledge

Studies 1 and 2 provided initial evidence that well-adjusted individuals are seen more accurately in face-to-face first impression contexts. Furthermore, these studies helped to disentangle the competing hypotheses regarding whether this greater accuracy is due to welladjusted individuals' greater judgeability or self-knowledge. That is, do new acquaintances agree more with well-adjusted individuals' regarding their unique personality traits because welladjusted individuals are easy to understand, or because well-adjusted individuals know themselves better? By considering when the self- vs. the other perspective may be more or less

accurate, these studies provided support for the judgeability hypothesis. Specifically, welladjusted individuals were seen significantly more accurately on less observable than highly observable traits, relative to less adjusted individuals. Because the self is arguably more knowledgeable about less observable traits compared with outside observers (e.g., Robins & John, 1997; Vazire, 2010), greater agreement on such traits can be considered reflective of greater judgeability – others are better able to understand these less visible traits.

Well-adjusted individuals were also seen somewhat more accurately than less adjusted individuals on their more observable traits. Because others are argued to be more accurate about more observable traits than the self (Vazire, 2010), greater agreement on such traits suggests that the self has greater knowledge about how they behave and appear to others. Thus, well-adjusted individuals may also have greater self-knowledge, in line with previous research (Campbell, 1990; Vogt & Colvin, 2005). Nevertheless, the greater levels of self-other agreement regarding well-adjusted individuals distinctive traits were more strongly driven by agreement on low observability traits, thus indicating that this greater agreement is more a function of greater judgeability, rather than self-knowledge. Thus, well-adjusted individuals are open books, even after just several minutes of acquaintance.

4.1.2 Mechanisms

Why are well-adjusted individuals such open books? Studies 3 and 4 examined a variety of possible mechanisms that could link psychological adjustment to judgeability. Specifically, drawing on the realistic accuracy model (RAM; Funder 1995), I examined whether well-adjusted individuals: a) provide more relevant behavioural or verbal cues, b) provide a greater amount of verbal cues, and/or c) promoted cue detection by eliciting greater perceiver attention. Across the two studies, the most consistent support was found for the behavioral cue relevance mechanism.

In particular, well-adjusted individuals were more likely to behave in line with their distinctive personality traits in the video clips, in turn allowing perceivers to base their judgements on more relevant cues and thus form more accurate impressions. Thus, well-adjusted individuals appeared to be sufficiently at ease in these interview situations to "be themselves", letting others better understand who their true self is.

In contrast, well-adjusted individuals did not appear to provide a greater overall quantity of information, nor did they consistently provide higher quality verbal information or elicit greater attention from perceivers. Nevertheless, when well-adjusted individuals did manage to garner greater attention, they were seen even more accurately, thus further supporting the argument that well-adjusted individuals provide others with better quality information. Overall, then, there is consistent evidence that well-adjusted individuals are open books because they provide others with a more coherent picture of what their personalities are really like.

4.2 Integration

Combined, these studies provide strong evidence that well-adjusted individuals are highly judgeable in first impression contexts and shed light on the underlying processes linking psychological adjustment to judgeability. That is, although well-adjusted individuals are more accurately understood on all of their traits, both high and low observability, it is their judgeability on their low observability traits that especially sets them apart from less adjusted individuals. Thus, if Jack is well-adjusted and Joe is much less adjusted, it is Jill's understanding of how forgiving and organized Jack is that really improves her understanding of Jack over Joe.

But what is it that Jack is doing differently from Joe that enables Jill to understand him so easily? Studies 3 and 4 suggest that in any given situation, Jack is more likely than Joe to behave in line with his distinctive characteristics. So if Jack is very energetic and not very forgiving, he

is likely to behave in a very active, energized manner with Jill, and he may even bring up some grudges he holds against other people during their conversation. In contrast, even though Joe is also quite energetic, he may or may not appear that way when he interacts with Jill, and his more forgiving nature is even less likely to come through, given that this is a less observable trait. On the other hand, Jack and Joe are unlikely to provide differential amounts of verbal information or elicit different amounts of attention from Jill. However, even if Jill pays very close attention to Joe, she may still have difficulty forming an accurate impression of Joe if he is not providing her with enough relevant information. Paying more attention to Jack, in contrast, should substantially improve the accuracy of her impressions, especially on less observable traits.

In conclusion, then, these four studies nicely complement one another, demonstrating the consistent role that adjustment plays in judgeability, shedding light on the types of traits for which this differential judgeability is likely to emerge, and providing initial insight into what it is that well-adjusted individuals do to enhance their judgeability. Nevertheless, the sources of well-adjusted individuals' judgeability were not fully explained by the mechanisms examined here, nor does adjustment itself fully explain individual differences in judgeability, indicating that further research on this topic is needed.

4.3 Implications

Beyond the central questions of interest, the research reported in this dissertation has a variety of broader implications for our understanding of both psychological adjustment and judgeability. Although several such implications have been briefly mentioned throughout the dissertation, these implications are summarized and elaborated upon below. Specifically, I consider the broader implications this research has for our understanding of psychological adjustment, how to improve judgeability, and the potential benefits of judgeability.

4.3.1 Psychological Adjustment

In addition to demonstrating that psychological adjustment is associated with greater judgeability, these findings have a number of further implications for our understanding of the construct of psychological adjustment. Specifically, the studies inform research on the hedonic vs. eudaimonic components of adjustment, and the relationships between adjustment and selfknowledge, personality coherence, and extraversion and attention.

Hedonic vs. Eudaimonic Adjustment

The remarkably consistent pattern of associations between the different indicators of psychological adjustment in Studies 1 and 2, and the reliable composite indicators in Studies 3 and 4, contribute to the growing body of literature demonstrating that the theoretical distinction hedonic and eudaimonic well-being is not evident in empirical research (Kashdan, Biswas-Diener, & King, 2008; Nave, Sherman, & Funder, 2008; Ryan & Deci, 2001). That is, hedonic well-being, or a happy frame of mind, and eudaimonic well-being, reflecting a more meaningful, purposeful satisfaction with life, generally appear to have similar patterns of associations. This raises the question as to how meaningful and useful the theoretical distinction between these different aspects of well-being is. Further research, where the aim is to directly distinguish these types of well-being from one another, is needed to address this question.

Self-Knowledge

Second, although the association between psychological adjustment and judgeability was stronger, there was still an association between psychological adjustment and self-knowledge. Specifically, well-adjusted individuals also agreed more strongly with new acquaintances about their more observable traits compared with less adjusted individuals, suggesting they do have a better understanding of how they behave in daily life. This is in line with previous findings and

theorizing that adjustment is related to greater self-knowledge (Campbell, 1990; Jahoda, 1958; Rogers, 1961; Vogt & Colvin, 2005). However, by using trait observability to disentangle selfknowledge from judgeability, the current findings overcome some of the issues with previous empirical findings, including the ambiguity involved in using self-other agreement as an indicator of self-knowledge (see Ch. 2) and the inherent problem of relying on self-reported selfknowledge (which itself assumes self-knowledge).

This link between adjustment and self-knowledge is especially interesting given evidence that well-adjusted individuals may also have positively biased self-views (e.g., Taylor & Brown, 1988). These are not necessarily conflicting findings, however, given that accuracy and bias can be independent of one another (e.g, Funder & Colvin, 1997): for example, Jack can think he is more energetic and forgiving than he really is but still know he more energetic than forgiving. As such, it is possible that well-adjusted individuals simultaneously hold more biased and accurate self-perceptions, which in turn might be a very beneficial combination (Lackenbauer, Campbell, Rubin, Fletcher, & Troister, 2010).

Personality Coherence

Third, the finding that psychological adjustment is associated with greater behavioral congruence contributes to the large but mixed literature linking psychological adjustment to greater personality coherence. Much previous research has found evidence for a link between greater psychological adjustment and coherence (e.g., Block, 1961; Donahue et al., 1993; McReynolds et al., 2000; Sheldon et al., 1997), yet much of this work has relied very heavily on self-reported coherence. More recent methodologically and statistically advanced research has found less evidence for a link between adjustment and distinctive coherence (Baird et al., 2006, Sherman et al., 2012). However, the present research, which went beyond self-reported indices

of personality coherence by utilizing both self- and close-other assessments of personality and external, independent ratings of behavior, did find support for an adjustment-personality coherence link, at least when personality coherence is indexed as greater distinctive personalitybehavior congruence. Clearly more research is needed to fully understand when and how welladjusted individuals may exhibit greater personality coherence.

Extraversion and Attention

Finally, these results suggest that, at least in basic getting acquainted situations, welladjusted individuals do not necessarily speak more or elicit more attention from others, two highly plausible possibilities given that extraversion is associated with some aspects of wellbeing (namely, positive affect; Diener et al., 1985), and that positive interpersonal behaviors can at times elicit more attention from perceivers (Human, Biesanz, Parisotto, & Dunn, 2012). One might expect well-adjusted individuals would be more socially at ease and thus willing and confident enough to provide more information, and/or be more charismatic and charming, but this did not appear to be the case. Perhaps this is because the greater personality-behavior congruence that well-adjusted individuals exhibit allows the less extraverted and charismatic individuals to let that side of themselves show, whereas their less adjusted counterparts try to cover that up, thus levelling out the playing field when it comes to the amount of information provided and attention elicited. Indeed, narcissists and chronic self-enhancers tend to behave in very positive manner in first impression contexts, with their more negative traits only emerging with longer acquaintance (Back, Schmukle, & Egloff, 2010; Paulhus, 1998).

4.3.2 How to Improve Judgeability

Cue Relevance

Beyond the role of psychological adjustment, these results more broadly illuminate the construct of judgeability and how to be seen more accurately. Studies 3 and 4 provide the most comprehensive simultaneous examination of the different stages of the realistic accuracy model to date. Notably, evidence for each of these stages promoting accuracy was found in at least one of the two studies. With respect to cue relevance, as has been emphasized, behaving in line with one's distinctive personality traits is one strong predictor of being seen more accurately. However, there was also some evidence that verbal cue relevance promotes distinctive accuracy too: in line with much earlier work (Andersen, 1984), Study 3 found that talking more about ones thoughts and feelings was associated with greater distinctive accuracy, and in Study 4, a more novel indicator of verbal cue relevance, the use of more causal, explanatory words, was found. Thus, both behavioral and verbal cue relevance may promote accuracy.

Cue Availability and Detection

Cue availability also promoted distinctive accuracy in Study 4, where the sheer amount of verbal information was associated with more accurate impressions, in line with previous experimental and longitudinal findings (Biesanz, West, & Millevoi, 2007; Blackman & Funder, 1998). Finally, an indicator of cue detection, unique dyadic level perceiver reported attention, was associated with more accurate impressions in both studies, also replicating previous research (Human, Biesanz, Parisotto, & Dunn, 2012). Clearly there are a variety of pathways through which a target can promote their judgeability, as each of these pathways can promote accuracy simultaneously. Hopefully future research will also be able to incorporate measures of the cue utilization stage of RAM, so that the role of each stage can be examined within the same study.

A benefit of examining multiple stages of RAM simultaneously is the ability to examine the multiplicative nature of the model (Funder, 1999). Indeed, these studies found support for the idea that the latter stages are somewhat dependent on the successful achievement of the previous stages. Specifically, cue detection was especially helpful when targets provided more relevant cues; in cases where targets did not provide high quality information (such as in the case of less adjusted individuals), greater cue detection was not beneficial. Thus, for the latter stages to promote accuracy, the previous stages must first be met. This once again emphasizes how important a role the target plays in influencing the ultimate accuracy of impressions, as targets arguably play the most direct role in the first stages of RAM.

Overall, by helping to delineate the processes through which well-adjusted targets are seen more accurately, the current studies potentially inform interventions to improve individuals' judgeability. For example, rather than trying to modify an individuals' well-being, which is possible but generally quite difficult (for review see Lyubomirsky, Sheldon, & Schkade, 2005), one could instead attempt to improve judgeability by more directly targeting characteristics that facilitate each of these stages of RAM.

4.3.3 Benefits of Judgeability

But why should people want to improve their judgeability? Being judgeable is a characteristic of psychologically adjusted individuals, but it is possible that judgeability also has benefits for psychological and interpersonal adjustment. For example, people strive to receive self-verifying information, or information that is in line with how one views the self (Swann, 1987; Swann & Hill, 1982), and receiving such information is associated with greater intimacy in romantic relationships (Swann, De La Ronde, & Hixon, 1994) and promotes relationship satisfaction (Lackenbauer et al., 2010). Assuming at least some degree of self-knowledge,

judgeable individuals are therefore more likely to receive such information and in turn enjoy the corresponding benefits. Indeed, Studies 1 and 2 found that well-adjusted individuals do likely have greater self-knowledge than less adjusted individuals, making them more likely to benefit from the self-verification that their greater judgeability is likely to entail. Being seen accurately may also improve one's sense of feeling understood, perhaps enhancing the perception of social support and reducing loneliness, which should both in turn promote individual and interpersonal functioning (e.g., Cohen & Wills, 1985; Hawkley & Cacioppo, 2010).

Perceivers may also better like judgeable people because accurately understanding a target should foster smoother interactions and communication, which could in turn facilitate liking and the motivation to pursue a relationship. Furthermore, perceivers are likely to experience greater processing fluency and familiarity when forming impressions about judgeable targets, which also tend to promote liking (e.g., Langlois & Roggman, 1990; Reber, Schwarz, & Winkielman, 2004; Reis, Maniaci, Caprariello, Eastwick, & Finkel, 2011; but see Norton, Frost, & Ariely, 2007). Indeed, the more accurately a perceiver views a new classmate, the more they interact with that classmate throughout the semester and come to like them by the end of the semester (Human, Sandstrom et al., 2012). Targets also better like perceivers who view them more accurately and sit with them more frequently in class (Human, Sandstrom et al., 2012). Thus, it does seem like it could be very beneficial to be seen accurately, both personally and interpersonally.

Nevertheless, the potential downsides of judgeability do need to be examined, as being accurately perceived may not be beneficial in all situations or for all individuals. For example, individuals with very negative self-views may not benefit from being perceived accurately if this further reinforces negative self-views (North & Swann, 2009). It is unclear, however, what the

alternative, more preferable scenario would be for people with negative self-views, as receiving self-discrepant, positive feedback is also likely to have a negative impact on these individuals' well-being (see Wood, Perunovic, & Lee, 2009). Overall, most individuals, and well-adjusted individuals in particular, are likely to experience many positive consequences as a result of their judgeability, perhaps enhancing or further reinforcing their well-being.

4.4 Limitations

4.4.1 Methodological

One limitation of the current studies is that they were all correlational in nature, thus raising questions about the direction of causality for all of the results. For example, although we have conceptualized adjustment as promoting judgeability, it is certainly plausible that judgeability also promotes adjustment. Indeed, as discussed in section 4.3.3 (Benefits of Judgeability), there likely is a bi-directional association between adjustment and judgeability. An important next step for this line of research will be to conduct experimental and longitudinal studies in order to determine whether adjustment and judgeability do in fact promote on another.

4.4.2 Alternative Explanations

It is also possible that there may exist third variables that could explain the apparent associations between adjustment and judgeability. For example, social status is associated with better psychological functioning (Dohrenwend et al., 1992) and may promote judgeability through several pathways. For example, people high in trait status are more likely to express themselves openly (Anderson & Berdahl, 2002), potentially facilitating the cue relevance stage of RAM. Thus, it is possible that it is social status, rather than adjustment, that promotes judgeability through greater personality-behavior congruence. However, high status individuals

also elicit more attention from others (e.g., Dépret & Fiske, 1999; Erber & Fiske, 1984; Neuberg & Fiske, 1987; Ruscher & Fiske, 1990), and thus if psychological adjustment really were just a proxy for social status, attention and cue detection would have likely played a stronger role in the adjustment-judgeability link. Nevertheless, it will be important for future research to examine whether the associations between psychological adjustment and judgeability hold controlling for social status, and to also examine social status as a predictor of judgeability in its own right.

4.4.3 Generalizability

Beyond First Impressions

The current studies focused on the associations between adjustment and accurate interpersonal impressions solely in first impressions contexts. Thus, it is possible that selfknowledge could play a stronger role in self-other agreement in longer-term relationships, and/or that different mechanisms could link adjustment to judgeability in longer-term relationships. Although past research has demonstrated that well-adjusted individuals are seen with greater self-other agreement by close peers (Colvin, 1993a, 1993b), the differential roles of judgeability and self-knowledge as determinants of this agreement and potential mechanisms have yet to be explored.

Judgeability vs. Self-Knowledge. With respect to the judgeability vs. self-knowledge question, it is possible judgeability remains the primary determinant of self-other agreement in longer-term acquaintanceship, but self-knowledge may also become important as others develop even more accurate impressions of targets (Biesanz et al., 2007), and likely gain greater access to their less visible traits (e.g., Vazire, 2010). Importantly, it may not be possible to utilize observability to disentangle self-knowledge and judgeability at higher levels of acquaintance, as the observability of traits is no longer such an important determinant of self-other agreement at

high acquaintance (Paunonen, 1989). An alternative approach may be needed to disentangle judgeability and self-knowledge for self-close other agreement.

Mechanisms. It is also possible that different mechanisms could link psychological adjustment and target judgeability in closer relationships. For example, perhaps information quantity rather than quality comes to play a stronger role in longer-term relationships. That is, once sufficiently relevant information has been made available to new acquaintances, enhancing accuracy over the longer term may be more about maintaining continued contact and being exposed to a higher quantity of information. It would be very interesting to examine the roles of these mechanisms in longer-term relationships, as well as track how adjustment relates to judgeability over time in longitudinal studies.

Beyond Personality Traits

Another limitation is that the current research examined impressions only of stable personality traits, rather than more transient states or cognitions, or of other stable characteristics, such as motivations. There is evidence that well-adjusted individuals' more immediate emotions are also more accurately understood (e.g., Riggio & Riggio, 2002), but future research will need to examine the comparative roles of judgeability and self-knowledge in that accuracy, as well as examine whether similar mechanisms link adjustment to judgeability in impressions of other characteristics.

Beyond North American Young Adults

All of the studies involved samples of university students in North America, raising questions about how these findings would apply to different cultural, social, and age groups. With respect to cross-cultural differences, the participants from the Western culture examined here are likely to value independence more so than those from East Asian cultures, where

interdependence is typically more strongly valued (Markus & Kitayama, 1991; Triandis, 1989). More interdependent values are in turn associated with lower levels of cross-situational consistency (Suh, 2002), an indicator of the personality coherence that we have just seen may explain the links between adjustment and judgeability. Furthermore, greater consistency is not as strongly associated with psychological well-being for individuals with more interdependent selfconstruals (Cross, Gore, & Morris, 2003; English & Chen, 2007; 2011; Suh, 2002). As such, it is possible that individuals from East Asian, and generally more interdependent, cultures may be less easy to judge, and that well-being may not play as strong a role in judgeability. Further, different cues to an individual's emotions and personality may be more relevant to judgeability in different cultures. However, recent work has demonstrated that even though individuals from interdependent cultures show less consistency across social roles, they still exhibit high consistency within social roles over time and this within role-consistency is also associated with positive functioning (English & Chen, 2007, 2011). Future research will need to directly examine whether levels of and antecedents of judgeability vary across cultures.

Judgeability may also not carry the same social and psychological consequences within interdependent cultures, as it may not be as important and beneficial to be judged accurately. For example, although European and African Americans enjoy having their personal selves accurately understood, people from East Asian cultures feel happier when their social selves are better understood (Oishi, Koo, & Akimoto, 2008); thus having one's distinctive personality traits be verified by others may be less important to East Asians' well-being. Interestingly, however, even though individuals from East Asian cultures are less likely to self-disclose than those from American cultures (e.g., Chen, 1995), self-disclosure is still associated with greater friendship strength among Chinese roommates (Wong & Bond, 1998). Thus, self-disclosure may still be relevant to interpersonal satisfaction in East Asian cultures. Thus, at present there is mixed evidence as to whether greater judgeability would have positive consequences in more interdependent cultures, making this a very interesting question for future research.

These studies did involve a large number of participants of East Asian descent, who presumably hold more interdependent than independent self-construals, and the results did not differ significantly between East Asian and North American cultural groups. However, participants with an East Asian background may have been highly acculturated to North American culture, making it unclear how these findings would apply to less acculturated groups. As such, it is critical that future research considers potential cross-cultural differences in judgeability and its associations with psychological adjustment, as well as different age groups and individuals with different education backgrounds, for example.

4.5 Final Conclusion

In conclusion, well-adjusted, happy people tend to be open books: their distinctive personality traits are accurately understood very quickly. Although well-adjusted individuals do appear to possess greater self-knowledge, which might help facilitate greater agreement between the self and new acquaintances, it appears that well-adjusted individuals are primarily seen more accurately because of their greater judgeability. That is, well-adjusted individuals enable others greater insight into their less observable, distinctive personality traits. How do well-adjusted individuals do this? Well-adjusted individuals tend to behave in a manner highly consistent with their distinctive personality traits, thus providing others with very diagnostic information regarding who they really are. In sum, well-adjusted individuals are more judgeable because to their own selves, they are true.

Bibliography

- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York, NY: Holt, Reinhart & Winston.
- Allport, G. W. (1961). *Patterns and growth in personality*. New York, NY: Holt, Reinhart & Winston.
- Ambady, N., Hallahan, M., & Rosenthal, R. (1995). On judging and being judged accurately in zero-acquaintance situations. *Journal of Personality and Social Psychology*, 69, 518-529. doi:10.1037/0022-3514.69.3.518
- Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, 83, 1362-1377. doi:10.1037//0022-3514.83.6.1362
- Andersen, S. M. (1984). Self-knowledge and social inference: II. The diagnosticity of cognitive/affective and behavioral data. *Journal of Personality and Social Psychology*, 46, 294-307. doi:10.1037/0022-3514.46.2.294
- Back, M., D. Schmukle, S. C. & Egloff, B. (2010). Journal of Personality and Social Psychology, 98, 132-145. doi: 10.1037/a0016338
- Baerger, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well-being. *Narrative Inquiry*, 9, 69-96.
- Baird, B. M., Le, K., & Lucas, R. E. (2006). On the nature of intraindividual personality variability: Reliability, validity, and associations with well-being. *Journal of Personality* and Social Psychology, 90, 512-527. doi:10.1037/0022-3514.90.3.512

- Bates, D., & Sarkar, D. (2007). *lme4: Linear mixed-effects models using S4 classes (R package version 0.9975-12) [Computer Program]*. Retrieved January 15, 2009, from http://cran.r-project.org/ web/packages/lme4/index.html.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*, 323. doi:10.1037//1089-2680.5.4.323
- Bem, D. J., & Allen, A. (1974). On predicting some of the people some of the time: The search for cross-situational consistencies in behavior. *Psychological Review*, 81, 506-520. doi:10.1037/h0037130
- Beer, A., & Watson, D. (2008). Personality judgment at zero acquaintance: Agreement, assumed similarity, and implicit simplicity. *Journal of Personality Assessment, 90*, 250-260. doi:10.1080/00223890701884970
- Biesanz, J. C. (2010). The social accuracy model of interpersonal perception: Assessing individual differences in perceptive and expressive accuracy. *Multivariate Behavioral Research*, 45, 853-885. doi: 10.1080/00273171.2010.519262
- Biesanz, J. C., Falk, C. F. & Savalei, V. (2010). Assessing mediational models: Testing and interval estimation for indirect effects. *Multivariate Behavioral Research*, 45(4), 661-701. doi: 10.1080/00273171.2010.498292
- Biesanz, J. C., & Human, L. J. (2010). The cost of forming more accurate impressions:
 Accuracy-Motivated perceivers see the personality of others more distinctively but less
 normatively than perceivers without an explicit goal. *Psychological Science*, *21*, 589-594.
 doi:10.1177/0956797610364121

- Biesanz, J. C., & West, S. G. (2000). Personality coherence: Moderating self-other profile agreement and profile consensus. *Journal of Personality and Social Psychology*, 79, 425-437. doi:10.1037/0022-3514.79.3.425
- Biesanz, J. C., West, S. G., & Graziano, W. G. (1998). Moderators of self-other agreement:
 Reconsidering temporal stability in personality. *Journal of Personality and Social Psychology*, 75, 467-477. doi:10.1037/0022-3514.75.2.467
- Biesanz, J. C., West, S. G., & Millevoi, A. (2007). What do you learn about someone over time? The relationship between length of acquaintance and consensus and self-other agreement in judgments of personality. *Journal of Personality and Social Psychology*, *92*, 119-135. doi:10.1037/0022-3514.92.1.119
- Blackman, M. C., & Funder, D. C. (1998). The effect of information on consensus and accuracy in personality judgment. *Journal of Experimental Social Psychology*, 34, 164-181. doi:10.1006/jesp.1997.1347
- Block, J. (1961). Ego-identity, role variability, and adjustment. *Journal of Consulting and Clinical Psychology*, 25, 392-397. doi:10.1037/h0042979
- Block, J. (1965). The challenge of response sets. New York: Century.
- Borkenau, P., & Liebler, A. (1993). Convergence of stranger ratings of personality and intelligence with self-ratings, partner ratings, and measured intelligence. *Journal of Personality and Social Psychology*, 65, 546-553. doi: 10.1037/0022-3514.65.3.546
- Borkenau, P., & Zaltauskas, K. (2009). Effects of self-enhancement on agreement on personality profiles. *European Journal of Personality*, *23*, 107-123. doi:10.1002/per.707
- Brunswik, E. (1956). *Perception and the representative design of psychological experiments*. Los Angeles, CA: University of California Press.

- Cervone, D., & Shoda, Y. (1999). *The coherence of personality: Social-cognitive bases of consistency, variability, and organization*. New York: Guilford Press.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105. doi: 10.1037/h0046016
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology*, *59*, 538-549. doi:10.1037/0022-3514.59.3.538
- Campbell, L. (2005). Responses to verifying and enhancing appraisals from romantic partners: The role of trait importance and trait visibility. *European Journal of Social Psychology*, 35, 663-675. doi:10.1002/ejsp.288
- Chan, M., Rogers, K., Parisotto, K. L. & Biesanz, J. C. (2010). Forming first impressions: The role of gender and normative accuracy in personality perception. *Journal of Research in Personality*. doi: 10.1016/j.jrp.2010.11.001
- Chaplin, W. F., & Goldberg, L. R. (1984). A failure to replicate the Bem and Allen study of individual differences in cross-situational consistency. *Journal of Personality and Social Psychology*, 47, 1074-1090. doi:10.1037//0022-3514.47.5.1074
- Cheek, J. M. (1982). Aggregation, moderator variables, and the validity of personality tests: A peer-rating study. *Journal of Personality and Social Psychology*, 43, 1254-1269. doi: 10.1037/0022-3514.43.6.1254

Chen, G. M. (1995). Differences in self-disclosure patterns among Americans versus Chinese: A comparative study. *Journal of Cross-Cultural Psychology*, *26*, 84-91.
doi:10.1177/0022022195261006

- Clifton, A., and Kuper, L. E. (2011). Self-reported personality variability across the social network is associated with interpersonal dysfunction. Journal of Personality, 79, 359 390. doi: 10.1111/j.1467-6494.2010.00686.x
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310-357. doi: 10.1037/0033-2909.98.2.310
- Colvin, C. R. (1993a). Childhood antecedents of young-adult judgeability. *Journal of Personality*, *61*, 611-635. doi:10.1111/j.1467-6494.1993.tb00784.x
- Colvin, C. R. (1993b). Judgeable people: Personality, behavior, and competing explanations.
 Journal of Personality and Social Psychology, 64, 861-873. doi:10.1037/0022-3514.64.5.861
- Colvin, C. R., Block, J., & Funder, D. C. (1995). Overly positive self-evaluations and personality: Negative implications for mental health. *Journal of Personality and Social Psychology*, 68, 1152-1162. doi:10.1037/0022-3514.68.6.1152
- Cronbach, L. J. (1955). Processes affecting scores on "understanding of others" and "assumed similarity". *Psychological Bulletin*, *53*, 177-193. doi:10.1037/h0044919
- Cronbach, L. J. & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*, 281-302. doi: 10.1037/h0040957
- Cross, S. F., Gore, J. S., & Morris, M. L. (2003). The relational-interdependent self-construal, self-concept consistency, and well-being. *Journal of Personality and Social Psychology*, 85, 933-944. doi: 10.1037/0022-3514.85.5.933
- Dépret, E., & Fiske, S. T. (1999). Perceiving the powerful: Intriguing individuals versus threatening groups. *Journal of Experimental Social Psychology*, *35*(5), 461-480.
- Diehl, M., & Hay, E. L. (2007). Contextualized self-representations in adulthood. Journal of

Personality, 75, 1255-1283. doi:10.1111/j.1467-6494.2007.00475.x

- Diehl, M., & Hay, E. L. (2010). Risk and resilience factors in coping with daily stress in adulthood: The role of age, self-concept incoherence, and personal control.
 Developmental Psychology, 46, 1132-1146. doi:10.1037/a0019937
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71-75. doi:10.1207/s15327752jpa4901 13
- Dohrenwend, B.P., Levav, I., Shrout, P.E., Schwartz, S., Naveh, G., Link, B.G., et al. (1992). Socioeconomic status and psychiatric disorders: The causation-selection issue. *Science*, *255*, 946–952.
- Donahue, E. M., Robins, R. W., Roberts, B. W., & John, O. P. (1993). Divided we fall: Selfconcept differentiation, personality, and psychological adjustment. *Journal of Personality* and Social Psychology, 64, 834-846. doi: 10.1037/0022-3514.64.5.834
- Dunning, D. (2005). *Self-insight: Roadblocks and detours on the path to knowing thyself.* New York: Psychology Press.
- Dunning, D., Heath, C., & Suls, J. M. (2004). Flawed self-assessment: Implications for health, educations, and the workplace. *Psychological Science in the Public Interest*, *5*, 69-106. doi: 10.1111/j.1529-1006.2004.00018.x
- Edwards, A. L. (1957). *The social desirability variable in personality assessment and research*. New York: Dryden.
- Ellis, B. J., Simpson, J. A., & Campbell, L. (2002). Trait-specific dependence in romantic relationships. *Journal of Personality*, *70*, 611-659. doi: 10.1111/1467-6494.05019
- Emmons, R. A., & Diener, E. (1985). Personality correlates of subjective well-being.
 Personality and Social Psychology Bulletin, 11, 89-97. doi: 10.1177/0146167285111008

- English, T., & Chen, S. (2007). Culture and self-concept stability: Consistency across and within contexts among Asian Americans and European Americans. *Journal of Personality and Social Psychology*, 93, 478-490. doi: 10.1037/0022-3514.93.3.478
- English, T. & Chen, S. (2011). Self-concept consistency and culture: The differential impact of two forms of consistency. *Personality and Social Psychology Bulletin*, *37*, 838-849. doi: 10.1177/0146167211400621
- Erber, R., & Fiske, S. T. (1984). Outcome dependency and attention to inconsistent information. *Journal of Personality and Social Psychology*, 47, 709-726. doi:10.1037//0022-3514.47.4.709
- Erickson, T. M., Newman, M. G., & Pincus, A. L. (2009). Predicting unpredictability: Do measures of interpersonal rigidity/flexibility and distress predict intraindividual variability in social perceptions and behavior? *Journal of Personality and Social Psychology*, *97*, 893-912. doi:10.1037/a0016515
- Falk, C. F & Biesanz, J. C. (2012) A cross-platform program for making inferences about indirect effects in mediational models. Unpublished manuscript.
- Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology*, 80, 1011 -1027. doi: 10.1037/0022-3514.80.6.1011
- Fleeson, W., & Wilt, J. (2010). The relevance of Big Five trait content in behavior to subjective authenticity: Do high levels of within-person behavioral variability undermine or enable authenticity achievement? *Journal of Personality*, 78, 1353 - 1382. doi: 10.1111/j.1467-6494.2010.00653.x

Fletcher, G. J. O. (2002). The new science of intimate relationships. Malden, MA: Blackwell

Publishing.

- Friedman, H. S., Riggio, R. E., & Casella, D. F. (1988). Nonverbal skill, personal charisma, and initial attraction. *Personality and Social Psychology Bulletin*, 14, 203-211. doi:10.1177/0146167288141020
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review*, 102, 652-670. doi:10.1037/0033-295X.102.4.652
- Funder, D. C. (1999). Personality judgment: A realistic approach to personality perception. San Diego, London: Academic.
- Funder, D. C., & Colvin, C. R. (1997). Congruence of others' and self-judgments of personality.In R. Hogan, J. Johnson & S. Briggs (Eds.), *Handbook of Personality Psychology*. San Diego, CA: Academic.
- Funder, D. C., & Dobroth, K. M. (1997). Differences between traits: Properties associated with interjudge agreement. *Journal of Personality and Social Psychology*, *52*, 409-418. doi:10.1037/0022-3514.52.2.409
- Funder, D., Furr, R., & Colvin, C. (2000). The Riverside Behavioral Q-sort: a tool for the description of social behavior. *Journal of Personality*, 68, 451-489.
- Funder, D. C., & West, S. G. (Eds.) (December, 1993). Viewpoints on personality: Consensus, self-other agreement and accuracy in judgments of personality. *Journal of Personality*, *61(4)*. [Special Issue]. doi: 10.1111/j.1467-6494.1993.tb00778.x
- Furr, R. M. (2008). A framework for profile similarity: Integrating similarity, normativeness, and distinctiveness. *Journal of Personality*, 76, 1267-1316. doi:10.1111/j.1467-6494.2008.00521

Gagné, F. M., & Lydon, J. E. (2004). Bias and accuracy in close relationships: An integrative

review. Personality and Social Psychology Review, 8, 322-338.

doi:10.1207/s15327957pspr0804_1

- Gelman, A. (2008). Scaling regression inputs by dividing by two standard deviations. *Statistics in Medicine*, *27*, 2865-2873. doi: 10.1002/sim.3107
- Gesn, P. R., & Ickes, W. (1999). The development of meaning contexts for empathic accuracy: Channel and sequence effects. *Journal of Personality and Social Psychology*, 77, 746-761. doi:10.1037//0022-3514.77.4.746
- Gosling, S. D., John, O. P., Craik, K. H., & Robins, R. W. (1998). Do people know how they behave? Self-reported act frequencies compared with on-line codings by observers. *Journal of Personality and Social Psychology*, *74*, 1337-1349. doi: 10.1037/0022-3514.74.5.1337
- Hall, J. A., Andrzejewski, S. A., Murphy, N. A., Schmid Mast, M., & Feinstein, B. A. (2008).
 Accuracy of judging others' traits and states: Comparing mean levels across tests. *Journal of Research in Personality*, 42, 1476-1489. doi: 10.1016/j.jrp.2008.06.013
- Hall, J. A., & Bernieri, F. J. (2001). *Interpersonal sensitivity: Theory and measurement*.Mahwah, NJ: Lawrence Erlbaum.
- Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, 40, 218-227. doi: 10.1007/s12160-010-9210-8
- Human, L. J. (2009). *The role of adjustment in accurate interpersonal impressions*. Unpublished master's thesis, University of British Columbia, Vancouver, British Columbia, Canada.
- Human, L. J., & Biesanz, J. C. (2011a). Target adjustment and self-other agreement: Utilizing trait observability to disentangle judgeability and self-knowledge. *Journal of Personality*

and Social Psychology, 101, 202 - 216. doi:10.1037/a0023782

- Human, L. J., & Biesanz, J. C. (2011b). Through the looking glass clearly: The role of adjustment in accuracy and assumed similarity in first impressions. *Journal of Personality and Social Psychology*, 100, 349-364. doi: 10.1037/a0021850
- Human, L. J., & Biesanz, J. C. (2012). Accuracy and assumed similarity in first impressions of personality: Differing associations at different levels of analysis. *Journal of Research in Personality*, 46, 106-110. 10.1016/j.jrp.2011.10.002
- Human, L. J., & Biesanz, J. C. (*under review*). Targeting the good target: An integrative review of the characteristics and consequences of being accurately perceived. *Personality and Social Psychology Review*.
- Human, L. J., Biesanz, J. C., Finseth, S., & Pierce, B. (*under review*). To thine own self be true:Psychological adjustment promotes judgeability via personality-behavior congruence.
- Human, L.J., Biesanz, J.C., Miller, G.E., Chen, E., Lachman, M.E., Seeman, T.E. (2012). Is change bad? Personality change is associated with poorer psychological health and greater metabolic syndrome in midlife. *Journal of Personality*. doi: 10.1111/jopy.12002.
- Human, L. J., Biesanz, J C., Parisotto, K. L., & Dunn, E. W. (2012). Your best self reveals your true self: Trying to make a good impression results in more accurate impressions. *Social Psychological and Personality Science*, *3*, 23-30.
- Human, L. J., Sandstrom, G. M., Biesanz, J. C., & Dunn, E. W. (2012). Accurate first impressions leave a lasting impression: The long-term effects of accuracy on relationship development. *Social Psychological and Personality Science*. doi:10.1177/1948550612463735

Ickes, W. (1997). *Empathic accuracy*. New York, NY: Guilford Press.

Jahoda, M. (1958). Current concepts of positive mental health. New York: Basic Books.

- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspecitves. In L. A. Pervin & O. P. John (Eds.), *Handbook of Personality: Theory and Research* (2nd ed., pp. 102-138). New York: Guilford.
- John, O. P., & Robins, R. W. (1993). Determinants of interjudge agreement on personality traits: The Big Five domains, observability, evaluativeness, and the unique perspective of the self. *Journal of Personality*, 61, 521-551. [Special Issue]. doi: 10.1111/j.1467-6494.1993.tb00781.x
- John, O. P., & Robins, R. W. (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. *Journal of Personality and Social Psychology*, 66, 206-219. doi: 10.1037/0022-3514.66.1.206
- Kahneman, D., Diener, E., & Schwartz, N. (1999). Well-being: The foundation for hedonic psychology. New York: Russell Sage Foundation.
- Kashdan, T. B., Biswas-Diener, R., & King, L. A. (2008). Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *Journal of Positive Psychology*, 3, 218-233. doi:10.1080/17439760802303044
- Kenny, D. A. (1994). Interpersonal perception: A social relations analysis. New York: Guilford.
- Kenny, D. A., & Acitelli, L. K. (2001). Accuracy and bias in the perception of the partner in a close relationship. *Journal of Personality and Social Psychology*, *80*, 439-448. doi:10.1037//0022-3514.80.3.439
- Kenny D. A., & Winquist L. A. (2001). The measurement of interpersonal sensitivity: Consideration of design, components, and unit of analysis. In J. A. Hall & F. J. Bernieri

(Eds.), Interpersonal sensitivity: Theory and measurement (pp. 265–302). Mahwah, NJ: Erlbaum.

- Kenny, D. A., West, T. V., Cillessen, A. H., Coie, J. D., Dodge, K. A., Hubbard, J. A., & Schwartz, D. (2007). Accuracy in judgments of aggressiveness. *Personality & Social Psychology Bulletin*, 33, 1225-1236. doi:10.1177/0146167207303026
- Kenrick, D. T., & Stringfield, D. O. (1980). Personality traits and the eye of the beholder:
 Crossing some traditional philosophical boundaries in the search for consistency in all of the people. *Journal of Personality and Social Psychology*, 87, 88-104. doi:10.1037/0033-295X.87.1.88
- Keyes, C. L. M., Schmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82, 1007-1022. doi:10.1037/0022-3514.82.6.1007
- Kruglanski, A. W. (1989). The psychology of being "right": The problem of accuracy in social perception and cognition. *Psychological Bulletin*, *106*, 395-409. doi:10.1037/0033-2909.106.3.395
- Kurt, A., & Paulhus, D. L. (2008). Moderators of the adaptiveness of self-enhancement:
 Operationalization, motivational domain, adjustment facet, and evaluator. *Journal of Research in Personality*, 42, 839-853.
- Lackenbauer, S., Campbell, L., Rubin, H., Fletcher, G. J. O., & Troister, T. (2010). The unique and combined benefits of accuracy and positive bias in relationships. *Personal Relationships*, 17, 475-493. doi: 10.1111/j.1475-6811.2010.01282.x
- Langlois, J. H., & Roggman, L. A. (1990). Attractive faces are only average. *Psychological Science*, *1*, 115-121. doi:10.1111/j.1467-9280.1990.tb00079.x

- Larrance, D. T., & Zuckerman, M. (1981). Facial attractiveness and vocal likeability as determinants of nonverbal sending skills. *Journal of Personality*, 49, 349-362. doi: 10.1111/j.1467-6494.1981.tb00219.x
- Letzring, T. D. (2008). The good judge of personality: Characteristics, behaviors, and observer accuracy. *Journal of Research in Personality*, *42*, 914-932. doi:10.1016/j.jrp.2007.12.003
- Letzring, T. D., Wells, S. M., & Funder, D. C. (2006). Information quantity and quality affect the realistic accuracy of personality judgment. *Journal of Personality and Social Psychology*, *91*, 111-123. doi:10.1037/0022-3514.91.1.111
- Lorenzo, G. L., Biesanz, J. C., & Human, L. J. (2010). What is beautiful is good and more accurately understood: Physical attractiveness and accuracy in first impressions of personality. *Psychological Science*, 21, 1777-1782. doi: 10.1177/0956797610388048
- Lucas, R. E., Diener, E., Grob, A., Suh, E. M., & Shao, L. (2000). Cross-Cultural evidence for the fundamental features of extraversion. *Journal of Personality and Social Psychology*, 79(3), 452. doi:10.1037//0022-3514.79.3.452
- Lyubomirksy, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111-131. doi: 10.1037/1089-2680.9.2.111
- Marangoni, C., Garcia, S., Ickes, W., & Teng, G. (1995). Empathic accuracy in a clinically relevant setting. *Journal of Personality and Social Psychology*, 68, 854-869. doi:10.1037//0022-3514.68.5.854
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224-253. doi:10.1037/0033-295X.98.2.224

McLean, K. C., & Breen, A. V. (2009). Processes and content of narrative identity development

in adolescence: Gender and well-being. *Developmental Psychology*, 45, 702-710. doi:10.1037/a0015207

- McReynolds, P., Altrocchi, J., & House, C. (2000). Self-pluralism: Assessment and relations to adjustment, life changes, and age. *Journal of Personality*, 68, 347-381. doi:10.1111/1467-6494.00100
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, *89*(6), 852-863. doi:10.1037/0022-3514.89.6.852
- Nave, C. S., Sherman, R. A., & Funder, D. C. (2008). Beyond self-report in the study of hedonic and eudaimonic well-being: Correlations with acquaintance reports, clinician judgments and directly observed social behavior. *Journal of Research in Personality, 42*, 643-659. doi:10.1016/j.jrp.2007.09.001
- North, R. J., & Swann, W. B. Jr. (2009). Self-verification 360°: Illuminating the light and dark sides. *Self and Identity*, *8*, 131-146. doi: 10.1080/15298860802501516
- Norton, M. I., Frost, J. H., & Ariely, D. (2007). Less is more: The lure of ambiguity, or why familiarity breeds contempt. *Journal of Personality and Social Psychology*, *92*, 97-105. doi: 10.1037/0022-3514.92.1.97
- Oishi, S., Koo, M., & Akimoto, S. (2008). Culture, interpersonal perceptions, and happiness in social interactions. *Personality and Social Psychology Bulletin*, 34, 307-320. doi: 10.1177/0146167207311198
- Ozer, D. J., & Buss, D. M. (1991). Two views of behavior: Agreement and disagreement among marital partners. In D. J. Ozer, Healy, J. M. Jr., & Stewart, A. J. (Eds.). *Perspectives in personality* (pp. 91-106). London, England: Jessica Kingsley Publishers.

- Paunonen, S. V. (1989). Consensus in personality judgments: Moderating effects of target-rater acquaintanceship and behavior observability. *Journal of Personality and Social Psychology, 56*, 823-833. doi: 10.1037/0022-3514.56.5.823
- Paunonen, S. V., & Jackson, D. N. (1985). Idiographic measurement strategies for personality and prediction: Some unredeemed promissory notes. *Psychological Review*, 92, 486-511. doi:10.1037//0033-295X.92.4.486
- Paulhus, D. L. (1984). Two-Component models of socially desirable responding. Journal of Personality and Social Psychology, 46, 598-609.
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 74, 1197-1208. doi:10.1037/0022-3514.74.5.1197
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, *8*, 162-166. doi: 10.1111/j.1467-9280.1997.tb00403.x
- Pennebaker, J., Booth, R., & Francis, M. (2007). *Operator's manual: Linguistic inquiry and word count. LIWC2007*. Austin, Texas: LIWC.
- Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology*, 72, 863-871. doi: 10.1037/0022-3514.72.4.863
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Assessing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185-227.

- R Development Core Team, R Foundation for Statistical Computing. (2009). *R: A language and environment for statistical computing (Version 2.8.1)* [Computer software]. Retrieved April 11, 2010, from http://cran.rproject.org/bin/macosx/old/R-2.8.1.dmg
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385-401.
 doi:10.1177/014662167700100306
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review*, 8, 364-382. doi:10.1207/s15327957pspr0804_3
- Reis, H. T., Maniaci, M. R., Caprariello, P. A., Eastwick, P. W., & Finkel, E. J. (2011).
 Familiarity does indeed promote attraction in live interaction. *Journal of Personality and Social Psychology*, *101*, 557-570. doi:10.1037/a0022885
- Riggio, H. R., & Riggio, R. E. (2002). Emotional expressiveness, extraversion, and neuroticism:
 A meta-analysis. *Journal of Nonverbal Behavior, 26*, 195-218. doi:
 10.1023/A:1022117500440
- Riggio, R. E., & Friedman, H. S. (1986). Impression formation: The role of expressive behavior. Journal of Personality and Social Psychology, 50, 421-428. doi:10.1037/0022-3514.50.2.421
- Robins, R. W., & Beer, J. S. (2001). Positive illusions about the self: Short-term benefits and long-term costs. *Journal of Personality and Social Psychology*, *80*, 340-352. doi: 10.1037/0022-3514.80.2.340

- Robins, R. W., & John, O. P. (1997). The quest for self-insight: Theory and research on accuracy and bias in self-perception. In R. Hogan, J. Johnson, & S. Briggs (Eds.). *Handbook of personality psychology* (pp. 649-678). San Diego, CA: Academic.
- Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston: Houghton Mifflin.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Ruscher, J.B., & Fiske, S. T. (1990). Interpersonal competition can cause individuating processes. *Journal of personality and social psychology*, 58, 832-843. doi: 10.1037/0022-3514.58.5.832
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 68-68. doi:10.1146/annurev.psych.52.1.141
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations of the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069-1081. doi:10.1037/0022-3514.57.6.1069
- Sheldon, K. M., Ryan, R. M., Rawsthorne, L., & Ilardi, B. (1997). Trait self and true self: Cross-Role variation in the big five traits and its relations with authenticity and subjective wellbeing. *Journal of Personality and Social Psychology*, 73, 1380-1393. doi:10.1177/01461672962212007
- Sherman, R. A., Nave, C. S., & Funder, D. C. (2010). Situational similarity and personality predict behavioral consistency. *Journal of Personality and Social Psychology*, 99, 330-343. doi:10.1037/a0019796

- Sherman, R. A., Nave, C. S., & Funder, D. C. (2012). Properties of persons and situations relate to overall and distinctive congruence. *Journal of Research in Personality*. doi: 10.1016/j.jrp.2011.12.006
- Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, 105, 131-142.
- Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, 66(1), 174-184. doi:10.1037/0022-006X.66.1.174
- Snodgrass, S. E., Hecht, M. A., & Ploutz-Snyder, R. (1998). Interpersonal sensitivity: Expressivity or perceptivity? *Journal of Personality and Social Psychology*, 74, 238-249. doi:10.1037//0022-3514.74.1.238
- Stillman, T. F., Lambert, N. M., Finchman, F. D., & Baumeister, R. F. (*in press*). Meaning as magnetic force: Evidence that meaning in life promotes interpersonal appeal. *Social Psychological and Personality Science*.
- Suedfeld, P., & Rank, A. D. (1976). Revolutionary leaders: Long-term success as a function of changes in conceptual complexity. *Journal of Personality and Social Psychology*, 34, 169-178. doi: 10.1037/0022-3514.34.2.169
- Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. *Journal of Personality and Social Psychology*, 83, 1378-1391. doi:10.1037//0022-3514.83.6.1378
- Swann, W. B., Jr. (1987). Identity negotiation: Where two roads meet. *Journal of Personality* and Social Psychology, 53, 1038-1051. doi:10.1037/0022-3514.53.6.1038

- Swann, W. B., Jr., De La Ronde, C., & Hixon, J. G. (1994). Authenticity and positivity strivings in marriage and courtship. *Journal of Personality and Social Psychology*, 66, 857-869. doi:10.1037/0022-3514.66.5.857
- Swann, W. B., & Hill, C. A. (1982). When our identities are mistaken: Reaffirming selfconceptions through social interaction. *Journal of Personality and Social Psychology*, 43, 59-66. doi:10.1037//0022-3514.43.1.59
- Thomas, G., & Fletcher, G. J. (2003). Mind-Reading accuracy in intimate relationships: Assessing the roles of the relationship, the target, and the judge. *Journal of Personality and Social Psychology*, 85, 1079-1094. doi:10.1037/0022-3514.85.6.1079
- Thomas, G., & Maio, G. R. (2008). Man, I feel like a woman: When and how gender-role motivation helps mind-reading. *Journal of Personality and Social Psychology*, 95, 1165-1179. doi:10.1037/a0013067
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103, 193-210. doi:10.1037/0033-2909.103.2.193
- Taylor, S. E., Lerner, J. S., Sherman, D. K., Sage, R. M., & McDowell, N. K. (2003). Portrait of the self-enhancer: Well adjusted and well liked or maladjusted and friendless? *Journal of Personality and Social Psychology*, 84, 165-176. doi: 10.1037/0022-3514.84.1.165
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, *96*, 506-520. doi:10.1037/0033-295X.96.3.506
- Uziel, L. (2010). Rethinking Social Desirability Scales: From Impression Management to Interpersonally Oriented Self-Control. *Perspectives on Psychological Science*, *5*, 243-262. doi: 10.1177/1745691610369465

- Vazire. S. (2010). Who knows what about a person? The self-other knowledge asymmetry (SOKA) model. *Journal of Personality and Social Psychology*, 98, 281-300. doi: 10.1037/a0013314
- Vazire, S., & Mehl, M. R. (2008). Knowing me, knowing you: The accuracy and unique predictive validity of self-ratings and other-ratings of daily behavior. *Journal of Personality and Social Psychology*, 95, 1202-1216. doi: 10.1037/a0017908
- Vogt, D. S., & Colvin, C. R. (2005). Assessment of accurate self-knowledge. Journal of Personality Assessment, 84, 239-251. doi:10.1207/s15327752jpa8403_03
- Wainer, H. (2000). The centercept: An estimable and meaningful regression parameter. *Psychological Science*, *11*, 434-436. doi:10.1111/1467-9280.00284
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness
 (Eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology, 41*, 221-229. doi:10.1037/0022-3514.64.4.678
- Watson, D., Hubbard, B., & Wiese, D. (2000). Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity. *Journal* of Personality and Social Psychology, 78, 546-558. doi:10.1037/0022-3514.78.3.546
- White, P. A., & Younger, D. P. (1988). Differences in the ascription of transient internal states to self and other. *Journal of Experimental Social Psychology*, *24*, 292-309. doi: 10.1016/0022-1031(88)90022-4
- Wilson, T. D. (2002). Strangers to ourselves: Discovering the adaptive unconscious.Cambridge, MA: Belknap Press/Harvard University Press.

- Wilson, T. D., & Dunn, E. (2004). Self-knowledge: Its limits, value, and potential for improvement. *Annual Review of Psychology*, 55, 493-518. doi: 10.1146/annurev.psych.55.090902.141954
- Wong, S. C. H., & Bond, M. C. (1999). Personality, self-disclosure and friendships between Chinese university roommates. *Asian Journal of Social Psychology*, *2*, 201-214. doi:10.1111/1467-839X.00034
- Wood, D., Gosling, S. D., & Potter, J. (2007). Normality evaluations and their relation to personality traits and well-being. *Journal of Personality and Social Psychology*, 93, 861-879. doi: 10.1037/0022-3514.93.5.861
- Wood, J. V., Perunovic, W. Q., & Lee, J. W. (2009). Positive self-statements: Power for some, peril for others. *Psychological Science*, *20*, 860-866. doi:10.1111/j.1467-9280.2009.02370.x
- Zaki, J., Bolger, N., & Ochsner, K. (2008). It takes two: The interpersonal nature of empathic accuracy. *Psychological Science*, *19*, 399-404. doi:10.1111/j.1467-9280.2008.02099.x
- Zuckerman, M., Bernieri, F., Koestner, R., & Rosenthal, R. (1989). To predict some of the people some of the time: In search of moderators. *Journal of Personality and Social Psychology*, 57, 279-293. doi:10.1037//0022-3514.57.2.279
- Zuckerman, M., Koestner, R., DeBoy, T., Garcia, T., Maresca, B. C., & Sartoris, J. M. (1988).
 To predict some of the people some of the time: A reexamination of the moderator
 variable approach in personality theory. *Journal of Personality and Social Psychology*, 54, 1006-1019. doi:10.1037//0022-3514.54.6.1006