

**PERSONAL INTELLIGENCE EXPRESSED:
A MULTIPLE CASE STUDY OF BUSINESS LEADERS**

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ABSTRACT

An individual's intelligences promote success in a wide range of life areas, including at school and at work. A recently proposed intelligence, personal intelligence (PI), is defined as the "capacity to reason about personality and to use personality and personal information to enhance one's thoughts, plans and life experience." This article employs a multiple case study of well-known business leaders to see if the expressions of PI are really identifiable in people's life expressions. High PI leaders, compared to other leaders, appeared interested in their own and others' personalities, possessed theories of how they were the same as and different from others, used their identities to motivate themselves, and were able to better speak from the heart.

Are there people who understand their own personality and the personalities of others particularly well? Some people are known to be *interested* in psychological processes relative to others, a characteristic sometimes referred to as *psychological mindedness* (Wolitzky & Reuben, 1974). In addition, Gardner (1983) described people who were high in an *intrapersonal intelligence*, which had to do with understanding their inner feelings (Gardner, 1983), and Wedeck (1947) suggested that there existed a kind of "psychological ability" at reading

people. Each of these concepts concerns how people think about one or another aspect of personality, but none of them are focused on the more global concern of being intelligent about personality itself.

Recently, *personal intelligence* has been defined as the “capacity to reason about personality and to use personality and personal information to enhance one’s thoughts, plans and life experience” (Mayer, 2008, 2009). Personality is the system that generates motivational and emotional energy and guides that energy with knowledge and self-control toward its effective expression. If personal intelligence (PI) exists, it seems likely that the ability ought to be recognizable from a person’s life expressions: people who successfully reason about motives, thinking, and plans should behave differently from others. On the job, for example, individuals with higher personal intelligence are predicted to possess more accurate self-understanding and a better ability to interact with others.

The present research employs a multiple case study approach to see if the expressions of personal intelligence are potentially identifiable in people’s biographical data. More specifically, the biographies of eight well-known American business leaders were studied in relation to personal intelligence. The personal intelligence of each leader was considered using methods developed for assessing personality-at-a-distance (e.g., Alexander, 1990; Schultz, 2005; Song & Simonton, 2007). A description of personal intelligence was then developed, and new characteristics of it were identified from the several leadership examples examined. Such research can help explain the behavior of leaders and support the concept of PI (Smith, 2005).

THE STUDY OF PERSONAL INTELLIGENCE

Personality and Personal Intelligence

An individual’s personality potentially exerts modest but detectible influences over a person’s life-course (Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007). More specifically, personality represents an individual’s overall psychological functioning. Personality concerns how an individual’s motivational and emotional energy is shaped by knowledge and reasoning into plans for action, and how well a person self-manages and directs his or her own psychological processes where useful (Mayer, 2005). The “intelligence” of personal intelligence refers specifically to a person’s capacity to learn about and use information to adapt to changing environmental conditions (Averill, 1992; Mayer, 2003). Personality draws upon its intelligences to navigate the surrounding world (e.g., Ree, Earles, & Teachout, 1994; Riggio, Murphy, & Pirozzolo, 2002; Sternberg, 1999; Zeidner, Roberts, & Matthews, 2008).

In the 20th century, “cool” intelligences received considerable research attention. These intelligences concern information of a general and relatively impersonal nature (Mayer, Salovey, & Caruso, 2004). Verbal-propositional

intelligence, for example, concerns the ability to understand and use words and to understand sentence meanings. Perceptual-organizational intelligence concerns pattern recognition and reasoning with such patterns (Ree & Carretta, 2002; Ree et al., 1994). There exist hot intelligences as well that involve reasoning about information more closely relevant to personal needs and well-being (Mayer, Roberts, & Barsade, 2008; Mayer et al., 2004; Riggio et al., 2002). For example, emotional intelligence concerns reasoning about emotions and emotional information (Matthews, Zeidner, & Roberts, 2007; Mayer, Roberts, & Barsade, 2008; Riggio et al., 2002).

Personality may draw specifically on a personal intelligence—a capacity to reason that is focused directly on one’s own personal characteristics and on the personality of others. People who possess personal intelligence may express their skills in four areas. Such high PI individuals *recognize personally-relevant information*: they label their own and others’ inner experiences, and attend to their own and others’ personal reputations better than those lower in PI. Second, they *form accurate models of personality*: they know who they are, and understand individual differences in others. Third, they *guide their own choices through personality-related information*: they use personal goals to make relevant choices in relationships and other life areas. Fourth, such individuals *systematize their goals, plans, and life stories*: they assemble the pieces of their personality into an integrated whole over time (Mayer, 2008).

Concepts Related to Personal Intelligence

There are a number of concepts and research areas that are related to personal intelligence but differ from it in key ways. Consider the comparisons, for example, between personal intelligence’s (PI’s) focus on reasoning about personalities and personal information, and such concepts as emotional and intrapersonal intelligences. Personal intelligence is broader than emotional intelligence (EI), with EI’s focus on, “. . . reason[ing] about emotions and . . . process[ing] emotional information . . .” (Brackett & Salovey, 2004, p. 181), and PI differs from intrapersonal intelligence with its focus—similar to emotional intelligence—on “. . . an individual’s examination of his own feelings . . .” (Gardner, 1983, p. 241). Personal intelligence is more involved with reasoning and strategizing about personalities than is the concept of empathic accuracy (Ickes, 2003), which is defined as recognizing another’s thoughts and feelings but does not include understanding the overall functioning of an individual, or appreciating individual differences (although that might be involved). Finally, social intelligence emphasizes attention to social cues, social memory, social goals, moral development, and the environment (e.g., Taylor, 1990, p. 454; Thorndike, 1920); it is more focused on social settings and situations and less focused on the individual, relative to personal intelligence.

The fact that personal intelligence is formulated as an ability (and can be assessed that way) means that it will likely be distinct from such chiefly motivational concepts as psychological mindedness – nowadays often defined as a self-judged tendency “. . . to understand or to explain behavior in psychological terms” (Wolitzky & Reuben, 1974, p. 26, but see Applebaum, 1973, for an alternative), and PI will differ as well from those who exhibit self-monitoring, a trait that concerns self-observation so as to regulate “. . . self-presentation for the sake of desired public appearances” (Gangestad & Snyder, 2000, p. 530).

Personal intelligence is more focused on reasoning compared to the arguably narrower concept of self-knowledge, which centers on possessing correct knowledge about one’s self (Silvia & Gendolla, 2001, p. 241). For example, a person with self-knowledge might correctly know and acknowledge that she is extraverted; someone with personal intelligence, by contrast, would know not only that she is extraverted, but also understand how people vary on that quality, and how to best use that knowledge in making career and relationship choices.

Potential Contributions of Personal Intelligence in General and to Leadership

High levels of personal intelligence may help individuals better lead their own lives and help others. High PI may buffer people against such problematic qualities as excessive narcissism, on the one hand, and against excessive dependency on other people, on the other (cf. Collins, 2007). Personal intelligence might also manifest among people-oriented leaders (e.g., Stogdill, 1950) as a capacity to better understand those with whom one works; it might further include the capacities to inspire others through personal stories. Moreover, accurate measurement of personal intelligence may be a realistically achievable goal.

Assessing Personal Intelligence

Good assessments of personal intelligence are necessary to understand it. Personal intelligence may be amenable to two converging methods of measurement, both of which are resistant to faking and distortion (Mayer, 2009). The first involves the development of intelligence tests to assess reasoning in each of PI’s areas (Mayer, Panter, & Caruso, 2010). The second involves the assessment of personal intelligence based on an individual’s biographical data. The biographical approach is the focus here: it seems plausible that high levels of personal intelligence ought to be visible in a person’s biographical data and life expressions. Such assessments “from a distance” have been used successfully in the study of verbal intelligence, which can be estimated from a person’s vocabulary and complexity of writing (Cox & Klinger, 2004; Song & Simonton, 2007). An approach in some ways parallel to assessing verbal intelligence from a distance is further developed here for personal intelligence.

In an earlier review, research in each of the four PI areas (identifying information, forming models, guiding choices, and systematizing goals) was drawn together to see how those abilities were expressed in a person's life (Mayer, 2009). For example, people higher in personal intelligence were expected to seek accurate information about themselves. In business, managers higher in personal intelligence were expected to seek out frank and open feedback with questions such as, "How can I improve in this job?—Please feel free to criticize my current practice . . ." (Ashford & Tsui, 1991; Tuckey, Brewer, & Williamson, 2002). As another example, Funder (2001) found that the most accurate judges of others' personalities were more motivated to learn about other people, relative to less-good judges. In all, the earlier review of research studies yielded about 30 indicators of high PI and a similar number of indicators of low PI (Mayer, 2009). High PI indicators included:

. . . being motivated to understand others, observing others carefully, using an open style in requesting feedback, and appreciating the time necessary for key tasks of the life span . . . being able to create an accurate self-concept, and to use personal memories to motivate oneself, and in certain social contexts and cultures, doing well in psychotherapy. (adapted from Mayer, 2009, p. 52)

The above description is plainly incomplete and provisional. The purpose of the present research is in part to develop it more completely with an initial examination of real life cases.

Rationale for a Multiple Case Study of Personal Intelligence

Case study approaches can be especially helpful in illustrating and exemplifying new theories (McAdams & West, 1997). Here, we conducted a multiple case study of eight well-known U.S. business leaders from archival data of their lives (Alexander, 1990; Song & Simonton, 2007). Present reviews suggest that general intelligence promotes overall workplace success (Kuncel, Hezlett, & Ones, 2004; Ree et al., 1994; Simonton, 2006). More specific intelligences are likely to describe the relative strengths and weaknesses of a leader, as opposed to a leader's overall effectiveness. For example, emotional intelligence specifically predicts better social relationships at work in the case of mid-level management positions (Mayer et al., 2008).

In the present study we examined whether personal intelligence could be recognized from leaders' biographies, interviews, and similar information, and if so, how the style of high personal-intelligence leaders might be characterized and how the style might differ from that of low-PI leaders. These questions are appropriate to the early stages of concept validation (Smith, 2005). Moreover, addressing them will go some way toward indicating what personal intelligence looks like, at least in the context of the work performed by the business leaders we studied.

METHOD

Participants and Target Individuals

The Business Leaders Sample

Our target sample of business leaders consisted of contemporary (i.e., living) U.S. business leaders of interest to the public as indicated by high levels of media coverage. We excluded business leaders who held elected office or who were publicly identified with religious activities so as to minimize the kinds of biases that such political or religious involvements might elicit. If the research team (the coauthors) agreed a leader was of sufficient interest and importance, we then began an initial research phase to determine whether at least one biography or autobiography of reasonable quality had been published about the individual. In at least one instance, we abandoned the study of a leader because the biographical work available appeared focused on public relations to such an extent that it compromised its own balance and accuracy. Although we sought a diverse group, we were only partially successful.

The eight leaders included six men, two women, and one minority: Warren Buffett, Bill Gates, Steve Jobs, Jack Welch, Martha Stewart, Charles Schwab, Donald Trump, and Oprah Winfrey. Each leader's key career attributes are described briefly in Table 1. The already-public reputations of the leaders coupled with the difficulty of disguising publically-available documentation on them (e.g., biographies, interviews) while still sourcing our biographical data, argued for identifying leaders' identities. In the sense that the leaders are in positions of power and are frequently portrayed in the media, they are public figures (SPJ Code of Ethics, 1996). In employing the leaders' names, we further considered that our aim would be limited to illustrating different levels of personal intelligence through examples from the leaders' lives, and that the leaders' long-established reputations were not likely to be, or intended to be, altered by this analysis. We further sought to be balanced in our coverage of the individuals (Elms, 1976, pp. 178-180), and specified both our methods of measurement and their limits (American Psychological Association, 2002). The study was reviewed and approved by the Department of Psychology's *Review Committee*, a committee of the University of New Hampshire's *Institutional Review Board*.

Independent Judges

Eight undergraduates recruited from a participant pool formed the group of independent judges. The judges were asked to rate each leader's personal intelligence based on psychobiographical data presented to them. This formed a check on similar judgments made by the psychobiographical researchers (see below).

Table 1. Demographic and Biographical Overview of the Eight Leaders Studied

Figure studied	Age at beginning of study; birthdate; education; and present home	Major accomplishments and leadership positions
Warren Buffett	Age 76 at start of study; born 1930; attended the Universities of Pennsylvania, Nebraska, and Columbia; present home in Omaha, NE	Chairman & CEO, Berkshire Hathaway; 2007 <i>Time</i> magazine's "World's Most Influential People"; influential investor, entrepreneur and philanthropist
Bill Gates	Age 51 at start of study; born 1955; attended Harvard University but dropped out to begin computer business; present home in Seattle, WA	CEO Microsoft Computers, Inc.; Co-chair and founder of the Bill & Melinda Gates Foundation
Steve Jobs	Age 52 at start of study; born 1955; attended Reed College but dropped out to work with computers; present home in Palo Alto, CA	CEO Apple, Inc.; Board of Directors Walt Disney Co.; Co-invented Apple II computer; Chairman, Pixar Animation Studios
Charles Schwab	Age 70 at start of study; born 1937; attended Stanford University as an undergraduate and graduate student; present home in Atherton, CA	CEO of Charles Schwab Corp.; knighted in Sigma Nu Fraternity; philanthropist
Martha Stewart	Age 66 at start of study; born 1941; attended Barnard College; present home in Katonah, NY	Noted television personality, author and business personality; CEO of Martha Stewart Living Omnimedia, Inc.
Donald Trump	Age 61 at start of study; born 1946, attended the University of Pennsylvania; present home Manhattan, NY	CEO, Trump Organization built Trump Plaza and Trump Tower; media personality, television host, and entrepreneur
Jack Welch	Age 71 at start of study; born 1935; attended the Universities of Massachusetts and Illinois; present home in Fairfield, CT	CEO of General Electric through a period of sustained growth and productivity; considered a model CEO in many ways
Oprah Winfrey	Age 53 at start of study; born 1954; attended Tennessee State University; present home Chicago, IL	Media personality (talk-show host; actress) and now media tycoon; founder of <i>O Magazine</i> ; created Leadership Academy Foundation, South Africa; one of <i>Time</i> magazine's 100 most influential people of the 20th century

Measurement Materials

The "Psychobiographical Record Sheet"

A Psychobiographical Record Sheet was prepared for each leader selected. Each Record Sheet was divided into the four skill areas of PI: (a) recognizing information; (b) forming accurate models; (c) guiding choices; and (d) systematizing goals. Within each skill area, indicators of high vs. low personal intelligence were listed. For example, for the first area, "Recognizing Information," high indicators included "accurate introspection (knows how feels)," "understands own reputation," and "at times may experience an unstable sense of self." Negative indicators were: "expresses grandiose sense of self-importance" and "suspects, without basis, that others are harming him/her."

For the "Forming Models" area, high indicators included "exhibits expertise in areas where claims expert knowledge," "experienced with others; extraverted" and "carefully observes the mannerisms and expressions of others." Low indicators were "uninterested in understanding others" and "takes little notice of other's mannerisms or expressions."

For the "Guiding Choices" area, high indicators included, "has a sense of who they are and can flexibly take on other roles if needed," "exhibits a good fit between their personality and occupation," and "distinguishes viewpoints [when they are] in conflict with [a compromising] situation. . . ." Low indicators were, "exhibits a poor fit between their personality and occupation" and "fails to recognize when it is important to express one's identity and values."

Finally, for "Systematizing Goals," high indicators included "exhibits goals that are well chosen and mostly consistent" and "perceives tasks and goals as part of a meaningful, generative activity." Examples of low indicators were "exhibits goals that often are inconsistent or potentially in conflict . . ." and "interprets autobiography in destructive, hopeless, or blaming fashion."

The biographical researchers (primarily the second and third authors) filled out the Psychobiographical Record Sheets by adding relevant quoted biographical source material immediately following an indicator on the sheet. Our bias was toward being inclusive of material given that later coders could selectively disregard any comment or life event they regarded as irrelevant. The presence of many diverse examples relevant to the indicators was expected to reflect an identifiable pattern of personal intelligence or its relative absence (Mayer, 2009).

The "Personality Rating Scale"

The Independent Judges filled out a Personality Rating Scale of personal intelligence on a given leader based on their reading of the leader's Psychobiographical Record Sheet. The Personality Rating Scale consisted of 4 sets of 3 items (12 items, total) corresponding to the four areas hypothesized to define PI. For example, a "Forming Models" item described a leader as possessing

an: “. . . Accurate view of own abilities and personal qualities.” A “Systematizing Plans” item read “. . . Has woven tasks and goals into a meaningful life view.” These 12 items were embedded amidst 15 other items (for 27 in all), drawn from the Big Five personality traits (e.g., Goldberg, 1993) that served as distracters. All items were answered on a 7-point response scale from “(1) Not Present” to “(7) Present to an Extreme Degree.” The item order was block randomized by content area.

Procedure

Biographical Research

Biographical information about the leaders relevant to personal intelligence was sought from biographies, autobiographies, print-media profiles, and interviews. The two primary biographical researchers were the second and third authors of this article. In particular, the researchers sought: (a) plainly-recorded direct acts of the individual him/herself; (b) direct quotes attributed to the individual him/herself; and (c) specific observations or reactions by those who met or knew the person first-hand, including reactions of family members, friends, coworkers, journalists, and so forth (Schultz, 2005).

As the information was obtained, it was entered into the Psychobiographical Record Sheets. Typically, four to six pages of quotes, anecdotes, and other materials were collected per leader. The research process was carried out gradually over approximately half-a-year, and the researchers were finished when had they gone through three or four authoritative sources and had excerpted what appeared to be the most clearly relevant material.

Ranking of the Business Leaders on Personal Intelligence

After the biographical research phase of the project was over, the two researchers each rank-ordered the business leaders according to their apparent level of personal intelligence. The researchers then discussed their rankings together and developed a single ranking of the leaders as to their personal intelligence.

A partly independent ranking of the leaders also was generated by the independent judges. The judges were told that we had substituted pseudonyms for the leaders' names. We expected that at least some participants would recognize the identities of certain leaders—hence the judges were blind to the leaders' identities, but imperfectly so. Judges were asked to read about a leader's life from his or her psychobiographical form and, after studying the form, to fill out a rating sheet as to the leader's qualities. The judges evaluated only the individual features of personal intelligence, such as “Accurate view of own personality . . .” and “uses personal memories to motivate self . . .,” and were not

instructed about personal intelligence itself. Their overall rating of PI was based on our sum of their endorsements of individual PI items.

Four pairs of judges read through the eight Psychobiographical Record sheets, with each pair-member reading four Record Sheets, counterbalanced so that one pair of judges reads all eight descriptions. Each pair of judges formed one “virtual judge” and the average ratings of a leader’s personal intelligence by the four virtual judges was used as the independent judges’ estimate of the business person’s PI.

RESULTS

Agreement Between Psychobiographical Researchers and Independent Judges

Recall that the 8 leaders had been ranked as to their personal intelligence by the psychobiographical researchers and by the independent judges. The researchers’ rankings of the business leaders on PI are in Table 2 (Column 3); the independent judge’s rankings (based on their mean ratings) are in the right-hand portion of Table 2 (Column 4). The two different methods yielded very similar results. Oprah Winfrey was rated highest in PI (rank of 1) by both methods, and Donald Trump and Steve Jobs were ranked lowest by both methods (ranks of 7 and 8). Although the N was very small, the Spearman rho between the two approaches was statistically significant, $r(8) = .88$, $p < .05$, with a 95% confidence interval from $r = .14$ to 1.00. To obtain a final single rank order for the group of leaders, we averaged the researchers’ and judges’ rankings, shown in Column 1 of Table 3. A number of ties existed, but the high- and low-ranked leaders could be distinguished from the rest.

Key Quotes as the Starting Basis for the Qualitative Analyses

To begin the qualitative portion of the analyses we examined the three leaders rated highest in personal intelligence. Data from their Psychobiographical Record Sheets—quotes, statements, and acts—were transcribed into Table 3. Table 3 lists the three highest-ranked leaders across the top and relevant psychobiographical information about them, roughly organized by the four areas of personal intelligence (Table 3’s spanning rows). For instance, a quote from Oprah Winfrey relevant to the first ability area of PI, “identifying personality-relevant information,” begins the Table. The quote reflects Ms. Winfrey’s attention to her internal states (from Table 3, Area 1):

But I have to, every day, find a place where I can physically allow myself to breathe, and be aware of the power of my own breath and what that represents—that I am alive and I am still here. (Clemetson, 2001, p. 44)

Table 2. Overall Rating of Leaders on Personal Intelligence: Biographical Experts' and Judges' Assessments

Target leaders	Assessed level of personal intelligence			
	Overall rank (Mean ranking)	Researchers' rank	Independent judges'	
			Rank	Mean rating
Oprah Winfrey	1 (1)	1	1	5.95
Charles Schwab	2 (2)	2	2	5.66
Bill Gates	4 (4)	3	5	4.76
Warren Buffett	4 (4)	4	4	4.98
Jack Welch	4 (4)	5	3	5.33
Martha Stewart	6 (6)	6	6	4.58
Steve Jobs	7 (7.5)	7	8	4.01
Donald Trump	8 (7.5)	8	7	4.07

A similar collection of information for the three lowest-ranked leaders is in Table 4. The leaders ranked lower in personal intelligence did not produce similar quotes for the “Identifying Information” area that we could find. Rather, individuals less able to identify internal states were expected to have more interpersonal conflicts with others (based on reviews of empirical findings; e.g., Mayer, 2009; Mayer et al., 2008). For Mr. Jobs, who was rated lower in personal intelligence, such conflicts at work were often remarked upon (Table 4, Area 1). For example, a computer designer who worked closely with Mr. Jobs remarked of him, “. . . First you get to fight the guy tooth and nail, and then you make him successful in spite of himself . . .” (Young, 1988, p. 314).

General Characterization of Leaders with High and Low Personal Intelligence

A first approximate characterization of how leaders high and low in personal intelligence differed drew on materials from the Psychobiographical Record Forms such as those found in Tables 3 and 4. Leaders higher in personal intelligence appeared to consider their own and others’ personalities more often than lower-PI-ranked leaders. For example, Mr. Schwab, who was rated highly in PI, explained in an interview regarding himself, “. . . I have a pretty ‘up’ personality . . . I have pretty good communication skills” (Kador, 2002, p. 33). Ms. Winfrey keeps in mind that “. . . everybody doesn’t operate the way you do.” In regard to power, she notes, “People handle power differently,” and that power can take on different meanings for different people (LaGesse, 2005, p. 44).

Table 3. Three Leaders Higher in Personal Intelligence: Qualitative Observations

Oprah Winfrey	Charles Schwab	Bill Gates
<p>"It is constant work . . . coming from a centered place. But I have to, every day, find a place where I can physically allow myself to breathe, and be aware of the power of my own breath and what that represents—that I am alive and I am still here" (Oprah Winfrey quoted in Clemetson, Jan. 8, 2001, p. 44).</p>	<p>"Jim Wiggett, long-time head of human resources had given Charles a list to use as an aid in addressing a group of HR professionals. After struggling with the first bullet point, Charles looked up at the group and said, 'I'm sorry Jim, I'm going to do this a different way.' Charles then told stories and spoke from his heart and people loved him" (Kador, 2002, p. 33).</p>	<p>Although he was not the most lively public speaker, Gates had a way of winning people over with his quick intelligence and the ease with which he grasped new problems (Connolly, 1999, p. 24).</p>
<p>Recognizing Personally-Relevant Information</p>		
<p>". . . I started . . . thinking you could run a business like you run a family . . . [but] There has to be a system of communication because everybody doesn't operate the way you do. People handle power differently, and it means to other people what it doesn't mean to me" (Oprah Winfrey quoted in LaGessee, Oct. 31, 2005, p. 44).</p>	<p>"Fortunately, I have a pretty 'up' personality, and that helped me all the way through. I tried hard and I had pretty good communication skills, so I could persuade my teachers that I was a pretty good kid" (Charles Schwab quoted in Kador, 2002, p. 33).*</p>	<p>"You get Bill Gates in a room with his peers, and he will know more than anybody else in the room" (J. Allen Grayson, who has worked with Gates for more than 10 years, <i>Time</i> magazine, 1995, cited in Connolly, 1999, p. 42).</p>
<p>Forming Accurate Models of Personality</p>		

Guiding Choices with Personal Information

"I think that the show's been successful because I'm always aiming for the truth. I relate to the core of everyone's pain and promise because I've known pain and promise. . . . Having that understanding and that connection has really given me wings to fly because I know that I can talk about anything to anybody with a sense of respect and integrity" (Oprah Winfrey quoted in Kantrowitz, Peterson, & Wingert (Oct. 24, 2005).

"Charles describes how, at age 11 or so, he scoured the woods for English walnuts, sacked them, and sold them for \$5 per 100-pound sac. "Some other kids thought I was a little crazy, spending my free time rooting through the twigs and leaves," he recalls. His status as a maverick, willing to risk the scorn of the elites—in this case, the popular kids in school—was being refined" (Kador, 2002, p. 30).

"Gates excelled in elementary school, particularly in mathematics and the sciences. At age 14 Gates formed a venture with fellow student Paul Allen, called Traf-O-Data, to make traffic counters based on the Intel 8008 processor. That first year he made \$20,000" (Biographiq, 2008, p. 7).

Systematizing Goals, Plans, and Life Stories

"I am never not aware of who I am, where I've come from—and what it took for me to give back. I am a colored girl born in Mississippi in 1954 and all that that means: poverty, isolation, discrimination, deprivation, lack of information, low self-esteem. The expectation for me was to work in white people's kitchens. I am here because I have walked across the backs of people who made this way for me . . . I find strength and honor in that. My responsibility is not just to myself" (Oprah Winfrey quoted in LaGessee, Oct. 31, 2005, p. 44).

"The memories I have of growing up with dyslexia keep me humble. I never fully realized the profound effects the disorder had on me until after I started talking about it. I owe a lot to the nuns who kept me after grade school and drilled me at the blackboard on the alphabet, phonics, and the multiplication tables. But I've found that sometimes there's an inverse relationship between how well people do in school and their performance in life" (Charles Schwab quoted in Olsen, August 14, 2005, p. 4).

"When you're lucky and successful, it's important not to get complacent. Luck can turn sour, and customers demand a lot of the people and companies they make successful. Big mistakes are rarely tolerated. I hope to remain successful but there are no guarantees" (Bill Gates, 1997, quoted in Connolly, 1999, p. 50).

*Quote has been reclassified, i.e., moved to a different category from the original coding sheet.

Table 4. Three Leaders Lower in Personal Intelligence:
Qualitative Observations

Martha Stewart	Steve Jobs	Donald Trump
<p>“ . . . I’ve already tried therapy and it doesn’t work for me because I’m always smarter than the shrink. I can always outsmart them” (Martha Stewart quoted in Oppenheimer, 1997, p. 5).</p>	<p>“ . . . First you get to fight the guy tooth and nail, and then you make him successful in spite of himself . . .” (Matt Carter, Macintosh Division Designer, quoted in Young, 1988, p. 314).</p>	<p>“Those who dislike me don’t know me, and have never met me. My guess is that they dislike me out of jealousy” (Donald Trump quoted in Friedrich, January 16, 1989, p. 48).</p>

Recognizing Personally-Relevant Information

Forming Accurate Models of Personality

“ . . . It is important to think about your business ideas in a clear and disciplined way, tuning in to precisely what it is that your customers need and want; then concentrate on thinking big” (Stewart, 2005, p. 24).

“Steve believed in hands-on management. He would march into your cubicle, invade your space, sit right down, and start playing with whatever you were working on . . .” (Donn Denman, Macintosh Division Designer, quoted in Young, 1988, p. 230).

“I’m not running for President,” he told Newsweek in 1987. “But if I did, I’d win” (Donald Trump quoted in Powell & McKillop, 1987, p. 51).

Guiding Choices with Personal Information

“When it comes to managing, I follow my instincts. I listen and gather advice, but I take responsibility for what my educated instincts tell me about what needs to be done” (Stewart, 2005, p. 144).

“Steve Jobs seems to introduce tension, politics, and hassles rather than enjoying a buffer from those distractions . . .” (Quoted from an Apple Internal Memo, 12/12/80, cited in Young, 1988, p. 206).

“I don’t do it for the money. I’ve got enough, much more than I’ll ever need. I do it to do it. Deals are my art form. Other people paint beautifully on canvas or write wonderful poetry. I like making deals, preferably big deals. That’s how I get my kicks” (Trump, 2004, p. 1).

Systematizing Goals, Plans, and Life Stories

“To many onlookers, what I have accomplished may appear easy, but it was all done with hard work, old-fashioned elbow grease and a certain amount of emotional pain and suffering” (Martha Stewart quoted in Adler, 2006, p. 18).

“We just wanted to build the best thing we could build . . . the aesthetic, the quality has to be carried all the way through” (Steve Jobs quoted in Sheff, February 1985, p. 58).

“I have an absolute strategy, but it’s an innate strategy and not definable,” he says. “When you start studying yourself too deeply, you start seeing things that maybe you don’t want to see. And if there’s a rhyme and reason, people can figure you out, and once they can figure you out, you’re in big trouble” (Donald Trump quoted in Friedrich, January 16, 1989, p. 48).

The lower PI individuals as a group seemed more focused on the outcomes of people's efforts and the products they could produce. Ms. Stewart notes that her management style depends on her "clear and disciplined" approach to meeting customers' needs, and her "thinking big" (Stewart, 2005, p. 24). And Donn Denman, an associate of Mr. Jobs, notes of Jobs' problem-focused style: "He would march into your cubicle, invade your space, sit right down, and start playing with whatever you were working on . . ." (Young, 1988, p. 230). Mr. Jobs himself emphasizes goals that are product-oriented (as opposed to person-oriented):

We just wanted to build the best thing we could build . . . the aesthetic, the quality has to be carried all the way through. (Sheff, 1985, p. 58)

Expected Differences between Leaders High and Low in Personal Intelligence

A more specific attribute of the higher PI leaders was that they seemed to draw regularly on their life histories and on inner convictions that emerged from their experiences so as to motivate themselves and others. Ms. Winfrey uses her personal background both as a stimulus to herself, and as a way for others to understand her and what her life means. Her self-awareness, she notes, includes her remembrance that:

I am a colored girl born in Mississippi in 1954 and all that that means: poverty, isolation, discrimination. . . .The expectation for me was to work in white people's kitchens. I am here because I have walked across the backs of people who made this way for me. . . . I find strength and honor in that. My responsibility is not just to myself. (quoted in LaGesse, 2005, p. 44)

Mr. Schwab, also high in PI, reflects that:

. . . The memories I have of growing up with dyslexia keep me humble. I never fully realized the profound effects the disorder had on me until after I started talking about it. . . . (Olsen, 2005, p. 9)

Similar comments about personal memories and their meanings were lacking among leaders ranked lower in PI.

Another distinguishing feature of the higher-ranked leaders that we had generally anticipated was their sensitivity to others' motives and how those motives can vary from person to person. For example, Mr. Schwab noted that his daughter was the only one of his five children to join his company and commented that ". . . your children should do what they want to do"—with the clear implication that they may differ from each other motivationally in certain key ways (Olsen, 2005, p. 9). Ms. Winfrey's already-discussed quote that power means different things to different people (see above) also fits this category.

Unexpected Expressions of Leaders High and Low in Personal Intelligence

In addition to qualities of high and low personal intelligence that we had anticipated might be exhibited, there were other qualities that fit with the theory but that we had not expected to see. One of these was that the higher PI leaders made surprisingly candid acknowledgments of their own sense of self-understanding and how it helped them succeed. Ms. Winfrey noted in an interview in *U.S. News and World Report* that, “I am never not aware of who I am, where I’ve come from – and what it took for me to give back” (quoted in LaGesse, 2005, p. 44). Those leaders ranked lower in personal-intelligence could be just as candid about their *lack* of self-understanding. Mr. Trump, for example, appeared to have recognized the limits of his self-awareness, and to have developed a philosophy to turn the potential weakness into strength. Mr. Trump was quoted in *Time*:

When you start studying yourself too deeply, you start seeing things that you don’t want to see. And if there’s a rhyme and reason, people can figure you out, and once they can figure you out, you’re in big trouble. (Friedrich, 1989, p. 48)

All these leaders are very bright, and even at the low end of PI were far from ignorant about themselves. So, for example, Mr. Trump nonetheless had thought about his work-related motives and understood himself sufficiently well to have remarked of his real estate transactions, “I don’t do it for the money . . . I like making deals. . . . That’s how I get my kicks” (Trump, 2004, p. 1). Yet Mr. Trump is uninterested in self-exploration beyond that: When asked if he had ever thought about psychotherapy Mr. Trump expressed surprise, saying, “No,” and then added:

I’ve never felt even close to needing it. I haven’t ever felt that I was out of control. I keep busy. I don’t have time to think about my problems. (Friedrich, 1989, p. 48)

Another difference between lower- and higher-rated PI leaders included the readiness among the low-PI leaders to occasionally make unrealistic or at least immodest claims regarding their qualities. Mr. Trump, for example, believed that a wide range of people would find him likable the more they came to know him. As he argued in *Time* magazine: “people who dislike me don’t know me, and have never met me. My guess is that they dislike me out of jealousy” (Friedrich, 1989, p. 48). Although Mr. Trump possesses a number of admirable qualities, it seems optimistic for him (or anyone) to conclude that people would like him better if they just knew him better. Although familiarity sometimes brings people closer together, it also can drive them apart. Ms. Stewart remarked that psychotherapy, which she tried, doesn’t work for her because, as she put it, “I’m always smarter than the shrink” (Oppenheimer, 1997, p. 5). Such claims seem to extend

the leaders' genuine gifts to the point of exaggeration and sometimes implausibility. Mr. Trump noted about himself, for example, that "I'm not running for President . . . but if I did, I'd win" (Powell & McKillop, 1987, p. 51). At one point, in fact, Mr. Trump had formed an exploratory committee for such a presidential run (Friedrich, 1989, p. 48).

Another unanticipated expression of personal intelligence that emerged in at least one case was Mr. Schwab's own personal study of other people's lives—modern artists—through which he better understood and framed his own life. A journalist described Mr. Schwab's admiration for modern artists and how they create, quoting Schwab in *Fortune* as saying, "They give me a lot of inspiration," and then noted that Mr. Schwab compared his own creative struggles with those of the painters: "He's no Picasso, he says, but the company is his canvas, and he's not finished yet" (Morris, 2005, p. 99).

Whereas Mr. Schwab studies others' lives and can find inspiration in them, Mr. Trump's style appears more oriented toward his objectives than toward individual people. For example, Mr. Trump explained that, "My style of deal-making is quite simple and straightforward. I just keep pushing and pushing and pushing to get what I'm after" (Friedrich, 1989, p. 48).

Tradeoffs between Personal Intelligence and Other Skills

Leadership styles involve trade-offs. Mr. Jobs and Mr. Trump are both ranked lower in PI, but make up for it in other ways. Mr. Job's emphasis, at *Apple*, on his products lead him to produce highly elegant technology that is superbly designed and often avidly sought after. Mr. Trump has turned his impersonal and, in some ways, socially awkward approach into a net plus—many people enjoy watching him play himself on television—a gruff, enormously confident character who shares pearls of wisdom on business and management.

By contrast, Ms. Winfrey and Mr. Schwab, both ranked highly in PI, draw on their own values and experiences to enrich their communication with and motivation of others. The point is that Ms. Winfrey's and Mr. Schwab's higher PI has permitted them to employ their knowledge of their own and others' personalities at work, which they have done very successfully. The leaders ranked lower in personal intelligence; Mr. Trump, Ms. Stewart and Mr. Jobs have succeeded by employing other groups of abilities and talents without any particular emphasis on a knowledge of personality or its uses.

It is worth acknowledging that although personality qualities are important to success generally speaking, and personal intelligence appears likely to be important as well, many influences beyond personality are key to life outcomes, including an individual's physical health, family background, social status, wealth, and chance events. It also is the case that leaders' styles change over time. So, one leadership consultant expressed the opinion that Steve Job's

interpersonal style improved after his marriage, and also that perhaps it would change further as he coped with his medical illnesses during the 2000s (Anderson & Miller, 2003; Huber, 1998; Pfeffer, 1977).

DISCUSSION

Major Findings Regarding Personal Intelligence

In this article, we tested whether PI could be identified in part through a person's life expressions. An earlier review of PI-related abilities had identified approximately 30 indicators each of high and low personal intelligence (Mayer, 2009). In the present study, researchers read biographical descriptions of eight leaders and recorded possible indicators of their high or low personal intelligence on a Psychobiographical Record Sheet. The researchers then rank-ordered the eight leaders on their levels of personal intelligence, as did independent judges who worked from the same Record Sheets. There was close agreement between the researchers and the independent judgments as to the rankings.

A qualitative analysis indicated that the leaders higher in personal intelligence, Oprah Winfrey and Charles Schwab, seemed particularly able to verbalize their internal experience, held accurate views of themselves, and had created overall motivating life stories from which they had drawn important meanings. By contrast, leaders lower in PI often disavowed any special self-understanding or purpose to such understanding. To compensate, they often were energetic, "thought big," and displayed special technical and aesthetic expertise; two leaders in this latter group included Martha Stewart and Steve Jobs. Leaders who were ranked in the middle, such as Warren Buffet and Jack Welch, likely integrated moderate levels of ability in these areas with their other prodigious skills.

The multiple case analysis allowed for a description of how personal intelligence manifested itself in the individual lives of those leaders. The high- and low-ranked PI leaders exhibited some differences we expected. For example, high PI leaders drew on personal memories to motivate themselves, whereas low PI leaders had not mentioned doing so. The study identified some additional qualities of PI that we had not anticipated but that were consistent with the theory. Among these qualities, high PI leaders were aware and candidly avowed their own high levels of self-knowledge. Low PI-ranked leaders by contrast, disavowed such self knowledge with surprising candor. One of those highest in personal intelligence, Mr. Schwab, studied others' lives to enrich his understanding of his own life, identifying with the creative struggles of modern painters. Finally, those lower in personal intelligence seemed to gently (or enthusiastically) misrepresent aspects of themselves, overestimating their skills, intelligence, or popularity.

Strengths, Limitations, and Support for the Concept of Personal Intelligence

The validation of a concept such as PI depends upon the concept's fit to a nomological network in a science, and involves an evolving group of findings (Smith, 2005). As Smith points out, a given finding, however strong, is only one piece of evidence that can be further supported or undermined by future research. The sample of leaders here was very small, and this limited the use of quantitative statistical tests. Moreover, case study data always must be treated cautiously. Life material can be collected selectively, presented in a biased fashion, and (even with multiple cases) may be idiosyncratic rather than representative. The findings here, therefore, are not in any sense decisive by themselves as to the validity of the personal intelligence concept although they are supportive of such validity.

Another limitation is that personal intelligence overlaps somewhat with a number of other psychological concepts and these overlaps might extend to the observed patterns of a person's life expressions. The Psychobiographical Record Sheets included some indicators that, taken individually, overlap with expressions of emotional intelligence, psychological mindedness, and empathic accuracy, among others. In the case of leadership, PI might overlap with concepts such as *consideration-focused leaders*, who emphasize sympathetic concern with their peers and subordinates (Stogdill, 1950), and *leader authenticity*, which includes "greater self-awareness, an internalized moral perspective, . . . and relational transparency on the part of leaders working with followers" (original italicized; Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008, p. 94). Our coding methods likely picked up at least some elements of these related psychological concepts and behavioral patterns.

There is nonetheless still reason to be optimistic about this initial version of a Psychobiographical Record Sheet procedure. First, although a given indicator of personal intelligence such as "motivated to know others" might overlap with another concept such as psychological mindedness, the full diversity of qualities we coded for, including, "imitates or acts out others' behaviors . . .," "appreciates the length required of crucial life-span tasks . . .," and "draws on memories of the past to motivate themselves now . . .," more uniquely define personal intelligence when deployed in the aggregate. Moreover, PI is a variable at a psychological level, and so if certain managerial styles such as leader authenticity overlap with it, it would suggest that PI makes such authenticity possible.

Overall, the findings here do provide some evidence in the validation process for personal intelligence. The fact that personal intelligence can be identified in certain leaders but not others with some reliability, and that the examples "make sense," can be regarded as supportive of the personal intelligence concept. The observations here further enrich the understanding of the concept and how it may be expressed in a person's life. A clearer understanding of these

relations, however, awaits future research with more leaders and, perhaps, tests for divergent validity using other coding systems and other measurement approaches.

The Present Research and the Future

Further investigations into biographical coding such as were conducted here seem warranted, perhaps extending the present methods for use with other occupational groups. In addition, criterion-report scales (ability measures) are regarded as a gold standard for intelligence measurement (Carroll, 1993). Ultimately, such ability-based measures may provide mutually supportive, converging operations with biographical coding. If so, it will be helpful in further substantiating and defining the existence of this form of intelligence.

Personal intelligence is one among a set of increasingly-studied intelligences including the emotional, social, and practical. Sometimes these intelligences are referred to as “hot” in that they concern personal information about the self and others that is potentially mentally painful or pleasurable (in the case of personal intelligence, for example: “Does my shyness make me inadequate or is my shyness all right?”). In the present multiple case study of business leaders, the leaders varied dramatically as to their apparent levels of personal intelligence. Those who appeared high in personal intelligence were interested in their own and others’ personalities, possessed theories of how they were the same and different from others, used their identities to motivate themselves, and studied others’ lives to better understand their own. The findings from the present study add one additional piece of supporting evidence for the existence of such a new intelligence and how it might look. This investigation, along with others, may further enlarge our conceptions of human problem-solving and its domains of expertise.

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