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The Reiss Motivation Profile®:
Reliability and Validity

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Abstract

The Reiss Motivation Profile (RMP; Reiss & Havercamp, 1998) is a standardized assessment of 16 empirically derived lifelong motives (human needs, basic desires) called acceptance, curiosity, eating, family, honor, idealism, independence, order, physical activity, power, romance, saving, social contact, status, tranquility, and vengeance. The underlying rationale and evidence for the factor validity, concurrent validity, and criterion validity of the RMP is summarized in this article. Although everybody embraces all 16 needs, individuals prioritize them differently. Reiss's (2008) theoretical model holds that individual differences in prioritizations of human needs, as assessed by the RMP, motivates numerous personality traits and may predict a wide range of behavior in real-world contexts. Thus far the published applications of the 16 human needs include personality assessment (e.g., Olson & Weber, 2004), business coaching (Markus & Elkhe, 2008), marital relationships (Judah, 2008), school psychology (Reiss, 2009), media psychology (Reiss & Wiltz, 2004), athletics (Reiss, Wiltz, & Sherman, 2001), spirituality (Reiss, 2004), and intellectual disabilities and autism (Reiss, 2010).

THE REISS MOTIVATION PROFILE: RELIABILITY AND VALIDITY

The Reiss Motivation Profile: Reliability and Validity
Deep down, what are the basic desires of mankind? This is a question that has interested psychologists for a long time. James (1890/1950) and McDougall (2003/1908) suggested that every person is so constituted to seek, to strive for, and to desire certain goals that are common to the species, and the attainment of which goals satisfies and allays the urge or craving or desire that moves us. These goals include food, romantic intimacy, companionship, shelter from danger, and triumph over opponents. James and McDougall called these goals „instincts" because they thought they are common to everyone, motivate our nearest relatives in the animal world, and occur „automatically" (that is, without a deliberate decision). Murray (1938) and Maslow (1945) replaced the concept of „instinct" with that of „human needs." I have preferred the German term lebensdmotive (life motives) because, literally, these are motives that influence behavior over the lifespan, and the term „basic desire" because I am exploring the psychology of conscious purpose. In this article, the terms „instinct," „human need," „universal goal," „life motive," and „basic desire" are used interchangeably to refer to goals that motivate everyone from adolescence to grave.

I have spent 15 years accumulating evidence that psychologically significant human wants and values arise from 16 deeply rooted basic desires that are intrinsic to all of us. I have con-

structed a standardized assessment tool, called the Reiss Motivation Profile (RMP), and my colleagues and I have projected the 16 basic desires into a wide range of professional endeavors, including self-discovery, personality theory, business coaching, relationship counseling, world-class athletics, school psychology, and health psychology. In this article I will summarize research on the reliability and validity of the RMP assessment instrument. Although much of this research was previously reported in various books and peer reviewed publications, my goal is a comprehensive summary of scientific evidence and current practice.

Empirical Derivation of 16 Basic Desires

The theory of 16 basic desires is the only taxonomy and assessment of human needs that was empirically derived. It is based on factor studies of what diverse samples of people said motivates them. I began with a question, „Deep down, what are the basic desires of human nature?" Over a time period of several months, I constructed a list of every possible universal goal I could imagine. I asked every colleague or friend who would put up with my questions to suggest additional goals, and I consulted the psychology books on my shelve including books on personality, psychodynamics, and social psycholgoy. The initial draft questionnaire had more than 500 items. I pared these down to 328 by eliminating redundancies and motives of little psychological significance.

We administered the 328-item questionnaire to a diverse sample of 401 adults from many walks in life, and we submitted the results to mathematical analyses aimed at determining how many significant basic desires we should interpret. Based on the results of a maximum likelihood extraction method with oblique direct oblimin rotations, the first factor study (n = 401) yielded 15 factors. The initial 328-item instrument was revised significantly to support the 15-factor solution. One hundred and ten items were retained, and 110 new items were added to the instrument, so that the second draft instrument had 220 items, 108 fewer than the first draft RMP.

The process of factor analysis and instrument revision was repeated three times and followed with a fourth, confirmatory factor study. Each study was conducted with a different sample with no person participating in more than one study. Reiss and Havercamp (1998) and Havercamp and Reiss (2003) executed a total of six RMP factor studies (N = 2,032). The samples consisted of 401, 380, 341, and 398 people. Each sample included diverse adolescents and adults from different walks in life and various states of residence. The fourth study confirmed the 15-factor solution. When the factors were allowed to correlate, the 15-factor solution yielded a "close fit" to the data.

Subsequently, we executed two additional factor analytic studies intended to add a sixteenth factor, called saving, to assess the motive of hoarding. The second of these studies was a confirmatory factor analysis with a new sample of 512 adults solicited from several sources in urban and rural Ohio and Indiana, Using an oblique rotation, Havercamp (1998) found that the Steiger-Lind Root Mean Square Error of Approximation (RMSEA) was .053; the Expected Cross-Validation Index (ECVI) was 38.962; the Non-Normed Fit Index was .894; and the Normed Fit Index was .8379. These results were interpreted as indicating a reasonable fit of the 16-factor model with the data obtained in our second confirmatory factor analysis.

The 16 basic desires (human needs, life motives) that resulted from the factor analytic work became the 16 RMP scales. They are defined as follows:

>**Acceptance**, the desire for positive self-regard.
>**Curiosity**, the desire for understanding.
>**Eating**, the desire for food.
>**Family**, the desire to raise children and spend time with siblings.
>**Honor**, the desire for upright character.
>**Idealism** the desire for social justice.
>**Independence**, the desire for self-reliance,
>**Order**, the desire for to be organized and clean.
>**Physical activity**, the desire for muscle exercise
>**Power**, the desire for influence or leadership.
>**Romance**, the desire for beauty and sex.
>**Saving**, the desire to collect.
>**Social contact**, the desire for peer companionship.
>**Status**, the desire for respect based on social standing.
>**Tranquility**, the desire to be free of anxiety and pain.
>**Vengeance**, the desire to confront those who offend.

Table 1 presents basic psychometric reliability data, which are approximately equivalent or superior to the psychometric reliabilities reported for widely used personality instruments. Table 1 presents two estimates of the internal reliabilities of the RMP's 16 life motives. One set of estimates was calculated on data from a sample of 398 racially diverse adolescents and adults. The alpha coefficients ranged from .74 to .92, with a median of .82. The other set of estimates was from a sample of 171 racially diverse undergraduate students who participated in the assessment voluntarily for course credit. These alpha coefficients ranged from .79 to .94 with a median of .88.

Table 1 presents the four-week, test-retest reliabilities obtained from a sample of 123 racially diverse, undergraduate students (44 males and 79 females) who had participated in the study for course credit. Pearson product-moment correlations ranged from .69 to .88 (M = .80). These results can be compared to those reported for other motivation personality assessments. For example, Hjelle and Bernard (1994) reported 3-week tests-retest reliabilities ranging from .32 to .78 (M = .60) across the subscales of the Personality Research Form (PRF; Jackson, 1984). Table 2 presents Pearson product-moment correlations between the RMP's 16 life motives and the Marlowe-Crowne Social Desirability Scale (Havercamp & Reiss, 2003). The r's ranged in absolute value from .01 to .39 (M = .16). For sake of comparison, Jackson (1984) reported correlations between his desirability and content scales as ranging from .01 to .44 (M= .22). These findings suggest that the RMP scales are minimally affected by social desirability.

Comprehensives of 16 Basic Desires
Each RMP scale is a correlated group of universally motivating goals. Reiss (2006) discussed in detail what is and what is not included in each scale. Nearly all psychologically important motives appear to be reducible to one or more of the 16 basic desires. Colleagues usually have a number of questions when they first see the list, such as, „Isn't money a basic desire? Where's creativity?" Here is how we answer them.

First of all, we deliberately excluded many biological motives that have only minor psychological significance. Thirst, for example, has little relevance for personality theory, values, meaning of life, or culture. On the other hand, we did include eating, because of its cultural relevance, the time and effort people devote to preparing and consuming food, and its relevance to obesity and other medical concerns. Many religions have dietary laws, but few or none have laws governing how people should drink water.

Some critics have suggested that to exclude thirst adds a subjective element to our results. The fact of the matter, however, is that many scientific classifications exclude the insignificant. Millions of rocks orbit the Sun, but astronomers consider only eight of them to be significant enough to be classified as 'planets.' Pluto was declassified from the list of planets because it is too small. In limiting the list of basic desires to psychologically significant motives -- that is, motives relevant to personality, culture, or religion -- we are operating within well established scientific customs.

As for wealth, recall that the 16 basic desires were defined by mathematical analysis of responses from thousands of people. Among those responses, we found a higher statistical congruity between the pursuit of wealth and the valuation of social status than the pursuit of wealth and the valuation of power or security. Therefore, materialism and wealth building are both classified under the basic desire for status. Many other important preoccupations -- such as wishes for attention or emotional closeness, for example -- have a high statistical correlation with one of the basic sixteen and are classified with it. They are included in the list, but not immediately visible in the most general schema.

What about creativity? The desire to be original is not a universal goal. Many people do not aim to be original, and some do not even value it. Since creativity implies originality, it is not recognized as a basic desire. But creativity has another component -- the desire to build or construct something. This goal falls under the basic desire for power, which is considered as a need for influence of will, or a need to make a difference. Similarly, the desire for achievement motivation also falls under the basic desire for power.

The RMP classifies beauty as closely related to romance; at least we could not distinguish beauty and romance in our factor studies. This may be because beauty is a primal stimulus for sex: In every human society, people want to appear beautiful to their partners prior to and during sex.

Some evolutionary psychologists have wanted to know why survival and reproduction are not among the 16 basic desires. The 16 basic desires include motives essential for survival, such as eating, physical exercise, and cleanliness, but not a basic desire for survival itself. In natural environments, survival per se motivates very little behavior. Except when I am very ill, I never think about trying to survive. Previous psychologists who studied human needs also did not include survival on their various lists. Widely used psychological personality assessments do not assess traits for survivor. On the other hand, the evolutionary psychology concept of reproduction is a fusion of the basic desires for family and romance.

Henry Murray suggested a need for sensuality, which I regard as a fusion of two basic desires:

romance and eating. The „sensual person" is somebody who happens to enjoy eating and sex, which for most people are unrelated motives.

What about the motives of attention, imitation, and play, which are so evident in children? Attention seeking is not a single motive, but several depending on what it is we want others to notice. Seeking attention for wealth or social standing falls under the basic desire for status; seeking attention for achievements falls under the basic desire for power; and seeking attention for one's looks falls under the basic desire for romance. Similarly, what motivates imitation depends on what it is we are imitating. Imitation of celebrities, for example, falls under the basic desire for status; imitation of achievers falls under the basic desire for power; while imitation of great lovers falls under the basic desire for romance.

Positive psychologists have suggested that happiness is the most important basic desire. They are certainly right that it is human nature to want to be happy, but I think happiness is pursued indirectly and not as a principal end. I agree with J. S. Mill who observed that, „Those only are happy … [who] have their mind fixed on some object other than their own happiness." To find happiness, you must aim to satisfy your strongest basic desires, and happiness will be experienced in passing.

Some religious people have criticized the 16 basic desires schema for not including a basic desire for God or spirituality. This is a complex issue I have addressed in detail (Reiss, 2004). The RMP treats God or spirituality as encompassing all meaningful human aspirations rather than as a seventeenth basic desire separate from all others. This analysis implies that everybody is equally „spiritual," but in different ways.
I would argue, moreover, that the 16 basic desires provide an uncommonly good fit for psychological analysis of spirituality and religion. Common attributes of God are the greatest imaginable expression of 11 of the 16 basic desires: Omnipotence, for example, is the greatest imaginable expression of the basic desire for power; omniscience is the greatest imaginable expression of the basic desire for curiosity; and divinity is the greatest imaginable status.

Like all scientific classification systems, the 16 basic desires are a work in progress and not an inalterable truth. We are open to changes, provided they can be justified scientifically.

Motivation and Personality

Reiss's model analyzes basic desires and human needs into two significant psychological aspects, herein called the universal life goal and the priority. The universal life goal is what the individual wants, whereas the priority is the individual's standardized valuation of the goal. Universal life motives are common to the species, but standardized valuations are specific to the individual. For the life motive of "social contact," for example, the goal is the company of peers, and the priority indicates how much the individual values socializing. For the life motive of curiosity, the goal is understanding and the priority is a standardized assessment of how much the individual values intellectual knowledge.

The construct of a motivational priority is central to Reiss's (2004a, 2008) model of basic desires and best distinguishes it from all previous models of human needs and core motives. Individuals show reliable and enduring differences in how they prioritize universally valued goals,

and these prioritizations may predict personality traits, values, and a wide range of behavior in natural environments. The RMP is an assessment of motivational priorities; it predicts personality traits based on an analysis of how an individual with certain motivational priorities is likely to gratify those motives on a habitual, everyday basis. People who give higher than normative priority to tranquility, for example, are predicted to show the personality trait of timidity, because timid behavior minimizes the experience of fear and, thus, gratifies the need for a high level of tranquility. People who give higher than average priority to honor may value character and show the personality trait of trustworthiness because trustworthy behavior gratifies a need for a high level of honor. Those who give lower than average priority to honor may value expedience and show the personality traits of an opportunist because expedient behavior gratifies the desire to experience minimal honor.

Based on norms calculated from administering the RMP to 7,580 people in North America and Europe, Reiss (2008, pp. 37-55) distinguished high, average, and low prioritizations of each of the 16 life motives. When an individual obtains an RMP scale score in the upper 20% of the normative population, he/she is said to give "high priority" to the life motive in question. "High social contact," for example, means that the individual standardization prioritization (valuation) of the company of peers falls in the upper 20% of the normative sample. When an individual obtains an RMP scale score in the lower 20% of the normative population, he/she is said to give "low priority" to the life motive in question. All other RMP scores are interpreted as indicating average prioritization of a life motive.

In Reiss's (2008) theory, high versus low prioritization of the same life motive should be associated with opposite values and personality traits. A person with a high priority for order, for example, is theoretically predisposed to value orderliness more than the average person and, thus, gain a reputation as an organized individual. In contrast, a person with a low priority for order is theoretically predisposed to devalue orderliness compared with the average person and, thus, to gain a reputation as a disorganized or spontaneous person. A person with a high priority for honor might impress others as righteous, whereas a person with a low priority for honor might impress others as expedient.

How could Reiss's model explain the common phenomena of wanting opposite goals at different points in time? Most people enjoy socializing sometimes, but at other times they enjoy solitude. Most people enjoy tranquility sometimes, but at other times they enjoy excitement. In Reiss's model, enjoying opposite goals at different times is consistent with "average" prioritization of a life motive. It is part of the management of life goals to desired priorities. When we experience more intellectual activity than we desire, we experience frustration and have a tendency to avoid thinking or even behave mindlessly for a while. When we experience less intellectual activity than we desire, we experience boredom and have a tendency to seek out intellectual stimulation. How we balance these opposite goals of increasing or decreasing intellectual activity depends on how curious we are, which is what the RMP curiosity scale purports to measure.

Reiss's (2008) model holds that priorities of life motives predict personality traits and core values. Priorities, traits, and values may be so closely connected that knowledge of any one of the variables predicts the other two. People who give high priority to curiosity, for example, are predicted to value knowledge and to show the personality traits of intellectuals. Gregar-

ious people are predicted to give high priority to social contact and to value friendship and social skills. Reiss (2008, pp. 157-170) has published a 13-page table of scientifically testable predictions of the motives and priorities associated with each of hundreds of personality traits.

Criterion and Concurrent Validity

Researchers have presented evidence for the criterion or concurrent validity of each of the 16 RMP scales. The following is a summary of this evidence. I have reported the statistical p values in order to show how uncommonly powerful the validity effects are. Professional experience suggests that the RMP's validity „can be seen," meaning it is evident in real-world behavior. The measures used to assess concurrent validity are as follows: NEO-P-I-R (Big 5; Costa and McCrae, 1992); Myers Briggs Type Indicator (MBTI; Myers, McCaulley, Quenk, & Hammer, 1998); Work Preference Inventory measure of intrinsic and extrinsic motivation (Amabile, Hill, Hennessey, and Tighe, 1994); Purpose in Life (Crumbaugh & Maholick, 1964); Positive and Negative Affect (Watson, Clark, & Tellegen, 1988); Personality Research Form (Jackson, 1984); Sternberg Triangular Love Scale (Sternberg, 1998); Romantic Attractiveness Scale (Campbell, 1999) Relationship Assessment Scale (Hendrick, 1988) and Anxiety Sensitivity Index (Reiss, Peterson, Taylor, Schmidt, & Weems, 2008).

Acceptance. The RMP Acceptance scale consists of eight items assessing the fear of failure and rejection. High priority (high RMP standard scores) theoretically suggests the personality traits of insecurity, whereas low priority (low RMP standard scores) theoretically suggest the personality trait of self-confidence. Very high scores may be associated with low self-esteem along the lines of what is often seen in psychopathology.

The RMP Acceptance scale is positively correlated with "Big 5" Neuroticism, $r = .50$, $p < .01$ (Olson & Weber, 2004). This finding is consistent with professional observations that high scores are common in individuals referred for psychological assistance. RMP Acceptance scores also are positively correlated with Negative Affect, $r = .46$, $p < .01$, but negatively correlated with Purpose in Life scale, $r = -.29$, $p < .01$. RMP Acceptance scores are positively correlated with extrinsic motivation, $r =. 48$, $p < .01$ (Olson & Chapin 2007). These findings provide evidence for the concurrent and criterion validity of the scale.

 Compared with a group of 737 people from diverse walks in life, a group of 71 athletes scored below-average on RMP Acceptance, $t (806) = 9.71$, $p < .001$, $d = 1.21$ (Havercamp & Reiss, 2003). Sports consultants have evaluated thousands of athletes, from high school to professional level, and report anecdotally that athletes tend to have low acceptance scores, although there are many individual exceptions. These findings are consistent with the assumption that self-confidence can be crucial for athletic success.

Curiosity. The RMP Curiosity scale consists of eight items assessing need for cognition.   High standard scores theoretically suggest intrinsic valuation of theoretical ideas, whereas low standard scores theoretically suggest intrinsic valuation of actions rather than ideas. People with high scores are theoretically predisposed to become intellectuals, whereas those with low scores may tend to be practical people. Students with low RMP Curiosity scores may be bored by traditional school curricula and intellectual activities.

The RMP Curiosity scale is significantly correlated with intrinsic motivation, $r = .54$ (Olson &

Chapin 2007), and with Positive Affect, r = .26, p < .01 (Olson & Chapin 2007). Compared with MBTI Sensors, on average MBTI Intuitives scored .76 s.d.'s higher on RMP Curiosity, t (92) = -3.00, p < .01, d = .85 (Reiss & Wiltz, 2008). These findings provide support for the concurrent validity of the scale.

Compared with a group of 737 people from diverse walks in life, a group of 52 college philosophy majors scored very high for RMP Curiosity, t (787) = 7.20, p < .01, d = 1.06 (Havercamp & Reiss, 2003). Further, 19 of 49 (38.8%) low-achieving students scored at least .8 s.d.'s below the norm for curiosity, compared with only four of 49 (8.1%) who scored at least .8 s.d.'s above the norm for curiosity (Kavanaugh & Reiss, 2002). These findings provide support for the criterion validity of the RMP curiosity scale.

RMP Curiosity is positively correlated with Big 5 Openness to experience, r = .46, p < .01 (Olson & Weber, 2004). This findings support the utility of the RMP scale as a research measure. Eating. This scale consists of eight items assessing trait appetite. High standard scores theoretically suggest a tendency to overeat, whereas low standard scores theoretically suggest a tendency to eat little. The scores are positively correlated with extrinsic motivation, r = .35, p < .01 (Olson & Chapin 2007), but negatively correlated with adult age, t (1, 1713) = 4.82, d = .24 (Reiss & Havercamp, 2005). These findings provide support for the concurrent validity of the eating scale.

Compared with a group of 737 people from diverse walks in life, a group of 44 overweight adults scored significantly above-average on RMP Eating, t (779) = 4.55, p < .001, d = .71, as did a group of 55 culinary students, t (795) = 3.43, p < .01, d = .47 (Havercamp & Reiss, 2003). These findings support the criterion validity of the RMP Eating scale.

Olson and Weber (2004) obtained a .25 correlation between RMP Eating and Big 5 Neuroticism. The significance of this finding is unclear – it may mean that the Neuroticism scale taps into overeating, at least to a small degree.

Family. This scale consists of eight items assessing the individual's motivation for family life. High standard scores theoretically suggest strong parenting instincts, although in a small number of instances they may indicate instead attachment to siblings. In business contexts the desire to have time for one's children, as indicated by high scores, may come into conflict with certain jobs, possibly leading to work/life imbalances.

The RMP Family scale is positively correlated with Purpose in Life, r = .33, p < .01 (Olson & Chapin 2007); Positive Affect, r = .26, p < .01 (Olson & Chapin 2007); Big 5 Agreeableness, r = .22, p < .01 (Olson & Weber, 2004); and Big 5 Conscientiousness, r = .21, p < .01 (Olson & Weber, 2004). Compared with MBTI Thinkers, on average MBTI Feelers scored .82 s.d.'s higher on RMP Family, t (93) = 3.23, p < .01, d = .74 (Reiss & Wiltz, 2008). These findings provide support for the concurrent validity of the scale.

A group of 133 Christians who rated themselves as "very religious" scored higher on RMP Family than a group of 86 Christians and atheists who rated themselves as "not at all" religious, t (1, 220) = -3.55, p < .01 (Reiss, 2000b). Since Christianity embraces family values, this finding

provides evidence for the criterion validity of the RMP Family scale.

Reiss, Wiltz, & Sherman, (2001) tested 415 college students, finding that RMP Family scores were positively associated with the number of varsity high school or college sports the student had played, F (2, 242) = 7.7, p < .01. Professional experiences with thousands of high school, college, and professional athletes further suggests that athletes score high on RMP Family. These findings exemplify the research utility of the RMP Family scale.

Honor. This scale consists of eight items assessing strength of motivation for character and moral behavior. High standard scores theoretically suggest loyalty, trustworthiness, and valuation of the moral code of one's ancestors (e.g., Ten Commandments). Low standard scores theoretically suggest expedience, opportunism, and disloyalty. In business contexts, honorable people should be predisposed to stay with the same company for many years, whereas expedient people should be predisposed to change jobs when they perceive opportunities elsewhere.

The RMP Honor scale is positively correlated to Big 5 Conscientiousness, r = .31, p < 01 (Olson & Weber, 2004); Purpose in Life, r = .33, p < .01 (Olson & Chapin 2007); and Positive Affect, r = .20, p< .05 (Olson & Chapin 2007). These findings provide evidence for the concurrent validity of the RMP Honor scale. The RMP Honor scale also is correlated with self-efficacy in choosing a career (Bath, 2002).

A group of 137 Christians who had rated themselves as "very religious" scored .52 s.d.'s higher on RMP Honor than did a group of 86 Christians and atheists who had rated themselves as "not at all" religious, t (1, 220) = 5.08, p < .01 (Reiss, 2000b). These findings provide support for the criterion validity of the Honor scale.

Reiss and Wiltz (2004) found that RMP Honor scores were significantly lower for people who watched two or more reality television shows, F (2, 226) = 4.4, p < .02. Further, Reiss and Havercamp (2005) found that RMP Honor scores increase with adult age, t (1, 1713) =10.0, d =. 70. These findings support the research utility of the RMP honor scale.

In a sample of 49 low achieving high school students, 21 of 49 (42.9 percent) had significantly below-average RMP scores for honor, presumably because they shirked their homework and other academic duties, whereas four had significantly above-average scores (Kavanaugh & Reiss, 2002).

Professional experience suggests that people with conduct problems score low for honor. These anecdotal observations are consistent with Reiss's (2008) hypothesis that honor inhibits antisocial impulses.

Idealism. This scale consists of eight items assessing intrinsic valuation of public service, community volunteerism, and social causes. High standard scores theoretically suggest an enduring interest in social justice, whereas low standard scores theoretically suggest a "hard-nosed" approach to social issues.

RMP Idealism is positively correlated with Big 5 Agreeableness, r = .30, p< .01 (Olson & Weber,

2004); Big 5 Conscientiousness, r = .24, p < .01 (Olson & Weber, 2004); Purpose in Life, r =.28, p<.01 (Olson & Chapin 2007); and intrinsic motivation, r = .24, p < .01 (Olson & Chapin 2007). A group of RMP Idealists scored high on measures of passion (Engel, Olson, & Patrick, 2002). These findings provide support for the concurrent validity of RMP Idealism.

Compared with a group of 737 people from diverse walks in life, a group of 66 community volunteers scored high on RMP Idealism, t (801) = 3.31, p < .001, d = .43, as did a group of 49 Protestant seminary students, t (784) = 5.18, p < .01, d = .77. Reiss and Crouch (2005) found that 314 registered organ donors scored higher on RMP Idealism than did 169 non-donors, t (481) = 1.88, p < .03. These findings provide support for the criterion validity of RMP idealism. Independence. This scale consists of eight items assessing intrinsic valuation of self-reliance. High standard scores theoretically suggest independence, possibly accompanied by stubborn-ness and/or valuation of individuality. In contrast, low standard scores theoretically suggest interdependence, possibly including intrinsic valuation for oneness (mysticism). Professional experience in both coaching and marriage counseling suggests that independent people can be difficult to get along with. In business contexts, high standard scores suggest a "strong" leadership style in which an executive makes decisions even when others may still disagree, whereas low standard scores suggests an executive who prefers to lead by consensus.

RMP Independence is negatively correlated with Big 5 Agreeableness, r = -.29, p < .01 (Olson & Weber, 2004), but positively correlated with intrinsic motivation, r = .21, p < .05 (Olson & Chap-in 2007). Compared with MBTI Introverts, on average MBTI Extroverts scored 0.61 lower on RMP Independence, t (93) = -2.47, p < .05, d =0.58 (Reiss & Wiltz, 2008). These findings provide evidence for the concurrent validity of the RMP Independence scale.

In a study of religiosity (N= 558), RMP Independence scores decreased as self-rated religiosity increased, F (2, 555) = 7.6, p < .01 (Reiss, 2000b). Compared with a group of 737 people from diverse walks in life, moreover, a group of 49 Protestant seminary students scored below average for RMP Independence, t (784) = 5.18, p < .01, d = .77 (Havercamp & Reiss, 2003). In a study of 45 fundamental Christians and 19 atheists, Beasley and Rowell (2003) found that low independence scores differentiated these groups. These findings are consistent with the idea that religious people value oneness (as in becoming one with God) and with the viewpoint that some religious people may consider independence as the sin of pride. The findings provide evidence for the criterion validity of the RMP Independence scale.
Order. This scale consists of eight items assessing motivation to organize. High standard scores theoretically suggest orderliness, whereas low standard scores theoretically suggest flexibility and spontaneity. High scores theoretically suggest someone who is detailed orient-ed, whereas low scores theoretically suggest someone who is focused on the "big picture." Professional experience suggests that orderly people tend to stay the course, whereas spon-taneous people tend to change directions quickly.

The RMP Order scale is positively correlated with PRF Order, r = .60, p < .01 (Havercamp & Reiss, 2003). On the MBTI, Judgers scored higher than Perceivers, t (92) = 4.00, p < .001, d = .83 (Reiss & Wiltz, 2008). These findings provide evidence for the concurrent validity of the RMP Order scale.

RMP Order is negatively correlated with Big 5 Openness to experience scale, r = -.19, p < .05

(Olson & Weber, 2004), but positively correlated with Big 5 Conscientiousness, r = .33, p < .01 (Olson & Weber, 2004). RMP Order is positively correlated with Big 5 Neuroticism, r = .33, p < .01 (Olson & Weber, 2004), perhaps because the authors of the Big 5 Neuroticism scale regarded orderliness as compulsiveness.

RMP Order is positively correlated with extrinsic motivation, r = .23, p < .05. Reiss and Crouch (2005) found that 314 registered organ donors scored lower on RMP Order than did 169 non-donors, t (481) = -3.35, p < .01, d = 0.32. These findings exemplify the utility of the scale in behavioral research.

Physical Activity. This scale consists of eight items assessing trait motivation for physical exercise. The scores are positively correlated with participation in varsity sports, F (2, 412) = 33.1, p < .01 (Reiss, Wiltz, & Sherman, 2001) and with Positive Affect, r = .44, P < .05 (Olson & Chapin 2007). These findings provide evidence of the concurrent validity of the RMP Physical Activity scale.

Compared with a group of 737 people from diverse walks in life, a group of 71 athletes scored very high on RMP Physical Activity, t (806) = 9.71, p < .01, d = 1.21 (Havercamp & Reiss, 2003). A group of 65 ROTC military students also scored high for RMP Physical Activity, t (800) = 6.26, p < .01, d = 0.81. RMP Physical Activity is negatively correlated with adult age, t (1, 1713) = 15.4, d = .86 (Reiss & Havercamp, 2005). These findings provide evidence for the criterion validity of the RMP Physical Activity scale.

Power. This scale consists of eight items assessing motivation to lead and/or influence others. High standard scores theoretically suggest intrinsic valuation of leadership, achievement, and self-assertion. Low standard scores theoretically suggest a dislike for the spotlight, a lack of ambition, and nondirective behavior. Professional experiences suggest that people with high scores are hardworking, whereas those with low scores are laid back and easygoing.

RMP Power scores are positively correlated with the PRF Dominance scale, r = .55, p < .01 (Havercamp & Reiss, 2003). RMP Power is also correlated with Big 5 Extraversion, r = .39, p < .01 (Olson & Weber, 2004). Compared with MBTI Introverts, on average MBTI Extroverts scored .39 s.d.'s higher on RMP Power, t (93) = 2.06, p < .05, d = .40 (Reiss & Wiltz, 2008). These findings provide evidence for the concurrent validity of the RMP Power scale.

RMP Power scores are positively correlated with participation in varsity sports, F (2, 412) = 3.2, p < .05 (Reiss, Wiltz, & Sherman, 2001). Compared with a group of 737 people from diverse walks in life, a group of 71 athletes scored .69 s.d.'s above the norm for RMP Power, t (806) = -5.91, p < .01 (Havercamp & Reiss, 2003). A group of 65 "Greek" college students (those participating in fraternities or sororities) also scored high, t (350) = 0.01, p < .01, d = .78, presumably because many Greek organizations aim to recruit campus leaders (Havercamp & Reiss, 2003). These findings provide evidence for the criterion validity of the RMP Power scale.

Romance. This scale consists of eight items assessing libido. All items directly ask about interest in sex (suggesting high face validity). Spouses with significantly different Romance scores tend to quarrel over sex.

The scores are negatively correlated with Big 5 Agreeableness, r = -.23, p < .01 and with adult

age, t (1, 1713) = 8.33, p < .01, d = .41 (Reiss & Havercamp, 2005). Although this scale has excellent reliability and face validity, more rigorous evidence of validity is needed.

Saving. This scale consists of eight items assessing trait motivation for collecting. High standard scores theoretically suggest intrinsic valuation of ownership and saving, whereas low standard scores theoretically suggest a tendency to spend or waste. Professional experience suggests that married couples with large differences in saving scores tend to quarrel over money/spending.

RMP Saving scores are positively correlated with extrinsic motivation, r = .30, p < .01 (Olson & Chapin 2007). This finding provides evidence for the concurrent validity of this scale. RMP Saving is also correlated with Big 5 Neuroticism, r = .28, p < .01 (Olson & Weber, 2004), and with Negative Affect, r= .26, p < .01, (Olson & Chapin 2007), perhaps because hoarding is a possible symptom of compulsive disorders.

Reiss and Crouch (2005) found that 314 registered organ donors scored lower on RMP Saving than did 169 non-donors, t (481) = -3.29, p < .01, d = .31. Apparently, collectors hate throwing things away so much they even may not want to donate their organs after they die! This finding exemplifies the research utility of the Saving scale.

Social Contact. This scale consists of eight items assessing intrinsic interest in socializing. High standard scores theoretically suggest gregariousness, whereas low standard scores theoretically suggest a tendency to be private, shy, or a loner.   Professional experiences with this scale suggest that people with high scores are fun loving, whereas those with low scores are "serious." High scores theoretically suggest someone who is people oriented, whereas low scores theoretically suggest someone who tends to keep to himself/herself.

RMP Social Contact scores are positively correlated with Big 5 Extraversion, r = .58, p < 01 (Olson & Weber, 2004). Compared with MBTI Introverts, on average MBTI Extroverts scored 1.03 s.d.'s higher on RMP social contact, t (93) = 5.16, p < .001, d = 1.08 (Reiss & Wiltz, 2008). RMP Social Contact scores also were positively correlated with Big 5 Openness to Experience, r = .20, p < 05 (Olson & Weber, 2004); Purpose in Life, r = .25, p<.01 (Olson & Chapin 2007); and Positive Affect, r = .26, p<.01 (Olson & Chapin 2007). These findings provide evidence for the concurrent validity of RMP Social Contact.

Compared with a group of 737 people from diverse walks in life, a group of 65 "Greek" college students (those participating in fraternities or sororities) scored high on RMP Social Contact, t (350) = 2.95, p < .01, d = .41 (Havercamp & Reiss, 2003). This finding provides evidence for the criterion validity of the RMP Social Contact scale.

In a group of 239 adults, Reiss and Wiltz (2004) found that RMP Social Contact scores were positively associated with watching reality television shows, F (2, 226) = 5.8, p < .01. This finding exemplifies the research utility of the RMP Social Contact scale.

Status. This scale consists of eight items assessing motivation for social standing and prestige. High standard scores theoretically suggest intrinsic valuation of wealth, popularity, and/or social class, whereas low standard scores theoretically suggest disinterest in wealth, popularity, and/or social class. High scores suggest someone attentive to VIPs, whereas low scores

suggest someone inattentive to titles and status within the company and industry.

RMP Status scores are associated with extrinsic motivation, r = .42, p <. 01 and, to a lesser extent, Positive Affect, r = .22, p< .05 (Olson & Chapin 2007). These findings provide evidence for the concurrent validity of the RMP Status scale.

Compared with a group of 737 people from diverse walks in life, a group of 49 seminary students scored very low for RMP Status, t (784) = -4.63, p < .01, as did a group of 66 community service volunteers, t (784) = -5.58, p < .01 (Havercamp & Reiss, 2003). In contrast, a group of 65 "Greek" college students (those participating in fraternities or sororities) scored very high on RMP Status, t (800) = 7.11, p < .01, d = .92 (Havercamp & Reiss, 2003). These findings provide evidence for the criterion validity of the RMP Status scale. The seminary students were predicted to have low status because they shun costly things and wear plain clothes, and the community volunteers because they identify with the downtrodden. The "Greek" students were predicted to have high status because membership in fraternities and sororities is often considered an indicator of popularity.

In a group of 239 adults, Reiss and Wiltz (2004) found that RMP Status scores were positively associated with watching reality television shows, F (2, 226) = 18.1, p < .01. The values projected by these shows are fame and fortune, or the values associated with high RMP Status (Reiss, 2008). Further, Reiss and Crouch (2005) found that 314 registered organ donors scored lower on RMP Status than did 169 non-donors, t (481) = -2.67, p < .01, d = .26. This finding is consistent with the policy of not paying organ donors, which arguably expresses an anti-materialistic value. These findings suggest the research utility of the RMP Status scale.

Tranquility. This scale consists of eight items assessing sensitivity to anxiety and pain. Four of the items are from the 16-item Anxiety Sensitivity Index (ASI), which has been extensively validated in more than one thousand published studies (Reiss et al., 2008). The other four items evaluate sensitivity to pain, which has been shown in many studies to be correlated with sensitivity to anxiety (Reiss et al., 2008). High RMP Tranquility scores theoretically suggest timidity and proneness to future panic attacks or anxiety disorder, whereas low standard scores theoretically suggest adventuresome traits.

The RMP Tranquility scale is positively correlated with the ASI, r = .58, p < .01 (Havercamp & Reiss, 2003); with Big 5 Neuroticism, r = .46, p < .01 (Olson & Weber, 2004); and with Negative Affect, r = .32, p < .01 (Olson & Chapin 2007). These findings provide evidence for the concurrent validity of the scale.

Compared with MBTI Introverts, on average MBTI Extroverts scored 0.36 s.d.'s lower on RMP tranquility, t (93) = -2.22, p < .01, d = .35 (Reiss & Wiltz, 2008). This finding is consistent with previous findings that people with high ASI are prone to panic attacks. (As in agoraphobia, people with panic attacks tend to stay at home.)

Reiss and Crouch (2005) found that 314 registered organ donors scored lower on RMP Tranquility than did 169 non-donors, t (481) = -2.69, p < .01, d = .26. This finding is consistent with the idea that some people may be afraid that if they registered as an organ donor, some

doctors hoping for organ donations might not make an all-out effort to save them when they are seriously ill.

Olson and Chapin (2007) found that RMP Tranquility is negatively correlated with intrinsic motivation, r = -.25, p < .01.

Vengeance. This scale consists of eight items assessing strength of the motive to get even with people who offend. High standard scores theoretically suggest a predisposition toward confrontation, whereas low standard scores theoretically suggest a predisposition to avoid conflict. High scores suggest someone who is very competitive, whereas low scores suggest someone who prefers to get things done cooperatively and without confrontation.

RMP Vengeance scores are positively correlated with Big 5 Neuroticism, r = .31, p < .05 (Olson & Weber, 2004) and with Negative Affect, r = .34, p < .01 (Olson & Chapin 2007). RMP Vengeance scores are negatively correlated with Big 5 Agreeableness (Olson & Weber, 2004), r = -.61, p < .01, and with Purpose in Life, r = -.32, p< .01 (Olson & Chapin 2007). These findings provide evidence for the concurrent validity of the RMP Vengeance scale.

In a group of 558 Christians, Reiss (2000b) found that RMP Vengeance scores were much lower for people who rated themselves as "very religious" than for less religious group, F (2, 555) = -4.74, p< .01. Consistent with findings that aggression decreases with adult age (Eron & Huesmann, 1990), Reiss and Havercamp (2005) found that RMP Vengeance decreased with age, t (1, 1713) = 9.77, p< .01, d = .91.   These findings provide evidence for the criterion validity of the RMP Vengeance scale.

Reiss and Crouch (2005) found that 314 registered organ donors scored lower on RMP Vengeance than did 169 non-donors, t (481) = -2.39, p < .05, d = .23. In a sample of 49 low achieving high school students, 24 of 49 (49.0 percent) had significantly above-average RMP Vengeance scores, perhaps because combativeness leads to low achievement (Kavanaugh & Reiss, 2002). These findings exemplify the research utility of the RMP.

Applications
The RMP is the first empirically derived, standardized assessment of human needs. It provides the only significant taxonomy of human needs based on factor analysis (mathematical congruence of goals) of survey data of what diverse samples of people said motivates them. The data summarized in this article demonstrate construct validity, reliability, concurrent validity, and criterion for each of the 16 RMP scales.

The construct of motivational priority (defined as individual differences in the valuation of universally reinforcing stimuli, or goals that motivate everyone but not necessarily in the same way) has numerous practical implications, sufficient to prove that James, McDougall, Murray, and Maslow had correctly identified human needs as a central topic for understanding behavior in natural environments. Here is a listing of the current professional or published applications of the RMP and the construct of motivational priority.

   (a) Self-Discovery. Mengel (2009) has studied the use of the RMP for self-discovery. In this
       application, ordinary („mentally healthy") individuals use the RMP to reflect on how

their motives, values, and traits might be interconnected.

(b) Business Coaching. Ion & Brand (2009) among others have applied the RMP to business coaching, or the counseling of business executives with job related problems. In this application, the RMP is used to identify unmet needs at work and/or possible incompatibilities of goals or values between the executive and the corporate culture or supervision.

(c) Sports Coaching and Health Psychology. Reiss, Wiltz, & Sherman (2001) reported RMP profiles of athletes. Peter Boltersdorf, the German coach, founded a sports institute based on the RMP, and now counts among its clients an Olympic gold medalist and two world championship teams.

(d) Marriage Counseling. Judah (2006) administered the RMP to more than one hundred couples who had sought marriage counseling and twenty happy couples. Although he did not evaluate the results scientifically, there were obviously large differences in congruence of RMP scores. The couples in the troubled marriages were much more likely to hold opposite values and goals compared to those in the happy marriages. Unfortunately, Dr. Judah passed away before he could publish this work, which now needs to be executed by future researchers.

(e) School Psychology. Reiss (2009) adapted the RMP to assess six common motivational reasons for poor school achievement (inadequate ambition, fear of failure, inadequate curiosity, disorganized, irresponsible, and combative). Each reason implies a different intervention. Counselors and psychologists working at about forty schools nationwide and elsewhere are exploring this approach.

(f) The RMP is the basis for a widely-cited study in media psychology that profiled reality television audiences (Reiss & Wiltz, 2004). The RMP is well suited for such research because it is a scientifically validated instrument that assesses a comprehensive range of motives.

(g) Reiss (2010) has applied the construct of motivation priority to planning happy lives for people with intellectual disabilities, autism, or other developmental disabilities.

(h) Reiss (2004) suggested a new theory of spirituality and religion based on the construct of motivational priority. The attributes of the Judeo-Christian construct of God represent the greatest imaginable expression of eleven of the 16 basic desires. Creator, for example, is the greatest imaginable expression of the basic desire for power, while omniscient is the great imaginable expression of the basic desire for curiosity. Future researchers need to test this theory and possibly apply it to faith-based counseling.

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Table 2. Internal and Reliabilities and Social Desirability of RMP Scales

Scale	α1	α2	r3	r4
Acceptance	.87**	.82**	.80**	-.18*
Curious	.85**	.82**	.84**	.24**
Eating	.87**	.80**	.82**	-.16*
Family	.87**	.92**	.79**	.19*
Honor	.79**	.82**	.77**	.39**
Idealism	.86**	.84**	.69**	.31**
Independence	.89**	.71**	.72**	-.08
Order	.89**	.87**	.81**	.09
Physical Activity	.89**	.89**	.82**	.01
Power	.88**	.86**	.84**	-.07
Romance	.93**	.89**	.87**	-.26**
Saving5	---	---	.80**	-.08
Social Contact	.86**	.84**	.81**	.04
Status	.90**	.84**	.88**	-.08
Tranquility	.92**	.83**	.74**	-.02
Vengeance	.94**	.92**	.86**	-.35**

** p < .01
* p < .05
1 Havercamp and Reiss (2003) cronbach alpha (n= 311)
2 Reiss and Havercamp (1998) cronbach alpha (n = 341)
3 Havercamp and Reiss (2003) 4-week test retest reliability (n = 123)
4 Havercamp and Reiss (2003) correlation with Marlowe-Crowne Social
  Desirability Scale (n =171)
5 Added as a sixteenth life motive after internal reliability studies.