United States Standard Group Study

for the

Inventory for Work Attitude and Motivation

[U.S.2007]

An Institute Research Report

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The original United States Standard Group was created by jobEQ in 2001 based on population of U.S. residents who completed the iWAM from its launch until the time of the research. Since that time, thousands of additional individuals have completed the *Inventory for Work Attitude and Motivation.*

jobEQ and The Institute made a joint decision to update the U.S. Standard Group based on the current pool of participants. With the assistance of Ryan Hooper, a graduate intern from Saint Louis University, and the staff of jobEQ, the study was launched in June 2007.

Attempts were made to gather missing demographic data on some participants. Where partners and licensed professionals knew the individuals or where participants themselves could be contacted to provide missing information (e.g. birth date, job classification), we made the effort to fill in the missing information.

With the assistance of a second intern from Saint Louis University, Tyler Stockstill, we gathered U.S. Census Data in order to have a basis for comparing the participants in this study with the population at large. The Census Data from the U.S. Department of Labor Statistics Website were used to make the comparisons.

Some individuals were purged from the pool based on having left more than six of the forty iWAM items ranked as they are in the original instrument. jobEQ has determined that an excess of six unchanged items jeopardizes the accuracy of the results. We used that criterion in order to be certain that the sample was as "pure" as possible.[1]

The report is organized into the following sections:

- Updating the iWAM United States Standard Group Profile
- 2007 Standard Group versus 2001 Standard Group
- Conclusions and Implications for the 2007 U.S. Standard Group
- Variance of the U.S. 2007 Standard Group with U.S. Workforce Demographics: Research Implications of Standard Group Composition

In addition, there are appendices containing supplementary data for the study.

Carl L. Harshman, Ph.D. CEO
The Institute for Work Attitude & Motivation

September 18, 2007

[1] The data analysis and report drafts were done by Ryan Hooper, Institute Research Associate and a graduate student in psychology at Saint Louis University in St. Louis, Missouri. Research support and production was provided by Tyler Stockstill, an undergraduate intern from the School of Business at Saint Louis University, and Jackie Barnes, the Registrar of The Institute.

Updating the iWAM United States Standard Group Profile [U.S.2007]

About the Sample

The 2007 standard group is based on 1,921 individuals who are residents of and working in the United States and who completed the iWAM questionnaire since its launch in 2000. When comparing the 2007 Standard group to 2007 data from the U.S. Department of Labor Statistics, the Standard Group is representative of the current U.S. workforce.[2]

The 2007 Standard group has over 34% of the sample that selected 'Other' (8.84%) or did not specify (25.24%) their occupation. Although the occupation category identified as "Professional" in the sample is only 5.77% of the total compared to the U.S. employment data in which that category has over 33%, when we did a cumulative count of all the categories that constitute a professional role (Consulting, Executive/Senior Management, Professional, Engineering, Education/Training, Research and Development, Accounting/Finance), we came up with almost 30%. Assuming that a considerable number of the unspecified group fall into this category, we concluded that the professional role is adequately represented in the sample.

On the other hand, "blue collar" positions such as production, transportation, construction, and maintenance occupations are underrepresented in the 2007 Standard Group (2.07% vs. 24.7%).

Based on our experience with certified professionals and client groups, we believe that the professional category of participants would be comparable if there were not so many unreported or "other" designations. At the same time, by virtue of the client population in the U.S. during this decade, we believe that blue collar professions are truly underrepresented and, therefore, the iWAM should not automatically be considered to be representative of workers in this category.

The 2007 Standard group is composed of higher percentage of females (53.7% vs. 46.5%) and late-career age group (38.57% vs. 23.69%) than indicated in the U.S. employment data. Although some might see this as a disadvantage of the current Standard Group, there are two possible positives for this outcome. First, at this time, the primary applications of the iWAM in the American workplace are with people who tend to reflect the profile in this study. Second, when one looks at many of the studies for assessment tools, one finds that the creators may have over-sampled younger participants by using college students to create the norm groups.

The 2007 Standard group is over-representative of college graduates who make up 57% of the sample as opposed to 34% in the U.S. employment data.

The reasons for and implications of the differences between the iWAM Standard Group and the U.S. employment data for age and education are consistent with the findings for blue collar workers. As such, we recommend that any application in which the participants are significantly different than those in this Standard Group be reviewed carefully before drawing firm conclusions about any differences between the population in the study and this Standard Group.

The data from the study are summarized in the tables (1-4) on the following pages.

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[2] 2007 U.S. employment data obtained from http://www.bls.gov/cps/home.htm

Table 1

Occupation Categories for the iWAM Standard Group

iWAM Standard Group by Occupation	N	%
Government/Military	32	1.66%
General administrative/ supervisory	74	3.85%
Computer related (Internet & other)	98	5.09%
Sales/marketing/advertising	135	7.02%
Student	153	7.96%
Consulting	100	5.2%
Unemployed/Between Jobs	41	2.13%
Executive/Senior management	134	6.97%
Professional (medical, legal, etc)	111	5.77%
Engineering	61	3.17%
Self-employed/owner	62	3.22%
Education/training	96	4.99%
Manufacturing/production/operations	28	1.45%
Accounting/Finance	58	3.01%
Customer service/support	40	2.08%
Research and development	16	0.83%
Tradesman/craftsman	12	0.62%
Homemaker	6	0.31%
Other	170	8.84%
Not Specified	485	25.24%

Table 2

Gender: 2007 iWAM vs. U.S. Employment Data

iWAM Data	*n*	%	U.S. Employment[1]	%
Male	867	45.13%	Male	53.5%
Female	1032	53.72%	Female	46.5%
Unknown	22	1.14%		

Table 3

Age: 2007 iWAM vs. U.S. Employment Data

iWAM Data		N	%	U.S. Employment[1]	%
Youth	<21 years	15	0.78	<19	4.08
Young Professional	21-30 years	349	18.16	20-34 years	31.25
Mid Career	31-44 years	568	29.56	35-44 years	23.42
Late Career	45-60 years	741	38.57	45-54 years	23.69
Senior	>60 years	137	7.13	>54	17.64
Unknown		111	5.77		

Table 4

Education: 2007 iWAM vs. U.S. Employment Data

iWAM Data	*n*	%	U.S. Employment[1]	%
1-6 years	104	5.41%	< 12 years	9.63%
7-12 years	170	8.84%	12 years	29.50%
13-15 years	358	18.63%	13-15 years	26.88%
16-21 years	1095	57.0%	> 15 years	34.13%
Unknown	127	6.61%		
Other	67	3.48%		

2007 U.S. Standard Group vs. 2001 U.S. Standard Group

The major difference between the 2007 sample and the 2001 sample is in sample size (1,921 vs. 300). When comparing the samples using a 1-tailed t-test, several significant differences ($p < .05$) emerged. These are described in the following sections.

Findings Related to Variance

When comparing the 2007 U.S. standard group to the 2001 U.S. standard group, all factors are significantly ($p < .05$) more varied according to the f-test statistic. This is likely to be an indicator that the 2007 standard group is more heterogeneous than the 2001 standard group, which is also an indicator that it may be more representative of the U.S. culture and workplace.

Findings Related to Differences Between U.S. 2007 and U.S. 2001

Goal Orientation & Problem Solving

The 2007 range for *Goal Orientation* is significantly higher ($p < .001$) than the 2001 standard group and significantly lower ($p < .05$) and more dispersed than the 2001 standard group on the *Problem Solving* scale. This seems to indicate that the 2007 Standard Group is more motivated to pursue goals but less concerned about detecting problems and solving them than the 2001 group. Given the larger proportion of professionals and the number of supervisory/management/ executive participants in the study, their *Goal Orientation* is likely to be higher since this has been characteristic of leadership teams with which jobEQ and The Institute have worked. With the exception of certain industries and roles, this group also tends to be less motivated to solve problems and less concerned about avoiding errors.

Individual Environment & Group Environment

The 2007 standard group had a significantly higher average ($p < .001$) on the *Individual Environment* scale which perhaps reflects an increasing individual nature of the U.S. culture. Although the 2007 standard group scored statistically similar to the 2001 Standard Group on the *Group Environment* scale indicating that social contact remains important in the work environment.

Indifference

The 2007 U.S. standard group had a significantly lower average ($p < .001$) on the *Indifference* scale indicating an even stronger interest in rules that was reflected in the 2001 study. For the level of individuals in this study and perhaps for the U.S. in general since the events early in this decade, rules are even more important than in the past.

Compliance, Tolerance, & Assertiveness

The 2007 U.S. standard group had a significantly higher average ($p < .01$) on *Compliance* indicating that knowing the rules and policies and being exemplars of them is more important.

The 2007 U.S. standard group had a lower average ($p < .001$) on *Tolerance* indicating that this population may be less motivated to deal with others who have very different rules than they

have and would be less tolerant of people who have rules that are significantly different than their own.[3]

At the same time, there is a higher average on *Assertiveness* ($p < .05$), which would indicate an increased willingness to tell others that they should follow the rules held or followed by the respondent. Since *Compliance* is also high, we can assume that the "rules" in this case would include those of the workplace when in the context of a job.

Neutral vs. *Affective Communication*

The 2007 U.S. standard group had a significantly lower average ($p < .001$) on *Neutral Communication* while scoring statistically similar on *Affective Communication.* This indicates that the 2007 sample seems to have less interest in the actual content of communication while maintaining an equal level of interest with the 2001 group in the non-verbal component of communication.

During the last decade there has been increasing interest in and importance of emotional intelligence in the American workplace. The increased interest may have resulted in a shift away from attention to the content itself. In addition, for the U.S., the media is now so widespread and reports so much that there is a constant stream of messages (content) that are assumed to be a result of "spin." In addition, there are regular reports of what the elected or government official meant when he or she made an official statement. In such matters, if one only paid attention to the content, one would miss the message. In a sense, content of communication is becoming less important to many people because you cannot necessarily trust the words you are hearing.

Convinced by Number of Examples & Consistency vs. Automatically

The 2007 U.S. Standard Group had a significantly higher average on *Number of Examples* ($p < .001$) *and Consistency* ($p < .05$) while having a significantly lower average on *Automatically* ($p < .001$). This indicates that Convincer Processes may have moved away from early adoption and towards a more gradual process that involves getting more examples to be convinced and being reconvinced.

There have not been a large number of high *Automatics* in the groups with which we have worked. At the professional, managerial, and executive levels, there are not a large number of high *Automatics.* This and the fact that the state of the American culture suggests to people that it might not be wise to be convinced too quickly. If so, there would be a shift toward *Consistency.*

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[3] There are two possible reasons for this factor. First, the people in this standard group consist of a lot of individuals in mature organizations and who have managerial responsibilities. Based on our experience of giving feedback, we are more likely to find people who are (a) compliant and (b) less tolerant. People working in start-up companies or in high-change environments such as *Google* might be less compliant and more tolerant. Users of the instrument are encouraged to be sensitive to these possibilities.

A second possibility is the impact on individuals of events in the country. In this case, we cite the incidents of September 11, 2001, and what has occurred since that time. In general, people have been asked to be more compliant (e.g. airport inspections) and less tolerant ("Please report anyone behaving in a suspicious manner . . .). As a result, we consider the possibility that the larger context has had an impact on individual metaprograms.

Present vs. Future Time Orientation

The 2007 U.S. standard group had a significantly higher average ($p < .01$) on *Present* orientation. There was a significant decrease ($p < .01$) on *Future* orientation. This indicates a shift from the 2000 U.S. standard group being more motivated to focus on the future to the 2007 group with a more "in the moment" or present motivational pattern.

We conclude that the number and proportion of managers and professionals in the sample would tend to shift the emphasis toward the present and away from the future. This group would consist of more "Realists" than "Dreamers."

Achievement

The 2007 U.S. standard group had a significantly higher average ($p < .01$) on *Achievement.* This group consists of more individuals who are more motivated to achieve than the earlier Standard Group. This probably reflects the concern with competence and goal achievement at this level of the population. There may also be more competitiveness and need for recognition in this because of their place in organizations and the economic structure.

Other Important Findings

Alternatives

The 2007 U.S. standard group had a significantly lower average ($p < .05$) on *Alternatives* indicating their decreased motivation to seek other ways of doing their work. Because of the global, social, and economic shifts occurring, people in this country may feel as though they have less options available than a decade ago. This sense or "framing" could impact the extent to which people are motivated to seek alternatives.

Breadth vs. Depth

The 2007 U.S. standard group had a significantly higher average ($p < .05$) on *Breadth* while remaining statistically similar on *Depth* indicating although details are important in the workplace, taking a broader view is increasingly important to this sample.

Sole Responsibility vs. Shared Responsibility

The 2007 U.S. standard group had a significantly lower average ($p < .05$) on *Sole Responsibility* with a higher average ($p < .05$) on *Shared Responsibility.* These scores may indicate that although the individual nature of the U.S. culture still exists, responsibility in the work place is better when it is spread out among others.

There has been a strong teaming movement afoot in the United States for the last two decades. These results suggest that the general shift away from the classic individualism and toward a collaborative, teaming environment.

Evolution

The 2007 U.S. standard group had a significantly higher average ($p < .05$) on *Evolution* which likely indicates a shift in U.S. culture toward need for change. This may also reflect the general cultural shift toward wanting things to get better (than they are, for example, after 9/11).

Concept & Structure

The 2007 U.S. standard group had a significantly higher average ($p < .05$) on the *Concept* and *Structure* scales than the 2001 group. This seems to indicate that the population is more interested in ideas and understanding and in organization than the 2001 sample. Again, with higher levels of education and more professionals in the sample, it is not unusual to see the gains in concept and structure.

Power

The 2007 U.S. standard group had a significantly lower average ($p < .05$) on *Power* indicating a decreased motivation to be in work situations in which they have authority and control over others.

Interest Filters

The 2007 U.S. Standard Group had significantly higher averages on *Focus on Time* ($p < .001$) and *Focus on People* ($p < .05$) than the 2001 group. The *Focus on Time* increase indicates more interest in paying attention to time and managing schedules. The increased focus on people is consistent with the data for the *Group Environment* scale.

The 2007 U.S. standard group had significantly lower averages on the *Focus on Tools* ($p < .05$), *Focus on Place* ($p < .05$), *and Focus on Money* ($p < .001$).

In general, the current Standard Group seems to have more a “people” orientation and less a “thing” orientation than the earlier standard group.

Conclusions and Implications for the U.S. 2007 Standard Group

For this study, we used the information from the U.S. Department of Labor (D.O.L.) Statistics rather than the U.S. Census Bureau. There are two reasons for the choice. First and foremost, the *Inventory for Work Attitude and Motivation* is primarily designed to measure metaprograms related to the context of work. In the U.S., there are differences between the demographics of the population and the demographics of the workforce or working population. Those differences are important in understanding and interpreting the relationship between the population at large and the profile of the participants in the iWAM Standard Group. Second, Department of Labor Statistics are more up-to-date than census data, since the last major census was in the year 2000 and labor statistics are updated annually. A relevant summary of the 2000 U.S. Census data are included as Appendix A for those who might want to compare and contrast those data with the 2007 U.S. employment survey data.

Differences Between iWAM Test-Takers and Department of Labor Statistics

In the analysis of the pool of individuals who had completed the iWAM from 2000 to the present, we found the following:

- A significant percentage of the iWAM population selected "Other" as their *occupational category*. That choice is a result of a limited list of choices available (see Table 1, for example). Finding none that appeared to the test-taker to be a sufficient match, they most likely chose the non-descript response. This puts a disproportionately large number of the iWAM sample in this category compared to the D.O.L. statistics.
- While the D.O.L. statistics indicate that almost 20% of the U.S. population is in an employment category called "Professionals," only 5.77% of the iWAM population categorized themselves that way. We assume that a significant percentage of those indicating "Other" (see prior bullet) would likely be in this category. In fact, given that some employment groups are underrepresented in the iWAM sample, we hypothesize that the category called "Professionals" may, in fact, be overrepresented compared to the actual working U.S. population.
- Blue collar occupations are underrepresented in the iWAM Standard Group. They constitute only 2.07% while the D.O.L. statistics indicate that they are 24.7% of the U.S. workforce. This result is not surprising since the focus of research and application in North America has been aimed more toward the executive, managerial, professional, and administrative roles. As a result, there are fewer participants in what are considered "blue collar" occupations.
- The study revealed that the iWAM population has a slightly higher percentage of females versus the U.S. working population (53.7% vs. 46.5%). We expect that this finding is related to the fact that the iWAM population is both weighted in the direction of professionals and that it may have a higher proportion of educational, consulting, and mental health professionals all of which may be more heavily populated by women than the general workforce. In addition, the small proportion of blue collar workers, which are historically predominately male, may contribute to the higher proportion of females in the sample.

- The iWAM Standard Group is heavily weighted in favor of college graduates (57%) versus the D.O.L. statistical sample (34%). Again, the bias toward professionals and away from blue collar workers will surely generate this level of disproportion.

We shall discuss the implications of these findings in the final section of the document.

2001 iWAM Standard Group versus 2007 iWAM Standard Group

We compared the U.S. 2001 Standard Group to those who took the iWAM since then to see what is similar and what is different. For the purpose of the analysis, the two groups were kept separate. Both samples are combined to create the 2007 Standard Group.

Variability of the Group

The most predominant finding was the fact that when we tested the two groups for differences in variance, *all factors were significantly different at the p < .05 level*! Therefore, we concluded that the 2007 U.S. Standard Group had significantly more variability than the 2001 Standard Group for all 48 patterns in the iWAM.
This seems to indicate that the 2007 group is less homogenous than the 2001 group. As such, the 2007 group may be more representative of the overall U.S. work population than was the 2001 group.

Findings Related to Specific Patterns

Here is a summary of the specific statistical pattern differences that emerged between the 2001 group and the 2007 group. The two groups were compared using a t-test. The probability (p) that the differences between the two groups could have occurred by chance is shown in parentheses. The direction of the difference— i.e. did 2001 or 2007 have the higher average score?—is in italics immediately preceding the probability statistic. Please note that for companion factors (e.g. the pairs in the "Operating Factors" category and threesomes in change or basic motivation) if more than one factor turned out to be significantly different, they are listed separately. If only one factor was significant, the other(s) is/are mentioned in parenthetical statement following the first one.

- The 2007 group was lower ($p < .05$) on *Problem Solving* than the 2001 group.
- The 2007 group was higher ($p < .001$) on *Individual Environment* than the 2001 group. (The 2007 group was not significantly different from the 2001 group on *External Reference*.)
- The 2007 group was lower ($p < .05$) on *Alternatives* than the 2001 group. (The 2007 group was not significantly different from the 2001 group on *Procedures*.)
- The 2007 group was higher ($p < .05$) on *Breadth* than the 2001 group. (The 2007 group was not significantly different from the 2001 group on *Depth/Detail*. This pattern tends to be very low for the U.S. population.)
- The 2007 group was lower ($p < .05$) on *Sole Responsibility* than the 2001 group.
- The 2007 group was higher ($p < .05$) on *Shared Responsibility* than the 2001 group.
- The 2007 group was even higher ($p < .05$) on the *Evolution* change scale than the 2001 group. (The 2007 group was not significantly different from the 2001 group on either the *Sameness* or *Difference* scales.)

- The 2007 group was higher ($p < .05$) on *Concept* than the 2001 group. (The 2007 group was not significantly different from the 2001 group on the *Use* scale.)
- The 2007 group was higher ($p < .05$) on *Structure* than the 2001 group.
- The 2007 group was lower ($p < .05$) on the *Power* basic motivation scale than the 2001 group.
- The 2007 group was higher ($p < .01$) on *Achievement* than the 2001 group. (The 2007 group was not significantly different from the 2001 group on the *Affiliation* scale.)
- The 2007 group was higher ($p < .05$) on *Assertiveness* than the 2001 group. (The 2007 group was not significantly different from the 2001 group on *Indifference*.)
- The 2007 group was higher ($p < .01$) on *Compliance* than the 2001 group.
- The 2007 group was lower ($p < .001$) on *Tolerance* than the 2001 group.
- The 2007 group was lower ($p < .001$) on *Neutral* communication than the 2001 group. (They were not significantly different on the *Affective* scale.)
- The 2007 group was higher ($p < .001$) on *Number of Examples* than the 2001 group. (The 2007 group was not significantly different from the 2001 group on the *Period of Time* convincer process.)
- The 2007 group was lower ($p < .001$) on *Automatic* than the 2001 group.
- The 2007 group was higher ($p < .05$) on *Consistency* than the 2001 group.
- With regard to work-related "Interest Filters," the analysis revealed the following:
    - The 2007 group was significantly higher on:
        - *Focus on Time* ($p < .001$)
        - *Focus on People* ($p < .05$)
    - The 2007 group was significantly lower on:
        - *Focus on Tools* ($p < .05$)
        - *Focus on Place* ($p < .05$)
        - *Focus on Money* ($p < .001$).

The results suggest that the 2007 U.S. Standard Group is significantly different than the 2001 group in a number of ways. Again, since the target population in North America for the iWAM continues to expand and diversify, the resulting statistics confirm what we already know in general based on projects and research studies.

The next section of this report discusses the implications of the findings for the new Standard Group.

Variance of the U.S. 2007 Standard Group with U.S. Workforce Demographics: Research Implications of Standard Group Composition

First, we noted some differences between the 2007 U.S. group and the U.S. Department of Labor's workforce statistics. The 2007 iWAM Standard Group has:

- More women
- A more mature makeup (higher in the age category)
- More members who are likely to be classified as "professionals" (which may include individuals in consulting, management, and supervision)
- More education (the U.S. employment sample has a significantly larger number of people with 12 years of education or less, somewhat more with 13-15 years of education than the standard group, and significantly less with 16-21 years of education than the standard group).
- In the remainder of this section, we cite some research that will shed light on the possible implications of the differences and discuss the implications of the new standard group based on these differences.

iWAM Research and Key Demographics

Patrick Merlevede of jobEQ has written several papers referencing the effects of gender, age, and occupation on iWAM scores (2005).[4]

Gender

According to Merlevede's research, gender does not have a large effect on iWAM responses although some differences were found. Women were more focused on the *Present*, more concerned with following *Procedures*, more focused on *Depth* (details), had higher scores on *Affective* (non-verbal communication), and higher scores on Interest Filters for *Information* and *Activity* than males. These differences are only important to this paper to the degree that the 2007 standard group would show some of the same biases.

Age

jobEQ research by Patrick Merlevede also yielded some findings related to age group. The youngest generation (born after 1973) is less focused on *Affective* (non-verbal communication), *Goal-Orientation*, and *Change*. In addition, the younger generation has lower scores on the *Automatic* convincer channel and higher scores on *Number of Examples*, *Consistency*, and *Time to be Convinced*. The younger generation has lower *Group* scores which may indicate less interest in working around or with others.

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[4] Here are the references for Patrick Merlevede's jobEQ research cited in this section:

"Do Metaprograms Evolve With Age?" (2005) (http://www.jobeq.com/articles/age_comparison.pdf)

"Metaprograms and Occupations." (2005) (http://www.jobeq.com/articles/occupations.pdf)

"Are Men From Mars and Women From Venus?" (2005) (http://www.jobeq.com/articles/occupations.pdf)

Occupation

Note that for occupations, we are not just interested in how patterns are the same or different between different occupations and among people within a given occupation. We are interested in the "success" patterns within an occupation. We are interested because research in jobEQ and The Institute for Work Attitude & Motivation both support the notion that there are *differences between high-performing and low-performing people in the same occupational role in a given context.* So, the discussion which follows occurs with this notion as the background.

Patrick Merlevede's jobEQ research on occupation effects and iWAM responses revealed that although success patterns may be different for different occupations, it is difficult to identify and therefore specify occupation success pattern differences on the iWAM. Success patterns for the same occupation may be different in different contexts. Sales of automobiles, for example, may require a different set of success patterns than the sale of pharmaceuticals to physicians. Further, it is possible that within the same company, success patterns may be different. For example, a company that sells globally may have different success patterns for its sales representatives based on product and region. Further, one research project carried out by The Institute revealed that there were significantly different success patterns for sales personnel in two business groups managed by the same corporate vice president.

Finally, we do not have, as part of the jobEQ database, information on performance ratings or indications of how successful the individuals that filled out the iWAM are at their jobs. This information could have implications for the use of the Standard Group in general and for its interpretation with regard to occupations in particular.

Implications for Interpretation of iWAM Assessment Data

It is not possible to predict specifically how the differences cited above might impact interpretation of the data. In general, jobEQ suggests that individuals who score at either extreme of the Standard Group (30% < Score > 70%) are more likely to be seen as different from the average person in the group. So, if a person generally fits the norm of the 2007 Standard Group (e.g. male or female, slightly older, in a profession, and well educated) then we have great confidence in predicting how others might view the motivational and attitudinal patterns of the person.[5] jobEQ also uses the word "extraordinary" to describe some people. This term might be more appropriate for people whose scores fall outside ± 1 standard deviation (in relative terms for the iWAM, this would be < 0% or > 100%).

On the other hand, if we test someone who is outside the general demographic parameters of the 2007 Standard Group (e.g. younger, blue collar, less education) and some of his or her patterns turn out to be different from the Standard Group's, we cannot be absolutely certain how to interpret the results of the test in terms of the work context.

What are the implications of this uncertainty?

[5] It is important to note that even someone who "fits the norm" will have differences from the "average" person. As Patrick Merlevede, president of jobEQ, likes to point out when confronted with the challenge of trying to make everyone alike: "If one calculates the combinations and permutations of the 48 iWAM scales, one gets a number for the possible different combinations that is larger than the population of the earth . . . that suggests that we are not likely to find or to be able to create large numbers of people who are like everyone else."

First, in interpreting the iWAM, in all cases, but especially with an individual (or group) who has significantly different demographics than the Standard Group, check for accuracy and for the individual's sense of how he or she is similar to or different from their peers. For example, recently we did a test and interpretation for an Asian woman who has been in the U.S. for about five years. During that time, she attended a graduate school to earn a Ph.D. and has taken a management position with a global corporation. We used the U.S. 2001 Standard Group in printing her report. She and we wanted to know how she compared to the U.S. norm because most of her colleagues are U.S. citizens. As it turns out, she was significantly different than the U.S. Standard Group on several scales. The differences were often attributed by her to her cultural heritage (Asian) or to her chosen profession (scientist). In discussing the findings in the context of her work experience with the U.S. corporation, we found that she experienced herself as different from the others in some cases and, in most of those cases, she said that her co-workers often described her behavior the same way. For example, she said that her co-workers often called her "stubborn." As it turns out, her Convincer Process scales were in the direction that would suggest "difficult to convince" behavior (Very Low on *Automatic;* Very High on *Consistency*). Her high need/desire for *Information* could be another pattern that reinforced the "difficult to convince" behavior if the person trying to convince her did not provide very much information in the course of the exchange.

With regard to the larger question, it is possible that a young person could have some different patterns than the Standard Group while having similar patterns to her or his peer group. So what? At a basic level, older colleagues in a work context, including the boss, might see this individual as "different." This interpretation could have implications for how the individual is managed, monitored, evaluated, rewarded, and promoted.

At the same time, this individual's peers could see the person as perfectly "normal"—translated to mean, "just like them."

That is why understanding the context and the person or groups with whom an individual will be interacting is important in deciding to what extent a set of patterns, if translated into behavior, will align.

We share the example above simply to emphasize that the Standard Group can be useful with anyone in any context, but only if the results are checked against the individual's perceptions of self, their experience in the workplace, and perhaps the requirements for success in a given context and role.[6]

The Importance of a Model of Excellence

Regardless of the similarities or differences between an individual or group and the U.S. Standard Group, if the organization builds a Model of Excellence for a role/position, then you have a powerful internal "standard group" against which to interpret an individual's iWAM assessment. The internal standard group (Model of Excellence) for a role will be a more powerful baseline against which to compare an individual's patterns than is the 2007 U.S. Standard Group.

[6] We suggest, however, that all efforts may be futile if you are dealing with an individual who falls into the "unconscious incompetence" category—that is, someone who doesn't know what s/he doesn't know.

Conclusion

Robert Dilts, in his paper on neurolinguistic psychology, said:[7]

> *No response, experience or behavior is meaningful outside of the context in which it was established or the response it elicits next. Any behavior, experience or response may serve as a resource or limitation depending on how it fits in with the rest of the system.*

In their book, *Metaphors We Live By*, George Lakoff and Mark Johnson argued that truth is by necessity relative to the conceptual systems of our culture.[8] These citations suggest that "context" is powerful in the formation and actualization of metaprograms and their attendant behavior. As such, the creation of a Standard Group is not just a statistical exercise. It is also an attempt to connect what we see in the data to both work and cultural contexts. Given that both are shifting more rapidly than in the past, it suggests that we not try to define something like a standard group for all time, but rather that we view it as a "work in progress" that requires regular review and update.

We anticipate as the iWAM gains more widespread use in North America that the base of individuals who have completed the survey will expand; that is, will become more diverse and more representative of the profile of the American workplace.

In the meantime, however, given the demographics of the 2007 Standard Group, interpretation of results for those who differ significantly from the Standard Group Range may be well within range for a given demographic (age, sex, country of origin). This does not weaken the results; in fact, they become more useful! You now have an indication of how a group such as the Standard Group might filter on the words and actions of someone who is different and be able to work with both the assets and liabilities of such an occurrence. Many other assessment tools do not provide this opportunity.

To the extent that an individual client or client group has the general characteristics of the U.S. Standard Group, then the present framework will provide a good base for comparison. As we expand application and research into more diverse occupations, industries, and classifications, we can test to see if and how the addition of new people impact iWAM Standard Group results. To the extent that we find differences in specific demographic groups, we shall publish updates to this report.

A Special Request

If you are using the Inventory for Work Attitude and Motivation in a consulting or research project and find that the results for a particular group appear to differ significantly from those of the U.S. 2007 Standard Group, please let us know. In such a case, we have analytic tools and the database to do additional analysis to see where and how a specific group differs from the U.S. Standard Group.

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[7] http://www.nlpu.com/Articles/artic20.htm.

[8] *Metaphors We Live By*, University of Chicago Press, 2003.

If you would like to discuss this possibility or have additional questions about the U.S. 2007 Standard Group, please contact:

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Appendix A

Summary Data from the 2000 U.S. Census

Age Group		*n*	%
Youth	<19	80,473,265	28.6
Young Professional	20-34 years	58,855,725	20.9
Mid Career	35-44 years	45,148,527	16.0
Late Career	45-59 years	51,147,189	18.2
Senior	>59	45,797,200	16.2
Unknown			00.1
Average Age: 35.3 years			

Gender	*n*	%
Male	138,053,563	49.1
Female	143,368,343	50.9

Occupation	*N*	%
Management, professional, and related occupations	43,646,731	33.6
Service occupations	19,276,947	14.9
Sales and office occupations	34,621,390	26.7
Farming, fishing, and forestry occupations	951,810	0.7
Construction, extraction, and maintenance occupations	12,256,138	9.4
Production, transportation, and material moving occupations	18,968,496	14.6