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Applying Personality Type Theory to Develop Individualized Wellness Plans for Reducing Chronic Diseases

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Abstract

Objective: The objective of this study was to explore if characteristics of personality type (using the Preferred Communication Style Questionnaire) are associated with activities people prefer for getting adequate exercise, losing weight, managing stress, quitting smoking, reducing alcohol consumption, and taking medications as prescribed.

Methods: The data source for this study was the 2016 National Consumer Survey of the Medication Experience and Pharmacists' Roles. Data were collected via an on-line, self-administered survey conducted from March 14-30, 2016. Data were obtained from 10,500 adults residing in the United States. Chi-square analysis was used for making comparisons between categories of personality types and how respondents believed they could best reach their personal goals. Statistical significance was set at $p < 0.05$. Practical significance was set at five or more percentage points above or below the overall mean.

Results: Findings showed that (1) there are key differences between individuals that impact their behavior and (2) these differences can be easily and accurately identified using the Preferred Communication Style Questionnaire. The findings supported the notion that individuals are more likely to experience success in changing health-risk behaviors if they engage in activities that are consistent with (i) how they are energized, (ii) the kind of information they naturally notice, (iii) how they prefer to make decisions, and (iv) their preferences to live in a more structured way or in a more spontaneous way.

Conclusions: Personality type characteristics can be used to develop and implement successful change strategies and intervention tools, such as individualized wellness plans (IWP™) that help promote intention stability, create implementation intention, resist situational pressure, reduce the impact of past habits on future performances, and improve change maintenance.

Chronic Disease and the Need for Health-Risk Behavior Change

Chronic diseases are the leading causes of death and disability in the United States. For example, seven of the top 10 causes of death in 2010 were chronic diseases [1]. Heart disease, stroke, cancer, diabetes and obesity are among the most common, costly, and preventable of all health problems [1]. In addition to significant impacts on quality of life, the estimated cost of chronic disease to the U.S. economy is in excess of one trillion dollars annually [1]. In 2010, 86% of all health care spending was for people with one or more chronic medical conditions [1]. According to the Centers for Disease Control and Prevention (CDC), about half of all adults in the United States have one or more chronic health condition with one in four adults having two or more chronic health conditions [1].

Chronic diseases are associated with so-called "health-risk behaviors." Health-risk behaviors are unhealthy behaviors individuals can change. Four of these health-risk behaviors—

lack of exercise or physical activity, poor nutrition, tobacco use, and drinking too much alcohol—cause much of the illness, suffering, and early death related to chronic diseases and conditions [1]. There is great motivation on the part of multiple healthcare stakeholders to find effective ways to mitigate this problem. There is widespread consensus that the solution lies in finding effective ways to achieve the daunting task of changing patients' health risk behaviors [2, 3]. In their review of theory and evidence-based interventions for changing health-risk behaviors, Baban and Craciun [2] concluded the following:

- There is a need to identify the determinants of required change instead of the predictors of the present behavior only.
- There is a need to identify the best psychological change strategies that cause behavior change.
- It is not sufficient to only identify what needs to be changed; more work is needed to explore how to translate behavior change predictors into successful change strategies and intervention tools that help promote intention stability, create implementation intention, resist situational pressure, reduce the impact of past habits on future performances, and improve change maintenance.

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Work by Lippke and colleagues [3] also showed that individuals who are in a higher stage of readiness for change for one behavior are more likely to be in a higher stage of readiness for change in another behavior as well. Thus, success in one behavior change can be used to facilitate changes in other behaviors – especially if the behaviors are both health-promoting or health-risky.

Shifting the Paradigm: Taking an Individualized Approach

There is evidence that shows what specific health-risk behaviors need to change and how such change could result in the reduction of chronic diseases [1]. However, we propose that conventional approaches designed to change patient behavior have met with limited success primarily, for two reasons: (1) they take a one-size-fits-all approach, failing to recognize key differences between patients which impact their motivation and ability to change their behavior and (2) an over-reliance on passive technology-based solutions, which might be a reflection of resource scarcity or a desire to reduce costs. To help tailor approaches for behavior change, various approaches have been applied. For example, the “concordance concept” [4] stresses how the expertise of patients and the expertise of health professionals can be pooled to arrive at mutually agreed health care goals. If concordant goals can be established, it is thought that patient-centeredness [5] could be achieved through perceptions that common ground was gained. Then, health behavior change strategies could be developed that would have the highest likelihood of success for that individual patient.

Another approach called “motivational interviewing” uses interactions between patients and health care providers that are more persuasive than coercive, more supportive than argumentative, and more intrinsically motivating than externally motivating for the patient [6]. Motivational interviewing is characterized by respecting patients and inviting them to talk about their own motivation to change [7]. That is, it helps patients to reason their way to the conclusion that they need to change their behaviors in order to achieve their goals [7].

Challenges to these approaches include how previous health professional training is in direct opposition to these principles because they are taught to find the clinically correct answer based on population-based evidence [7]. Also, health professionals can easily fall into routines and habits that would result in them applying the concordance and motivational interviewing approaches in a one-size-fits-all fashion to save time or to fit their personal skill set. Furthermore, some patients lack interest in chronic disease prevention, have physical and/or financial restrictions, lack knowledge or information about health conditions, or do not have a

professional relationship established with a health care provider [8].

We propose that even more individualized approaches are needed that address a person’s pertinent characteristics, experiences, goals, and preferences [9]. Specifically, we propose that: (1) there are key personality differences between individuals that impact their behavior, (2) these differences can be easily and accurately identified, and (3) healthcare providers can use this knowledge to positively influence behavior, reduce chronic disease, and improve health outcomes [10-12]. Such an approach can result in Individualized Wellness Plans (IWP™) that can help promote intention stability, create implementation intention, resist situational pressure, reduce the impact of past habits on future performances, and improve change maintenance.

Personality Type and Changing Health-Risk Behaviors

We propose that changing health-risk behaviors is associated with personality type [13-16]. The Personality Type construct reflects innate, individual characteristics and is applicable to this study since health-risk behaviors have been shown to be affected by how people are motivated, how they process information, make decisions, and prefer to structure their lives [15, 16]. The personality type construct used in this study was measured through the use of the Preferred Communication Style Questionnaire (refer to **Appendix A**) which focuses upon (1) how people are energized, (2) the kind of information people naturally notice, (3) how they make decisions, and (4) whether they prefer to live in a more structured way or in a more spontaneous way [15-16]. The assumption for this study is that personality type can be used for developing an “individualized wellness plan” (IWP™) since it characterizes important personal characteristics that are associated with the likelihood of changing health-risk behaviors.

Study Objectives

We propose that people are more likely to successfully change their health-risk behaviors if they engage in activities that they enjoy and are activities consistent with their personality type. This study endeavored to determine which specific activities that patients of different personality types are most likely to engage in to help them achieve health-risk behavior goals [1]. Thus, the **objective of this study** was to explore if characteristics of personality type (using the Preferred Communication Style Questionnaire) are associated with activities people prefer to help address health-risk behaviors. The activities were identified from previous research [1-3, 9, 15-16] and included: adequate exercise, losing weight, managing stress, quitting smoking, reducing alcohol consumption, and taking medications as prescribed.

Methods

Study Variables

Tieger and colleagues developed and validated the **Preferred Communication Style Questionnaire** as a way to measure the specific characteristics of a persons’ personality type [15, 16]. Questions in that questionnaire are forced-choice.

Respondents are asked to choose which answer – A or B – describes them better as a whole (See **Appendix A**). Each question identified the same personality characteristics that are identified by the Myers-Briggs Type Indicator (MBTI®) [13] as summarized in **Table 1**.

Table 1: Preferred Communication Style Questionnaire*

Question in the Survey	Response Option	Link to MBTI®
Question 1: Would you rather talk with lots of different people, or have an in depth conversation with one person?	A: You get excited and energized by being around people. B: While you like people, you also enjoy spending quiet time by yourself.	(E) Extraversion (I) Introversion
Question 2: Are you more of a realistic person who pays attention to what is happening now? Or a person who thinks about what may happen in the future?	A: You’d rather talk about real things than ideas that don’t have much practical value. B: You enjoy thinking about new ideas and possibilities.	(S) Sensing (N) iNtuition
Question 3: Do you tend to make decisions based more on logic or on your personal feelings?	A: You are most convinced by logical arguments. B: When making a decision, you consider how people will feel about it.	(T) Thinking (F) Feeling
Question 4: Do you prefer to live in a more planful, organized way? Or a more open-minded, spontaneous way?	A: You like things decided and feel best when you’ve got a plan. B: You like to keep your options open before making some decisions.	(J) Judging (P) Perceiving

* These questions identify the same personality type characteristics that are identified by the Myers-Briggs Type Indicator®

From individuals’ responses to these four questions, each respondent can be categorized into one of 16 personality types. Based upon work by Myers [13], Keirseay and Bates [14], and Tieger, Barron, and Tieger [15, 16], the 16 personality types (within four broad temperament groups) can be summarized as follows:

Traditionalists (Sensing-Judgers or SJs) – This temperament group consists of the four personality types listed below that value most being responsible and of service. They tend to be realistic and hardworking and possess a serious, no-nonsense demeanor. They like structure, respect authority, pay attention to facts, details and specifics, and are typically very self-disciplined.

- **Extraverted, Sensing, Thinking, Judging (ESTJ):** Get things done, responsible, dependable, practical, hardworking, logical, analytical, detail-oriented, organized
- **Introverted, Sensing, Thinking, Judging (ISTJ):** Serious, responsible, dependable, practical, hardworking, logical, analytical, detail-oriented, organized

- **Extraverted, Sensing, Feeling, Judging (ESFJ):** Practical, sympathetic, sensitive, responsible, conscientious, hard-working, collaborative, traditional.
- **Introverted, Sensing, Feeling, Judging (ISFJ):** Loyal, devoted, sympathetic, sensitive, responsible, conscientious, hard-working, collaborative, traditional, helpful

Experiencers (Sensing-Perceivers or SPs) – This temperament group consists of the four personality types listed below that value most their freedom, enjoying the moment and living their lives unrestrained. They are practical and realistic with a casual, playful demeanor, are prone to taking risks, and are typically not very self-disciplined.

- **Extraverted, Sensing, Thinking, Perceiving (ESTP):** Active, easygoing, pragmatic, fun loving, realistic, casual, responsive, present-oriented, observant, adaptable

- **Introverted, Sensing, Thinking, Perceiving (ISTP):** Straightforward, honest, pragmatic, fun loving, realistic, casual, responsive, present-oriented, observant, adaptable
- **Extraverted, Sensing, Feeling, Perceiving (ESFP):** Sensitive, gentle, practical, realistic, present-oriented, observant, nurturing, cooperative; having a zest for life
- **Introverted, Sensing, Feeling, Perceiving (ISFP):** Gentle, caring, sensitive, humble, practical, realistic, present-oriented, observant, nurturing, cooperative

Conceptualizers (iNtuitive-Thinkers or NTs) – This temperament group consists of the four personality types listed below that value most competence, excellence and success. They are independent, strategic, creative problem solvers with high standards and motivated by intellectual challenge. They tend to have a confident and assertive demeanor and strong opinions.

- **Extraverted, iNtuition, Thinking, Judging (ENTJ):** Inspiring leaders, logical, analytical, strategic, innovative, intellectual, confident, organized, goal-oriented
- **Introverted, iNtuition, Thinking, Judging (INTJ):** Perfectionists, logical, analytical, strategic, innovative, independent, intellectual, confident, organized, goal-oriented
- **Extraverted, iNtuition, Thinking, Perceiving (ENTP):** Love challenge, creative, logical, analytical, flexible, strategic, confident, inspirational, complex, perceptive
- **Introverted, iNtuition, Thinking, Perceiving (INTP):** Conceptual problem solvers, creative, logical, analytical, flexible, strategic, confident, complex, perceptive

Idealists (iNtuitive-Feelers)) – This temperament group consists of the four personality types listed below that value most meaningful relationships, individuality, uniqueness and personal growth. They have a collaborative, helpful demeanor and tend to be excellent communicators and talented creative problem solvers, especially when it comes to helping other achieve their goals.

Extraverted, iNtuition, Feeling, Judging (ENFJ): People-lovers, empathetic, creative, idealistic, goal-oriented, collaborative, tactful, original, productive, communicative

- **Introverted, iNtuition, Feeling, Judging (INFJ):** Independent, empathetic, creative, idealistic, integral, goal-oriented, committed, tactful, original, productive

- **Extraverted, iNtuition, Feeling, Perceiving (ENFP):** Enthusiastic, idealistic, creative, perceptive, collaborative, communicative, unconventional, spiritual, flexible, empathetic
- **Introverted, iNtuition, Feeling, Perceiving (INFP):** Inner harmony, idealistic, creative, perceptive, communicative, unconventional, flexible, empathetic

Items that were used to measure “Activities” in this study were behaviors associated with getting adequate exercise, losing weight, managing stress, quitting smoking, reducing alcohol consumption, and taking medications as prescribed. **Appendix B** contains the wording of the survey items along with variable names that are used in the tables for this article. These items were pretested by one of the co-authors (PT) and were included for this study so that comparisons could be made to his previous work [15, 16].

Data Collection

The data source for this study was the 2016 National Consumer Survey of the Medication Experience and Pharmacists’ Roles [17]. Data were collected via an on-line, self-administered survey coordinated by Qualtrics Panels (www.qualtrics.com) from March 14-30, 2016. Data were obtained from 10,500 adult individuals residing in the United States. A complete copy of the survey questions is available from the corresponding author.

Data Analysis

Chi-square analysis was used for making comparisons between categories of personality types and how respondents best reach their personal goals. For analysis, the proportions of respondents who reported “very” or “extremely” likely to respective survey items were computed. Statistical significance was set at $p < 0.05$. However, chi-square analysis with large sample sizes (e.g. 10,500 in this study) readily yields statistical significance. Based on previous work [15, 16], practical significance was set at five or more percentage points above or below the overall mean. Such an approach not only helped identify significantly different findings but also the most salient and actionable patterns in the findings.

Results

The 10,500 respondents were representative of the overall U.S. adult population in terms of geography (see **Figure 1**).

Figure 1: Geographic Distribution of Survey Respondents (N = 10,500)

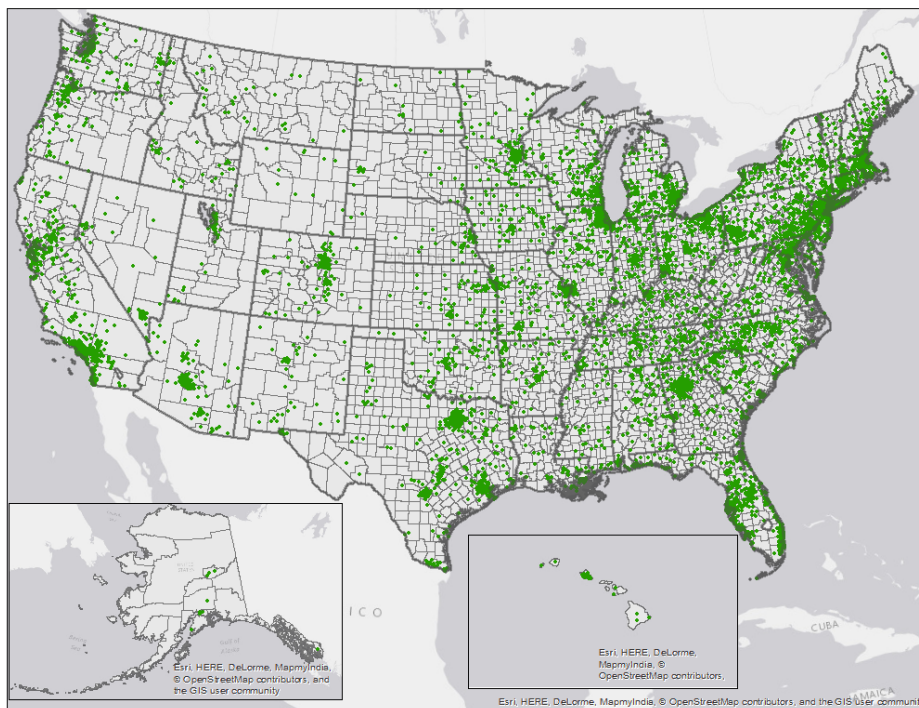


Figure 1 was developed by the Geospatial Analysis Center, University of Minnesota – Duluth, Stacey Stark, Director.

Demographic characteristics of the respondents showed variation patterns that were similar to U.S. Census estimates for the adult population (see Table 2).

Table 2: Respondent Demographics (N = 10,500)

Characteristic		N	%	Mean
Gender	Male	4200	40%	-
	Female	6300	60%	-
Age (years)	18 to 33	2620	25%	47.5
	34 to 50	31421	30%	
	51 to 69	3711	35%	
	70 or more	1028	10%	
Ethnic/Racial Background	American Indian	87	1%	-
	Asian	390	4%	
	Black/African American	908	9%	
	Latino/Latina	644	6%	
	White	8271	79%	
Marital Status	Other	200	2%	-
	Single (never married)	2969	28%	
	Single (separated/divorced)	1448	14%	
	Married or otherwise partnered	5566	53%	
	Widowed	517	5%	

Household Income	\$20,000 or less	1949	19%	-
	\$20,001 to \$40,000	2586	25%	
	\$40,001 to \$60,000	2063	20%	
	\$60,001 to \$80,000	1547	15%	
	\$80,001 to \$100,000	950	9%	
	More than \$100,000	1405	13%	
Highest Level of Education	Less than High School Graduate	194	2%	-
	High School Graduate	2085	20%	
	Some College, No Degree	2935	28%	
	Associate Degree	1343	13%	
	Bachelor's Degree	2625	25%	
	Master's Degree	1026	10%	
	Professional Degree	153	1%	
Doctoral Degree	139	1%		
Prescription Medications Taken Daily (number)	0	3937	37%	2.2
	1	1853	18%	
	2	1256	12%	
	3	954	9%	
	4	693	7%	
	5	569	5%	
	6	356	3%	
	7	245	2%	
	8	195	2%	
	9	103	1%	
	10	117	1%	
More than 10	339	2%		
Over-the-Counter Medications Taken Daily (number)	0	5427	52%	0.9
	1	2845	27%	
	2	1298	12%	
	3	486	5%	
	4	219	2%	
	5	114	1%	
More than 5	111	1%		
Herbal Supplements Taken Daily (number)	0	6824	65%	0.9
	1	1550	15%	
	2	855	8%	
	3	504	5%	
	4	249	2%	
	5	209	2%	
More than 5	309	3%		
Overall Health	Excellent	1423	14%	
	Good	6056	58%	
	Fair	2618	25%	
	Poor	403	4%	
Have You Been Hospitalized in the Past Year?	Yes	1275	12%	
	No	9225	88%	

Overall, 60% of the respondents were female, 79% white, and 37% had a bachelor's degree or higher. Respondents reported a median age of 48 years and taking an average of 2.2 prescription medications daily. Fifty-eight percent of respondents reported good health and 12% reported having been hospitalized in the past year.

Findings for the six different health-risk behavior areas are summarized in Tables 3 through 8. Cells with findings that are five units or more from the overall mean are highlighted and used in the presentation of the findings. It should be noted that there was an "other" option included in the survey for each health-risk behavior studied and this option was selected relatively often by responders. A review of written comments

explaining “other” responses showed that most written comments did not add another activity category. Rather, the comments were used to embellish or give more specificity to an existing category. Thus, “other” responses are not highlighted in the results section.

Health-Risk Behavior 1: Adequate Exercise

Table 3 summarizes findings related to getting adequate exercise. Overall, 71 percent of respondents reported that, if they wanted to increase the amount of exercise they do, they would be very or extremely likely to try “**doing more chores**” (housework, gardening). The two personality types with the highest scores were ENTJ and ENFJ, which are among the most action-oriented, organized and hard-working types according to Personality Type Theory. The two types with the lowest scores were ISTP and ISFP, which both share the Experiencer (SP) temperament and are characterized as the most motivated by enjoyment of the moment, tending to put off arduous activities and having a proclivity for procrastination. Additionally, both types with the lowest scores are Introvert – Perceivers (IPs), in contrast with both highest types who are Extravert – Judgers (EJs). The single personality type with the highest score was ENTJs, often characterized as the most ambitious, driven type. The type with the lowest score was ISFPs, often characterized as the most “laid-back” of the sixteen types. The two highest and lowest were diametric opposites on all four type preferences.

The next most common activity reported overall for increasing the amount of exercise was “**exercising by myself**” (Alone) with 69 percent reporting this activity. The two types with the highest scores were INTJ and INFJ, among the most reserved, independent, self-disciplined types. Both share three type preferences: Introversion, Intuition and Judging. The four types with the lowest score were the four Experiencers – ESTP, ISTP, ESFP and ISFP. Experiencers (SPs) are often drawn to action and excitement, and may find exercising outside the presence of others solitary, isolating and therefore boring. The type with the highest score – INTJ is known to have extraordinary self-discipline, while the type with lowest score – ISFP, is known for their easy-going, laid-back approach to life. Also worth noting: seven of the eight Extraverts’ scores were below the mean. This finding is expected, since a hallmark of Extraversion is becoming energized by being with others.

The next most common activity reported for increasing the amount of exercise was “**stick to a predetermined schedule and establish a routine**” (58 percent). The five types with the highest scores were all Judgers – people who are extremely goal-oriented and organized, who like to make, and stick with

plans. Predictably, the eight types with the lowest scores were all Perceivers – people who prefer to live in a more casual, spontaneous way. Also of note: All four of the Experiencer types (SPs) were in the lowest group. Experiencers value the freedom to be in the moment, and eschew rules, schedules and having structure imposed on them. Once again, the type with the highest score was ENTJ and the second lowest was ISFP – diametric opposites.

Overall, 50 percent of respondents reported that they would likely try “**recreation**” to increase exercise behavior (swimming, hiking, tennis, etc.). Interestingly, the six highest scores were all Intuitive types, with ENTJ as the highest. The two lowest scores were for Sensors - ISFJ and ISFP.

Forty-six percent reported that they would likely “**exercise with one or more friends.**” Of the eight highest types likely to use this activity, seven were Extraverts. This is predictable since Extraverts are energized by being with others. Conversely, the three types with the lowest scores were all Introverts, who typically enjoy sharing their own company. Additionally, three of the four Idealists (Intuitive Feeling – NF types) had the highest scores, which is also very consistent with type theory. For Idealists, relationships are paramount, so exercising with one or more friends does double duty: it can improve their health, and continue to allow them to nurture and enjoy valued relationships. Of note, the type with the lowest score was ISTJs – the least social, and typically, the least socially-oriented of all the 16 types.

Forty-six percent also reported that they would be likely to try “**seeking support from my friends and family**” for increasing exercise. Four of the five types with the highest scores were Feelers, who by nature, are sensitive and empathetic. The two types with the lowest scores were ISTJ and ISTP – Introverted, Sending Thinkers, who are among the least socially-oriented of the sixteen types. Consistent with Personality Type Theory, ENFPs, who are among the most social types had the highest scores.

Other activities were reported by less than 40 percent of respondents overall. However, the pattern of responses between the sixteen types was consistent with Personality Type Theory (see Table 3). It is noteworthy that types reporting that they would likely engage in the greatest number of options were ENFJ, ESTJ and ENFP – all Extraverts. The types reporting that they would likely engage in the least number of options were ISFP, ISFJ and ISTJ – all Introverts. This pattern of findings is also consistent with Personality Type Theory.

TABLE 3: Self-Reported Adoption Probabilities (%) of Exercise Behavior (N=10,500).

Behavior Change Catalyst (Self-Reported Adoption Probability)	Traditionalists – SJ n = 1367				Experiencers – SP n = 1200				Conceptualizers – NT n = 4726				Idealists – NF n = 3207				OVERALL
	485	148	528	206	322	254	375	249	1396	405	2318	607	870	472	1215	650	
	E S T J	I S T J	E S F J	I S F J	E S T P	I S T P	E S F P	I S F P	E N T J	I N T J	E N T P	I N T P	E N F J	I N F J	E N F P	I N F P	
Chores (%)	71	71	74	71	71	64	67	63	82	74	68	67	80	75	72	67	71
Alone (%)	69	70	65	66	61	63	60	64	68	76	66	71	70	75	67	70	69
Schedule Routine (%)	64	64	61	58	51	50	53	48	67	66	50	51	65	62	51	47	58
Other (%)	58	53	52	51	60	53	66	54	54	63	57	57	61	54	69	60	56
Recreation (%)	54	48	47	38	53	50	48	45	70	57	62	54	61	48	60	56	50
With Friends (%)	51	39	52	41	49	45	54	41	62	48	56	44	55	46	60	51	46
Family/Friend Support (%)	49	39	52	43	50	38	52	44	56	45	50	42	56	48	60	48	46
Electronics (%)	41	33	42	34	40	37	50	34	51	40	47	41	49	41	51	43	39
With Others at Gym (%)	40	28	37	23	38	32	39	23	52	30	43	29	40	27	36	27	30
Fitness Classes (%)	29	18	30	20	32	24	28	20	38	23	34	27	35	25	35	27	25
Personal Trainer (%)	27	17	25	17	29	23	29	17	30	22	35	21	30	19	35	22	22
Sports League (%)	31	20	23	13	36	26	24	13	38	23	36	23	25	14	25	17	20

- Refer to Appendix B for items used to measure each variable.
- Table percentages are the proportion of respondents who reported “very” or “extremely” likely.
- Due to large sample sizes, chi-square p-values for all comparisons were less than 0.001.
- Cells highlighted in green are 5 or more units above the overall mean.
- Cells highlighted in red are 5 or more units below the overall mean.
- Out of 10,500 responders, 220 (2%) reported that this set of questions was not applicable to them and reported N/A to the questions.

Health-Risk Behavior 2: Lose Weight

Table 4 summarizes findings related to losing weight. The most commonly reported activities reported overall were “becoming more active” (77 percent) and “making healthier food choices” (77 percent). Regarding the “becoming more active” activity, the two types with the highest scores were ENTJ and ENFJ, two of the most action-oriented, organized and conscientious types. Both are also Extravert-Judgers (EJs). The types with the lowest scores were ISFJ, ISTP and ISFP with ISFJ the lowest. All are Introvert-Feelers (I-Fs). Three of these four are Experiencers – people who prefer to live in a more casual, relaxed way. Regarding the “making healthier food choices” the three types with the highest scores were ENFJ, ENTJ and ENFP - all Extraverts and Intuitives, people who are more prone to trying new things and deviating from their routines. The type with the lowest score was ISFP – among the most laid-back and casual of all types. Of the four temperaments (SJ, SP, NT, NF), Experiencers (SP) scored the lowest. Since it is widely known that eating healthier usually has positive health benefits, a possible explanation of Experiencers’ low scores may be their well-documented penchant for enjoying the moment and tendency to not worry about future consequences, until they have to.

Sixty-seven percent of respondents overall reported that they would be very or extremely likely to “eat smaller portions at meals” in order to lose weight. The four types who scored highest were all Extraverts (Es), with three of them also being Intuitives (Ns). The lowest score were ISFPs – who self-reported in another part of this survey that they are the least self-disciplined of all the 16 types. This may help explain these findings, since it is widely acknowledged that while reducing

portion size is an effective weight control technique, it takes a lot of effort and self-discipline to do it.

Sixty-three percent reported that they would “create my own plan” for losing weight. The two highest types were ENTJ & ENFJ – both among the most energetic, organized, and achievement-oriented of the 16 types. The two types who scored lowest were both Experiencers: ISTP & ISFP. “Creating one’s own plan” requires people to use their imagination and tap into their creativity, which is the purview of Intuitive (N), not Sensing (S) types, who prefer to follow established plans and protocols. Evidence of this may be borne out by the fact that the mean score for the eight Intuitive types was six points higher than that of the eight Sensing types. Consistent with type theory, the highest scores were reported by ENTJs and the lowest by ISTPs.

Reflecting the commonly held belief that “cutting down on snacks” promotes weight loss, all types – except one – had scores close to the mean of 62 percent. The lone exception was ENFJ with 70% reporting that they would likely try to engage in this behavior. A possible explanation is that ENFJs are both disciplined and extremely appearance-conscious, so they might have additional motivation to cut down on snacks, in order to maintain or enhance their appearance.

Other activities were reported by less than 40 percent of respondents overall. However, the pattern of responses between the sixteen types was consistent with Personality Type Theory (see Table 4). It is noteworthy that only 13 percent reported that they would be very or extremely likely to join a formal plan like Weight Watchers or Jenny Craig.

TABLE 4: Self-Reported Adoption Probabilities (%) of Weight Loss Behaviors (N=10,500)

Behavior Change Catalyst (Self-Reported Adoption Probability)	Traditionalists – SJ n = 1367				Experiencers – SP n = 1200				Conceptualizers – NT n = 4726				Idealists – NF n = 3207				OVERALL	
	485	148	528	206	322	254	375	249	1396	405	2318	607	870	472	1215	650		10500
	E S T J	I S T J	E S F J	I S F J	E S T P	I S T P	E S F P	I S F P	E N T J	I N T J	E N T P	I N T P	E N F J	I N F J	E N F P	I N F P		
More Active (%)	77	76	78	72	77	73	74	73	85	80	79	80	84	79	81	79	77	
Eat Healthier (%)	76	73	80	75	76	74	77	71	84	79	78	76	87	80	83	78	77	
Reduce Portions (%)	66	64	68	67	64	63	73	60	72	68	65	66	73	68	74	66	67	
Own Plan (%)	67	62	64	60	60	56	60	57	73	66	63	65	72	65	67	66	63	
Cut Snacks (%)	65	62	62	61	60	62	65	59	66	63	61	61	70	63	66	62	62	
Other (%)	48	38	41	38	36	42	56	40	42	47	57	40	55	41	47	43	42	

Electronics (%)	39	33	41	33	43	35	47	33	50	38	45	44	51	42	46	43	39
Team up (%)	40	31	42	31	47	34	42	30	53	36	45	35	46	36	50	38	36
Keep Records (%)	36	26	33	25	31	22	33	23	45	33	32	27	40	32	35	32	30
Publicly Commit (%)	30	17	29	19	25	17	33	15	37	24	31	22	33	23	35	23	23
Supplements (%)	23	17	22	17	31	23	26	21	36	19	29	21	27	19	25	28	21
Formal Plan (%)	16	9	18	11	12	11	15	12	24	10	16	11	18	12	15	13	13

- Refer to Appendix B for items used to measure each variable.
- Table percentages are the proportion of respondents who reported “very” or “extremely” likely.
- Due to large sample sizes, chi-square p-values for all comparisons were less than 0.001.
- Cells highlighted in green are 5 or more units above the overall mean.
- Cells highlighted in red are 5 or more units below the overall mean.
- Out of 10,500 responders, 379 (4%) reported that this set of questions was not applicable to them and reported N/A to the questions.

Health-Risk Behavior 3: Manage Stress

Table 5 summarizes findings related to managing stress. By far, the highest proportion of respondents (78%) selected **“listening to music”** as a very or extremely likely activity they would use. The five types which were significantly higher than the mean were Intuitives (Ns). This includes three of the four Idealist (Intuitive-Feeling) types. Only one type – ISTJ - fell significantly below the mean. The type with the highest score (88%) was ENFP and the lowest (73%) was ISTJ which are polar opposites of each other. Sensors may find listening to music a “distraction” from actually “doing” something physical and “real”, whereas for Intuitives, listening to music is a more abstract exercise and evocative of other experiences / memories. This may allow them to escape realities in their life that may be causing them stress.

“Exercise” was reported by 64 percent overall as a likely way to manage stress. Of the four types which rated this option highest, three were Intuitives (Ns), and all four were Judgers (Js) – characteristically disciplined and goal-oriented. Three of the four were also Extraverts (Es) – who tend to be more proactive than Introverts (I). Significantly, three of the four types with the lowest scores were Experiencers (SPs), the temperament which consistently rates itself with the lowest “self-discipline” scores. The type with the highest mean scores was ENTJ – super achievers; the lowest – ESTPs, the type which most values enjoying the moment and is prone to procrastination of arduous tasks.

Sixty percent of all responders reported that they would be very or extremely likely to manage stress through **“relying on their inner self.”** Of the five types with the highest scores, all five were Intuitives (Ns). This included all four Conceptualizer (NT) types, with the two introverted types – INTJ and INTP

having the highest scores. A logical explanation is that this activity involves introspection, and is really an *idea* (the purview of INTs especially), and not a concrete task, which is preferred by Sensors, who scored the lowest on this question. Significantly, two of the three lowest scores were Experiencers (SPs) – people who can be described as being the least in “their heads” and the most in their bodies. The three types with the lowest scores were all Sensors – two of which were Introverts (Is). The types with the highest scores were INTJ and ENFJ, the lowest was ISTP.

Fifty-two percent reported that they would likely manage stress through **“eating or drinking specific foods or beverages.”** Of the five types with the highest scores, all five are Extraverts (Es). This may reflect Extraverts’ more adventurous spirit and proactive approach to life. The type with the highest score was the super-achieving ENTJs – the lowest being their polar opposites, the most laid-back ISFPs.

Mirroring the previous option, **“change my diet”** was reported by 51 percent of respondents overall. The four types that were significantly above the mean were all Extraverts (Es), which may suggest a greater willingness to be proactive in order to reduce stress in their lives. The only type which was statistically below the mean were ISFPs, and once again the type with the highest score were ENTJs and the lowest, ISFPs.

Repeating this familiar pattern, 46 percent reported **“taking nutritional supplements”** as a preferred way they would likely manage stress. The five types with the highest scores were ALL Extraverts (Es). Four of the five were also Intuitives (N). The two types significantly below the mean were both Introverted-Sensors (ISs). A possible explanation is that Intuitives (Ns) are more open to try new, alternative, and unproven approaches,

and is the case with nutritional supplements, whose efficacy is still unproven. Once again, the type with the highest score was ENTJ, and the lowest was ISFPs.

Forty-three percent of all respondents reported that they would be very or extremely likely to “**rely on a higher power**” to manage stress. The three types with the highest scores were Extraverts (Es). The type which scored the highest was ESFJ, and the lowest was INTP. This finding is not surprising because the concept of a higher power involves spirituality, and the dominant personality trait of ESFJs is Feeling, (as it is for the type with the second highest score – ENFJs). The dominant personality trait of INTPs is Thinking, and the next lowest scores were among ISTPs, also dominant Thinking types. By definition, Thinking types’ decisions are more objective, empirically-based while Feeling types’ are more subjective, often based on “gut feelings”. The type with highest scores were ESFJ, and the lowest, INTPS, which are polar opposites.

Forty-two percent reported that they would be likely to use “**spiritual disciplines such as prayer, confession, forgiveness, praise**” for managing stress. The three types with the highest scores were all Extraverts (Es) and Judgers (Js), with two of these three types (ESFJ and ENFJ), dominant Feelers. This option gave examples such as prayer, confession, forgiveness,

praise – all of which require the person to take action, which may account for the high scores for both Extraversion and Judging. The three types with the lowest scores were all Introverted-Thinking types (ITs). Also, two of these three – ISTP and INTP are dominant Thinkers. The type with the highest score was the ENFJ, and the lowest ISTP – polar opposites.

Other activities were reported by less than 40 percent of respondents overall. However, the pattern of responses between the sixteen types was consistent with Personality Type Theory (see Table 5). It is noteworthy that there were several examples of opposites having the highest and lowest scores.

TABLE 5: Self-Reported Adoption Probabilities (%) of Stress Management Behavior (N=10,500)

Behavior Change Catalyst (Self-Reported Adoption Probability)	Traditionalists – SJ n = 1367				Experiencers – SP n = 1200				Conceptualizers – NT n = 4726				Idealists – NF n = 3207				OVERALL	
	485	148	528	206	322	254	375	249	1396	405	2318	607	870	472	1215	650		10500
	E S T J	I S T J	E F J	I F J	E T P	I S T P	E F J P	I F J P	E N T J	I N T J	E T P	I N T P	E N F J	I N F J	E F P	I F P		
Music (%)	74	73	76	74	77	78	79	76	87	81	85	80	83	82	88	85	78	
Exercise (%)	70	63	66	58	52	59	65	57	76	70	68	68	72	68	65	60	64	
Inner Self	62	58	58	53	62	56	54	48	67	70	67	68	70	63	63	58	60	
Specific Foods (%)	56	48	55	46	55	49	57	46	66	56	57	48	63	55	59	55	52	
Change Diet (%)	55	48	55	47	54	47	58	42	63	54	54	47	61	55	56	52	51	
Supplements (%)	50	41	50	43	49	42	54	38	59	49	51	40	57	47	51	46	46	
Other (%)	52	38	41	38	46	46	63	51	42	43	53	48	52	43	51	42	44	
Higher Power (%)	42	38	53	42	42	38	46	40	51	42	41	37	52	47	47	43	43	
Spiritual (%)	46	37	51	41	42	32	44	40	52	44	44	33	54	46	46	43	42	

Meditation (%)	31	28	33	30	34	28	40	28	50	43	39	41	46	43	46	42	36
Rx Medications (%)	43	31	38	33	34	32	42	31	40	33	34	29	42	33	43	33	34
Yoga (%)	33	24	32	27	34	26	35	28	44	35	37	36	42	38	43	38	32
OTC Medications (%)	32	22	29	22	21	21	34	20	33	24	24	18	31	22	28	23	24
Counseling (%)	22	14	22	17	26	19	30	21	30	19	30	19	27	25	34	26	21

- Refer to Appendix B for items used to measure each variable.
- Table percentages are the proportion of respondents who reported “very” or “extremely” likely.
- Due to large sample sizes, chi-square p-values for all comparisons were less than 0.001.
- Cells highlighted in green are 5 or more units above the overall mean.
- Cells highlighted in red are 5 or more units below the overall mean.
- Out of 10,500 responders, 242 (2%) reported that this set of questions was not applicable to them and reported N/A to the questions.

Health-Risk Behavior 4: Quit Smoking

Table 6 summarizes findings related to quitting smoking. “**Quitting cold turkey**” was the most commonly cited activity (57% of respondents). Five types had the highest scores, which included all four Conceptualizer (NT) types. It is not surprising to see that all four Conceptualizers chose this option, since they are extremely success-oriented and relish difficult challenges. The other type was ESTJ – the prototypical “manager”, known for being responsible, organized and possessing great self-discipline. The two types with the lowest scores were both Sensors (Ss). ENTJs had the highest scores, and ESFP, the lowest. Although not *polar opposites*, these two types are different in many ways, especially in how they rate themselves regarding self-discipline in other sections of this study.

The next most common activity for quitting smoking was “financial incentives” (47% of respondents reported they would be very or extremely likely to use this activity for quitting smoking). All four of the types with the highest scores were Extraverts + Intuitives (ENs). The two types with the lowest score were both Introverts + Sensors (ISs). This may reflect the fact that ENs are generally more open, aware of and responsive to opportunities presented to them than ISs.

Forty-six percent reported they would “ask for support from family or friends.” The five types with the highest scores were all Extraverts (Es), and three were also Feelers (Fs). Both results are very consistent with type theory – as is the finding that the two types with the lowest scores are both Introvert Thinking types (ITs). Among the highest scores were ENFJs – whose “dominant” trait is Feeling. The type with lowest scores were ISTJs – the most conservative and least social of the sixteen types.

Forty-three percent reported that they would use “**nicotine replacement therapy.**” Four of the highest scoring types were Intuitives (Ns). This included three of the four types which comprise the Idealist (NF) temperament. Four of the five highest types were also Extraverts (Es). Intuitives are more likely to embrace new approaches, even if their efficacy has yet to be proven. The only type falling below the mean were the very conservative ISTJs – the type least likely to try a methodology that has not had proven results. A potential anomaly was that ESFPs scored highest in this category. A potential explanation is that this is a relatively simple option, which does not require a lot of preparation, discipline or work to employ – all things that naturally appeal to the casual, laid-back ESFPs.

Forty-two percent reported that they would be likely to “**take natural remedies.**” Of the five highest scores, all were Extraverts (Es) and four were Extraverts + Intuitives (ENs). All four of the lowest scoring types were Introverts + Sensors (ISs). Like several other options, the disparity is most likely do to the fact that ENs’ are generally more aware of and open to trying new, untested approaches than ISs. Two of the types with the lowest scores were Traditionalists, and two were Experiencers, adding to the argument that Introversion and Sensing are key variables at play.

Other activities were reported by less than 40 percent of respondents overall. However, the pattern of responses between the sixteen types was consistent with Personality Type Theory (see Table 6). It is noteworthy that there were several examples of opposites having the highest and lowest scores.

TABLE 6: Self-Reported Adoption Probabilities (%) of Quitting Smoking Behaviors (N=10,500)

Behavior Change Catalyst (Self-Reported Adoption Probability)	Traditionalists – SJ n = 1367				Experiencers – SP n = 1200				Conceptualizers – NT n = 4726				Idealists –NF n = 3207				OVERALL 10500
	485	148	528	206	322	254	375	249	1396	405	2318	607	870	472	1215	650	
	ESTJ	ISTJ	ESTJ	ISTJ	ESTJ	ISTJ	ESTJ	ISTJ	ENTJ	INTJ	ENTJ	INTJ	ENFJ	INFJ	ENFJ	INFJ	
Cold Turkey (%)	63	62	57	52	58	61	49	54	64	62	62	62	60	53	53	53	57
Financial Incentives (%)	50	42	49	42	49	53	52	44	57	45	51	49	57	45	60	47	47
Friend Support (%)	48	40	51	46	47	41	54	42	56	42	51	43	56	46	50	49	46
NRT (%)	42	38	42	41	50	44	51	39	54	43	41	41	50	46	48	48	43
Natural Remedies (%)	43	37	40	37	39	37	54	37	53	40	51	43	51	45	53	42	42
Other (%)	31	40	26	33	40	40	59	37	42	46	50	38	49	38	33	36	38
Rx Medications (%)	37	24	35	29	28	32	38	28	42	25	31	22	32	27	34	25	29
E-cigarettes (%)	24	21	24	23	35	29	43	25	38	25	36	30	29	25	31	37	27
Counseling (%)	27	20	28	24	26	25	32	24	42	24	35	24	32	27	30	28	26
Hypnosis (%)	25	16	24	16	23	16	32	16	27	22	27	21	27	22	23	26	21

- Refer to Appendix B for items used to measure each variable.
- Table percentages are the proportion of respondents who reported “very” or “extremely” likely.
- Due to large sample sizes, chi-square p-values for all comparisons were less than 0.001.
- Cells highlighted in green are 5 or more units above the overall mean.
- Cells highlighted in red are 5 or more units below the overall mean.
- Out of 10,500 responders, 4,713 (45%) reported that this set of questions was not applicable to them and reported N/A to the questions.

Health-Risk Behavior 5: Reduce Alcohol Consumption

Table 7 summarizes findings related to reducing alcohol consumption. Sixty-one percent of responders reported being “very” or “extremely” likely to “**create my own plan**” as a way to reduce alcohol consumption. Of the four types scoring highest, all four are Intuitives (Ns), and three of the four at Conceptualizers (Intuitives + Thinkers). This is not surprising since Intuitives in general, are people who like to use their imaginations, which creating their own plan requires. Conceptualizers are even more adept at and relish creatively solving problems, and independent types who often see how they can improve any existing plan or protocol, or create an entirely new one that will be superior. Also consistent with expectations, the two lowest scores were both Experiencers (Sensors + Perceivers), and also both Introverts. Experiencers, in general, and Introverted Experiencers in particular, prefer much more concrete direction. Echoing an often repeated pattern, the type with the highest score were ENTJs and the lowest, ISFPs – polar opposites.

Fifty-six percent reported that they would be likely to stop “**cold turkey**” to reduce alcohol consumption. There were only three types significantly above or below the mean.

The highest score was from ESTJs, people who are characteristically serious, organized, goal-oriented, and highly self-disciplined. The two types with the lowest scores were both Experiencers. The type with the lowest score were ESFPs – perhaps the most social, gregarious and fun-loving type.

Forty-nine percent reported that they would “**get support from family and friends.**” Three of the four types with the highest scores were Intuitives (Ns), and also Feelers (Fs). The only Thinking types (Ts) were ENTJs – high-achieving types who report a willingness to try the most options in this, and in most other categories. In general, Feelers (Fs) are much more likely to seek and offer support from others. The type with the lowest score were INTPs, the most independent of the sixteen types.

Other activities were reported by less than 40 percent of respondents overall. However, the pattern of responses between the sixteen types was consistent with Personality Type Theory (see Table 7). It is noteworthy that there were several examples of opposites having the highest and lowest scores.

TABLE 7: Self-Reported Adoption Probabilities (%) of Alcohol Consumption (N=10,500)

Behavior Change Catalyst (Self-Reported Adoption Probability)	Traditionalists – SJ n = 1367				Experiencers – SP n = 1200				Conceptualizers – NT n = 4726				Idealists – NF n = 3207				O V E R A L L
	485	148	528	206	322	254	375	249	1396	405	2318	607	870	472	1215	650	
	E S T J	I S T J	E S F J	I S F J	E S T P	I S T P	E S F P	I S F P	E N T J	I N T J	E N T P	I N T P	E N F J	I N F J	E N F P	I N F P	
Personal Plan (%)	65	62	57	58	64	55	65	52	69	66	67	60	66	60	60	60	61
Cold Turkey (%)	62	60	55	51	58	56	48	52	60	60	57	59	58	57	53	54	56
Friend Support (%)	50	45	54	48	50	46	51	44	59	48	50	42	56	50	61	52	49
Other (%)	42	35	27	29	47	37	50	48	43	39	44	41	37	42	43	41	38
Spiritual Counseling (%)	35	29	39	33	35	25	45	31	46	34	41	31	45	36	40	38	35
Counseling (%)	35	22	33	27	28	25	39	27	42	27	30	27	37	31	45	34	30
Establish Group (%)	32	22	35	26	29	25	33	25	45	27	26	24	35	28	38	31	28
Rehab. Facility (%)	27	16	23	18	27	22	23	20	34	18	21	19	27	22	32	23	21

- Refer to Appendix B for items used to measure each variable.
- Table percentages are the proportion of respondents who reported “very” or “extremely” likely.
- Due to large sample sizes, chi-square p-values for all comparisons were less than 0.001.
- Cells highlighted in green are 5 or more units above the overall mean.
- Cells highlighted in red are 5 or more units below the overall mean.
- Out of 10,500 responders, 4,725 (45%) reported that this set of questions was not applicable to them and reported N/A to the questions.

Health-Risk Behavior 6: Take Medications as Prescribed

Table 8 summarizes findings for taking medications as prescribed. Overall, 75 percent of respondents reported that, if they wanted to increase taking their medications as prescribed, they would be very or extremely likely to try “**keeping medication bottles organized.**” There were no types with scores significantly above the mean, but four that were below it. This finding is consistent with type theory as all four of these types were Perceivers (Ps), who characteristically struggle with organizational skills. Two of the lowest scoring types were Conceptualizers (Intuitives + Thinkers) – independent types who often chafe at routines or being told what to do. The other two types were Experiencers (Sensors + Perceivers) who self-describe as the least self-disciplined.

Sixty-seven percent reported that they would be likely to “**use an organizer to sort medications.**” Again, there were no types with scores significantly above the mean. Of the three types with scores significantly below the mean, all are Perceivers (Ps) and all are Experiencers (Sensors + Perceivers). This is a very dramatic finding because using an organizer is often considered an easy, economical, and effective way of increasing adherence, and Experiencers comprise approximately 27% of the U.S. population [15, 16].

Fifty-nine percent reported that they would likely try “**getting medicine refills sent automatically.**” All five of the types with the highest scores were Extraverts (Es). Three of the five were Judgers (Js). This may be explained by the fact that Extraverts + Judgers (EJs) are the most proactive and organized and likely to take the initiative to follow procedures necessary to set up an auto refill. The only type whose score was significantly below the mean were ISFPs, among the least proactive types.

Fifty-seven percent reported that they would likely try “**learning more about why taking my medication as directed is important.**” Of the four types with the highest scores, all four were Extraverts (Es). Three of the four were also Judgers (Js). This may again be because Extravert-Judgers are both extremely responsible and proactive. Three of the four types were also Intuitives (Ns), who naturally seek to understand the reasons behind actions and decisions, and do not usually take things at face value. Only two types have scores significantly below the mean, both Introverts (Is) and Experiencers (Sensors + Perceivers), consistent with several other findings in this research.

Fifty-seven percent also reported that they would try “**reducing the cost of my medicines**” as a way to take

medications as prescribed. The types with the four highest scores were all Extraverts (Es). Three of the four were Intuitives. This is likely explained by the fact that Extraverts + Intuitives (ENs) are characteristically both curious and proactive. The two types with the lowest scores were both Introverts + Sensors (Is) – types which are more inwardly-oriented and less likely to see or pursue options that not readily apparent.

Fifty-five percent reported they would try “keeping a record of medicine taking.” Only two types had scores which were significantly above the mean. Both were Extraverts + Judgers (EJs), characteristically organized and proactive. The only two

types with scores significantly below the mean were both Introverts + Perceivers (IPs), but perhaps more importantly, they were Experiencers (Sensors + Perceivers). The type with the highest scores was ESFJs, Traditionalists who are extremely responsible, and the type with the lowest score was ISFP, the least proactive.

Other activities were reported by less than 50 percent of respondents overall. However, the pattern of responses between the sixteen types was consistent with Personality Type Theory (see Table 8). It is noteworthy that there were several examples of opposites having the highest and lowest scores

TABLE 8: Self-Reported Adoption Probabilities (%) of Medication Adherence (N=10,500)

Behavior Change Catalyst (Self-Reported Adoption Probability)	Traditionalists – SJ n = 1367				Experiencers – SP n = 1200				Conceptualizers – NT n = 4726				Idealists –NF n = 3207				OVERALL	
	485	148	528	206	322	254	375	249	1396	405	2318	607	870	472	1215	650		10500
	E S T J	I S T J	E S F J	I S F J	E S T P	I S T P	E S F P	I S F P	E N T J	I N T J	E N T P	I N T P	E N F J	I N F J	E N F P	I N F P		
Bottle Organization (%)	77	75	74	78	73	71	70	68	75	79	70	67	79	77	79	75	75	
Organizing Tool (%)	71	66	66	70	62	62	67	61	70	68	65	65	68	68	69	69	67	
Auto. Refills (%)	58	56	64	57	58	55	65	53	66	59	67	61	68	59	62	62	59	
Learn Why (%)	62	55	61	55	56	48	60	48	63	60	58	53	68	59	62	60	57	
Reduce Cost (%)	55	52	59	54	59	54	63	51	61	59	63	61	66	58	65	60	57	
Keep Records (%)	58	52	61	56	51	48	56	47	59	58	51	56	60	55	58	57	55	
Electronics (%)	46	41	46	42	51	49	46	48	55	49	56	56	52	49	60	58	48	
Reduce Pill Frequency (%)	51	44	46	44	55	50	50	42	57	49	56	50	55	45	58	48	47	
Financial Incentives (%)	47	41	46	43	44	47	55	44	59	44	48	49	49	43	59	48	45	
Reduce Pill Number (%)	47	40	43	41	50	42	46	39	50	44	52	46	48	43	56	45	43	
Other (%)	43	39	39	28	45	38	50	36	34	44	54	39	46	38	36	40	38	
Help from Others (%)	38	27	39	28	37	31	40	29	47	31	39	32	43	32	47	38	33	

- Refer to Appendix B for items used to measure each variable.
- Table percentages are the proportion of respondents who reported “very” or “extremely” likely.
- Due to large sample sizes, chi-square p-values for all comparisons were less than 0.001.
- Cells highlighted in green are 5 or more units above the overall mean.
- Cells highlighted in red are 5 or more units below the overall mean.
- Out of 10,500 responders, 2,030 (19%) reported that this set of questions was not applicable to them and reported N/A to the questions.

Limitations

Before the findings are discussed, limitations of the study should be noted. First, respondents to the survey were part of a panel and may not be representative of the whole United States adult population. Overall, the respondents in this study were matched well with census estimates for the adult population in terms of geographic location, race, gender, education, income, and age. Also, the goal of this study was not to make population estimates. Rather the goal was to use the data to describe associations between study variables using a relatively large sample. If population estimates were of interest, weighting of the data to match the population of interest would be needed.

Second, the likelihoods of engaging in activities associated with health-risk behaviors were self-reported and not based on actual behavior data. It is possible that self-reports are biased. Third, respondents were able to respond to survey items as “not applicable.” For example, such responses were relatively high for smoking (45%) and alcohol consumption (45%) since many respondents did not smoke or consume alcohol. However, sample sizes were sufficiently large and responses from individuals for whom the items were applicable were obtained.

Finally, the application of personality type has limitations such as the amount of variance explained and applicability in certain situations [18-20]. We acknowledge these limitations and were careful to apply a personality type measure (Preferred Communication Style Questionnaire) that had direct relevance to health-risk behaviors. In addition, we draw on the application of personality type in multiple disciplines to influence and improve behavior including such examples as helping managers understand, engage and retain employees, helping teams collaborate more successfully, and helping individuals communicate more effectively in the workplace [15, 16]. Personality Type is estimated to be used by 89% of Fortune 100 companies to accomplish such personnel management objectives [15, 16]. This study investigated the application of Personality Type Theory for patient care management objectives in health care.

Discussion and Conclusions

There is a need to translate behavior change predictors into successful change strategies and intervention tools that help promote intention stability, create implementation intention, resist situational pressure, reduce the impact of past habits on future performances, and improve change maintenance [2, 3]. Findings from this study showed that (1) there are key personality differences between individuals that impact their behavior and (2) these differences can be easily and accurately identified. We propose that people are more likely to

experience success in changing health-risk behaviors if they engage in activities that they enjoy and are activities consistent with their inherent personality types which characterize (1) how they are energized, (2) the kind of information they naturally notice, (3) how they prefer to make decisions, and (4) their preferences to live in a more structured way or in a more spontaneous way.

The findings also identified personality types that were more likely and those that were less likely to be motivated by the items we utilized in this study. **Table 9** provides a summary of these findings and shows that extroverts were more likely than introverts to report trying the motivators that we listed in this study. Extroverts like to talk, keep the pace lively, and include variety in their interactions. Introverts need to be asked questions and listened to, need time to reflect, and prefer to focus on one topic at a time. The findings revealed that the list of motivators we included in this study may have resonated more with Extraverts. Alternatively, the reason for the findings could be that extroverts are more likely to try multiple motivators at the same time and introverts are more likely to focus on relatively few motivators at a time.

The findings showed that ENTJs were the most likely to engage in many activities that are designed to address “health-risk” behaviors and ISFPs – the polar opposites – were the least likely to engage in activities designed to address “health-risk” behaviors. This finding is consistent with research reported by Lippke and colleagues [3] in which individuals who are in a higher stage of readiness for change for one behavior are more likely to be in a higher stage of readiness for change in another behavior as well. Thus, success in one behavior change can be used to facilitate changes in other related behaviors.

However, these findings also suggest that some personality types tend to be more proactive and resonate with “typical” activities designed to address health-risk behaviors and others are reticent to trying activities and may even disengage when confronted with such activities. We suggest that, just like the clinical nuance that is needed for making decisions about prescribing health care treatments, health-risk behavior strategies should be based upon personality type nuances. These findings are consistent with work by Baban and Craciun [2] which suggested that there is a need to identify the determinants of required change instead of the predictors of the present behavior only and that there is a need to identify the best psychological change strategies that cause behavior change.

Table 9: Summary of Adoption Probabilities for All Behaviors Studied by Personality Types

Temperament Group	Personality Type	Number (%) of Motivators Significantly Higher than Overall Average	Number (%) of Motivators Near Overall Average	Number (%) of Motivators Significantly Lower than Overall Average	Overall
Traditionalists (SJ) (n = 1367)	ESTJ (n = 485)	20 (29%)	46 (68%)	2 (3%)	68 (100%)
	ISTJ (n = 148)	1 (1%)	37 (54%)	30 (44%)	68 (100%)
	ESFJ (n = 528)	17 (25%)	49 (72%)	2 (3%)	68 (100%)
	ISFJ (n = 206)	0 (0%)	40 (59%)	28 (41%)	68 (100%)
Experiencers (SP) (n = 1200)	ESTP (n = 322)	14 (21%)	49 (72%)	5 (7%)	68 (100%)
	ISTP (n = 254)	1 (1%)	46 (68%)	21 (31%)	68 (100%)
	ESFP (n = 375)	34 (50%)	28 (41%)	6 (9%)	68 (100%)
	ISFP (n = 249)	2 (3%)	32 (47%)	34 (50%)	68 (100%)
Conceptualizers (NT) (n = 4726)	ENTJ (n = 1396)	56 (82%)	12 (18%)	0 (0%)	68 (100%)
	INTJ (n = 405)	12 (18%)	56 (82%)	0 (0%)	68 (100%)
	ENTP (n = 2318)	36 (53%)	30 (44%)	2 (3%)	68 (100%)
	INTP (n = 607)	5 (7%)	55 (81%)	8 (12%)	68 (100%)
Idealists (NF) (n = 3207)	ENFJ (n = 870)	58 (85%)	10 (15%)	0 (0%)	68 (100%)
	INFJ (n = 472)	3 (4%)	65 (96%)	0 (0%)	68 (100%)
	ENFP (n = 1215)	42 (62%)	24 (35%)	2 (3%)	68 (100%)
	INFP (n = 650)	12 (18%)	55 (81%)	1 (1%)	68 (100%)

Percentages may not sum to 100% due to rounding.

This study identified which specific activities that patients of different personality types are most likely to engage in to help them get adequate exercise, lose weight, manage stress, quit smoking, reduce alcohol consumption, and take medications as prescribed. We propose that healthcare providers (physicians, pharmacists, nurses, etc.), wellness programs, and health coaches can use this knowledge to positively influence behavior, reduce chronic disease, and improve health outcomes. Such an approach can result in Individualized Wellness Plans (IWP™) that can help promote intention stability, create implementation intention, resist situational pressure, reduce the impact of past habits on future performances, and improve change maintenance. **Appendix C** presents an example of an Individualized Wellness Plan (IWP™) for a person with personality type ENFP and for another person with type ISFP. Such a plan could serve as a starting point for discussion and action. We propose that health care providers still would need to engage the patient in the communication style and decision style that fits best with each patient. Such an approach requires tailoring to each individual, but such a tailored approach could result in more

efficient and effective strategies for behavior change in the long run.

In conclusion, findings from this study identified personality type characteristics that can be used to develop and implement successful change strategies and intervention tools, such as individualized wellness plans (IWP™) that help promote intention stability, create implementation intention, resist situational pressure, reduce the impact of past habits on future performances, and improve change maintenance.

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Use of the proprietary, copyrighted tool: the "Preferred Communication Style Questionnaire" was obtained from Paul D. Tieger, SpeedReading People, LLC, 100 Allyn Street, Hartford, CT 06103, paul@speedreadingpeople.com.

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References

- Centers for Disease Control and Prevention. Chronic Diseases: The Leading Causes of Death and Disability in the United States. <http://www.cdc.gov/chronicdisease/overview/>, accessed August 18, 2016.
- Baban, A and Craciun, C. Changing Health-Risk Behaviors: A Review of Theory and Evidence-Based Interventions in Health Psychology, *Journal of Cognitive and Behavioral Psychotherapies*, 2007, Vol 7, No. 1: 45-67.
- Lippke, S, Nigg, CR and Maddock, JE. Health-Promoting and Health-Risk Behaviors: Theory Driven Analysis of Multiple Health Behavior Change in Three International Samples, *International Journal of Behavioral Medicine*, 2012, Vol. 19: 1-13.
- Bissel, P, May, CR, Noyce PR. From Compliance to Concordance: Barriers to Accomplishing a Re-Framed Model of Health Care Interactions, *Social Science and Medicine*, 2004, Vol. 58, No. 4: 851-862.
- Stewart, M, Brown, JB, Donner A, McWhinney IR, Oates, J, Weston, W, Jordan, J. The Impact of Patient-Centered Care on Outcomes, *The Journal of Family Practice*, 2000, Vol. 49, No. 9: 796-804.
- Rubak, S, Sandboek, A, Lauritzen, T, Christensen, B. Motivational Interviewing: A Systematic Review and Meta-Analysis, *British Journal of General Practice*, 2005, April: 305-312.
- Berger, BA, Villaume, WA, A New Conceptualization and Approach to Learning and Teaching Motivational Interviewing, *INNOVATIONS in pharmacy*, 2016, Vol. 7, No. 1: Article 3, 11 pages.
- Sannes, HJ. Barriers to Using Motivational Interviewing for Lifestyle Counseling, 2011, Theses, Dissertations, and Other Capstone Projects, Paper 211.
- Lauver, DR, Ward SE, Heidrich SM, Keller ML, Bowers BJ, Brennan PF, et al. Patient-Centered Interventions, *Res Nurs Health*, 2002, Vol. 25: 246-255.
- Deary, UJ, Weiss, A, Batty, GD. Intelligence and Personality as Predictors of Illness and Death: How Researchers in Differential Psychology and Chronic Disease Epidemiology are Collaborating to Understand and Address Health Inequalities, *Psychological Science in the Public Interest*, 2010, Vol. 11, No. 2: 53-79.
- Denollet, J, Schiffer, AA, Spek, V. A General Propensity to Psychological Distress Affects Cardiovascular Outcomes – Evidence from Research on the Type D (Distressed) Personality Profile, *Circ Cardiovas Qual Outcomes*, 2010, Vol. 3: 546-557.
- Axelsson, M, Brink, E, Lundgren, J, Lotvall, J. The Influence of Personality Traits on Reported Adherence to Medication in Individuals with Chronic Disease: An Epidemiological Study in West Sweden, *PLoS ONE*, 2011, Vol. 6, No. 3: e18241.
- Myers I. (1998). *Introduction to Type: A Guide to Understanding Your Results on the Myers-Briggs Type Indicator* (6th ed.). Palo Alto, CA: Consulting Psychologists Press.
- Keirse D and Bates M. (1984). *Please Understand Me* (3rd ed.). Del Mar CA: Prometheus Nemesis.
- Tieger PD, Barron B, and Tieger K. (2014). *Do What You Are* (5th ed.). New York: Little, Brown and Company.
- Tieger PD and Barron-Tieger B. (1999). *The Art of SpeedReading People*. New York: Little, Brown and Company.
- Schommer JC, Brown LM, Olson AW, Tieger PD, Tomaszewski DM, Worley MM, Godwin OP, Rashrash M, and Gomaa BT. (2016) *National consumer survey on the medication experience and pharmacists’ roles* (Working Paper #NCSME&PR-02). Minneapolis, MN.
- Pittenger, DJ. (1993) The utility of the Myers-Briggs Type Indicator. *Review of Educational Research*, 63(4): 467-488.
- Pittenger, DJ. (1993). Measuring the MBTI...And Coming Up Short. *Journal of Career Planning and Employment* 54 (1), 48–52.
- Gardner WL and Martinko MJ. (1996). Using the Myers-Briggs Type Indicator to study managers: A literature review and research agenda. *Journal of Management*, 22: 45–83.

Appendix A

Preferred Communication Style Questionnaire

Use of the proprietary, copyrighted tool: the "Preferred Communication Style Questionnaire" was obtained from Paul D. Tieger, SpeedReading People, LLC 100 Allyn Street, Hartford, CT 06103, paul@speedreadingpeople.com.

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Would you rather talk with lots of different people, or have an in depth conversation with one person?

Style A:

You get excited and energized by being around people. You may have many friends and like to have a lot of people in your life.

You tend to:

- Enjoy talking with people
- Make new friends easily
- Prefer to do many things at once
- Answer questions quickly
- Think out loud
- Be comfortable talking with strangers
- Sometimes be easily distracted

OR

Style B:

While you like people, you also enjoy spending quiet time by yourself. You usually prefer a small group of close friends.

You tend to:

- Be a good listener
- Develop a few, but deep friendships
- Devote time to the friends you already have
- Take your time answering questions
- Think before you speak
- Prefer to talk with people you know, rather than strangers
- Be good at concentrating on a task

Which style seems to fit you best?

- Style A
- Style B

Are you more of a realistic person who pays attention to what is happening now? Or a person who thinks about what may happen in the future?

Style A:

You'd rather talk about real things than ideas that don't have much practical use. You have good common sense and appreciate others who do, too.

You tend to:

- Pay attention to details and specifics
- Appreciate practical solutions
- Be pretty realistic and “down to earth”
- Remember important facts and details
- Trust things that you know from your own past experience
- Prefer using skills you already have
- Be aware of what’s going on in the present moment

OR

Style B:

You enjoy thinking about new ideas and possibilities. You are good at seeing how ideas are related and connected to each other.

You tend to:

- See “the big picture”
- Appreciate new or creative ideas, even if they are untested
- Enjoy using your imagination
- Look for and see the deeper meaning in things
- Trust your hunches and “gut instincts”
- Enjoy learning new skills
- Think more about the future than the present

Which style seems to fit you best?

- Style A
- Style B

Do you tend to make decisions based more on logic or on your personal feelings?

Style A:

You are most convinced by logical arguments. You tell the truth even if it might hurt someone’s feelings.

You tend to:

- Look at things objectively, not personally
- Try to treat everyone fairly
- Be competitive
- Take few things personally
- See and point out, how things can be improved
- Sometimes find it fun to argue or debate
- Be motivated to achieve

OR

Style B:

When making a decision, you consider how people will feel about it. You tend to avoid arguments and conflicts.

You tend to:

- Be aware of other’s feelings
- Try to treat everyone kindly
- Be cooperative
- Sometimes take things too personally
- Not criticize others if it will upset them
- Want people to get along and be happy
- Be motivated to help others

Which style seems to fit you best?

- Style A
- Style B

Do you prefer to live in a more planful, organized way? Or a more open-ended, spontaneous way?

Style A:

You like things decided and feel best when you’ve got a plan. And once you’ve made a plan, you like to stick with it.

You tend to:

- Take your responsibilities seriously
- Be sure to prepare in advance
- Feel best when you finish projects
- Like to cross things off your “to do” list
- Find it easy making most decisions
- See the need for most rules
- Almost always be on time

OR

Style B:

You like to keep your options open before making some decisions. And, you’re often comfortable changing plans when necessary.

You *tend* to:

- Like to mix business with pleasure
- Complete some tasks at the last minute
- Often enjoy starting new projects best
- Don’t always finish items on your “to do” list
- Find it easy to be flexible
- Question the need for many rules
- Sometimes be late for appointments

Which style seems to fit you best?

- Style A
- Style B

Appendix B

**Survey Questions for “How You Best Reach your Personal Goals”
(with Variable Names Used in Tables Presented in this Report)**

HOW YOU BEST REACH YOUR PERSONAL GOALS

Next, we would like to learn about how you best reach your personal health goals. For this study, health goals are things like (1) getting adequate exercise, (2) managing weight, (3) reducing stress, (4) quitting smoking, (5) reducing alcohol consumption, and (6) taking your medications as directed.

Answer the questions in this section using the following scale:

- 1 = not very**
- 2 = somewhat**
- 3 = very**
- 4 = extremely**

NA = not applicable (choose this response if the question is not applicable to you)

1. If you wanted to increase the amount of exercise you do, how likely would you be to try the following? If you would not try any of the strategies listed or if increasing the amount of exercise you do is not applicable to you, choose NA = not applicable.

- a. Exercise at a gym where there are other people around. (WITH OTHERS AT GYM)
- b. Exercise by myself. (ALONE)
- c. Exercise with a personal trainer (PERSONAL TRAINER)
- d. Exercise with one or more friends. (WITH FRIENDS)
- e. Seek support of my friends and family (FAMILY/FRIEND SUPPORT)
- f. Stick to a predetermined schedule and establish a routine. (SCHEDULE ROUTINE)
- g. Play on a team or in a sports league. (SPORTS LEAGUE)
- h. Take a dance, spinning, or other type of class. (FITNESS CLASSES)
- i. Use electronic devices like Fitbit or smart phone apps to monitor my activity. (ELECTRONICS)
- j. Engage in recreational activities such as swimming, hiking, tennis, pick-up basketball (RECREATION)
- k. Engage in housework, yardwork, gardening, etc. (CHORES)
- l. Other (please specify) _____ (OTHER)

2. If you wanted to manage your weight, how likely would you be to try the following? If you would not try any of the strategies listed or if managing your weight is not applicable to you, choose NA = not applicable.

- a. Join a formal plan like Weight Watchers, Jenny Craig, etc. (FORMAL PLAN)
- b. Create my own plan. (OWN PLAN)
- c. Use electronic devices like Fitbit or smart phone apps to help me keep track of my food intake and calories. (ELECTRONICS)
- d. Become more active. (MORE ACTIVE)
- e. Take weight loss supplements. (SUPPLEMENTS)
- f. Keep a written record of my food intake and calories. (KEEP RECORDS)
- g. Cut down on snacks. (CUT SNACKS)
- h. Eat smaller portions at meals. (REDUCE PORTIONS)
- i. Make healthier food choices. (EAT HEALTHIER)
- j. Make a “public commitment” to family or friends. (PUBLICLY COMMIT)
- k. Team up with another person who also is trying to lose weight. (TEAM UP)

I. Other (please specify) _____ (OTHER)

3. If you wanted to reduce your stress, how likely would you be to try the following? If you would not try any of the strategies listed or if reducing your stress is not applicable to you, choose NA = not applicable.

- a. Meditation (MEDITATION)
- b. Exercise (EXERCISE)
- c. Yoga (YOGA)
- d. Counseling (COUNSELING)
- e. Listen to music (MUSIC)
- f. Spiritual disciplines such as prayer, confession, forgiveness, praise, etc. (SPIRITUAL)
- g. Rely on a higher power (HIGHER POWER)
- h. Rely on my inner self (INNER SELF)
- i. Take prescribed medication (RX MEDICATIONS)
- j. Take over-the-counter medication (OTC MEDICATIONS)
- k. Change my diet (CHANGE DIET)
- l. Take nutritional supplements (SUPPLEMENTS)
- m. Eat or drink specific foods or beverages (SPECIFIC FOODS)
- n. Other (please specify) _____ (OTHER)

4. If you wanted to quit smoking, how likely would you be to try the following? If you would not try any of the strategies listed or if quitting smoking is not applicable to you, choose NA = not applicable.

- a. Quit "cold turkey" (just stop) (COLD TURKEY)
- b. Financial incentives (receiving money from my employer or another source) (FINANCIAL INCENTIVES)
- c. Ask for support from friends or family (FRIEND SUPPORT)
- d. Seek counseling (COUNSELING)
- e. Get nicotine replacement therapy (such as using a patch, nasal spray, inhalers, gum or lozenges) (NRT)
- f. Take prescription drugs (RX MEDICATIONS)
- g. Take natural remedies (NATURAL REMEDIES)
- h. Use hypnosis (HYPNOSIS)
- i. Use E-Cigarettes (E-CIGARETTES)
- j. Other (please specify) _____ (OTHER)

5. If you wanted to reduce your alcohol consumption, how likely would you be to try the following? If you would not try any of the strategies listed or if reducing your alcohol consumption is not applicable to you, choose NA = not applicable.

- a. Join an established support group like Alcoholics Anonymous (ESTABLISH GROUP)
- b. Undergo counseling (COUNSELING)
- c. Stop "cold turkey" (COLD TURKEY)
- d. Create my own plan (PERSONAL PLAN)
- e. Enter a rehabilitation facility (REHAB FACILITY)
- f. Get support from family and friends (FRIEND SUPPORT)
- g. Seek spiritual counseling (SPIRITUAL COUNSELING)
- h. Other (specific) _____ (OTHER)

6. If you wanted to improve taking your medications as directed, how likely would you be to try the following? If you would not try any of the strategies listed or if taking your medications as directed is not applicable to you, choose NA = not applicable.

- a. Get help from another person. (HELP FROM OTHERS)
- b. Use electronic devices to help remind me. (ELECTRONICS)
- c. Take advantage of financial incentives (FINANCIAL INCENTIVES)
- d. Keep a record of my medicine-taking (KEEP RECORDS)
- e. Learn more about why taking my medicine as directed is important (LEARN WHY)
- f. Use an organizer to sort my medications (ORGANIZING TOOL)
- g. Keep my medication bottles organized (BOTTLE ORGANIZATION)
- h. Reduce the number of pills I take each day (REDUCE PILL NUMBER)
- i. Reduce the number of times per day I need to take medicines. (REDUCE PILL FREQUENCY)
- j. Reduce the cost of my medicines. (REDUCE COST)
- k. Get my medicine refills sent to me automatically. (AUTO REFILLS)
- l. Other (please specify) _____ (OTHER)

Appendix C

Individualized Wellness Plan for an ENFP Personality Type

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Your Individualized Wellness Plan (IWP)

“A unique, holistic plan that will keep me healthy”

Research has shown that up to 80% of chronic illnesses - such as heart disease, stroke, type 2 diabetes, obesity, and some types of cancer - can actually be prevented, but only if people make positive changes in their lives.

Change is hard. But knowing what works best for people like you can make it much easier.

Research shows that people like you actually have an advantage because you’re organized, committed, and willing to follow a routine. You’re also most successful at making changes in your life when family, friends, and co-workers are not simply cheerleaders, but actively participating in your progress. The advice outlined here can help you make tangible positive changes, and feel more in control of your life.

None of the strategies in this Individualized Wellness Plan are one-size-fits-all. These strategies been chosen specifically for you, based on the most comprehensive, ground-breaking research to date. Not all of these categories will pertain to you (for example, non-smokers don’t need to quit), and not all of these strategies listed are equally effective. But if you want to change any behaviors that put your health at risk, you’re likely to have the greatest success by trying the one or two strategies in each category that appeal to you most.

To Get Enough Exercise

It doesn’t have to be as painful as it sounds.

- Engage in housework, yardwork, etc.

Kill two birds with one stone by turning everyday housework into a workout regimen. Not only will you be able to see tangible outcomes from the tasks - a clean floor, a tidy bookcase - but you’ll be able to rest easy at night, knowing you’ve worked towards your long-term goal of taking back your health. This article from Weight Watchers offers some tips that can turn even the simplest tasks into a full-body workout.

https://www.weightwatchers.com/util/art/index_art.aspx?tabnum=1&art_id=573&sc=3037

- Stick to a predetermined schedule and establish a routine

Even when we know we should do it, the hundreds of tiny things that come up in our lives can easily prevent us from sticking to our exercise regimen. This article from the Mayo Clinic: “Barriers to Fitness: Overcoming Common Challenges” provides practical tips for clearing the most common hurdles that pop up so you can get back on track with your fitness plans.

http://www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/fitness/art-20045099

- Engage in your favorite recreational activities

Whether it’s playing tennis, jogging, or mowing the lawn, you’re far more likely to engage in activities that you find enjoyable. This handy site will not only show you how many calories you burn performing the various activities you already enjoy, but can give you some ideas for some calorie-burning activities you may not have thought of.

http://calorielab.com/burned/

- **Exercise with one or more friends**

Most things are better when you're doing it with a friend. Getting exercise is no different. However, if you need a little extra push, this article: "Six Reasons to Work out with a Partner" offers a wonderful rationale. Though it appears in Men's Fitness, the same good insights apply to women.

<http://www.mensfitness.com/training/six-reasons-to-work-out-with-a-partner>

- **Seek support of friends and family**

Letting your loved ones know that you're prioritizing your health can be the make-or-break difference between whether you stick to your plan or not. Check out this article from Johns Hopkins that details the research done on this exact subject. Those who have a strong support network have a 50% higher chance of not dying of a cardiovascular disease. That makes a compelling case for keeping your network in the know.

http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-to-eliminate-cardiovascular-health-disparities/about/influences_on_health/family_social_support.html

To Lose Weight

Whether you need to lose a lot of weight, or just that last stubborn 10 lbs.

- **Make healthier food choices**

Knowledge is power, so lucky us that we live in an age where we can look up just how many calories are in the foods we eat regularly. TwoFoods.com is a fantastic resource if you're trying to decide between two different meal options, and want to know which one is the healthier choice. Just plug in the two options and hit compare!

<http://www.twofoods.com>

- **Become more active**

It sounds simple, but many people have a hard time changing their daily habits into more active ones. This page on the American Heart Association website says that the fastest way to become more active *today* is to walk everywhere you can. But that's just one of many activities they recommend, separated into At Home, At Work, and At Play.

http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/GettingActive/Get-Moving-Easy-Tips-to-Get-Active_UCM_307978_Article.jsp#.V6H1W5MrLV0

- **Create your own plan**

You might find the best success by developing a plan that borrows from different approaches. This comprehensive article gives you lots of concrete ideas and information that can help you do just that. It's called "How to Build Your Weight Loss Meal Plans and Make Losing Fat Easier on Yourself", and can be found at JCDFitness.com.

<http://jcdfitness.com/2015/03/how-to-build-your-weight-loss-meal-plans-and-make-losing-fat-easier-on-yourself/>

- **Eat smaller portions at meals**

It's no secret that portion sizes at restaurants are out of control, and that problem is carrying over into our home-cooked meals, as well. Luckily, Health.com provides "14 Ways to Cut Portions Without Feeling Hungry" -- listing strategies as simple as starting a meal with a glass of water, to more advanced ones, like turning carbs into a topping on your plate, instead of a base.

<http://www.health.com/health/gallery/0,,20769037,00.html#make-carbs-the-topper-instead-of-the-base-0>

- **Cut out snacks**

Sometimes practicing moderation can be much harder than simply quitting cold turkey. It takes a lot of willpower, however, to refrain from casual snacking. To give yourself the upper hand, adopt as many strategies as you can. You'll find plenty of good strategies that can help you in this article from FitDay.com: "7 Tips to Stop Snacking".

<http://www.fitday.com/fitness-articles/nutrition/healthy-eating/7-tips-to-stop-snacking.html>

- **Or, cut down on snacks...**

On the other hand, you may subscribe to the "everything in moderation" approach, including snacks. If you find snacking just too hard to give up, this WebMd article "5 Snacks to Enjoy (And 5 to Avoid)" can help you start snacking smarter.

<http://www.webmd.com/diet/guide/best-worst-snacks?page=2>

To Reduce and Manage Your Stress

Feel better, live longer, and be more enjoyable to be around.

- **Listen to music**

Music has a profound and proven effect on our psyche. Research has shown that songs at a certain speed can connect with our alpha brainwaves, the type of brainwave that is present when we're relaxed and receptive. This page on the University of Nevada Reno website has a helpful list of free music (via YouTube) that you can bookmark for those times that you need to de-stress.

<https://www.unr.edu/counseling/virtual-relaxation-room/releasing-stress-through-the-power-of-music>

- **Exercise**

It's no secret that exercising regularly will help bring down your stress levels. The thing that stops people from doing it is oftentimes not knowing which exercise is the right one for them. Rest assured, there's a way for *everyone* to exercise, regardless of their situation, and this article can help you determine which may work best for you. It's called "6 Questions to Help You Find Your Ideal Exercise", and is brought to us by the Huffington Post.

http://www.huffingtonpost.com/larry-sarokin/best-exercise-programs_b_4158115.html

- **Rely on your inner self**

Often times stress is simply a result of us not having a good framework within our own minds, which we can overcome by looking at life from a different perspective. This article from MyWellBeing.com offers some practical ways to start looking at your life differently, and puts the power of de-stressing your life in your own hands.

<http://www.mywell-being.com/health/think/12-tips-finding-your-inner-strength>

- **Change your diet**

"You are what you eat" isn't just a saying -- it's the truth. The things you put in your body can make a big difference not just in how you look, but how you feel and think. To take a big first step towards your goal of having less stress in your life, start with this article, "13 Foods That Fight Stress".

<http://www.prevention.com/mind-body/emotional-health/13-healthy-foods-that-reduce-stress-and-depression>

- **Use spiritual disciplines such as prayer, etc.**

There is some startling evidence that having a spiritual discipline in your life can greatly reduce your stress levels. In addition, being a part of a spiritual community seems to help people recover faster from situations that would sideline those without one. Check out this

article on the Huffington Post from an author who shares the results from a study at Duke University. The benefits seem quite compelling.

http://www.huffingtonpost.com/therese-borchard/spirituality-and-prayer-r_b_497222.html

- **Do yoga**

Doing a daily yoga routine can make you feel more balanced and centered throughout your day, as well as keep you from hurting yourself during routine maneuvers as you get older. It's just a matter of obtaining the correct gear and learning the first few poses. This helpful "Yoga for Beginners" article from GAIAMLife details the first few poses for you, as well as how to keep from hurting yourself before you even get started.

<http://life.gaiam.com/article/getting-started-yoga-beginners>

- **Meditate**

Meditation oftentimes gets a bad rap for being too difficult, or confusing, for people to start. That's unfortunate, because it's one of the most proven ways to lower your stress levels, and it doesn't cost a dime to get started. This article from Into the Gloss does a fantastic job of taking all the excuses that people come up with to *not* meditate, and breaking them down one by one. By the end of this thoughtful piece, you'll be ready to achieve inner serenity. Or at least try...

<https://intothegloss.com/2014/03/easy-meditation/>

To Quit Smoking

Hard to kick? Sure. But that doesn't mean you shouldn't try...or can't succeed! .

- **Quit "cold turkey"**

Many people find this method works best for them, though it can oftentimes be the most painful. After all, there's no wiggle room in going cold turkey. You're either smoking or you're not. If you're seriously considering this method, it'd be wise to read this article: "Quitting Cold Turkey: The Ultimate Guide" first. There are plenty of pitfalls, and you want to consider this option as well informed as you can be.

<https://quitsmokingcommunity.org/how-to-quit-smoking/cold-turkey/>

- **Seek financial incentives**

The average price of a pack of cigarettes in the US is over \$5 (that's \$1,825 per year for a pack-a-day smoker. In NY, it's \$12.50 or \$4,562 per year). On average, smokers pay 15-20% more in health insurance premiums. Some employers and insurance providers even offer significant discounts to non-smokers. This article details just how much money you could save on an annual basis by giving up tobacco.

<http://classroom.synonym.com/health-insurance-premium-discounts-nonsmokers-8011.html>

- **Ask for support from family and friends**

People are more likely to succeed at quitting when friends and family help. If you don't want to tell your family that you smoke, ask friends to help you quit. If it's hard to find people who will support you (for example, if your friends smoke and aren't interested in quitting) then you might consider joining an online or in-person support group, like the one described in this link.

<http://www.becomeanex.org/family-and-friends.php>

- **Take natural remedies**

If you wanted to quit smoking today, there are things that you have in your home right now that can greatly increase your odds of success. For example, did you know grape juice can help detox your body, flushing those nasty cigarette chemicals out? Take a look at this article for 5 easy home remedies that will put you on the path to quitting.

<https://quitsmokingcommunity.org/the-5-best-home-remedies-to-quit-smoking/>

- **Get nicotine replacement therapy**

Nicotine Replacement Therapy aims at making the symptoms of nicotine withdrawal less harsh by getting nicotine into the bloodstream without smoking. The data suggests that NRT increases the odds of a successful transition. This article – “Nicotine Replacement Therapy” -- tells you pretty much everything you need to know about NRT.

<http://patient.info/health/nicotine-replacement-therapy>

To Reduce Your Alcohol Consumption

We could all stand to have fewer drinks.

- **Quit “cold turkey”**

Medical professionals strongly recommend against quitting alcohol cold turkey if you suspect that you're physically dependent on alcohol. Not only is it dangerous, but it has a lower success rate than other methods. Some experts recommend that you choose some "alcohol-free days" in your weekly schedule and see how that feels. This article from DrinkAware - a fantastic resource for those trying to moderate their drinking - details the benefits of taking a day or two off from drinking.

<https://www.drinkaware.co.uk/advice/how-to-reduce-your-drinking/how-to-cut-down/alcohol-free-days/>

- **Get support from family and friends**

AlAnon has been around since 1951, providing a resource for family and friends of alcoholics. This site is a rich resource whether you are living with an active drinker or not. It also provides a handy link that can help you find a meeting near you. Simply click on "Find a Meeting", enter the address, and you've already made a huge first step in your recovery.

<http://al-anon.org/how-al-anon-works-for-me>

- **Seek spiritual counseling**

Spirituality and recovery have gone hand in hand since the first 12 step program was developed, and accepting a higher power is a necessary step in many recovery programs. Some programs are more religion-based than others. If you identify as a Christian – regardless of the demonization - this article can be a great resource for you.

<http://www1.cbn.com/what-bible-says-about-alcohol-and-alcoholism>

If you are attracted to a more purely *spiritual* approach, you may find this article will resonate best with you.

<http://alcoholrehab.com/addiction-recovery/daily-spiritual-practices-are-helpful-in-recovery/>

- **Undergo counseling**

This article from the National Institute on Alcohol Abuse and Alcoholism details the various types of counseling one can undergo for reducing alcohol consumption, beginning with one's primary care doctor before moving on to psychiatrist, psychologist, or alcohol counselor. Continue reading for the types of treatment options available, as well as a comprehensive list of phone numbers you can use to begin the process of finding the right treatment.

<http://pubs.niaaa.nih.gov/publications/Treatment/treatment.htm - chapter02>

- **Join an established support group**

A community of people supporting you in your decision to moderate or quit drinking can make a substantial difference in how long it takes for you to achieve your goal. No program has more resources at their disposal than Alcoholics Anonymous, which has been around since 1935. According to AA's 2014 membership survey, 27% of its members have been sober less than one year, 24% have 1–5 years sober, 13% have 5–10 years, 14% have 10–20 years, and 22% have more than 20 years sober. This official Alcoholics Anonymous questionnaire will let you gauge the severity of your consumption rate, and help you decide if this program is the right one for you.

http://www.aa.org/pages/en_US/is-aa-for-you-twelve-questions-only-you-can-answer

Individualized Wellness Plan for an ISFP Personality Type

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Your Individualized Wellness Plan (IWP)

“Simple, easy, and fun ways to be healthier that work for me”

Research has shown that up to 80% of chronic illnesses - such as heart disease, stroke, type 2 diabetes, obesity, and some types of cancer - can actually be prevented, but only if people make positive changes in their lives.

Change is hard. But knowing what works best for people like you can make it easier.

Research shows that people like you can make lasting positive changes in their lives when you have access to enjoyable strategies that are easy to maintain and to fit into your lifestyle. The plans shown here can not only help show you how to live a healthier life, but also make it easier to battle the urge to put things off for another day.

None of the strategies in this **Individualized Wellness Plan** are one-size-fits-all. These strategies been chosen specifically for you, based on the most comprehensive, ground-breaking research to date. Not all of these categories will pertain to you (for example, non-smokers don’t need to quit), and not all of these strategies listed are equally effective. But if you want to change any behaviors that put your health at risk, you’re likely to have the greatest success by trying the one or two strategies in each category that appeal to you most.

To Get Enough Exercise

It doesn’t have to be as painful as it sounds.

- **Exercise by yourself**

The act of exercising can make one feel self-conscious, which is why many people choose to do it in isolation. This article from the US News & World Report makes a good case for why exercising alone is actually better than doing it at a gym. For example, you get to pick the tunes and look as weird as you want!

<http://health.usnews.com/health-news/health-wellness/articles/2014/10/01/the-case-for-exercising-alone>

- **Engage in housework, yardwork**

Kill two birds with one stone by turning everyday housework into a workout regimen. Not only will you be able to see tangible outcomes from the tasks - a clean floor, a tidy bookcase - but you'll be able to rest easy at night, knowing you've worked towards your long-term goal of taking back your health. This article from Weight Watchers offers some tips that can turn even the simplest tasks into a full-body workout.

https://www.weightwatchers.com/util/art/index_art.aspx?tabnum=1&art_id=573&sc=3037

- **Stick to a predetermined schedule and establish a routine**

Even when we know we should do it, the hundreds of tiny things that come up in our lives can easily prevent us from sticking to our exercise regimen. This article from the Mayo Clinic: “Barriers to Fitness: Overcoming Common Challenges” provides practical tips for clearing the most common hurdles that pop up so you can get back on track with your fitness plans.

<http://www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/fitness/art-20045099>

- **Seek support from family and friends**

Letting your loved ones know that you're prioritizing your health can be the make-or-break difference between whether you stick to your plan or not. Check out this article from Johns Hopkins that details the research done on this exact subject. Those who have a strong support network have a 50% higher chance of not dying of a cardiovascular disease. That makes a compelling case for keeping your network in the know.

http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-to-eliminate-cardiovascular-health-disparities/about/influences_on_health/family_social_support.html

- **Engage in favorite recreational activities**

Whether it's playing tennis, jogging, or mowing the lawn, you're far more likely to engage in activities that you find enjoyable. This handy site will not only show you how many calories you burn performing the various activities you already enjoy, but can give you some ideas for some calorie-burning activities you may not have thought of.

<http://calorielab.com/burned/>

To Lose Weight

Whether you need to lose a lot of weight, or just that last stubborn 10 lbs.

- **Be more active**

It sounds simple, but many people have a hard time changing their daily habits into more active ones. This page on the American Heart Association website says that the fastest way to become more active *today* is to walk everywhere you can. But that's just one of many activities they recommend, separated into At Home, At Work, and At Play.

http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/GettingActive/Get-Moving-Easy-Tips-to-Get-Active_UCM_307978_Article.jsp#.V6H1W5MrLVo

- **Make healthier food choices**

Knowledge is power, so lucky us that we live in an age where we can look up just how many calories are in the foods we eat regularly. TwoFoods.com is a fantastic resource if you're trying to decide between two different meal options, and want to know which one is the healthier choice. Just plug in the two options and hit compare!

<http://www.twofoods.com/>

- **Eat smaller portions**

It's no secret that portion sizes at restaurants are out of control, and that problem is carrying over into our home-cooked meals, as well. Luckily, Health.com provides "14 Ways to Cut Portions Without Feeling Hungry" -- listing strategies as simple as starting a meal with a glass of water, to more advanced ones, like turning carbs into a topping on your plate, instead of a base.

<http://www.health.com/health/gallery/0,,20769037,00.html>

- **Cut out snacks**

Sometimes practicing moderation can be much harder than simply quitting cold turkey. It takes a lot of willpower, however, to refrain from casual snacking. To give yourself the upper hand, adopt as many strategies as you can. You'll find plenty of good strategies that can help you in this article from FitDay.com: "7 Tips to Stop Snacking".

<http://www.fitday.com/fitness-articles/nutrition/healthy-eating/7-tips-to-stop-snacking.html>

- **Or, cut down on snacks...**

On the other hand, you may subscribe to the "everything in moderation" approach, including snacks. If you find snacking just too hard to give up, this WebMd article "5 Snacks to Enjoy (And 5 to Avoid)" can help you start snacking smarter.

<http://www.webmd.com/diet/guide/best-worst-snacks?page=2>

- **Create your own plan**

You might find the best success by developing a plan that borrows from different approaches. This comprehensive article gives you lots of concrete ideas and information that can help you do just that. It's called "How to Build Your Weight Loss Meal Plans and Make Losing Fat Easier on Yourself", and can be found at JCDFitness.com.

<http://jcdfitness.com/2015/03/how-to-build-your-weight-loss-meal-plans-and-make-losing-fat-easier-on-yourself/>

To Reduce and Manage Your Stress

Feel better, live longer, and be more enjoyable to be around.

- **Listen to music**

Music has a profound and proven effect on our psyche. Research has shown that songs at a certain speed can connect with our alpha brainwaves, the type of brainwave that is present when we're relaxed and receptive. This page on the University of Nevada Reno website has a helpful list of free music (via YouTube) that you can bookmark for those times that you need to de-stress.

<https://www.unr.edu/counseling/virtual-relaxation-room/releasing-stress-through-the-power-of-music>

- **Exercise**

It's no secret that exercising regularly will help bring down your stress levels. The thing that stops people from doing it is oftentimes not knowing which exercise is the right one for them. Rest assured, there's a way for *everyone* to exercise, regardless of their situation, and this article can help you determine which may work best for you. It's called "6 Questions to Help You Find Your Ideal Exercise", and is brought to us by the Huffington Post.

http://www.huffingtonpost.com/larry-sarokin/best-exercise-programs_b_4158115.html

- **Rely on your inner self**

Oftentimes stress is simply a result of us not having a good framework within our own minds, which we can overcome by looking at life from a different perspective. This article from MyWellBeing.com offers some practical ways to start looking at your life differently, and puts the power of de-stressing your life in your own hands.

<http://www.mywell-being.com/health/think/12-tips-finding-your-inner-strength>

- **Eat or drink specific foods or beverages**

You wouldn't think that food could have such a profound effect on our moods, but it most certainly does. Simply by avoiding these foods, you'll be taking a huge step towards cutting down on your stress. This article from EatThis, "Fifteen Foods that Make Your Depression or Anxiety Worse", can help you identify those foods that you might want to stay away from, especially when you're feeling stressed.

<http://www.eatthis.com/foods-make-anxiety-worse>

- **Change your diet**

"You are what you eat" isn't just a saying -- it's the truth. The things you put in your body can make a big difference not just in how you look, but how you feel and think. To take a big first step towards your goal of having less stress in your life, start with this article, "13 Foods That Fight Stress".

<http://www.prevention.com/mind-body/emotional-health/13-healthy-foods-that-reduce-stress-and-depression>

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<http://www.becomeanex.org/family-and-friends.php>

- **Take prescription medication**

Many people find prescription drugs to be incredibly helpful when they quit smoking. There is a lot of misinformation out there, so we'd encourage you to start with this article: "Which smoking medication is right for you?" It lists several options you might consider.

<https://smokefree.gov/explore-medications>

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