

Intentions

The Beginnings of an Empirically Derived Typology

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### Abstract

Ryan and Deci advanced motivation research by shifting the focus from Maslow's hierarchy of basic need fulfillment to examining types of motivation: intrinsic and extrinsic. While a helpful distinction, this two-dimension typology of motivation was never empirically derived. It also is primarily interested in *where* the motivation comes from—the source—not in *what* the motivation is, such as *to protect*, *to support*, *to persevere*, and so forth. The goal of this paper is to take initial steps to identify types of motivation at this more granular level. Types of specific motivation may be able to help us evaluate, which intentions lead to well-being, beyond goal attainment. To accomplish this, I review relevant literature, including Maslow's Hierarchy of Motivation, Ryan & Deci's Theories of Intrinsic and Extrinsic Motivation, and other content-based theories and studies of motivation. I then conduct two exploratory empirically-based exercises. The first exercise will analyze the 1000 most used infinitives in American English based on the Corpus of Contemporary American English (COCA). The second exercise uses the 28 groupings that emerged from that COCA analysis to code the intentions in 27 personal stories. As a result, I identify a list of 28 intentions that represented the vast majority of motivations identified in these exploratory exercises. Recommended next step includes writing items to measure each of these intentions and subjecting them to an exploratory factor analysis so that a typology of motivation might be empirically derived.

*Keywords:* intention, motives, motivation, qualitative, typology

### **Acknowledgements**

Oprah Winfrey attributed intention as the guiding principle of not only her company but also her life. When I heard this story in 2016, I was drawn to study the psychological construct that she was describing. For igniting this fire, I thank her. I would also like to thank Angela Duckworth. In the first weekend of her class, she asked us to draw a hypothetical construct of a concept we were interested in. I beamed with enthusiasm as I began to draw out what intention might lead to. I would like to thank her for encouraging me to ask good questions, for always answering my questions with helpful detail, for her advice, and for pushing me to look at constructs that already exist.

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## Introduction

For millennia, scholars have asked *why do people do what they do*. As a result, the study of motivation has been extensively explored in psychology (Kanfer, Frese, & Johnson, 2017; Cerasoli, Nicklin, & Ford, 2014; Wagner & Szamoskozi, 2012). Motivation is not necessarily observable through behavior. The same behavior demonstrated by two different individuals can have very different intentions. For example, consider two families interested in purchasing larger homes. In the discussion of one family, their primary intention might be to create more space for their two adopted children while the other is discontent with having the smallest house in the neighborhood and what the neighbors might think. As Zukav noted, although the action of buying bigger homes may look the same to an observer, the intentions of both families are not the same (2014).

The distinction between varying motivations has also been explored. Depending on different factors, a multitude of motives often influence behavior. There has been excellent research done in the motivation space looking at types of motivation, from a hierarchy of basic needs based on prepotency (Maslow, 1943; Alderfer, 1969; Wahba & Bridwell, 1976), to the variety of theories based on intrinsic motivation (Ryan & Deci, 2000; Gagne & Deci, 2005; Grant, 2008; Liu, Chen, & Yao, 2011; Deci, Connell, & Ryan, 1989), to trait-based theories of motivation (Barrick & Mount, 1991; Chang, Ferris, Johnson, Rosen, & Tan, 2012).

The study of intention can advance the field of psychology by looking at intentions in different contexts. The development of specific measures of intention can capture past intentions for further evaluation as well as potential future intentions to contribute to the goal-striving

literature. The nature of prospective and retrospective intentions may be conceptually different and would be worth the further exploration in this field.

We have a clearly formulated understanding of types of motivation (Ryan & Deci, 2000) and types of values (Maslow, 1943) but what seems to be missing is a systematic understanding of types of intentions (motives). This level of granularity can help to define specific types of motives across a range of various contexts. Considering the complexity of what drives behavior and the decision-making process, it can be difficult to identify which intentions are productive, helpful, or conducive to wellbeing. By developing the granularity of this typology of motivation and integrating it into existing theories, we can continue to advance our understanding of the question *why do people do what they do*. This paper has two parts. The first part explores the relevant literature in motivation. The second part of the paper will discuss two exploratory exercises of intentions that lead to hypotheses for future study.

### **Literature Review**

This literature review will examine theories of motivation and other relevant empirical findings, including an in-depth overview of intrinsic and extrinsic motivation, conflicting motivations, and the concept of Eudaimonia. I do not cover the development of motivation over the lifespan, how to change or manipulate motivation, context-specific based theories of motivation, or process-based theories of motivation.

### **Content-Based Theories of Motivation**

#### *Need Fulfillment*

In 1943 Abraham Maslow drafted what would serve a seminal theory in the direction of Human Motivation research and understanding. In this paper, he addressed new understandings

he had about previously postulated ideas and presented what has famously coined as the human's hierarchy of needs (Maslow, 1943). He presented the theory that there is a prepotency of needs, by which, higher needs cannot be satisfied until basic needs have been met. The hierarchy he proposed, beginning at the most basic needs, was: physiological needs, safety needs, love needs, esteem needs, and the need for self-actualization (Maslow, 1943). Keeping in this theory, he presented the rule that until each basic need had been adequately met, a higher order need, such as self-actualization could neither be focused on by the individual or pursued (Maslow, 1943). In order to further understand his observations, he noted that the hierarchy may not be as fixed as originally conceived, since there were many individuals who proved to be exceptions to the strict hierarchical nature that Maslow initially presented.

This theory of what drives behavior, along with its own internal critiques and questions, presents many considerations in the current study of motivation. When evaluating goal pursuit, Maslow (1943) even postulated that basic physiological needs such as hunger and sex drives were not an adequate center for motivation theory. This somatic function, upon further examination, proved to not be as common as initially presumed (Kanfer et al., 2017). The centering point of any theory of motivation should be based on ultimate goals rather than basic needs (Maslow, 1943). Motives or intentions point to ultimate goals as the most direct motivation for behavior. Poignant examples, such as martyrs and activists proved to be the most stand-out exceptions in Maslow's (1943) research since their pursuit of a value or belief allowed them to transcend this hierarchy altogether. While there is some empirical support for a hierarchy of needs, there is little support for the process that Maslow (1943) describes, where higher needs cannot be pursued until lower needs are fulfilled (Kanfer et al., 2017). These theories also do not

predict certain behaviors and don't account for many individual differences. (Kanfer et al., 2017).

### *Trait-Based Motives*

In the 1970's, McClellan began emphasizing the role that achievement motives play in behavior (McClellan, 1975). His work examined motives such as power, affiliation and achievement. For example, his 1985 study with Boyatzis found that 237 managers with a high to moderate need for power, low need for affiliation, and high activity inhibition were significantly correlated with managerial success and influence ( $r = .20, p < .05$ ) when compared to those who did not have this personality pattern (McClellan & Boyatzis, 1982). From this work the authors did not suggest that these components were the most essential to managerial success but wanted to begin to delineate these factors as an important characteristic.

Other characteristics of personality have also been found to mediate job performance. A study of 164 sales representatives looked at communion intentions, accomplishment intentions, and status intentions and the correlation with agreeableness, conscientiousness, and extraversion from a 5-factor model of personality (Barrick, Stewart, & Piotrowski, 2002). Their results indicated that motivational orientation had a mediating effect on Extraversion, Conscientiousness, and Performance. While evaluating this utility can be helpful and, in some cases, useful, it is important to understand how motivation can affect individuals when it is untethered to specific performance outcomes and can be applicable in a broader range of scenarios.



*Intrinsic and Extrinsic Motivation*

Ryan and Deci (2000) defined motivation as being propelled to do an action. Someone who did not have this impetus to act would have, what they rereferred to as, *amotivation* (Ryan & Deci, 2000). Prior to this theory, motivation was conceptualized and discussed as a unitary occurrence. The variation between individuals was the amount of motivation one could have. Ryan and Deci argued that it is not only the amount of motivation one has that matters but also the type of motivation that impacts behaviors and goals (Ryan & Deci, 2000). This theory was a shift to begin to understand the orientation of motivation, or the why of action. While the amount of motivation can remain the same between activities, the nature and focus of the motivation can affect outcomes (Ryan & Deci, 2000).

Within Ryan and Deci's (2002) Self-Determination Theory, intrinsic motivation is performing an action because the activity is inherently interesting or enjoyable while extrinsic motivation is doing something because it leads to a separable outcome (Ryan & Deci, 2002). This classic distinction of motivation inspired much research that supported the potency of intrinsic motivation (Ryan & Deci, 2000). Although this is the case, every activity cannot be intrinsically motivated (Ryan & Deci, 2000; Ryan & Deci, 2002). As such, understanding other types of motivation is essential to unpacking human behaviors.

In fact, Ryan & Deci (2002) presented updates to their initial theory that although intrinsic motivation and its potency cannot be dismissed, most behavior is done for a separable outcome. They present a taxonomy of human motivation that organizes motivation according to a continuum of autonomy, see Figure 1.

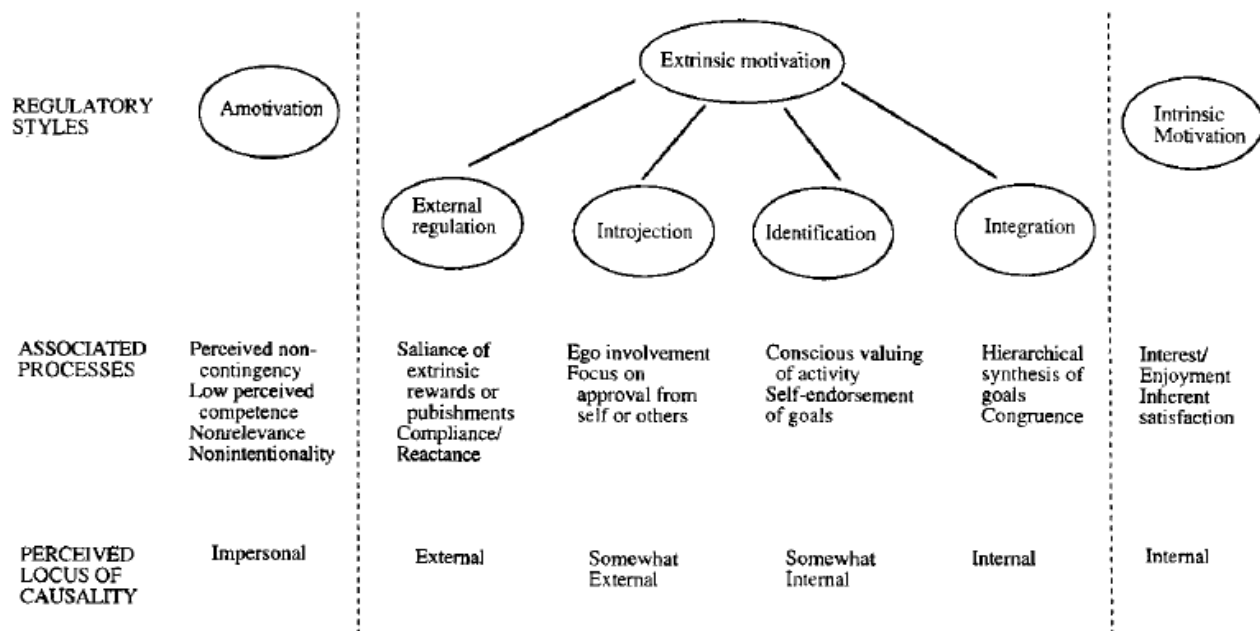


Figure 1 (Ryan & Deci, 2000)

This organization of motivation based on agency emphasizes the nature of separable outcomes as opposed to the outcomes themselves. This organization, while helpful, was not empirically derived. As a result, there may be other categories not included that could be worth considering. While the need for independence and autonomy may be an important consideration that drives behavior (Ryan & Deci, 2002), there could also be more meaningful ways to organize motivation that helps us understand outcomes in more goal-like terms.

Harackiewicz & Elliot (1993) explored the impact of achievement goals on intrinsic motivation in two studies. In the first study, participants received a goal (performance, mastery, or neutral) for a pinball game. They controlled for performance so that participants could experience similar levels of mastery. They then measured intrinsic motivation by a free choice period after the game. If participants chose to continue pinball (instead of playing other games) during the free choice time frame, that behavior (measured in seconds) was indication of intrinsic

motivation. In this study, the type of goal assigned to subjects did not have a significant impact on performance but subjects who were assigned goals did have more task-related thoughts ( $M = 5.42$ ) during the activity than the neutral group ( $M = 4.72$ ). The correlations between time and enjoyment did not differ between groups (Harackiewicz & Elliot, 1993). This result supported their hypothesis that achievement goals did not negatively affect intrinsic motivation, the effects were moderated by differences in achievement orientation. In second study, they attempted to replicate their findings with another group with the manipulation of the intervals of goal-attainment feedback. They also directly asked questions of intrinsic motivation. They found similar results for performance (Harackiewicz & Elliot, 1993). When they conducted a meta-analysis of both studies, Achievement and Goal type was significant ( $Z = 3.05, p < .01$ ) as well as patterns of enjoyment ( $Z = 2.00, p < .05$ ) (Harackiewicz & Elliot, 1993). These studies provided evidence that achievement goals seem to support intrinsic motivation.

In a longitudinal study of elementary school children, Lemos and Verissimo (2014) found that intrinsic and extrinsic motivation were not opposites on a single dimension of motivation but were rather two different and independent types of motivation. Their study focused on the role of intrinsic and extrinsic motivation in the school context because of its relation to learning and scholastic success. They surveyed two separate groups of students. The first group was 200 students split evenly as third, fourth, fifth, and sixth graders. The second group that was followed longitudinally consisted of 200 third grade students that were equally divided by gender. They adapted the scale of Intrinsic versus Extrinsic Orientation in the Classroom so that for students to choose the extent to which intrinsic and extrinsic motivation contributed independently to their behavior instead of a forced choice between extrinsic and intrinsic motivation (Lemos &

Verissimo, 2014). Teacher's ratings of student's performance served as the achievement measure.

Their results from principal component analysis confirmed their hypothesis that intrinsic and extrinsic motivation were independent variables that aligned with the previous understanding of the constructs (Lemos & Verissimo, 2014). Items that equated motivation to interest and enjoyment loaded under intrinsic motivation and items that depended on the teacher and preference for easy work loaded under extrinsic motivation. Intrinsic and extrinsic motivation are only correlated slightly and the strength and relationship of this correlation was different based on grade level, in grade 3 there was a modest positive correlation ( $r = .26, p < .001$ ), no correlations in grade 4 and 5, and a modest negative correlation ( $r = -.20, p < .001$ ) in grade 6. There was a significant positive correlation between achievement and intrinsic motivation at all grade levels. There was a significant, negative correlation between extrinsic motivation and achievement at grade 4. From this study both intrinsic and extrinsic motivations seem to have different implications for different behaviors. For tasks that are particularly difficult, extrinsic motivation can prove to be very useful.

Grant (2008) looked to integrate theories of intrinsic motivation and prosocial motivation. Prosocial motive is to be moved on behalf of someone else or to help other people (Batson, 1987). In a study of 58 firemen, Grant (2008) measured prosocial and intrinsic motivation using a self-report scale. He measured persistence as the outcome measure two months later using overtime data. In his analysis, he found that prosocial motivation, and intrinsic motivation, were positively correlated ( $r = .41, p = .001$ ). He found that prosocial motives did not predict overtime

( $p = .89$ ) but that intrinsic motives ( $p = .04$ ) and the interaction of the two motives did ( $p = .02$ ) (Grant, 2008).

Grant (2008) also looked at the interaction effects of these motives, job satisfaction, performance, and productivity for 140 fundraisers who work by phone. He first did a factor analysis to confirm that prosocial motivation and intrinsic motivation were indeed distinct categories. In this study, he found that neither prosocial motives or intrinsic motives alone were predictors of performance or productivity but the interaction of the two motives did predict increased outcomes with 11 more calls made and \$200 more raised on average. The findings of these two studies support that interaction between multiple prosocial and intrinsic motives were predictive of both performance and productivity (Grant, 2008).

Autonomy is another widely studied contributor to intrinsic motivation (Ryan & Deci, 2002). Since a desire to support one's family is a substantive reason for work, this study looked at the role of family motivation when autonomy within a job and intrinsic motivation may be low (Menges, Tussing, Wihler, & Grant, 2017). Family motivation in this study is defined as a specific type of prosocial motivation fueled by a desire to support one's family. The study looked at employees of a Mexican company that processes coupons. The study surveyed 151 employees and asked them to keep a diary of motivation for two weeks following the initial survey. The sample was almost completely comprised of women, representative of the company's demographics. They measured intrinsic motivation and family motivation using a scale that was context specific for work. They used a two-item scale to measure daily energy and stress and job performance was assessed through an objective measure (Menges et al., 2017). Using a factor analysis, they found that intrinsic motivation, external motivation, and family motivation were

three distinct constructs. Job performance was strongly associated with motivation ( $r = .13, p < .01$ ).

The first hypothesis of the study was that family motivation is positively correlated with performance outcomes. This was supported by their findings ( $r = .13, p < .01$ ). The second and third hypotheses were that intrinsic motivation moderates the relationship between family motivation and performance. When intrinsic motivation is high, family motivation will be less positively associated with performance. When intrinsic motivation is low, family association will be more positively associated with energy. The second hypothesis was supported ( $b = -.39, p < .01$ ). The findings for third hypothesis showed when intrinsic motivation was low, family motivation was positively correlated with energy ( $b = .19, p = .05$ ). The authors also predicted that family motivation would be likely to decrease stress. They found the opposite to be true ( $\gamma = .33, p < .01$ ). Overall, prosocial family motivation seems to help bolster motivation to complete uninteresting work (Menges et al., 2017). The range of studies explored here provide evidence that both intrinsic and extrinsic motivation, as well as their interaction, can influence outcomes. By exploring how multiple motives work together, we can begin to understand the complexity of motivation.

### *Conflicting Motivations*

Intrinsic motivation is fueled by enjoyment and interest, this distinction does not include other internal motives that may not be driven by those two variables. In order to evaluate multiple motives in West Point cadets, Wrzesniewski and colleagues (2014) shifted this distinction to internal instead of intrinsic and instrumental instead of extrinsic. Within internal motives, Ryan and Deci (2000) made a distinction between short and long-term motives, that is

longer than a few minutes (Wrzensniewski et al., 2014). In Wrzensniewski and colleagues' research, they tested how internal and instrumental motives amplify or diminish behaviors over time. In their study of 11,320 West Point Cadets over a span of 10 years, they measured a variety of outcomes, such as promotions, extensions of service, and officer commissions. They examined the impact of holding multiple motives, both internal and instrumental, on these outcomes. They hypothesized that holding strong internal motives would correlate with both perseverance and heightened performance but when the internal motives occur alongside instrumental motives, both persistence and performance will suffer (Wrzensniewski et al., 2014). Officers completed surveys that assessed their motives and reasons for joining West Point. An example of an internal motive that was assessed was *I joined West Point because I desire to have sound leadership*. An example of an instrumental motive tested was *I joined West Point because of the prospect of obtaining a good job* (Wrzensniewski et al., 2014). In their analysis of this archival data, they found that officers were more likely to leave after their completion of the mandated 5-year service except when their internal motives were the strongest ( $p = 0.01$ ) (Wrzensniewski et al., 2014). Their hypothesis held true; cadets holding strong internal motives for going to West Point as well as instrumental based reasons were more likely to exit the military after the mandated time ( $p = 0.0003$ ). As instrumental motives increased, in comparison to internal motives, so did attrition (Wrzensniewski et al., 2014).

Grant and colleagues (2011) proposed that differences in autonomy and controlled motivations impact both initiative and performance outcomes. They conducted two studies that looked at how multiple motivations shape the effectiveness of initiative and subsequent behaviors. The authors explored autonomous and controlled motivations as independent factors,

as opposed to opposites. The first study looked at juniors and seniors in college who were applying to jobs. The applicants were given a survey that assessed autonomous motivations (*ex: because I enjoy the process*), controlled motivations (*ex: because I don't want to disappoint my parents and mentor*), initiative, and outcomes (number of job offers) two to three months apart. Their three-factor solution model clearly showed that initiative, autonomous motivation, and controlled motivation were three distinct factors (Grant, Nurmohamed, Ashford, & Dekas, 2011). Initiative was most strongly related to outcomes, when autonomous motivation is high and controlled motivation is low, doubling the number of job offers on average (2:1). These results supported the hypothesis (Grant et al., 2011). The second study looked at more objective measures of performance of employees in a call center. The employees were given a survey to assess both autonomous motivation and controlled motivation. Initiative was measured by the number of calls made in an hour. This study also confirmed the two motivations were distinct through a confirmatory factor analysis. Their results indicated that employees high on autonomous motivation and low on controlled motivation take more initiative which resulted in approximately \$100 more in revenue per hour for that call center (Grant et al., 2011). These studies have two important implications, the confirmatory factor analysis of distinct motivations and that outcomes were most positive when multiple motivations were imbalanced- more autonomous motivation than controlled motivation.

In two studies of students, the first cohort- high school students and the second- college students, they looked to see what kind of motives might be most dominant for academic behavior (Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). They specifically looked at autonomous and controlled motivation within these two groups of students and a variety of their



learning outcomes. In the first study, they surveyed 800 high school students on measures of *academic self-regulation, cognitive processing, meta-cognitive regulation, determination, cheating, and academic performance*. They used a cluster analysis to distinguish four clusters of autonomy (low or high) and controlled motivation (low or high) and generate 4 distinct motivational outcomes (Vansteenkiste et al., 2009). Autonomous motivation was positively correlated with self-regulation, cognitive processing, metacognitive processing, determination, and academic performance. It was negatively correlated with cheating. Controlled motivation showed the opposite correlations (average  $z$  value for all outcomes = 10.18). In the second study, they surveyed 484 college students, who were training to become teachers, regarding *academic self-regulation, learning outcomes* and *perceived teaching style*. Similar patterns between high autonomous motivation and low controlled motivation with positive outcomes were found in the second study as well (average  $z$ -value = 9.26). The studies showed evidence in support of motivational elements of self-determination theory, specifically, autonomy, competence, and relatedness.

#### *Considerations for Organizational Psychology*

The literature review of this paper covered studies that were primarily concerned with how motivation can impact workplace behaviors. There has already been progress in looking at other types of motivations, specifically Grant's (2008) studies on pro-social motivation. Organizations also seem to be increasingly interested in addressing the well-being of their employees, not just as workers but as individuals. The exploration of intentions does not have to stop at the individual level. As organizations strategically plan and make structural changes, evaluating the company's motivation can help to influence and clarify outcomes. Since the types

of motivation that are often measured in workplaces are intrinsic and extrinsic, this level of granularity can help to expand these measures to look at specific intentions to track performance, movement in a company/between jobs, well-being, and other more general outcomes.

### *Considerations for Educational Psychology*

The study of Educational Psychology is also interested in motivation. Although not directly mentioned in this review, exploring motivation and intentions through development can be an informative aspect of developing programs, interventions, and the structure of schools. A large aspect of adolescent education isn't anchored in academic achievement. The importance of behavior and character education have grown into focus as well. By adding in the granularity of teaching about intention, we can begin to understand what is driving behavior instead of just correcting behavior as it manifests. This consideration goes beyond direct instruction and can also influence strategic decisions.

Within intrinsic or extrinsic motivation, there are multiple motives that impact outcomes. Distinguishing between motives types can significantly shed light on behavior. If there are different types of motives, are there some motives that are *better* than others? For the sake of the question at hand- *What intentions lead to well-being?* I will delineate what is meant by *better* in the context of this work.

### *Defining the Good*

In 1998, Martin E. P. Seligman was elected to be president of the American Psychological Association. In his inaugural address, he presented an audacious charge to the association and its practitioners (Seligman, 2002). He posited that psychology had done a good job developing a descriptive and prescriptive science about mental illness. He also argued that

the field had not done enough to study what makes life worthwhile and the external and internal conditions surrounding those who thrive. His mission was to develop an area of psychology that had not received much attention, the study of well-being (Seligman, 2002). Traditional psychology, prior to the turn of the millennium, focused much of its intellectual and experimental efforts in unpacking the deficits present in human beings. The study of positive psychology is not meant to replace traditional psychology, but rather, add a more inclusive perspective (Seligman, 2002).

As a result, the development of positive psychology has helped led to research and interventions that focused on human flourishing. Considering the early stage of this science, many researchers and practitioners in the field are currently working to both define and refine existing constructs and positive interventions. There is also work that focuses on expanding the repertoire of studies and interventions as well. As the research is growing, individuals, organizations, and communities are embracing and implementing positive interventions. By considering theoretical, empirical, and experiential understandings of positive psychology and positive interventions, one may be better suited to guide oneself, as well as others, on the path of well-being.

Considering the complexity of the definition of good or positive, Pawelski (2016) derived a normative definition of the term. He describes positive as simple preference- something that one would prefer to be included rather than excluded. The inclusion parameters include relative preference- something that is included over something else, sustainability- something that stays positive over time, between persons, across effects, and is scalable across structures (Pawelski,

2016). These conceptual considerations are essential to understanding which intentions can lead to well-being.

The roots of human flourishing arguably began in 350 B.C.E.; Aristotle was articulating his considerations about what constitutes a well-lived life (Ryff & Singer, 2006). Aristotle wasn't necessarily concerned with what it means to be good, instead one of the most seminal questions he posed was, "what is the highest of all good achievable by human action?" (Ryff & Singer, 2006, 15). Aristotle went on to answer this inquiry by equating the highest of goods as Eudaimonia, or happiness found within the balance of virtue and joy one feels when striving toward their potential (Ryff & Singer, 2006). In many regards, he postulated that the highest good was not subjective well-being but rather goal-directed and purposeful (Ryff & Singer, 2006). Considering the emphasis that Aristotle places on habitually practicing virtues in order to live *The Good Life* (Melchert, 2002), it is completely fitting that James (1892/1984) explains the importance of habit in psychology. He approaches his explanation of this phenomena through the physiological processes which occur in the brain as behaviors become habitual. In many ways, James provides the theoretical framework for the biological phenomenon to support Aristotle's claims about *The Good Life*.

James (1892/1984) explains that habits are simply repeated actions that become increasingly easier to give into until they become a deed or series of deeds disconnected from conscious thought. I would extend James' claim by positing that habit is more than simply repeated actions, it is the process of repeating clear intentions that begin these neurological pathways that are deepened by habitual action. In order for an intention and action to become our ally through habit, it must not be conflicted. As we have seen in the literature, internal and

instrumental motives can either be in conflict (Wrzensniewski et al., 2014) or work to amplify performance (Grant, 2008). Multiple motives undoubtedly complicate behavior and outcomes, especially when the aim of the behavior is to live *The Good Life*.

The classic definition of intrinsic motivation, an action that is done because it is interesting or enjoyable (Ryan & Deci, 2000), may not always align with the pursuit of well-being. Considering a eudaemonic profile, that which is enjoyable may not always be beneficial and that which is beneficial may not always be enjoyable or interesting. In an attempt to answer the question, what intentions lead to well-being, I began by considering what kind of data might be most useful. There are three objectives for the following exploratory exercises the data collection had to meet. The data had to include both context specific data and context absent data in order to have a comprehensive collection. The data also had to be archival as to not to confound intentions that have already happened with prospective intentions. The third aim was to collect data rich stories of individuals at their perceived best. The first two objectives help us begin to carve out the space of intention and the final objective helps us to begin to understand which of those intentions might contribute to wellbeing.

### **Exploratory Empirically-Based Exercises**

The space of intention can be difficult to map. One approach might be to take a lesson from language to help capture the construct. Intentions are not behaviors that can simply be conjugated as verbs. Intentions are also not tangible things and therefore cannot be considered as normal nouns either. A viable solution to unify the classification of intentions is to conjugate intentions in the infinitive form. The infinitive, in the English language, is a verbal, or verb form, which conjugates verbs into nouns. Infinitives place the article ‘to’ in front of the verb (i.e., *to*

*help*). In the exercises below, intentions are denoted as infinitive verbs that function as nouns structurally within sentences. Intentions are not specific actions (action verbs) but act more as nouns structurally. Therefore, the conjugation of the intention matters. For example: ‘*I supported her*’ would not be an infinitive; it would be an action verb. The intention would have to appear in the form of ‘*to support*’ in order to represent the cognitive reasoning that supports the manifestation of behavior.

In order to empirically derive a typology of intentions, there are three key steps: intention identification, item creation, and factor analysis, which would result in scale creation. To begin to identify intentions for further study, I conducted two empirically-based exploratory exercises for intention identification. The item creation and factor analysis will be left for later work.

#### *Exploratory Exercise A- COCA Data*

This project does not aim to capture an exhaustive list of all possible intentions. Rather, the objective was to identify more frequent intentions that relate to wellbeing. Thus, in the first exploratory exercise, I used a method similar to one of Clifton and colleagues (2017) used to identify primal world beliefs. Their method involved the analysis of 840 adjectives from the Corpus of Contemporary American English (COCA) that could be used to describe a belief about the world. For this work, I analyzed the 1000 most frequently used infinitives in contemporary American English. This list was also drawn from the Corpus of Contemporary American English (COCA). This database is a collection of over 560 million of the most frequently used words selected from five written genres from 1990-2012.

The initial list of 1000 words was narrowed to 421 words by removing entries that were irrelevant to the psychological construct of motive (e.g. *mess, download, run, melt, etc.*). These

421 words were then organized into groups of comparable granularities based on similarity. Since many of the words were synonymous, groupings helped provide more meaningful analysis. When the groupings were not obvious, an online dictionary/thesaurus was used as a reference to determine the most useful definition of the word. From this process, 28 groupings of intentions emerged. The frequency of each grouping's representation was also calculated. In other words, out of 450 infinitives the grouping of '*to support*' was represented 66 times. See Figure 2 for other observations. The intentions that appeared with the highest frequency were to support (66), to understand (45), to grow (31), to teach (29), to challenge (26), to dominate (23), and to thwart (21).

Category from COCA	Frequency in COCA
support	66
understand	45
grow	31
teach	29
challenge	26
dominate	23
thwart	21
avoid	19
contribute	18
persevere	17
connect	14
clarify	12
create	12
protect	11
antagonize	10
please	9
compete	8
take	8
manipulate	7
impress	6
enjoy	5
save	5
believe	4
deceive	4
disconnect	4
empathize	2
honor	2
sacrifice	2

Figure 2. The list of intentions from COCA analysis.



The use of a robust and comprehensive database that is not restricted by context is a practically useful methodology to help understand the scope of the space. However, there are several important limitations. For example, the list was coded, grouped, and analyzed by only one person. Multiple coders would be needed to establish inter-rater reliability for the codes as well as the groupings. Another limitation of this method was that the words are provided as a list, without context. In order to derive further meaning, looking at intentions within specific contexts will be important. For future directions of this exploration, I suggest expanding the analysis with multiple coders and possibly include other dimensions found in a range of context specific texts, similar to the method used by Clifton and colleagues (2017). Although this data is not able to offer insight into the contexts of these intentions, frequency is an indicator of importance.

In order to further understand intentions in specific contexts, the next exercise looked to evaluate intentions within personal stories. The 28 categorical groupings from COCA were used to analyze and code intentions in exploratory exercise B.

#### *Exploratory Exercise B- Coding Context Specific Intentions*

Since the COCA database captures the frequency of words in the English Language without context it was important to evaluate intentions within context specific stories. The second study aimed to code the intentions of individuals who are acting in a way that they are particularly proud of. At the beginning of courses in Positive Psychology, students are asked to write a Positive (or Serious) Introduction that they use to initially present themselves to the class (Peterson, 2006). The introduction asks students to recount a time when they were at their best. The groupings of intentions derived from the COCA data set served as the final set of codes to organize the and analyze the data set.

The written statements from the current (2018) cohort of Masters Students in the Applied Positive Psychology Program at The University of Pennsylvania were coded, using the methods of grounded theory (Charmaz, 2006), for the intentions of the participants at their self-reported best. The statements were already written and posted on an internal course site, Canvas.

This sample consisted of 27 stories from 27 individuals, ages 21 to 75, including the author, enrolled in the 2018 Masters of Applied Positive Psychology program at The University of Pennsylvania; 22 were female.

### **Analysis**

The analysis was based on Grounded Theory, which is a set of procedures and methodology that helps researches see patterns and develop hypotheses for small data sets and theories for larger, comprehensive data sets (Swanson & Holton, 2005; Charmaz, 2006). The first step of the methodology is the collection and cleaning of the statement. Once the study was approved by the IRB and permission was obtained from the participants, the individuals stories were copied from the internal class website Canvas. The statements were then organized and assigned numbers through a random generator to protect the identity of the subjects. The data was cleaned of any personal identifiers, replacing any names with pronouns. The next step was familiarization by assigning the set of initial codes. All of the statements were read for initial comprehension and intentions were assigned codes. During this process, keeping memos was a critical step in order to track thoughts and questions about the data (Merriam, 1988). During the initial pass, codes were generated based on what the data was saying based on the context, without trying to fit the intentions into a category based on the COCA groups. From this initial list, the intentions were sorted into the 28 categories derived from the COCA data. According to

best practices in qualitative research, categories were as exhaustive as possible, relevant to the research question, mutually exclusive, and conceptually congruent (Swanson & Holton, 2005).

## Results

Many intentions from the COCA analysis were absent from the positive introductions. The intentions *to antagonize*, *to compete*, *to deceive*, *to dominate*, *to enjoy*, *to impress*, *to take*, and *to thwart* were not represented in the data set at all. While the intention to *support* appeared over 134 unique times in a sample of 27 stories. This result has significant implications for further study of the construct. Aligning with the findings from Grant's (2008) studies, prosocial motives may play an important role in not only enhancing performance but also in individual's self-evaluations of their most desirable and best behaviors. To provide further context, the intentions that were included in this group is represented in Figure 4. The other groups of intentions that had a high representation were *to persevere* (40), *to understand* (40), *to connect* (38), *to grow* (38), *to sacrifice* (28), and *to teach* (25).

Category from COCA	Frequency in IRB Study
support	134
persevere	40
understand	40
connect	38
grow	38
sacrifice	28
teach	25
believe	16
empathize	12
create	11
protect	11
avoid	10
contribute	6
clarify	4
honor	4
manipulate	4
challenge	3
disconnect	2
save	2
please	1
antagonize	0
compete	0
deceive	0
dominate	0
enjoy	0
impress	0
take	0
thwart	0

Figure 4. The list of intentions from positive introductions analysis.

*Limitations*

This exercise is also of limited value. More robust data analysis would require a larger, representative data set of positive introductions, and more coders to establish inter-rater reliability. Having a 360 evaluation of individuals at their best, where they have a co-worker and family member complete a positive introduction on their behalf would also be able to provide a more nuanced profile of an individual's intentions in this context. With the variability of intentions within individuals and between individuals, it may be helpful to further develop this coding system through a more sophisticated platform so that we can begin to measure the intentions of individuals in a variety of experiences.

If awareness is the first step to the possibility of change, then this clarifying process can prove to be essential in understanding this phenomenon. This data set was also pulled from students who had self-selected to enroll in a full-time, year-long, Masters of Applied Positive Psychology program at the University of Pennsylvania to study well-being. As a result, these frequencies of these intentions would not be generalizable to a wider population of all individuals at their perceived best. A possible future direction would be to compare the intentions of Wharton MBA students' serious introductions to this data set to see what similarities might be present. The final step in the coding process is to generate meaning (Charmaz, 2006), and although the patterns derived from this exercise aren't comprehensive enough to generate a hypothesis, the systematic review may be relevant to a hypothesis for further exploration.

### Future Directions

Ryan and Deci greatly contributed to motivation research by advancing motivation literature from Maslow's hierarchy of basic need fulfillment to examining types of motivation: intrinsic and extrinsic. While this differentiation has been helpful to various literatures and subsequent studies, this typology of motivation was not empirically derived. The focus of this theory is also primarily interested in *where* the motivation comes from—the source—not in *what* the motivation is, such as *to protect, to support, to persevere*, and so forth. This paper aimed to take initial steps to identify types of motivation at this more granular level with the primary guiding question of *what are possible groupings of intentions?* The paper also began to look at intentions that are ideal candidates for further study to answer the question *what intentions lead to well-being*.

This project aimed to begin to define the space of by systematically identifying what would be included and excluded from individual intentions and groupings of intentions. Based on the previous two exercises, my suggestion is that the 28 intentions identified through these empirical exercises be further studied through factor analysis. The validation of these groups can have many implications for various studies and applications of psychology broadly. In terms of looking at intentions specifically related to well-being, I suggest collecting a more robust and representative sample of positive introductions. There seems to be a distinct difference in the frequency of intentions found in these stories, with the first 12 seeming to be the most prominent. In order to narrow the list of intentions related to well-being moving forward, it would be important to draw from a more representative and robust sample. Once the intentions from the

larger sample are analyzed, the intentions identified could lead to a factor analysis of intentions related to well-being.

### *Considerations for Positive Psychology and Broader Application*

Positive Psychology, as a developing field, can benefit from considering the role of intentions within well-being. Considering the example presented initially in the paper of the two families interested in buying a house. Both families are motivated by extrinsic ends, adoption and competition. By evaluating the intentions within each motivation, we are able to clearly distinguish between a desire to support and a desire to compete. Once this work is further developed, intentions can be organized into categories that seem to support well-being and categories that seem to undermine well-being. This information can be critical to the development of theory and practice within this developing field.

### **Conclusion**

So far, psychologists have yet to examine the content of motivation at a level of granularity that would be particularly useful for clinical, wellbeing, and research purposes. By empirically deriving a typology and exploring what contexts seem represent various intentions, psychologists can begin to fill that gap. This paper has conducted part one of a three-part project including intention identification, item creation & factor analysis. By specifying types of motivation, at the level of intention, we can work towards clarifying the layers of complex behaviors with the hope of improving well-being.

### **Appendix A: Explanation of Positive Introduction Task**

*This is the original assignment from the MAPP 602 course that served as the prompt for the written positive introductions.*

Your one-page writing assignment is to craft a “positive introduction.” During Immersion Week, you will have the opportunity to introduce yourself in this positive way to your “cohort,” the small group of 3-5 students you will be working closely with over the course of the semester. You will want to bring your one-page introduction to the MAPP 602 class on Thursday, September 7. You will receive more instructions at that time. To prepare your introduction, think of a time in your life when you were at your best. It may have been in response to a particular challenge, or it may have been simply an initiative you took to make a good situation even better. Write the introduction as concretely as you can, allowing the facts of the story to demonstrate your strengths, and think of a powerful way to end it. This is an unusual exercise, and it may feel awkward at first. (It may feel like bragging—something we’ve all been taught not to do!) We’ll talk more about this during Immersion Week. Please keep in mind that the more meaningful the experience you entrust to your cohort members, the deeper and richer will be the beginning of your work together. What we are looking for is authenticity, which may or may not include any type of heroism. Your introduction may be about an extraordinary, life-changing experience; alternatively, it may just as effectively be about you at your everyday best. Chris Peterson described positive introductions (he called them “serious introductions”) in more detail in his *Primer in Positive Psychology* (see pages 25-28). You will want to read those pages in preparation for writing your own positive introduction.



### Appendix C: Intention Codes from COCA

#1- Infinitive Form	Category	#2- Intrapersonal	#3 Essential to Behavior
BOTHER	antaganize	Yes	Yes
DENY	antaganize	Yes	Yes
HATE	antaganize	Yes	Yes
THREATEN	antagonize	Yes	Yes
SCARE	antagonize	Yes	Yes
TRIGGER	antagonize	Yes	Yes
DIMINISH	antagonize	Yes	Yes
INVADE	antagonize	Yes	Yes
UPSET	antagonize	Yes	Yes
OFFEND	antagonize	Yes	Yes
AVOID	avoid	Yes	Yes
LOSE	avoid	Yes	Yes
PASS	avoid	Yes	Yes
FORGET	avoid	Yes	Yes
ESCAPE	avoid	Yes	Yes
BLAME	avoid	Yes	Yes
IGNORE	avoid	Yes	Yes
RESIST	avoid	Yes	Yes
QUIT	avoid	Yes	Yes
COPE	avoid	Yes	Yes
ABANDON	avoid	Yes	Yes
WITHDRAW	avoid	Yes	Yes
DISMISS	avoid	Yes	Yes
SUPPRESS	avoid	Yes	Yes
CONCEAL	avoid	Yes	Yes
ISOLATE	avoid	Yes	Yes
DISTRACT	avoid	Yes	Yes
OVERLOOK	avoid	Yes	Yes
RETREAT	avoid	Yes	Yes
HOPE	believe	Yes	Yes
PRAY	believe	Yes	Yes
DREAM	believe	Yes	Yes
RAISE	challenge	Yes	Yes
FIGHT	challenge	Yes	Yes
ARGUE	challenge	Yes	Yes
TEST	challenge	Yes	Yes
ATTACK	challenge	Yes	Yes
CHALLENGE	challenge	Yes	Yes
NEGOTIATE	challenge	Yes	Yes
QUESTION	challenge	Yes	Yes
CONFRONT	challenge	Yes	Yes
APPEAL	challenge	Yes	Yes
CORRECT	challenge	Yes	Yes
DEMAND	challenge	Yes	Yes
COMPLAIN	challenge	Yes	Yes
DISAGREE	challenge	Yes	Yes
DIFFER	challenge	Yes	Yes
PROTEST	challenge	Yes	Yes
REFUSE	challenge	Yes	Yes

OPPOSE	challenge	Yes	Yes
COUNTER	challenge	Yes	Yes
CRITICIZE	challenge	Yes	Yes
STRUGGLE	challenge	Yes	Yes
DOUBT	challenge	Yes	Yes
DEBATE	challenge	Yes	Yes
OBJECT	challenge	Yes	Yes
PROVOKE	challenge	Yes	Yes
REPEAL	challenge	Yes	Yes
DISTINGUISH	clairify	Yes	Yes
SEPARATE	clairify	Yes	Yes
INTERPRET	clairify	Yes	Yes
CONSOLIDATE	clairify	Yes	Yes
REVISE	clairify	Yes	Yes
EMPHASIZE	clarify	Yes	Yes
CLARIFY	clarify	Yes	Yes
EXTRACT	clarify	Yes	Yes
EXHIBIT	clarify	Yes	Yes
SPECIFY	clarify	Yes	Yes
STRESS	clarify	Yes	Yes
PINPOINT	clarify	Yes	Yes
WIN	compete	Yes	Yes
PROVE	compete	Yes	Yes
ACHIEVE	compete	Yes	Yes
PERFORM	compete	Yes	Yes
REPLACE	compete	Yes	Yes
BEAT	compete	Yes	Yes
COMPETE	compete	Yes	Yes
SUCCEED	compete	Yes	Yes
INVOLVE	connect	Yes	Yes
RELATE	connect	Yes	Yes
REFER	connect	Yes	Yes
INCORPORATE	connect	Yes	Yes
COOPERATE	connect	Yes	Yes
INTEGRATE	connect	Yes	Yes
COORDINATE	connect	Yes	Yes
UNITE	connect	Yes	Yes
EXCHANGE	connect	Yes	Yes
TIGHTEN	connect	Yes	Yes
COLLABORATE	connect	Yes	Yes
BRIDGE	connect	Yes	Yes
REASON	connect	Yes	Yes
MERGE	connect	Yes	Yes
RESPOND	contribute	Yes	Yes
PARTICIPATE	contribute	Yes	Yes
SUGGEST	contribute	Yes	Yes
ENGAGE	contribute	Yes	Yes
REPRESENT	contribute	Yes	Yes
CONTRIBUTE	contribute	Yes	Yes
COMMUNICATE	contribute	Yes	Yes

INDICATE	contribute	Yes	Yes
COMMENT	contribute	Yes	Yes
REACT	contribute	Yes	Yes
DECLARE	contribute	Yes	Yes
INSIST	contribute	Yes	Yes
PROPOSE	contribute	Yes	Yes
INITIATE	contribute	Yes	Yes
STEER	contribute	Yes	Yes
CONFESS	contribute	Yes	Yes
CONTEND	contribute	Yes	Yes
ENRICH	contribute	Yes	Yes
CREATE	create	Yes	Yes
IMAGINE	create	Yes	Yes
GENERATE	create	Yes	Yes
RESTORE	create	Yes	Yes
DESIGN	create	Yes	Yes
REFORM	create	Yes	Yes
RESEMBLE	create	Yes	Yes
EXPERIMENT	create	Yes	Yes
REPLICATE	create	Yes	Yes
INVENT	create	Yes	Yes
MODEL	create	Yes	Yes
RECONSTRUCT	create	Yes	Yes
LIE	decieve	Yes	Yes
SNEAK	decieve	Yes	Yes
FOOL	decieve	Yes	Yes
COPY	decieve	Yes	Yes
EXCLUDE	disconnect	Yes	Yes
DIVIDE	disconnect	Yes	Yes
UNDO	disconnect	Yes	Yes
DISCRIMINATE	disconnect	Yes	Yes
KILL	dominate	Yes	Yes
END	dominate	Yes	Yes
BREAK	dominate	Yes	Yes
CONTROL	dominate	Yes	Yes
DESTROY	dominate	Yes	Yes
ELIMINATE	dominate	Yes	Yes
CAPTURE	dominate	Yes	Yes
IMPOSE	dominate	Yes	Yes
ENFORCE	dominate	Yes	Yes
DEFEAT	dominate	Yes	Yes
DOMINATE	dominate	Yes	Yes
PUNISH	dominate	Yes	Yes
EXPLOIT	dominate	Yes	Yes
MANIPULATE	dominate	Yes	Yes
ASSERT	dominate	Yes	Yes
SNAP	dominate	Yes	Yes
ERASE	dominate	Yes	Yes
COMMAND	dominate	Yes	Yes
CONDEMN	dominate	Yes	Yes

DICTATE	dominate	Yes	Yes
CONQUER	dominate	Yes	Yes
OVERTURN	dominate	Yes	Yes
RESTRAIN	dominate	Yes	Yes
FEEL	empathize	Yes	Yes
INCLUDE	empathize	Yes	Yes
ENJOY	enjoy	Yes	Yes
ATTRACT	enjoy	Yes	Yes
SATISFY	enjoy	Yes	Yes
RELAX	enjoy	Yes	Yes
INDULGE	enjoy	Yes	Yes
BELIEVE	believe	Yes	Yes
CHANGE	manipulate	Yes	Yes
BUILD	grow	Yes	Yes
DEVELOP	grow	Yes	Yes
IMPROVE	grow	Yes	Yes
INCREASE	grow	Yes	Yes
GROW	grow	Yes	Yes
ADD	grow	Yes	Yes
OPEN (expand)	grow	Yes	Yes
RECEIVE	grow	Yes	Yes
GAIN	grow	Yes	Yes
EXPAND	grow	Yes	Yes
RISE	grow	Yes	Yes
EXTEND	grow	Yes	Yes
SPREAD	grow	Yes	Yes
ADJUST	grow	Yes	Yes
ADVANCE	grow	Yes	Yes
TRANSFORM	grow	Yes	Yes
ADAPT	grow	Yes	Yes
MAXIMIZE	grow	Yes	Yes
REGAIN	grow	Yes	Yes
EVOLVE	grow	Yes	Yes
THRIVE	grow	Yes	Yes
ACCELERATE	grow	Yes	Yes
UPGRADE	grow	Yes	Yes
BROADEN	grow	Yes	Yes
CAPITALIZE	grow	Yes	Yes
CULTIVATE	grow	Yes	Yes
PROFIT	grow	Yes	Yes
FLOURISH	grow	Yes	Yes
SIMULATE	grow	Yes	Yes
FORGIVE	grow	Yes	Yes
COMPROMISE	grow	Yes	Yes
RESPECT	honor	Yes	Yes
HONOR	honor	Yes	Yes
INSPIRE	impress	Yes	Yes
IMPRESS	impress	Yes	Yes
EXCEED	impress	Yes	Yes
OBEY	impress	Yes	Yes

SHINE	impress	Yes	Yes
EMULATE	impress	Yes	Yes
CONVERT	manipulate	Yes	Yes
MODIFY	manipulate	Yes	Yes
LURE	manipulate	Yes	Yes
DIVERT	manipulate	Yes	Yes
PERSUADE	manipulate	Yes	Yes
SUBSTITUTE	manipulate	Yes	Yes
START	perservere	Yes	Yes
BEGIN	perservere	Yes	Yes
WAIT	perservere	Yes	Yes
PRODUCE	perservere	Yes	Yes
FINISH	perservere	Yes	Yes
COMPLETE	perservere	Yes	Yes
PURSUE	perservere	Yes	Yes
OVERCOME	perservere	Yes	Yes
ACCOMPLISH	perservere	Yes	Yes
CLIMB (advance)	perservere	Yes	Yes
WITHSTAND	perservere	Yes	Yes
UNDERTAKE	perservere	Yes	Yes
MASTER	perservere	Yes	Yes
UPHOLD	perservere	Yes	Yes
ABIDE	perservere	Yes	Yes
PERSIST	perservere	Yes	Yes
ENDURE	perservere	Yes	Yes
BELONG	please	Yes	Yes
PLEASE	please	Yes	Yes
COMPENSATE	please	Yes	Yes
ENTERTAIN	please	Yes	Yes
ADMIRE	please	Yes	Yes
CONFORM	please	Yes	Yes
REWARD	please	Yes	Yes
IMITATE	please	Yes	Yes
COMPLEMENT	please	Yes	Yes
PROTECT	protect	Yes	Yes
WATCH	protect	Yes	Yes
SAVE	protect	Yes	Yes
COVER (conceal)	protect	Yes	Yes
DEFEND	protect	Yes	Yes
MONITOR	protect	Yes	Yes
WARN	protect	Yes	Yes
INTERVENE	protect	Yes	Yes
GUARD	protect	Yes	Yes
CONSERVE	protect	Yes	Yes
EVACUATE	protect	Yes	Yes
SACRIFICE	sacrifice	Yes	Yes
SURRENDER	sacrifice	Yes	Yes
REPAIR	save	Yes	Yes
CURE	save	Yes	Yes
RECONCILE	save	Yes	Yes

ALLEVIATE	save	Yes	Yes
SHIELD	save	Yes	Yes
HELP	support	Yes	Yes
GIVE	support	Yes	Yes
PROVIDE	support	Yes	Yes
SUPPORT	support	Yes	Yes
ALLOW	support	Yes	Yes
LEAD	support	Yes	Yes
FOLLOW	support	Yes	Yes
CARE	Support	Yes	Yes
SERVE	support	Yes	Yes
LOVE	support	Yes	Yes
ACCEPT	support	Yes	Yes
AGREE	support	Yes	Yes
LISTEN	support	Yes	Yes
PROMOTE	support	Yes	Yes
ENCOURAGE	support	Yes	Yes
MANAGE	support	Yes	Yes
TRUST	support	Yes	Yes
BENEFIT	support	Yes	Yes
APPRECIATE	support	Yes	Yes
ENHANCE	support	Yes	Yes
THANK	support	Yes	Yes
INTRODUCE	support	Yes	Yes
CELEBRATE	support	Yes	Yes
ASSIST	support	Yes	Yes
INVEST	support	Yes	Yes
CONNECT	support	Yes	Yes
RESOLVE	support	Yes	Yes
RECOVER	support	Yes	Yes
COMMIT	support	Yes	Yes
ACKNOWLEDGE	support	Yes	Yes
ACCOMMODATE	support	Yes	Yes
CONFIRM	support	Yes	Yes
ENABLE	support	Yes	Yes
SUSTAIN	support	Yes	Yes
BALANCE	support	Yes	Yes
EMBRACE	support	Yes	Yes
STRENGTHEN	support	Yes	Yes
BOOST	support	Yes	Yes
RECOMMEND	support	Yes	Yes
EASE	support	Yes	Yes
APPROVE	support	Yes	Yes
REBUILD	support	Yes	Yes
ASSURE	support	Yes	Yes
PERMIT	support	Yes	Yes
HEAL	support	Yes	Yes
CALM	support	Yes	Yes
RESCUE	support	Yes	Yes
AID	support	Yes	Yes

STIMULATE	support	Yes	Yes
REINFORCE	support	Yes	Yes
ADVISE	support	Yes	Yes
ENDORSE	support	Yes	Yes
DEVOTE	support	Yes	Yes
BOLSTER	support	Yes	Yes
MOTIVATE	support	Yes	Yes
REASSURE	support	Yes	Yes
COMFORT	support	Yes	Yes
COACH	support	Yes	Yes
ADVOCATE	support	Yes	Yes
URGE	support	Yes	Yes
MITIGATE	support	Yes	Yes
SUPPLEMENT	support	Yes	Yes
EMPOWER	support	Yes	Yes
SUSPECT	support	Yes	Yes
MOBILIZE	support	Yes	Yes
MODERATE	support	Yes	Yes
OWN	take	Yes	Yes
DEPEND	take	Yes	Yes
ACQUIRE	take	Yes	Yes
STEAL	take	Yes	Yes
POSSESS	take	Yes	Yes
ATTAIN	take	Yes	Yes
OCCUPY	take	Yes	Yes
RECLAIM	take	Yes	Yes
EXPLAIN	teach	Yes	Yes
WRITE	teach	Yes	Yes
SHARE	teach	Yes	Yes
TEACH	teach	Yes	Yes
DESCRIBE	teach	Yes	Yes
PREPARE	teach	Yes	Yes
FIX	teach	Yes	Yes
PRESENT	teach	Yes	Yes
CONVINCE	teach	Yes	Yes
EXPRESS	teach	Yes	Yes
DEFINE	teach	Yes	Yes
INFLUENCE	teach	Yes	Yes
EVALUATE	teach	Yes	Yes
PLAN	teach	Yes	Yes
GUIDE	teach	Yes	Yes
FACILITATE	teach	Yes	Yes
SHIFT	teach	Yes	Yes
INFORM	teach	Yes	Yes
DIRECT	teach	Yes	Yes
EDUCATE	teach	Yes	Yes
CONVEY	teach	Yes	Yes
DISPLAY	teach	Yes	Yes
ILLUSTRATE	teach	Yes	Yes
FOSTER	teach	Yes	Yes



EXPOSE	teach	Yes	Yes
ARTICULATE	teach	Yes	Yes
DIFFERENTIATE	teach	Yes	Yes
FRAME	teach	Yes	Yes
ELABORATE	teach	Yes	Yes
STOP	thwart	Yes	Yes
PREVENT	thwart	Yes	Yes
LIMIT	thwart	Yes	Yes
MINIMIZE	thwart	Yes	Yes
UNDERMINE	thwart	Yes	Yes
HARM	thwart	Yes	Yes
INTERFERE	thwart	Yes	Yes
REJECT	thwart	Yes	Yes
DELAY	thwart	Yes	Yes
DAMAGE	thwart	Yes	Yes
INTERRUPT	thwart	Yes	Yes
RUIN	thwart	Yes	Yes
DISCOURAGE	thwart	Yes	Yes
RESTRICT	thwart	Yes	Yes
DETER	thwart	Yes	Yes
DISRUPT	thwart	Yes	Yes
WEAKEN	thwart	Yes	Yes
PROHIBIT	thwart	Yes	Yes
CONFUSE	thwart	Yes	Yes
CHEAT	thwart	Yes	Yes
EMBARRASS	thwart	Yes	Yes
KNOW	understand	Yes	Yes
THINK	understand	Yes	Yes
UNDERSTAND	understand	Yes	Yes
LEARN	understand	Yes	Yes
REMEMBER	understand	Yes	Yes
READ	understand	Yes	Yes
CONSIDER	understand	Yes	Yes
IDENTIFY	understand	Yes	Yes
FOCUS	understand	Yes	Yes
DISCUSS	understand	Yes	Yes
CHECK	understand	Yes	Yes
SEEK	understand	Yes	Yes
EXAMINE	understand	Yes	Yes
SOLVE	understand	Yes	Yes
STUDY	understand	Yes	Yes
EXPLORE	understand	Yes	Yes
ASSESS	understand	Yes	Yes
REFLECT	understand	Yes	Yes
INVESTIGATE	understand	Yes	Yes
DISCOVER	understand	Yes	Yes
MEASURE	understand	Yes	Yes
COMPARE	understand	Yes	Yes
PREDICT	understand	Yes	Yes
CLEAR	understand	Yes	Yes



PREDICT	understand	Yes	Yes
CLEAR	understand	Yes	Yes
SEARCH	understand	Yes	Yes
ANALYZE	understand	Yes	Yes
CONCENTRATE	understand	Yes	Yes
CONCLUDE	understand	Yes	Yes
ABSORB	understand	Yes	Yes
GRASP	understand	Yes	Yes
PROCESS	understand	Yes	Yes
RESEARCH	understand	Yes	Yes
NAVIGATE	understand	Yes	Yes
PERCEIVE	understand	Yes	Yes
COMPREHEND	understand	Yes	Yes
CHARACTERIZE	understand	Yes	Yes
DISCERN	understand	Yes	Yes
INDUCE	understand	Yes	Yes
RECONSIDER	understand	Yes	Yes
RETHINK	understand	Yes	Yes
CONCEIVE	understand	Yes	Yes
CONTEMPLATE	understand	Yes	Yes
ASCERTAIN	understand	Yes	Yes
FORMULATE	understand	Yes	Yes
TOLERATE	understand	Yes	Yes

### References

- Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance*, 4, 143-175. doi.org/10.1016/0030-5073(69)90004-X
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26. doi.org/10.1111/j.1744-6570.1991.tb00688.x
- Barrick, M. R., Stewart, G. L., & Piotrowski, M. (2002). Personality and job performance: Test of the mediating effects of motivation among sales representatives. *Journal of Applied Psychology*, 87, 43-51. doi.org/10.1037/0021-9010.87.1.43
- Batson, C.D. (1987) Prosocial motivation: Is it ever truly altruistic? In. L. Berkowitz (Ed.), *Advances in experimental social psychology*, 20, 65-122. New York: Academic Press. doi.org/10.1016/S0065-2601(08)60412-8
- Brown, K. W., & Ryan, R. M. (2015). A self-determination theory perspective on fostering healthy self-regulation from within and without. In S. Joseph (Ed.), *Positive psychology in practice: Promoting human flourishing in work, health, education, and everyday life* (2nd ed., pp. 139-157). Hoboken, NJ: Wiley. doi.org/10.1002/9781118996874.ch9
- Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. *Psychological Bulletin*, 140 (4), 1980-1008. doi.org/10.1037/a0035661
- Chang, C-H., Ferris, D. L., Johnson, R. E., Rosen, C. C., & Tan, J. A. (2012). Core self-evaluations: A review and evaluation of the literature. *Journal of Management*, 38, 81-128. doi.org/10.1177/0149206311419661

- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*, Thousand Oaks, CA: Sage Publishing.
- Clifton, J. D. W., Baker, J. D., Park, C. L., Yaden, D. B., Clifton, A. B. W., Terni, P., Miller, J. L. Zeng, G., Giorgi, S., Schwartz, H. A., Seligman, M. E. P. (2017). *Primal World Beliefs*. Manuscript submitted for publication, Department of Psychology. The University of Pennsylvania.
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989) Self-determination in a work organization. *Journal of Applied Psychology*, 74, 580-590. doi.org/10.1037/0021-9010.74.4.580
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331–362. doi.org/10.1002/job.322
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93 (1), 48-58. doi:10.1037/0021-9010.93.1.48
- Grant, A. M., Nurmohamed, S., Ashford, S. J. & Dekas, K. (2011). The performance implications of ambivalent initiative: The interplay of autonomous and controlled motivations. *Organizational Behavior and Human Decision Processes*, 116, 241-251.
- Haidt, J., Seder, J. P., Kesibir, S. (2008). Hive psychology, happiness, and public policy. *Journal of Legal Studies*, 37, 133–156.
- Harackiewicz, J. & Elliot, A. J., (1993). Achievement goals and intrinsic motivation. *Journal of Personality and Social Psychology*, 65 (5), 904-915.
- James, W. (1984). Habit. In *Principles of psychology: Briefer course* (pp. 125-138). Cambridge, MA: Harvard University Press. (Original work published 1892).

- Kanfer, R., Frese, M., Johnson, R. E., (2017). Motivation related to work: A century of progress. *Journal of Applied Psychology*, 102 (3), 338-355.
- Lemos, M. S. & Verissimo, L. (2014). The relationships between intrinsic motivation, extrinsic motivation, and achievement along elementary school. *Social and Behavioral Sciences*, 112, 930-938.
- Liu, D., Chen, X.-P., & Yao, X. (2011). From autonomy to creativity: A multilevel investigation of the mediating role of harmonious passion. *Journal of Applied Psychology*, 96, 294–309. doi.org/10.1037/ a0021294
- Maddux, J. E. (2009). Self-efficacy: The power of believing you can. In C.R. Snyder & S. J. Lopez (Eds.), *Oxford handbook of positive psychology*, (2nd ed., pp. 335-343). New York, NY: Oxford University Press.
- Maslow, A. H. (1943) A theory in human motivation. *Psychological Review*, 50(4), 370-396
- McClellan, D. C. & Boyatzis, R. E. (1982). Leadership motive pattern and long-term success in management. *Journal of Applied Psychology*, 67 (6), 737-743.
- McClellan, D. C. (1975). *Power: The inner experience*. New York: Irvington-Halsted-Wiley.
- Melchert, N. (2002). Aristotle: The Reality of the world. The good life. In *The great conversation: A historical introduction to philosophy* (pp. 186-195). Boston, MA: McGraw-Hill.
- Menges, J. I, Tussing, D. V., Wihler, A., Grant, A. M. (2017). When job performance is all relative: How family motivation energizes effort and compensates for intrinsic motivation. *Journal of Management*, 60 (2), 695-719.
- Pawelski, J. O (2016). Defining the ‘positive’ in positive psychology: Part 11. A normative

- analysis. *The Journal of Positive Psychology*, 11(4), 357-365.  
doi:10.1080/17439760.2015.1137628
- Peterson, C. (2006). *A Primer in Positive Psychology*. New York: Oxford University Press.
- Piaget, J. (1954). *The Construction of Reality in the Child*. New York: Basic Books.
- Ryan, R. M. & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.  
doi:10.1006/ceps.1999.1020
- Ryan, R. M. & Deci, E. L. (2002). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55 (1), 68-78.
- Ryff, C. D. & Singer, B. H. (2006). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9, 13-39.  
doi10.1007/s10902-006-9019-0
- Seligman, M. E. P. (2002). *Authentic Happiness*. New York: Simon & Schuster.
- Seligman, M. E. P. (2011). *Flourish*. New York: Simon & Schuster.
- Vansteenkiste, M., Sierens, E., Soenens, B., Luyckx, K., & Lens, W. (2009). Motivational profiles from a self-determination perspective: The quality of motivation matters. *Journal of Educational Psychology*, 101 (3), 671-688. doi.org/10.1037/a0015083
- Wagner, E., & Szamoskozi, S., (2012). Effects of direct academic motivation-enhancing intervention programs: A meta-analysis. *Journal of Cognitive and Behavioral Psychotherapies*, 12(1), 85-101.

- Wahba, M. A., & Bridwell, L. G. (1976). Maslow reconsidered: A review of research on the need hierarchy theory. *Organizational Behavior and Human Performance*, 15, 212–240. doi.org/10.1016/0030-5073(76)90038-6
- Wrzesniewski, A., Schwartz, B., Cong, X., Kane, M., Omar, A., & Kolditz T., (2014). Multiple types of motives don't multiply the motivation of west point cadets. *Proceedings of the National Academy of Sciences of the United States of America*, 111 (30) 10990-10995. doi.org/10.1073/pnas.1405298111
- Zukav, G. (2014). *Seat of the Soul: 25<sup>th</sup> Anniversary Edition*. New York: Simon & Schuster.