



**Master thesis**

*The Effect of Motivational  
Orientation on Work Meaning*

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# *The Effect of Motivational Orientation on Work Meaning*

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*This study aimed to explore the effect of motivational orientation on the experience of work meaning, while taking into account the related constructs life meaning and happiness. Through a questionnaire, based on several existing scales, among the working population (n=151) several hypotheses were tested. The results showed that an intrinsic motivational orientation has a positive effect on work meaning whereas an extrinsic motivational orientation does not. However, a certain degree of extrinsic motivation was found to be necessary for an intrinsic motivational orientation to have a positive effect on work meaning. This moderating effect, together with the absence of a correlation between intrinsic and extrinsic motivational orientation, shed light on the complicated relationship between intrinsic and extrinsic motivation. Additionally, to further investigate this relationship a fourfold typology was made based on the height of the intrinsic and extrinsic motivational orientation scores. It was found that happiness benefits most from an intrinsic motivational orientation while life meaning benefits most from a combination of both orientations.*

**Keywords:** Motivational orientation; intrinsic motivation; extrinsic motivation; work meaning; life meaning; happiness

## ***Introduction***

The financial crisis and its aftermath have compelled the workforce to take a different perspective on work. Where employees felt free to allow themselves fairly high standards in terms of job content and fringe benefits, the crisis has caused employees to focus more on retaining their jobs than on the search for the perfect job. They had to deal with a changing job climate as well as changing expectations from their employers. Longer hours, more insecurity, greater responsibility and more flexibility were being expected from a workforce that was rapidly losing its sense of loyalty to the organization it was working for (Cartwright & Holmes, 2006). This forced employees to re-evaluate the value of their work, career and their ambitions.

Moreover, the crisis limited the resources that were available to most companies, forcing them to allocate the resources to those places that ensured their survival rather than to their employees' opportunities for growth and development. This limitation of the employees' freedom can greatly impact their motivation. When resources are readily available it leaves employees free to look for work that in itself is gratifying and motivating (intrinsic motivation). When limited however, resources become far more important and may shift the focus of work towards obtaining these resources (extrinsic motivation). Likewise, a diminishing sense of autonomy leads to a decrease in intrinsic motivation (IM) in favor of extrinsic motivation (EM) (Amabile, Hill, Hennessey & Tighe, 1994). Therefore, the crisis might have caused a shift from thinking about what one *wants* to thinking about what one *needs*, a crucial difference in terms of motivation and ambition.

Another result of the limitation of the employees' freedom is that it makes it harder for them to shape their own work to their needs and ambitions, leading to a decreased sense of meaning. The ability to craft one's job (Hackman & Lawler, 1971), the autonomy one enjoys (Berg, Dutton & Wrzesniewski, 2013) and the sense of self-efficacy one has (Baumeister, 1991), are all freedom related and important factors in the creation of work meaning. This causes a need to find alternative ways to create meaning that also take into account motivation. Meaning, for instance, is also created through the alignment of one's identity with the work one does (Rosso, Dekas & Wrzesniewski, 2010; Shamir, 1991). This is where motivation becomes important since IM is rooted in one's identity where EM is mainly based on cues outside of the self. The notion that motivation plays a part in the creation of meaning is further supported by Chalofsky and Krishna (2009). They considered meaning to be the most integrated part of IM, where the work is not just satisfying but brings meaning to one's existence. Considering the broadest of contexts, Chalofsky and Krishna wrote that when work became a less integrated part of people's lives, it lost its sense of meaning. This loss of meaning paved the way for motivational theories.

Although work meaning and motivation have not often been researched together, the importance of research that moves towards changing the perspective on work and motivation cannot be overstated. The current western paradigm is one still strongly tied to capitalism, despite its inherent flaws. Malka and Chatman (2003) came to the paradoxical conclusion "that even in a society dominated by capitalism, and in which one's status is signaled through one's income and the associated fruits—overall happiness and satisfaction with work are not very closely aligned with financial success" (p. 737). The consideration of happiness and external influences like

status and income, as well as the recent find by Baumeister, Vohs, Aaker and Garbinsky (2013) that happiness and meaning have substantial different roots, lead to inclusion of happiness in this study. The second additional construct added to this study was that of life meaning. This addition was expected to lead to a better understanding of the role of work within life, and to put work meaning within the larger context of one's general experience of meaning.

This research's contribution will be threefold: first it aims to add to a new perspective of work by exploring the connection between two concepts: motivational orientation and work meaning. This connection could shed light on the consequences of employing extrinsically oriented individuals opposed to intrinsically oriented ones. Second, this research will focus on the relationship between IM and EM, which is a much debated topic in the motivational research. The general notion is that IM and EM are separate constructs rather than being on a single scale, and that IM increases to the extent that EM decreases (Amabile et al., 1994). However, there is both research that found that external influences decrease IM (Malka & Chatman, 2003) as well as research that indicates that external influences have a positive effect on IM (Vansteenkiste, Lens & Deci, 2006). This study will therefore attempt to clarify this relationship. Thirdly, this research will use the notion that IM and EM are different constructs to create a fourfold typology based on individual's relative EM and IM scores. This will add to the understanding of how individuals with different combinations of motivational orientations experience meaning and happiness.

## ***Theoretical background and hypotheses***

### **Motivational orientation**

Although there are various definitions of intrinsic and extrinsic motivation, they differ little conceptually. IM can be defined as: "the motivation to engage in work primarily for its own sake, because the work itself is interesting, engaging, or in some way satisfying" (Amabile et al., 1994, p. 950) rather than being a means to an end (Staw, 1976). IM can therefore be considered a natural form of motivation where the work needs no end goal and is not a means to an end, but a purpose in itself. Other conceptualizations of IM often include: challenge, natural learning and development, enjoyment, personal enrichment, self-expression, interest, an internal locus of control, and self-determination (Amabile et al., 1994; Malka & Chatman, 2003; Rosso et al., 2010; Vansteenkiste et al., 2006). These concepts suggest a link between IM and the desire for personal growth and development through self-expression. This follows from the proposition that congruence between self-concept and an activity causes IM as well (Deci & Ryan, 1985). In short then, IM can be considered a growth oriented drive to satisfy inherent needs.

Extrinsically motivated individuals on the other hand are driven by factors outside the activity itself, such as status, rewards and recognition (Amabile et al., 1994; Vansteenkiste et al., 2006). This means that without the rewards, material or social, the extrinsically motivated individual is unlikely to engage in behavior. Alternatively, actions based on the fear of punishment and the avoidance of shame or guilt are also considered extrinsically motivated (Vansteenkiste et al., 2006). In this respect EM appears to be more fickle than IM, because a change in rewards or punishment can easily alter EM, where internal motivation is more stable. Aspects that are often related to EM are: income, competition, prestige and the dictates of other people (Amabile et al., 1994; Vansteenkiste et al., 2007). One of the key differences between IM and EM thus lies in the fact that, for the latter, constant external stimuli are necessary to cause behavior, which makes it the more conscience and likely more demanding form of motivation.

Wrzesniewski et al. (2014) warn for the ambiguity of the terms intrinsic and extrinsic as they can refer to a person's tendencies as well as to a reason to perform a task. This research focusses on these general tendencies, or orientations, rather than on specific tasks. These motivational tendencies are not merely dependent on circumstance but part of one's personality. Intrinsic and extrinsic motivational orientations are stable and enduring characteristics (Amabile et al., 1994) rather than influenced by context and situational aspects. That is not to say that one is born with such a characteristic. Upbringing and social context are instrumental in the creation of the motivational orientation (Cooper, 2012). Moreover, Amabile et al. (1994) found that there is a negative correlation between EM and work experience, suggesting that motivational orientation changes with age.

Substantial research has been done on factors that underlie IM in an attempt to explain where this type of motivation comes from and what its results are. Vansteenkiste et al. (2006) underline the importance of an autonomy-supportive context for the creation of IM. Concepts like opportunity for self-initiation, autonomy, causality orientation and personal causation were all related to IM (Amabile et al., 1994; Deci & Ryan, 1985; Gagné et al., 2014; Vansteenkiste et al., 2006). Controlled, non-autonomous situations on the other hand were associated with lower levels of IM (Amabile et al., 1994). This is understandably so, because when intrinsically motivated people are constrained or pressured, outside influence has a critical role in their behavior, making it at least partially extrinsic. Experiencing autonomy in a way that facilitates IM depends both on the belief that one's actions matter as well as on one's self-conceptions. A positive self-evaluation causes individuals to seek out

goals that are in line with their intrinsic values or interests (Bipp, 2010). EM on the other hand is based on results, which makes the work itself, or what one would learn from the work, less important. A different job with the same instrumental benefits would be equally appealing to the extrinsically motivated employee. Where IM benefits from autonomy, self-knowledge and self-efficacy, EM revolves less around beliefs and more around recognition.

### **Work meaning**

According to Maslow (1971), without the perception of meaning and purpose in the workplace an individual cannot reach his or her full potential. Despite the importance of this concept, accurately defining work meaning has proved to be difficult. Work meaning can be perceived as making sense of one's job and the significance it holds within one's life (Rosso et al., 2010). This is similar to the definition of work meaning by Wrzesniewski, Dutton and Debebe (2003): "employees' understandings of what they do at work as well as the significance of what they do" (p. 99). Work meaning therefore has both a meaning-making (the meaning work has within one's life) and a sense-making (understanding the significance of work) aspect. Understanding the purpose of work can often be found in definitions of work meaning as well (Pratt & Ashforth, 2003; Wrzesniewski & Dutton, 2001). Meaning is therefore strongly related to the position one has within the greater environment and, in case of work meaning, the organization. Additionally, Chalofsky and Krishna (2009) proposed an even more inclusive view when they wrote about an *integrated wholeness*. This signifies the congruence between values, purpose, relationships and activities pursued in life, in order to be able to work with integrity. The perception of work meaning is therefore dependent on the level at which it is examined.

The concept of *integrated wholeness* suggests a link between work meaning and life meaning. It is likely that work meaning has become more important in the past century, as personal freedom has replaced religion, necessity and social status as dictators of one's life path. As choosing between family, career or travelling is now a practical instead of a moral decision, the sense of having a single purpose might be lost forever (Crescioni & Baumeister, 2013). This decrease in clarity about one's life meaning could create a shift to work meaning as this is now considered one's primary source of meaning.

Work meaning was found to be connected to various other constructs. Practically, work meaning positively influences: motivation (Hackman & Oldham, 1980), job satisfaction (Wrzesniewski, McCauley, Rozin & Schwartz, 1997), integrity (Herriot, 2001), behavior (Wrzesniewski & Dutton, 2001) and fulfillment (Kahn, 2007). Contrarily, a lack of work meaning causes detachment (Thomas & Velthouse, 1990) and when one's meaning is threatened, it can result in an overly critical stance towards others who adhere less strongly to moral standards (Heine, Proulx & Vohs, 2006). Experiencing meaning in one's job then, is not merely a bonus but a necessary characteristic of any enduring, healthy job.

The creation of work meaning has been the subject of research as well. Work meaning creation can be examined from the perspective of the person, the job or the social and societal context. On the individual level there are multiple factors that influence the creation of work meaning. Personal characteristics as the reason one assumes people in general work, or the norms and values one holds are such factors. More temporary aspects can have an influence as well, such as self-determination (Fock, Yim & Rodriguez, 2009) which leads to a sense of responsibility and control, or identification with the job (Bunderson & Thomas, 2009). This confirms that work meaning is 'alive' rather than a constant. Work meaning can change significantly throughout a person's career. It can even be circumstantial on a daily basis, as it is based on personal experience rather than on objective measures. Additionally, several constructs were found to influence (the creation of) work meaning. Yim and Fock (2013) for instance found that pride enhanced work meaning among employees engaged in volunteer work. Another factor is work centrality (Chalofsky, 2003), which can be explained by the notion that the more important work is in one's life, the more meaning it can create. This suggests that involvement with the work one does and the connection to the activities one has, are indicators of meaningfulness.

Furthermore, job characteristics also influence the creation of work meaning (Hackman & Oldham, 1980; Wrzesniewski et al. 2003). Jobs high on task identity and autonomy (Hackman & Lawler, 1971), and jobs aiding in reaching personal goals (Rosso et al., 2010) are related to higher perceived work meaning. The effect that reaching these goals has, might be dependent on the tendency to frame goals intrinsically or extrinsically. Goals such as obtaining prestige and wealth are extrinsic and lead to lower self-esteem, life satisfaction and self-actualization (Vansteenskiste et al., 2006), which are constructs that are positively associated with work meaning (Rosso et al., 2010). Intrinsic goal framing leads to higher autonomous motivation, suggesting that this way of framing goals could have a stronger effect on work meaning than extrinsic goal framing.

Considering the context of work, Wrzesniewski et al. (2003) found that job activities, the evaluation of those activities and the role someone has within the organization influence work meaning. Those activities can not only be considered on an individual level (perception) or on a social level (shared perception), but also as part of social norms. The social aspect of work meaning suggests that it is not just influenced by the social environment but that the whole concept can have a different meaning in different environments. On a broader scale, Rosso et al. (2010) found that meaning depends on the extent to which it adheres to the current social and

cultural worldviews as well as its value systems. Again this confirms that not just meaningfulness but the whole concept of work meaning creation is determined by external factors as well as internal ones. This can also be seen in the way work meaning is measured. The MOW International Research Team (1987) measured work meaning based on: work centrality, work outcomes, work role identification, and social norms regarding work. These concepts show the correlation, or interaction, between the internal and external influences of work meaning. Similarly Steger, Dik and Duffy (2012) also made a distinction between three forms of work meaning: positive meaning, meaning making through work and greater good motivation. The first revolves around work having personal significance; the second is based on life meaning literature and focusses on personal growth; the last reflects the desire for work to impact others and the greater environment. Again a clear distinction is made between personal meaning and meaning created by affecting others.

In sum, it can be concluded that the perception of work meaning is an important part of any job and should be considered on multiple levels to get an inclusive view. Moreover its creation is an interaction between the characteristics of the person, the job, the environment and even society. Regardless, work meaning is ultimately a personal experience and based on a subjective evaluation of the tasks, relationships, job and self (Berg et al., 2013). However, it is not merely an individual quality per se. Given that a great deal of sense-making towards the self is based on the perception of others, it follows that the way sense is made of work (which often incorporates part of one's identity) is also influenced by others. Indeed Kuchinke and Cornachione (2010) concluded that the aspects of work that are intrinsic, inevitably find their foundation in the provision of extrinsic aspects.

### **The relationship between motivation and meaning**

Research on the relationship between motivational orientation and work meaning has been limited thus far. Based on the literature, both constructs have many similarities which could indicate a relationship. Since the tendency to search for meaning is not bound to a certain culture or social environment, it is safe to say that it is an inherent and thus intrinsically driven activity. Moreover, when one is intrinsically motivated, a part of the self is present within the work. It could be argued then that in such a case, work inherently has self-actualizing characteristics and that there is always a degree of personal meaning attributed to the intrinsically motivated work. This was confirmed in the literature review by Rosso et al. (2010) who found that IM gets interpreted as congruence between the work and the self-concept, creating an increased sense of meaning. Rosso et al. also found that intrinsically motivated work is seen as a way of expressing one's authentic self, which indicates the enactment of the self-concept, in turn increasing the experience of work meaning.

Although work meaning is not exclusively found in intrinsically motivated individuals, it does seem less likely to be present in jobs chosen on extrinsically motivated grounds. When looking for rewards outside of the work itself, aspects like: the purpose of the work, self-actualization, sense-making and the feeling of making a difference, do not have much influence. Moreover, some of the aspects that correlate negatively with EM are those associated with work meaning (autonomy, self-actualization and well-being). While aspects that make up EM, like a need for recognition and a decreased interest in work itself in favor of its results, impair the creation of meaning. It is therefore more likely that extrinsic motivational orientation has a negative impact on the experience of meaning. Based on these theorized relationships between IM, EM and work meaning the following hypotheses were formulated:

H1a: Intrinsic motivational orientation has a positive effect on work meaning.

H1b: Extrinsic motivational orientation has a negative effect on work meaning.

### **Life meaning**

Generally, life meaning is created when one pursues a purpose in life (Rosso et al., 2010). This view is supported by Yim and Fock (2013), who add that meaning is intrinsically motivated and dependent on how one interprets one's life purpose. In addition, because the fulfillment of goals enhances the perception of life meaning (Crescioni & Baumeister, 2013), the experience of meaning depends on the expectations one has and the goals one sets.

The importance of life meaning is made evident by its many advantages: increased satisfaction (Chamberlain & Zika, 1988), happiness (Debat, van der Lubbe & Wezeman, 1993), well-being (Reker, Peacock & Wong, 1987) and enjoyment at work (Bonebright & Ankenmann, 2000). A downside to experiencing and depending on life meaning was found as well. When threatened, meaning can cause inflexibility and judgmental behavior towards others who do not adhere to the same moral code (Heine et al., 2006). This could be the result of the need to emphasize that which causes meaning in an attempt to hold on to it.

In order to put the influence of motivational orientation in perspective, it is useful to consider its influence on (life) meaning as a whole. One would assume that the influence of motivational orientation on life meaning is similar to that of work meaning, be it on a larger scale. Frankl's (1984) statement that the search for meaning is the primary motivation in life indicates that this search itself is a highly intrinsically motivated

activity. People with an EM however, have life goals based on non-inherent needs which divert their attention from those aspects of their life that could lead to the experience of meaning. Therefore the following hypotheses were proposed:

H2a: Intrinsic motivational orientation has a positive effect on life meaning.

H2b: Extrinsic motivational orientation has a negative effect on life meaning.

## **Happiness**

Every individual will have his or her own idea of what happiness is and what it feels like. In a research context however, it is often affiliated with well-being or labeled subjective well-being (Baumeister et al., 2013). In an attempt to differentiate between happiness and meaningfulness, Baumeister et al. (2013) examined their relationship and found them to be positively correlated. Moreover, they found that both happiness and meaningfulness are enduring traits, which indicates people have a general tendency towards experiencing (a lack of) happiness and meaning. On the other hand, Baumeister et al. found some substantial differences between the two constructs as well: meaning can be obtained through negative experiences, is often based on what one means to other people and is associated with struggle. In contrast, happiness is only obtainable through positive events, is based on (selfish) need satisfaction, and is negatively impacted by struggle. Conversely, Schnell (2010) found that the relationship between meaning and happiness is not a positive one, since low meaningfulness does not lead to lower happiness. According to Schnell, meaning can be found in the simplest of jobs if it leads to a busy life.

Although Baumeister et al.'s results may seem to suggest that one has to choose between meaning and happiness because of their contradicting characteristics, this might not be an actual choice in practice. Some individuals for instance might care about meaning to such a degree that without the search for meaning, they cannot feel happy. Every person will likely need a certain amount of meaning in his life to be able to be happy.

With regard to motivational orientation however, it is unknown whether this construct behaves similar in relation to happiness as it does to meaning. Happiness and meaning are overlapping constructs yet have different roots and can exist largely independent of each other. It is therefore quite possible that motivational orientation has a different effect on each of them. Given the amount of shared positive outcomes between IM and meaning, and the relationship between meaning and happiness, one would also expect a positive relationship between IM and happiness. On the other hand, since financial success is not closely related to happiness (Malka & Chatman, 2003) and people with extrinsic work values are less happy (Vansteenkiste et al., 2007), one would assume an extrinsic orientation negatively impacts happiness. Therefore, the following hypotheses were formulated:

H3a: Intrinsic motivational orientation has a positive effect on happiness.

H3b: Extrinsic motivational orientation has a negative effect on happiness.

## **The relationship between intrinsic and extrinsic motivation**

The relationship between IM and EM is a much debated topic in the motivational research. Initially it was believed that they were both on a single scale, where IM increased to the extent that EM decreased (Amabile et al., 1994). However, subsequent results showed that individuals could be both intrinsically and extrinsically motivated, which forced this view to change. For instance, Kuchinke and Cornachione (2010) stated that intrinsic aspects cannot exist without the provision of extrinsic ones. Contemporary research therefore assumes that IM and EM work separately, though not independent of each other. Many factors that have a positive effect on one motivation either have no effect or a negative effect on the other motivation. It is therefore proposed that IM and EM work in opposite directions rather than being opposites (Amabile et al., 1994).

One of the areas in which the relationship between IM and EM is unclear, is in the effect of extrinsic motivational cues on IM. It is generally assumed that extrinsic rewards have a negative impact on IM. However, whether and how EM undermines IM is still unclear. Malka and Chatman (2003) found that providing rewards for someone who is intrinsically motivated can result in a decrease in the sense of autonomy, which negatively impacts IM. Moreover, external factors like deadlines and surveillance also have a detrimental effect on IM (Vansteenkiste et al., 2006). Outside interference does not only have a negative impact on IM, but also on inherent motives. Wrzesniewski et al. (2014) found that instrumental motives negatively impact internal motives. This is in line with the proposition that both motivations work in opposite directions. When considering motives however, it is important to make a distinction between consequences and motives. Just because an action has instrumental results, this does not mean that the person engaged in that activity holds instrumental (extrinsic) motives (Wrzesniewski et al., 2014).

On the other hand, there has been research that found external influences to have either no effect on IM or even increase it (Vansteenkiste et al., 2006). Extrinsically oriented individuals need extrinsic goals, like

salary, in order to feel competent (Malka & Chatman, 2003) because this is embedded within their value system. When a person's self-esteem is strongly tied to such extrinsic objectives, it can still have benefits that are generally considered intrinsic, like an increase in self-esteem (or other higher order needs). According to Cooper (2012) external influences determine whether an individual believes intrinsic or extrinsic values are most effective in fulfilling their needs. This would mean that in some cases EM leads to greater well-being when intrinsic motivated behavior was discouraged by, for instance, parents or the social environment. The extent to which a person can let go of these beliefs and find other more effective and intrinsically motivated ways to reach goals, determines not only his well-being but also his (motivational) orientation. In this case, belief plays a crucial role in motivation, whether they are influenced by parents, the social environment or even (inter)national paradigms.

Yet another approach to the IM and EM relationship is to consider them as co-existing. Amabile et al. (1994) recognized this idea by stating that a particularly autonomous person might both be strongly intrinsically motivated toward his work as well as seek compensation for it. This would mean that IM and EM do not always work in opposite directions. Finkelstein (2009) solved this discrepancy by suggesting that each motive should be seen as possibly incorporating both IM and EM. However, this does not account for the conflicting results on their mutual relationship. For instance, it was found that money and task rewards had a negative effect on IM, while positive feedback and performance rewards did not (Amabile et al., 1994). Another illustration of the complexity of this relationship is the conclusion of Vansteenkiste et al. (2007) that money has a positive effect on well-being *unless* financial gain is the most important value at work. This means that if money is a by-product of doing that which one is intrinsically motivated to do, it is a welcome bonus. If money is the goal itself on the other hand, money is less appreciated and more of a presumed necessity for a happy life. Taken together then, it is likely that looking from a purely intrinsic versus extrinsic point of view is too limited, and that context and situational factors have substantial impact.

The conflicting results in the effect of IM on EM and vice versa make it difficult to predict the influence they have on each other and their relationships with other constructs. It was previously proposed that intrinsic aspects cannot exist without the provision of extrinsic ones (Kuchinke & Cornachione, 2010), that EM can have a negative as well as positive effect on IM, and that context and situational factors influence their mutual relationship. Given the likelihood of IM and EM influencing each other, but the lack of consistency in evidence as to how they are related, this study will try to clarify the relationship in two different ways. First, the moderating effect of both IM and EM on their subsequent relationship with work meaning will be examined. Second, a fourfold division will be made based on individual's intrinsic and extrinsic motivational orientation to determine whether these orientations influence the experience of meaning. Although it is quite possible that IM and EM are moderators in their relationships with work meaning, its size and effect are difficult to predict. Because of the uncertainty of the possible moderating effects, a conservative approach will be taken in formulating the hypotheses on this subject assuming the absence of an effect:

H4a: Extrinsic motivational orientation has no effect on the relationship between intrinsic motivation and work meaning.

H4b: Intrinsic motivational orientation has no effect on the relationship between extrinsic motivation and work meaning.

The second approach to clarify the IM and EM relationship was the creation of a fourfold typology where individuals are in one of four groups (Table 1) depending on the height of their intrinsic and extrinsic motivational orientations. To each of these types, characteristics can be attributed based on existing literature.

Table 1  
A fourfold typology based on relative intrinsic and extrinsic motivational orientation

		Intrinsic motivational orientation	
		Low	High
Extrinsic motivational orientation	Low	Simplicity seekers	Personal growth seekers
	High	Confirmation seekers	Opportunity seekers

Type 1: Simplicity Seekers (low IM, low EM)

Individuals in this category will experience relatively little motivation compared to other people. This does not necessarily mean they experience no motivation, just less than their peers. It is likely that these individuals do not experience much social pressure and are not as well aware of their inherent needs. They generally do not measure the success of their own performance by comparing it to that of others. Additionally, it is unlikely that these individuals are ambitious or strongly devoted to a cause. It is more likely that the experienced

meaningfulness suffers from this lack of devotion, as it consistently demands self-reflection and commitment, which is facilitated by motivation (Schnell, 2010). Either they have not found anything to be driven by or simply do not seek to enrich their lives in such a way. Because these individuals have a lack of desire for both personal development and external confirmation, and are possibly obstructed by pressure or past events, they are probably looking for a simple and straightforward life. They have limited big picture ideas of what they want to be or where they want to go, and will therefore mostly be looking for short-term successes and instant gratifications.

However, it should not be ruled out that these individuals do not have a natural tendency to fall within this category, but are experiencing low motivation because of outside influence. They may feel either overwhelmed or incompetent, leading to amotivation. Thus, although motivational orientation is a relatively stable concept, some respondents might be in a temporary state of amotivation despite their natural IM or EM orientations.

#### Type 2: Personal growth seekers (high IM, low EM)

In this category individuals are actively looking for opportunities to grow (Vansteenkiste et al., 2006) and seek to develop on a personal level (Vansteenkiste et al., 2007) as well as on an intellectual level (Malka & Chatman, 2003). They perceive processes to be valuable learning opportunities rather than letting its value depend on the outcome. This implies that they will not always take the quickest or most efficient route to reach a goal, but they feel the desire to understand and learn from the experience as well as determine their own role, and attempt to reach their full potential (Vansteenkiste et al., 2007). In order to take such a route, a certain amount of freedom is required. Individuals of this type therefore value autonomy and will seek opportunities to influence and shape their own jobs (Wrzesniewski and Dutton, 2001) to fulfill their curiosities and their broad interests (Amabile et al., 1994; Ryan & Deci, 2000). Moreover, they prefer creative ways to solve problems (Amabile et al., 1994) over simply following orders. This leads them to appreciate broad-minded people and look for close connections with others, outside of any economical (cost-benefit) considerations. It also means that, since they are open to new experiences (Bipp, 2010), they will more easily engage in activities without knowing the outcome.

Socially, intrinsically motivated individuals prefer meaningful and satisfying relationships (Vansteenkiste et al., 2007). They will also feel less inclined to seek attention for their successes, and more inclined to seek out others in their search for answers and dealing with struggles in their work. Finally, this type of individuals will likely attribute more importance to their own inherent wishes and will often engage in self-reflection, for this will reveal their internal wishes making it easier to act on internal motivation.

#### Type 3: Confirmation seekers (low IM, high EM)

Individuals in this category are generally looking for recognition and confirmation of their own value from others. Their sense of competence and confidence depends on the evaluation of their own relative wealth or status (Vansteenkiste et al., 2006). They are generally less aware of their inner workings and needs (Vansteenkiste et al., 2007), leaving them with a relatively superficial life. They reflect less on the person that they are and more on the actions that did, or did not, lead to greater wealth or status. Their internal motivation is usually based on avoiding shame and guilt, and they generally experience less life satisfaction, have lower self-esteem and more anxiety and prejudice (Vansteenkiste et al., 2006). Their tendency to judge others more harshly is likely due to their attempt to maintain a positive self-image in the face of peers that are deemed superior. Additionally, their development will be one of efficiency considerations rather than one attempting to get a deeper understanding of their own persona.

It is also likely that they experience more dissatisfaction, frustration and anxiety as they fail to meet their own expectations or reach their own goals (Vansteenkiste et al., 2007). Moreover, they generally experience learning as not particularly enjoyable or meaningful (Vansteenkiste et al., 2006) because the instrumental rewards of learning are often unclear. Although they do often have long time goals in terms of promotion and salary, they are more prone to temptations leading to short term need satisfaction (Vansteenkiste et al., 2007). This short term thinking and the instrumental way of perceiving their environment also leads to less strong and meaningful relationships with others (Khanna, 1999). They are therefore likely to have friendships that could benefit them in their working careers.

#### Type 4: Opportunity seekers (high IM, high EM)

In this category individuals are highly motivated from different sources, creating an image of eager and ambitious individuals who are unlikely to pass on opportunities to further their aims, be it on the subject of career or personal growth. They are out to reach their potential in competence as well as material wealth or status. These are individuals with an appreciation of the process as well as an eye on the outcomes of their actions. They likely experience the focus and openness to experiences from their intrinsic orientation, and the low retention rate and opportunistic behavior from their extrinsic orientation. They probably learned in their youth that there are multiple ways to obtain warmth, love and appreciation which lead them to appreciate both intrinsic and extrinsic principles (Cooper, 2012). They will therefore be able to see intrinsically motivated opportunities in extrinsically motivated actions and the other way around.



However, when appreciating both intrinsic and extrinsic rewards, one might also come to expect or desire work that brings a certain amount of both. This type of people will therefore be divided in those who could successfully incorporate both motivations and those that did not (yet) do so. Extrinsic rewards can, for instance, cause higher well-being *unless* they are part of the dominant value system (Vansteenkiste et al., 2007), over-idealized (Kasser, 2002) or when they cause a controlled regulatory style of working (Caver & Baird, 1998). Moreover, these individuals can draw self-esteem from both the self and others but might also require approval by others as well as meet their own standards. Another danger was made evident by Wrzesniewski et al. (2014), who found that in some instances holding multiple types of motivation can lead to poorer performance, because instrumental motives can negate the positive effect of internal motives. This type of individuals therefore appears to have both an abundance of opportunities for the creation of meaning as well as an abundance of threats to their experience of meaning. The way they perceive their life's purpose and their ability to balance both IM and EM will therefore largely determine their path.

## **Methodology**

The data for the analyses was obtained using an online questionnaire among the Dutch working populace. The sample consisted of 151 adults (57% female, 43% male). Their ages ranged from 19 to 64 years old (40 on average), and most respondents (85%) finished higher education. Respondent's workweeks ranged from 1 to 60 hours with an average workweek of 29 hours, and job experiences ranging from 1 to 40 years on the current job (with an average of 9 years).

At the start of the questionnaire, respondents were informed about the goals of the research and the extent of anonymity. The respondents had a chance to win a €25 gift card when entering their e-mail address at the end of the survey. This was done as an extra incentive, and to encourage more extrinsically motivated individuals to participate as well. The items were translated into Dutch to make the questionnaire more accessible, and to limit the loss of meaning by translating the scale to another language, two back-and-forward translations were used.

There were several respondents who did not complete their questionnaire. Those who filled out enough items to finish at least one construct were added to the analysis. The one respondent that did not meet this requirement was excluded from the analysis, together with one respondent that filled out the questionnaire with a consistency that can be considered incredibly unlikely. This left 149 valid entries.

## **Measurements**

Motivational orientation was measured with the Work Preference Inventory (WPI) by Amabile et al. (1994). This scale measures individual differences in the perception of IM and EM towards their occupation. There are important advantages to this particular scale: it was found to be relatively distinguishable from social desirable answers and intelligence, and incorporates different motivational elements (Amabile et al., 1994). In accordance with the scale from Amabile et al. a 4-point Likert scale was used, and answers ranged from *fully disagree* (1) to *fully agree* (4). The original scale had a decent internal consistency with Cronbach's alpha's of .75 for IM and .70 for EM, while in the current study the alpha's were .71 for IM and .72 for EM. Both subscales were therefore deemed reliable.

Work meaning was measured using the Work As Meaning Inventory (WAMI) by Steger et al. (2012). They developed a scale to measure several important aspects of work meaning, dividing it into three sub-scales: positive meaning, meaning making through work and greater good motivations. However, for the purpose of this study it will be considered a single construct as this research aims to find the effect of motivational orientation on work meaning as a whole. The advantage of this scale is that it is strongly centered on the person, the self-concept and beliefs. This in particular makes it valuable when combining meaning and motivation, opposed to a more outside in approach where life as a whole and the social environment are dominant. The WAMI retained its original 5-point Likert scale, and answers ranging from *fully disagree* (1) to *fully agree* (5). The original scale had a high internal consistency ( $\alpha=.93$ ) with the reliability somewhat lower in the current study ( $\alpha=.85$ ), although still considered very reliable.

Happiness and life meaning were both measured based on the 3-item Likert scales by Baumeister et al. (2013). Happiness was measured with the following items: 'In general I consider myself happy;', 'taking all things together, I feel I am happy;', and 'compared to most of my peers, I consider myself happy'. Meaningfulness was identified by three parallel items: 'In general I consider my life to be meaningful;', 'compared to most of my peers, my life is meaningful;', and 'taking all things together, I feel my life is meaningful'. For consistency reasons and ease of filling out the questionnaire, a 5-point Likert scale was again used with answers ranging from *fully disagree* (1) to *fully agree* (5). Baumeister et al. reported both scales to have a high internal consistency with alpha levels above .94. Although the alpha values were lower in this study ( $\alpha=.88$  for happiness,  $\alpha=.78$  for life meaning), both scales are considered quite reliable.

Control variables were measured to account for the influence of demographic variables on the relationship between the main constructs. The usual variables were included: age, educational level and gender. In addition, the average workweek was also added, as well as the amount of years respondents work at their current company. The former could influence work meaning in the sense that a 50-hour workweek leaves less room for meaning creation outside of the job than a 16-hour workweek. Additionally, attitudes towards the job and company will likely be different for employees that have been working a short time at their current job from employees that have been working there for decades.

The data was analyzed using IBM SPSS 21 with the addition of PROCESS (Hayes, 2013), an SPSS add-on for measuring mediation and moderation.

## Results

Based on the tendency for data to approximate normal distribution as the sample increases (central limit theorem: Platt, 2004), the histograms and the Q-Q plots, most of the main constructs were considered close enough to a normal distribution to use parametric tests. However, since happiness was strongly skewed to the left, any analyses including this construct were performed with non-parametric tests.

For most constructs, the Pearson's product-moment correlation coefficient was used to determine the correlation between constructs. For happiness the non-parametric Spearman's rank correlation coefficient was used. The descriptive statistics and correlations between the constructs can be found in Table 2.

Table 2  
Means, standard deviations and correlations among the main constructs, and between demographics and main constructs.

	Descriptives		Correlations				
	Mean	SD	1	2	3	4	5
1. Intrinsic motivational orientation	3.01	.30	(.71)				
2. Extrinsic motivation orientation	2.33	.30	-.09	(.72)			
3. Work meaning	3.73	.58	.28**	-.16	(.85)		
4. Happiness	3.92	.73	.29**	-.08	.09	(.88)	
5. Life meaning	3.76	.62	.31***	-.14	.39***	.43***	(.78)
Age	40.43	15.78	.07	.25**	-.20*	-.04	-.23**
Workweek	28.77	12.04	-.15	.11	-.29***	-.12	-.23**
Years at the job	9.25	10.37	.03	.18*	-.13	-.07	-.19*

Note: \*p<.05, \*\*p<.01, \*\*\*p<.001. Values in brackets are Cronbach's alpha values. Intrinsic and extrinsic motivational orientations were answered on a four-point Likert scale (1=fully disagree to 4=fully agree). Work meaning, happiness and life meaning were answered on a five-point Likert scale (1=fully disagree to 5=fully agree). *Italic* values are calculated using Spearman's Rho test.

Upon analyzing the relationship between intrinsic motivational orientation (IMO) and work meaning, it was found that IMO has a significant ( $p=.001$ ) positive effect on ( $r=.28$ ) work meaning. Although its contribution to work meaning is considered small ( $r^2=.078$ ), it does indicate that IMO has a positive influence on work meaning, thus confirming H1a. On the other hand, no significant effect was found of extrinsic motivational orientation (EMO) on work meaning. Since H1b predicted a significant, negative effect, this hypothesis was rejected.

When examining IMO in relation to other main constructs, it was found that IMO has a significant and positive effect on both life meaning ( $r=.31$ ,  $p<.0005$ ) and happiness ( $r=.29$ ,  $p=.001$ ). These results support H2a and H3a, which assumed a positive effect of IMO on these constructs. Again, EMO was not found to have any effect on either life meaning or happiness, meaning H2b and H3b were rejected as they predicted a negative effect. It should be noted that life meaning and happiness were significantly correlated among themselves ( $r=.46$ ,  $p<.0005$ ), indicating that life meaning has a positive effect on happiness as well. Additionally, work meaning was significant positively correlated with life meaning ( $r=.39$ ,  $p<.0005$ ).

The absence of a correlation between IMO and EMO confirms the notion that these are two separate constructs and should be analyzed as such. This means that results and correlations could differ between respondents that are low and high on IMO, or respondents that are low and high on EMO. To this effect, a group comparison was made using a median split, separating respondents into groups of relatively low and high levels of IMO and EMO. Independent-samples t-tests found a small, significant ( $t(142)=-2.58$ ,  $\eta^2=.045$ ,  $p=.01$ ) difference between respondents with high IMO ( $M=2.92$ ,  $SD=.51$ ) and low IMO ( $M=2.65$ ,  $SD=.67$ ), and their correlation with life meaning. Likewise, respondents with a high EMO ( $M=3.86$ ,  $SD=.55$ ) experienced significantly ( $t(143)=2.22$ ,  $\eta^2=.033$ ,  $p=.028$ ) more work meaning than respondents with a low EMO ( $M=3.64$ ,  $SD=.59$ ). The non-parametric Mann-Whitney U test also revealed that respondents with high IMO scores, are

significantly ( $z(142)=-2.57, p=.01$ ) more happy ( $M=4.06, SD=.74$ ) than respondents with low IMO scores ( $M=3.82, SD=.73$ ). These results indicate that respondents with a high IMO on average experience greater life meaning and are happier than respondents with a low IMO. EMO on the other hand influences work meaning, as people with a high EMO experience more of it.

The analyses on the moderating effect of IMO and EMO on their relationships with work meaning also yielded significant results. Via PROCESS (Hayes, 2013) the moderating effects of IMO and EMO were measured. It was found that EMO had a significant moderating effect on the relationships between IMO and work meaning. Specifically, at high (+1SD from the mean) and mean values of EMO, there is a significant (mean:  $\beta=.49, p=.003$ ; high:  $\beta=.60, p=.001$ ) positive correlation between IMO and work meaning, while there is no significant ( $p=.141$ ) correlation at low values of EMO (-1SD from the mean). Additional analyses (Johnson-Neyman test) showed that at very high values of EMO (above 3.17) there is no significant relationship between IMO and work meaning either. In short, IMO and work meaning are correlated when EMO values are between 2.14 (-.71 SDs) and 3.17 (+2.38 SDs). Practically this means that .7% of the respondents had a too high EMO for IMO and work meaning to be correlated, and 25.9% of the respondents had a too low EMO for IMO and work meaning to be correlated. It can therefore be concluded that fairly low extrinsically motivated people (bottom 25.9%) do not experience higher work meaning when being intrinsically motivated. Conversely, very high extrinsically motivated (top .7%) do not experience higher work meaning when being intrinsically motivated either. Consequently, as a moderating effect of EMO was found on the relationship between IMO and work meaning, H4a was rejected since it predicted no effect.

In order to judge whether this phenomenon limits itself to work meaning or whether it also applies to life meaning, the same test was held for the latter. Indeed, similar results were found for life meaning. At mean values and high values (+1SD from the mean) of EMO, there was a significant (mean:  $\beta=.58, p=.0012$ ; high:  $\beta=.74, p=.0004$ ) positive correlation between IMO and life meaning, while at low values of EMO (-1SD from the mean) there was not ( $p=.1322$ ). Again, additional analyses were performed and showed that IMO and life meaning are not correlated when EMO values are below 2.12 (-.70 SDs). Therefore 19.7% of the respondents did not have a high enough EMO for IMO and life meaning to be correlated. Thus, fairly low extrinsically motivated people (bottom 19.7%) do not experience higher life meaning when being intrinsically motivated, opposed to the top 80.3%.

IMO however was found not to moderate the relationship between EMO and work meaning or between EMO and life meaning. For none of the (measured) IMO values was EMO significantly correlated with either work meaning or life meaning. This means H4b was confirmed as there was indeed an absence of any moderating effect of IMO.

There are several noteworthy outcomes concerning demographic variables as well. Age had a positive and significant effect on EMO ( $r=.25, p=.002$ ), and a significant negative effect on work meaning ( $r=-.20, p=.019$ ) and life meaning ( $r=-.23, p=.005$ ). This suggests that older employees are stronger extrinsically motivated and experience less work and life meaning. Additionally, workweek had a positive influence on both forms of meaning as well, as there was a significant positive correlation with both work meaning ( $r=.29, p<.0005$ ) and life meaning ( $r=.23, p=.005$ ). It appears employees who work more hours a week, do not only obtain more meaning through their work, but experience more meaning in general. This is even more interesting considering the positive relationship between workweek and age ( $r=.32, p<.0005$ ). Finally, the amount of years respondents worked at their current company was both positively correlated with EMO ( $r=.18, p=.034$ ) and life meaning ( $r=.19, p=.027$ ).

The analysis based on the fourfold typology, yielded interesting results as well. A one-way between-groups multivariate analysis of variance was performed to examine the differences between the types and their work meaning and life meaning scores. Figure 1 shows the work meaning, life meaning and happiness scores for every type. The Wilks' Lambda test showed significant ( $F(6, 138)=2.40, \text{partial } \eta^2=.05, p=.028$ ) results, indicating differences between the types. Work meaning showed a significant ( $\eta^2=.058, p=.04$ ) difference. However, it should be noted that the p value is fairly high, so the results should be treated with caution. A subsequent ANOVA test was held that confirmed a significant difference ( $F(3, 139)=2.84$ ) between types 2 ( $M=3.94, SD=.67$ ) and 3 ( $M=3.55, SD=.63$ ). Individuals with high IMO scores and low EMO scores thus experience significantly more work meaning than those with high EMO scores but low IMO scores. This seems to be contradicting the earlier result that a minimum of EMO is necessary for IMO to positively influence work meaning. However, a low score in that analysis was indicated by -1 SD, while in this analysis a low score means that a respondent is part of the bottom 50% in terms of EMO. Although a remarkable combination of results, it is not necessarily a contradiction.

Additionally, life meaning also showed significant ( $\text{partial } \eta^2=.07, p=.018$ ) differences. Based on an ANOVA ( $F(3, 140)=4.06$ ) this difference was found to be between the types 3 ( $M=3.55, SD=.69$ ) and 4

( $M=3.92$ ,  $SD=.49$ ). Consequently, individuals that score high on both EMO and IMO experience significantly more life meaning than those that only score high on EMO.

Finally, to find possible differences between the four types and their happiness scores, a Kruskal-Wallis H test was performed and significant ( $\chi^2(3)=8.28$ ,  $p=.041$ ) differences were found. Post-hoc analysis showed a significant ( $p=.024$ ) difference between types 2 ( $M=4.05$ ,  $SD=.75$ ) and 3 ( $M=3.74$ ,  $SD=.72$ ), and a significant ( $p=.012$ ) difference between types 3 ( $M=3.74$ ,  $SD=.72$ ) and 4 ( $M=4.07$ ,  $SD=.61$ ). This indicates that individuals scoring high on IMO (regardless of their EMO scores) are significantly happier than individuals that score high on EMO but low on IMO.

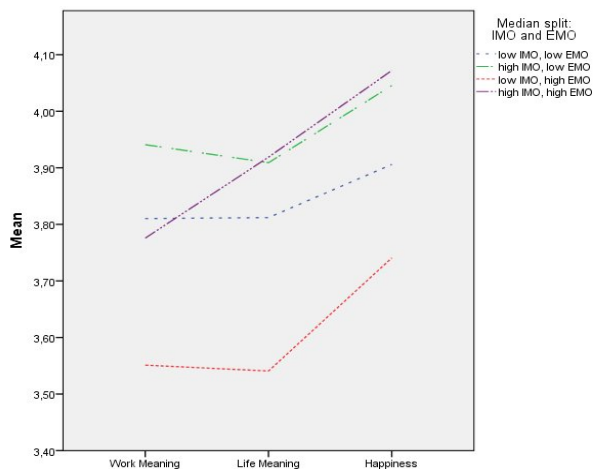


Figure 1. Mean work meaning, life meaning and happiness scores for the four motivational orientation types.

## Discussion

### Motivational orientation, meaning and happiness

This study found evidence that motivational orientation has a significant effect on not only the experience of work meaning, but on the experience of life meaning as well. Holding an IMO has a positive effect on work meaning, and individuals with a high IMO experience more life meaning than those with a low IMO. This confirms earlier finds by other researchers that IM leads to greater meaningfulness (Rosso et al., 2010; Shamir, 1991). A possible explanation for this is that the understanding of their curiosities and interests that individuals with an IMO have, create opportunities for meaning making through the commitment to, and appreciation of, the things that they do. Additionally, the appreciation of learning and personal growth inherent to people with an IMO will cause employees to attribute greater importance, and therefore meaning, to the work itself. Another effect of the increased self-knowledge of those who hold an IMO, is the increased happiness individuals with a high IMO experience. Because of the awareness of their inner needs and desires, individuals with an IMO can make a better distinction between things that truly make them happy and needs that are inspired by the environment or by society. Moreover, self-knowledge can help individuals express themselves and act authentically, an indicator of well-being (Wood, Linley, Maltby, Baliousis, Joseph, 2008) which is a substantial part of happiness. Acting authentically cannot only increase happiness but it can also enhance meaningfulness through the enactment of the true self (Rosso et al., 2010), both in one's life as in one's career. Individuals with an IMO will be motivated to put their own ideas and ideals into their work and use it as a means of self-expression. The stronger the work one does is tied to him or herself and the greater the investment in the work, the more meaning it can hold.

With increased self-knowledge arises both a need for sense-making as well as a means to do so. Since work meaning is created when one makes sense of the significance of one's work (Rosso et al., 2010), it is likely that the same sense-making process is responsible for life meaning. Indeed, Wong (2013) stated that IM leads to meaning as people understand and connect their experiences. This enhanced sense-making, a result of increased self-reflection and self-knowledge, leads to more meaningful experiences. Moreover, individuals with an IMO not only reflect more upon their actions but also have a stronger perceived locus of causality for their own behavior (Rosso et al., 2010). This is not unimportant as the belief that one means something to the world, is rooted in the belief that one's actions matter. Therefore, a sense of control is an important part of what makes an experience meaningful. Theoretically then, it is important to note that people with an IMO not only *search* for meaning through personal enrichment and challenge, but that they also *find* meaning.

Second, contrary to expectations, holding an EMO had no effect on the experienced meaningfulness. The absence of a positive effect of EMO on meaning was less surprising, as possessing wealth and status in itself

does not add meaning to one's life or to the greater environment. In addition, since the meaning of any action is dependent upon its outcome, the action itself will not be perceived as meaningful. This also indicates that extrinsically motivated people may pass over potentially meaningful experiences because they are not used to considering what it may mean for their personal development. Moreover, they are unlikely to find meaning in failed attempts to gain instrumental benefits, regardless of possible valuable insights it may provide. These insights however, could aid in determining the significance that, for instance, work holds within one's life, which is an important way to create meaning (Rosso et al., 2010). For people with an EMO this significance only goes as far as the work contributes to their wealth and status.

It is important to note that the absence of an effect of EMO indicates that this orientation does not add to the creation of meaning, but does not obstruct it either. Holding an EMO in itself simply does not aid in creating meaning, as this concept might not be as important to people who are less committed and less interested in learning and growing. They are more focused on recognition and confirmation of their worth from others. As proposed earlier, this makes EM more fickle than IM because it is strongly affected by outside influence. Since the creation of meaning is a process, and the experience of meaning an enduring trait, it would benefit from a more stable orientation. Moreover, it makes it more difficult for an individual with an EMO to be happy as there is a constant need for progression and feedback. Any stagnating effects will lead to frustration and disappointment. This statement is supported by the absence of an effect of EMO on happiness that was found in this study, and is in line with Vansteenkiste et al.'s (2007) proposition that wealth has no positive effect when it is one's primary value in life. This implies that regardless of the actual instrumental success, EMO does not lead to happiness. That is not to say an individual with an EMO could not be happy, this will merely not be a direct result of his motivational orientation.

To confirm this claim however, future research is needed that makes a clear distinction between successful and unsuccessful individuals with an EMO. It should also be noted that the above results were based on measuring EMO as a single construct. As an avenue for future research, it could be determined whether all forms of EMO lack effect on meaning, or whether another form does have an effect. Introject regulation for instance (a form of EM where internal pressure to gain status or avoid or guilt motivates an individual, Vansteenkiste et al., 2006) might well have a different effect on meaning than more extrinsically motivated motives.

In sum, the confirmation that IMO leads to meaning, where EMO does not, establishes the importance of having an IMO opposed to an EMO. Being motivated by money, status or guilt in itself does not add to meaning. It is created internally, based on inherent desires, interests and passions, rather than needs dictated by culture or the social environment. A similar conclusion can be drawn with regards to happiness, because in contrast with existing paradigms such as capitalism, it is the desire for personal growth, self-expression and personal enrichment that causes happiness.

### **The relationship between IM and EM**

The second goal of this research was to add to the discussion of the complicated relationship between IM and EM. The lack of correlation between IMO and EMO was therefore an important outcome. It confirms that despite the many contradictory characteristics, IMO and EMO are not opposites and an increase in one does not guarantee a decrease in the other. Additionally, it was found that a minimum level of both motivations is required for IMO to have a positive effect on both work and life meaning.

This effect can be explained by the notion that meaning is created by the role people play within the greater environment, based on what the activities they engage in mean to themselves and to the world. The latter is influenced by external factors as it is dependent on external feedback. Thus the evaluation of one's meaning will nearly always have an external component, hence the (indirect) influence of EMO on meaning. As Wrzesniewski et al. (2014) put it: "It is hard to imagine a meaningful domain of human activity that does not have instrumental consequences" (pp. 10995). The moderating effect of EMO also confirms that IMO and EMO may be separate constructs, but that they do not work independent of each other.

It becomes apparent that having just one type of motivational orientation might limit its positive outcomes. Despite the lack of positive results for holding an EMO, its moderating effect shows that it is important to keep in mind that having instrumental values can still lead to positive outcomes. For enough intrinsic motivation can lead to greater experienced meaning.

These outcomes are important considerations for future research as well, as it indicates that a broad scope is necessary to truly understand the influence of IM and EM on characteristics of (working) life. In relation to other constructs, IM and EM should be considered part of an integrated motivational orientation, rather than examined separately. Future research could also determine whether a general EMO is needed for IMO to positively influence meaning or if certain aspects of EM are more important in the meaning making process. There is a substantial difference between someone who is motivated primarily by money and someone who feels a strong need for confirmation from his peers, and from someone who finds motivation in trying to avoid shame and guilt.

Besides a moderator effect, this research also added to the understanding of the IM and EM relationship through the results of the fourfold typology. It was found that intrinsically motivated individuals with low EMO scores experience significantly more work meaning than those with high EMO but low IMO scores. This is in line with earlier results and conclusions about the effects of motivational orientation on work meaning. A somewhat different result was found for life meaning however. The typology indicated that individuals that both have a high IMO and a high EMO experience significantly more life meaning than those that only have a high EMO. This suggests that the ambitious, flexible and eager nature of those with both high IMO and EMO scores makes it possible for them to obtain and perceive ways to gain meaning more easily than those merely extrinsically motivated. Being driven by external factors therefore does not limit life meaning so long as one is aware of one's inner needs and does not let the EMO get in the way of growth, development and expression.

The different outcomes for work meaning and life meaning when comparing the four types, indicate that they should indeed be examined separately. The limiting effect that EMO has on work meaning is apparently not present in life meaning, since a high EMO even enhances life meaning when a high IMO is also present. The difference could also be the result of extrinsic values being more restrictive in working life than in non-working life. In working life the focus is on rewards in a situation that has already many external influences (salary, hierarchy, fringe benefits etc.). However, many situations outside of work do not have these external influences, making an EMO less threatening to the life meaning making process. Moreover, truly extrinsically motivated individuals will get the bulk of their meaning from work, as this is the primary source of wealth and status. When trying to find meaning through other sources, extrinsic values will be less important.

Contrarily to what one might suspect, there was no significant differences between people with low IMO and low EMO scores, and any other motivational orientation type in terms of meaning. This outcome suggests that people with relatively low motivation have less trouble finding meaning than one would assume. Schnell (2010) proposed that a lack of self-knowledge, needs and motives, can lead people to lean towards finding a general form of meaning rather than personal sources of meaning. This also confirms the notion that any job leading to a busy life can cause meaning (Schnell, 2010), which does not necessarily indicate that there is a deeper sense of meaning or fulfillment.

Similarly, no significant differences were found between individuals with low IMO and low EMO, and any other type in relation to happiness. Apparently, low motivation does not have to obstruct either meaningfulness or happiness. The latter could be explained by the notion that someone with low ambitions and low expectations who does not often engage in self-reflection, could be quite carefree and therefore happy. Another similarity between meaning and happiness and their relationship with motivational orientation is the positive effect of IMO. The typology showed that individuals with a high IMO are more happy than those who do not have a high IMO. Whether they have a low or high EMO does not matter so long as their IMO is high. This also means that external motives do not stand in the way of happiness when their enactment does not conflict with intrinsic motives. Apparently people with an IMO can experience joy and happiness, regardless of the instrumental value of an activity. A possible explanation for this could be that intrinsically motivated individuals seek out a certain freedom to satisfy their curiosity and to find themselves. Since happiness benefits from freedom; happiness and meaning are correlated; and they were both found to be enduring traits (Baumeister et al., 2013), it is possible that people with a tendency for IM also have a tendency to be relatively happy. That would explain the results as it suggests that EM is unimportant in terms of happiness. However, it is also possible that happiness is the result of the meaning that is created because of an IMO. As stated earlier, some people might simply need meaning in their lives to be happy. When these people obtain meaning it will likely not only be a prerequisite for their happiness, but also a stimulant.

On a final note, a particularly interesting difference between life meaning and work meaning was found as well. There was no positive relationship between work meaning and happiness where life meaning did positively influence happiness. This suggests that finding meaning outside of work has considerably more effect on happiness than finding meaning at work. Conversely it is not unthinkable that happy people are more inclined to engage in non-work activities that they consider meaningful. Moreover, happy people are more likely to interpret their own actions as meaningful. A person with a pessimistic outlook will consider an action not particularly meaningful, where a person with an optimistic outlook will judge the same action as personally meaningful.

The relationship that was found between life meaning and happiness confirms the same finding by Baumeister et al. (2013). Although this does not prove that people need meaning in their lives to be happy, it does indicate that meaning adds to happiness. Generally, having a sense of purpose and believing that one's life matters will enhance a sense of peace and contentment, leading to enhanced happiness.

As happiness was not the main focus of this study, more research is needed to better understand its relationship to meaning. Additionally, this study has shown that work meaning adds a substantial amount to life meaning but that the relationship is a complex one, which warrants a closer look.

## **Limitations**

There were several limitations to the current study that have to be acknowledged. First, as with every self-reporting questionnaire, the results of this research are prone to the whims and moods of the respondents. Especially the construct happiness was found to be less reliable because moods change frequently (OECD, 2013). Regardless, affect measures are deemed reliable enough to be used in social science (OECD, 2013).

Second, there are some limitations to generalizability of the results. The average educational level of the sample was higher than that of the working populace, limiting its generalizability among lower educated groups. Moreover, students were overrepresented in the sample which could also affect the generalizability when transferring it to the more experienced working populace. However, since the years respondents worked at their current job was not correlated with either IMO, work meaning or happiness, we expect its influence to be limited. The final threat to generalizability is the convenience sampling used in this study, making it more difficult to judge whether it is an accurate reflection of the general populace. The broad range of characteristics found among the respondents on the other hand, suggests many demographic groups were present in this study.

Lastly, the large differences in respondent's workweeks could cause validity difficulties, as the perception of someone that works 1 hour a week will differ substantially from someone that works 60 hours a week. However, considering the sample size in relation to the amount of outliers, this threat to validity seems limited. The vast majority (92.4%) of the respondents worked between 10 and 50 hours a week. The argument could be made that in order to measure work meaning properly, it should be one's primary occupation in life. Conversely, one could also argue that there are people who experience more work meaning within a 10 hour workweek than others would within a 50 hour workweek.

## **Conclusion**

In conclusion, when considering work meaning, having an IMO is far more valuable than a purely EMO, as having the former not only makes people value work meaning more but also gives them the tools to find it. However, a certain degree of EMO is desired and even necessary for the successful creation of meaning, so long as it does not interfere with intrinsic motivation. Indeed, based on this study, Finkelstein's (2009) suggestion that each motive incorporates both IM and EM appears to hold true.

With respect to happiness however, work meaning only has an indirect impact on this construct, as life meaning rather than work meaning increases happiness. It is also the IMO and the related benefits that lead to happiness rather than the pursuit of wealth. For a happy life then, one should aim at being intrinsically motivated above all else. Life meaning on the other hand benefits from a wider array of motivational orientations. Regardless, it is more present when people do those things that they are motivated to do themselves, that they are interested in, and that leads them to learning, growth, and self-expression. One could argue that those are the things that, in essence, truly matter to us as they are necessary to feel whole and healthy (Wong, 2013).

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