

# Employee Motivation in Contemporary Academic Literature: A Narrative Literature Review

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**Background:** Using the correct type of motivation is pivotal in triggering employees' affirmative work attitudes, such as work performance, job satisfaction, or voluntary retention, ultimately leading to increasing the organization's overall efficiency. Despite the ongoing academic debate, academics provide practitioners with mixed results on which motivation factors are relevant for targeted employee groups whose needs are under the economic and socio-psychological pressure of the rapidly evolving environment. Elton Mayo was the first to acknowledge these socio-psychological factors as significant motivation drivers almost a century ago.

**Methods:** Therefore, the purpose of this paper, using the narrative literature review method (supported by a systematic search strategy) on 83 articles, is to evaluate the research findings on employees' motivation (related to their affirmative work attitudes) and to unfold the motivation theory's advancement.

**Results:** Key motivation drivers were identified and unified into five motivation sets applicable to different employee groups. The findings also suggest that most academic works, theoretically grounded in classical motivational concepts, are quantitative analysis-based.

**Conclusion:** To increase the efficiency of employees' performance, internal motivation or internalization of external motivation seems to be the best solution. Employees' "floating" needs call for practitioners to be trained in techniques from psychology.

**Keywords:** Elton Mayo, Employee motivation, Motivation factor, Motivation theory

## 1 Introduction

George Elton Mayo is best known for his series of studies known as the "Hawthorn Study" or the "Hawthorn Experiment" conducted between 1927 and 1932. Based on the studies, using techniques from disciplines such as psychiatry or psychology (e.g., psychoanalysis or counseling), Mayo was the first to demonstrate the complexity of workers' motivation based on a socio-psychological rather

than the economic concept of an individual (Hansson & Wigblad, 2006).

Although Mayo reached this knowledge almost a century ago, the findings still seem more than recurrent as a growing body of practical literature is concerned with employee day-to-day negative experiences (e.g., work-life balance, work stress, mental health, or burnout syndrome). The same applies to academic debate. For instance, Safari (2020) deals with burnout syndrome, Budnick et al. (2020) with work-home boundaries, and Lutz et al. (2020) with

employees' mental health. Even though the phenomenon of "motivation" has played a significant role in academic research for decades (e.g., Gagné et al., 2010; Kuivas et al., 2017; Ahmed et al., 2021; Li et al., 2023), there seems to be a widening gap between theory and practice as organizations often fail to implement the new theoretical knowledge in practice. The reluctance to adopt the latest concepts might be caused by the lack of theoretical knowledge on the one hand or over-theorizing on the other. Another reason against successful adoption might be scarce resources or poor employee motivation management (Safari, 2020).

This paper uses the narrative literature review method on research articles to identify contemporary employee motivation drivers, current theories, and methods as they appear in the latest academic research. Thus, the research was guided by the following research question (RQ):

RQ: What motivates contemporary employees (what aspects of motivation are analysed in scientific research)?

To fulfil the paper's objectives and to answer the research question (RQ) to the fullest, two supporting sub-questions (SQs) were formulated:

SQ 1: What theoretical concepts are used by the authors under analysis?

SQ 2: What research methods do the authors under analysis use?

To accomplish given objectives, the following subsection presents current theoretical approaches to employee motivation (1.1). Section Material and Methods (2) highlights the method used to identify the studies under review. Section Results and Discussion (3) provides an overview and a summary of contemporary employee motivation as presented in the studies. It also synthesizes theoretical approaches and discusses the methods used in the current research. The review strategy is depicted in Figure 1.

## 1.1 Current theoretical approaches to employee motivation

### *Mayo's legacy for contemporary motivational theories*

Highhouse (1999) states that radical behaviourism prevailed in industrial/business psychology in the era before

Hawthorn's experiments, which is an approach based on the assumption that an individual's behaviour can be scientifically examined without knowledge of his/her inner mental states. Mayo's thesis that employees are human beings pursuing their interests and attaining self-satisfaction through their work and that the work itself is a social activity, and that is why most people strive for work that is fulfilling and meaningful became a ground-breaking idea at the time, which provided the basis for formulating new theoretical approaches to employee motivation (Khoshnevis & Tahmasebi, 2016). Thereby, it could be concluded that the results of the Hawthorne study have proven and thus shown the crucial importance of socio-psychological factors, such as the sense of belonging to a group, the ability to make decisions, and the importance of an employee as an individual for work productivity and employee satisfaction. The effectiveness of wage incentives is thus dependent on their relationship to other factors. It cannot be considered something that has an individual effect on an individual. Only in connection with interpersonal relationships at work and an individual's personal life it creates key determinants affecting labour productivity (Mayo, 1933). According to Highhouse (1999), this is Mayo's legacy for contemporary motivational theories and human resource management.

Scientists distinguish two theoretical approaches to contemporary employee motivation: the classical (traditional) approach, which is referred to as "classical theory," and the holistic approach, referred to as "modern motivation theory" (Lee & Raschke, 2016; Ryan, 2017).

### **Classical (traditional) motivational theories**

Traditional motivational theories focus on specific factors that motivate employees to perform. According to some authors (e.g., Khoshnevis & Tahmasebi, 2016; Lee & Raschke, 2016), classical theories originated at the turn of the last century and are the most often used by academia and practitioners.

### *Maslow's hierarchy of needs*

According to Maslow (1943), there are five levels of needs. After fulfilling a particular need, the individual is motivated to satisfy another need in the hierarchy—physiological, security, safety, social, recognition, and self-realization needs. If managers know the level of employee

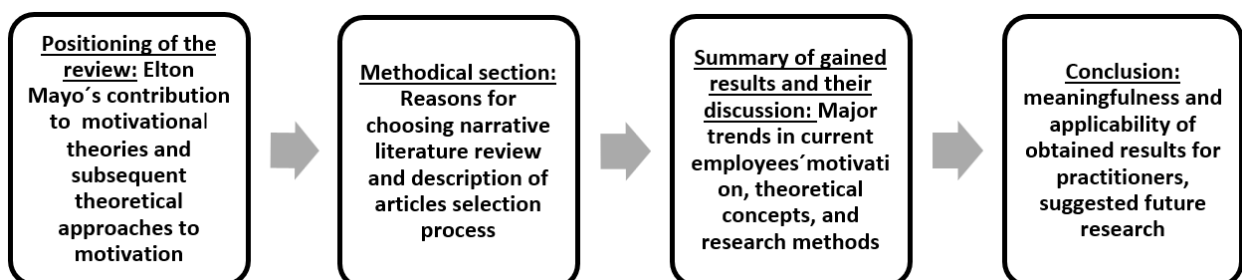


Figure 1: Overview of the study (authors' own work)

satisfaction, they can effectively motivate their employees.

### ***McGregor's motivational theory X and Y***

McGregor's Theory X (McGregor, 1960) assumes that employees do not like to work, do not want to be responsible, and do not care about their overall performance. It is, therefore, necessary to force them. In contrast, employees defined by the Y theory (McGregor, 1960) are considered dynamic, capable, and creative individuals. They can make decisions and accept responsibility for their work. McGregor (1960) does not claim that the Y theory can define all employees, but if employees are treated according to theory X, they will behave accordingly. Knowing the right "typology" of employees enables managers to choose appropriate employee management.

### ***Herzberg's theory of two factors***

Herzberg et al. (1959) distinguish between motivation and hygiene factors. Motivation factors or motivators bring employee satisfaction (e.g., success, recognition, growth opportunity). Hygiene factors are, e.g., organization policy, working conditions, relations with superiors, relations with colleagues, and financial remuneration. Hygiene factors alone do not satisfy employees, but their absence causes dissatisfaction. A hygiene factor (e.g., financial remuneration) can only motivate an employee if linked to a motivator (e.g., recognition).

Other classical theories include Vroom's theory of expectations (Expectancy theory) (Vroom, 1964), Skinner's motivational theory based on support and positive evaluation of employee behaviour (Reinforcement theory) (Skinner, 1953) or Deci's theory of self-determination (Self-determination theory) (Deci, 1971).

### **Modern (holistic) motivational theories**

Holistic (modern) theories are based on an interdisciplinary approach to employee motivation and use knowledge from neurology, biology, and psychology. For example, Nohria et al. (2008) use knowledge from various fields to explain "human nature" as an elementary factor influencing employee motivation. It is natural for employees to be driven by ownership (e.g., financial reward), belonging (e.g., company culture), understanding (e.g., job description), and feeling safe (e.g., performance management processes and resource allocation). The organization's performance is maximized if these so-called "drivers" effectively motivate employees.

### **Additional approaches to motivational theories**

Another possible way to classify motivational theories is based on the very approach to motivation. Scientists distinguish between theories that deal with motivational factors (Theories on factors of motivation), such as Maslow's Theory of Needs (Maslow, 1943), Herzberg's theory of two factors (Herzberg et al., 1959), or theories that focus on explaining the motivation process itself (General-process theories). These include Vroom's Expectancy theory (Vroom, 1964) and Adams's equilibrium theory (Steers et al., 2004).

## **2 Materials and Methods**

Literature reviews synthesize published literature on a topic and describe its current state of the art (Ferrari, 2015). While a narrative literature review is a comprehensive, critical, and objective analysis of the current knowledge on a topic (Baker, 2016), a systematic literature review identifies, selects, and critically appraises research to answer a clearly formulated question (Ferrari, 2015). In contrast to a systematic review, a narrative review can address one or more questions, and the selection criteria for inclusion of the articles may not be specified explicitly. However, the quality of a narrative review may be improved by borrowing from systematic review methods to reduce bias in selecting articles and employing an effective bibliographic research strategy (Ferrari, 2015).

Thus, due to the fragmented focus of each article under investigation, a narrative and systematic literature review were considered the most suitable.

For the systematic search of articles, in line with Ferrari's (2015) suggestions, one research question (RQ) and two supporting sub-questions (SQs) were formulated reflecting the intended use (see 1 Introduction).

### **2.1 Article selection strategy**

The selection criteria used to identify those studies that responded to the research question (RQ) were as follows:

- The studies were searched in the Web of Science and Science Direct databases.
- To resemble organizations' primary concern - employees' efficiency appraisal (research intentions of Mayo's Hawthorn experiment), the search included terms such as "employee motivation and job satisfaction," "employee motivation and commitment," "employee motivation and voluntary retention," "employee motivation and labour productivity," or "employee motivation and job performance."
- The search was limited to peer-reviewed works.
- The search was limited to works written in English.
- The search was limited to works published between January 2000 and July 2023.

### **Cleaning strategy**

Based on the content analysis of article titles, abstracts, and keywords resembling the search terms, the works that did not meet all the criteria were excluded.

Thus, after excluding those not meeting the criteria, the final number of articles was 83 (FN = 83). The number of articles based on empirical research was 73 (N = 73/83), and the number of articles based on systematic literature review was 10 (N = 10/83).

### Selected articles

To answer RQ, due to a very fragmented focus, the 83 articles were divided into five thematic sub-sections (Internal and external motivation, Motivation of Generation Y, Motivation of knowledge workers, Motivation of aging employees, and Motivation for pro-environmental behaviour of employees), as depicted in Table 1.

To answer supporting SQ 1 and SQ 2, only empirical research findings were under investigation (N = 73).

## 3 Results and Discussion

### 3.1 Motivation of contemporary employees (RQ)

#### Internal and external motivation

The most crucial outcome of motivation is employee performance. Thus, we can define internal motivation as a

Table 1: Selected articles division into thematic sub-sections (authors' own work)

Thematic sub-section	Article concern regarding motivation and employee efficiency and productivity appraisal	Individual articles listed in alphabetical order
<b>Internal and external motivation</b> (N=28)	Internal and external motivation,  Intrinsic and extrinsic motivation.	Benabou & Tirole, 2003; Bowles & Polanía-Reyes, 2012; Chatzopoulou et al., 2015; Contiu et al., 2012; Deci & Ryan, 2000; Deci et al., 2016; Donze & Gunnes, 2018; Elizur & Koslowsky, 2001; Frey & Jegen, 2001; Gagné & Deci, 2005; Gagné et al., 2010; Haghighatian & Ezati, 2015; Hitka & Balážová, 2015; Howard et al., 2016; Izercian et al., 2015; Judge et al., 2010; Khoshnevis & Tahmasebi, 2016; King et al., 2017; Kuivas et al., 2017; Lo et al., 2012; Maxwell, 2005; Mitchell et al., 2020; Moran et al., 2012; Rusu & Avasilcai, 2014; Siu et al., 2014; Vetráková & Mazúchová, 2016; Zámečník, 2014; Zhang & Liu, 2022.
<b>Motivation of Generation Y</b> (N=14)	Generation Y, millennials, internet generation, or young employees.	Allen, 2004; Aycan & Fikret-Pasa, 2003; Campos Monteiro et al., 2015; Chapman et al., 2005; Eisner, 2005; Frye et al., 2019; Lu & Adler, 2009; Lutz et al., 2020; Rosenbaum & Wong, 2012; Stewart et al., 2017; Supanti & Butcher, 2019; Wong et al., 2017; Wood, 2004; Xiong & King, 2019.
<b>Motivation of knowledge workers</b> (N=16)	Motivation of "knowledge," "highly skilled," "executive," "talented," or "creative" employees.	Davenport, 2005; Gupta et al., 2023; Hanaysha & Tahir, 2016; Lee & Kim, 2021; Lee & Suzuki, 2020; Li et al., 2021; Li et al., 2023; Mahjoub et al., 2018; Mládková, 2012; Mládková, 2013; Mládková, et al., 2015; Ng, 2017; Ozkeser, 2019; Pohle et al., 2022; Reboul et al., 2006; Schermuly et al., 2013.
<b>Motivation of aging employees</b> (N=8)	Aging employees, old employees, elderly employees, retired employees, or retiring employees.	Armstrong-Stassen, 2008; Armstrong-Stassen & Ursel, 2009; Budnick et al., 2020; Francis-Smith, 2004; Heslin et al., 2019; Johns, 2003; Kooij et al., 2014; Pak et al., 2018.
<b>Motivation for pro-environmental behaviour of employees</b> (N=17)	Motivation for "pro-environmental," "green," or "pro-philanthropic" employee behaviour.	Ahmed et al., 2021; Aitken et al., 2016; Appiah, 2019; Davis et al., 2020; Giocirlan, 2023; Goh & Ferry, 2019; Graves & Sarkis, 2012; Graves et al., 2013; Graves & Sarkis, 2018; Hu et al., 2016; Macke & Genari, 2019; Maki et al., 2016; Mamun, 2023; Sheldon et al., 2016; Voegtlin & Greenwood, 2016; Yuriev et al., 2018; Zhang & Huang, 2019.

desire to do the task for itself and to experience the satisfaction it provides (Deci & Ryan, 2000). Internal motivation is associated with positive results such as engagement, productivity, and identification with work (e.g., Chatzopoulou et al., 2015; Howard et al., 2016; Deci et al., 2016). In contrast, external motivation is usually defined as a desire to pursue the task to achieve positive consequences, such as incentives, or avoid negative consequences as punishment (Deci & Ryan, 2000; Judge et al., 2010).

Although the research on the relationship between internal and external motivation and its impact on employee performance has lasted nearly half a century, essential questions about the relationship between these motivations and their outcomes still need to be answered. At the general level, there is an ongoing debate about whether these two motivations positively affect each other or whether their effects differ. Therefore, they are mutually exclusive.

Some scientists view both motivations as compatible. The assumption is that external motivation triggered by tangible incentives is positively related to internal motivation triggered by intangible incentives such as social recognition (Stajkovic & Luthans, 2003). Therefore, Donze and Gunnes (2018) suggest that organizations should be more sensitive to social ideals and foster social interaction in the workplace. In other words, investing in social bonding reinforces the effectiveness of monetary incentives and increases average effort, ultimately helping homogenize the workplace and thus making it more productive.

However, other studies have shown that these two types of motivation are contradictory. Deci and Ryan (2000) concluded that tangible incentives or punishments disrupt internal motivation, suggesting that the association is negative. Other studies provided similar evidence (e.g., Frey & Jegen, 2001; Bowles & Polanía-Reyes, 2012). For example, according to Benabou and Tirole (2003), material incentives have signalling properties, indicating that the task requires further strengthening, probably because it is unpleasant. Such incentives undermine the intrinsic interest and change employee preferences (Benabou & Tirole, 2003). Also, the results of King et al. (2017) suggest that employees' work values, based on their former work memories, influence their current performance, with intrinsic values having a positive impact while extrinsic values displaying no significance.

The explanation for these partially contradictory findings may lie in how the tasks are coded in the meta-analyses and the different types of incentives under examination. More precisely, there are differences in the size and timing of incentives, the difficulty in obtaining them, and thus in the percentage of employees receiving them.

Moreover, external motivation has an ambiguous effect on overall work performance. This is partly due to its multi-tasking effect: In the context of tangible incentives, employees focus on tasks they are motivated by the most and neglect those they are motivated by the least. When

employees focus only on achieving positive incentives, affirmative affective states associated with internal motivation (e.g., enthusiasm, engagement, and well-being) are not present. Conversely, external motivation is usually associated with anxiety and lower satisfaction levels, reducing employee concentration and preventing them from fully engaging in the task (Gagné et al., 2010).

Kuuvas et al. (2017) further state that internal motivation is positively linked to work performance but negatively to dismissive outcomes such as an intention to retire, burnout, and conflict between work and personal life. External motivation is negatively linked or unrelated to work performance but positively related to the above-mentioned negative outputs. These findings thus support the crowding-out effect. Likewise, according to Chatzopoulou et al. (2015), the most satisfying motivation factor is the nature of work, irrespective of gender, age, education, or hierarchy at work, even under economic turnaround circumstances.

Hence, Kuuvas et al. (2017) propose that organizations should address internal and external motivation separately. Concerning employee performance, organizations should focus on increasing employees' internal motivation. Employees should be invited to decision-making and receive feedback when taking the initiative, not only when having problems. Organizations should exercise caution in using enforcement techniques such as conditional tangible incentives, staff monitoring, and benchmarking. These findings are also supported by Mitchell et al. (2020), who, based on a gamification study, conclude that extrinsic motivation can reduce employee autonomy and competence need satisfaction. However, internalizing extrinsic motivation (e.g., through perceived personal values) can support intrinsic motivation. Thus, through suitable development programs, e.g., fitting gamification and simulation-based learning design, organizations could manage the co-existence of extrinsic and intrinsic motivation to their advantage.

### *The Motivation of Generation Y*

Generation Y is a collective term for those born between 1980 and 2000 (Eisner, 2005). They are also referred to as the internet generation or millennials. Generation Y grew up in economic expansion and prosperity but matured over years of economic uncertainty and upheaval (Wong et al., 2017). Many millennials gain work experience before leaving school; therefore, they are assumed to have clear expectations of what they want to do, for whom they want to work, and what they want to achieve (Wood, 2004; Wong et al., 2017). According to Allen (2004) and Lu and Adler (2009), millennials want to set personal goals and do meaningful work.

A study by Chapman et al. (2005) showed that Generation Y requires clear direction and managerial support while requiring competency and flexibility to carry out tasks in their own way. Millennials prefer an inclusive



management style; they do not like the slow pace and require immediate feedback to evaluate their performance (Francis-Smith, 2004). They are willing to fight for freedom and appreciate home and family. Maxwell (2005) admits that job flexibility is a way to achieve work-life balance; therefore, flexibility should be promoted by management and corporate culture.

According to scientists (e.g., Stewart et al., 2017; Wong et al., 2017; Xiong & King, 2019; Supanti & Butcher, 2019), due to more career choices, millennials multiple needs must be met simultaneously; thus, they find it hard to reach a compromise. As a result, they are often motivated to work on multiple needs (Wong et al., 2017). Nevertheless, the prioritization of these needs is changing over time. Employees are often affected by economic changes. For example, millennials placed greater emphasis on financial remuneration and job security during the global financial crisis in 2008 and 2009, while following the 2010-2013 crisis, they increasingly emphasized socio-organizational and self-actualization aspects. Likewise, the role of monetary reward as an extrinsic motivator might be more significant for those for whom access to money is more complex, and thus, as a result, the deprivation of basic needs satisfaction is their daily life experience (Judge et al., 2010; Campos Monteiro et al., 2015). The findings of longitudinal qualitative studies (Wong et al., 2017) also show that wage levels have more weight for fresh graduates, while career success is more important for those working for several years. While an individual's personality traits can affect career and job choices, the influence of family and friends plays an even more important role. Millennials prefer to work for organizations that use advanced technology and enable employees to use social media. However, as Rosenbaum and Wong (2012) suggest, social media can be a potential problem in work performance and employee satisfaction, as internet addiction is related to attention deficit disorder and hyperactivity. Also, "trespassing" work-home boundaries (work-related messaging in the private domain or private messaging in the work domain) has a significant negative effect on employees' emotional well-being (Lutz et al., 2020).

There is a causal relationship between motivation and employee loyalty. There are three types of commitment: commitment to financial reward, commitment to people and organization, and commitment to career success (Aycan & Fikret-Pasa, 2003; Wong et al., 2017). Even if an organization meets the need for financial rewards, millennials do not necessarily stay loyal to the organization. According to some scientists (e.g., Stewart et al., 2017; Supanti & Butcher, 2019; Frye et al., 2019; Xiong & King, 2019), millennials would feel less under pressure, happier and more likely to remain in the organization if the organisation responded to their needs for interpersonal relationships, the working environment as well as their development and achievements.

### *The Motivation of Knowledge Workers*

Knowledge consists of two dimensions - explicit and tacit. The explicit knowledge is formally expressed by coding (e.g., picture or language). Tacit knowledge is that part of knowledge gained by nature, learning, or experience. The tacit knowledge is intangible and, therefore, challenging to manage. Managers cannot control how employees work since their results heavily rely on their tacit knowledge. Tacit knowledge may be partially or entirely subconscious.

Knowledge or creative work does not have to be linear. Individual's ideas and solutions can come up randomly, usually when employees are relaxed and outside the organization. Thus, the work results may be difficult to control and manage. They might differ in the short and long term. Also, knowledgeable or creative employees usually work under pressure, are stressed, and lack time. Thus, managers should check the independently working employees to see if they know the organization's goals and are guided by them.

Scientists suggest that knowledge workers are usually highly motivated to perform well, make decisions, self-actualize, and manage their activities (Davenport, 2005; Mahjoub et al., 2018; Ozkeser, 2019; Pohle et al., 2022). However, as various motivation theories show, different employees are motivated by different incentives. Mládková et al. (2015) claim that managers often do not understand the importance of proper motivation when working with such a group of employees. Managers should, therefore, be cautious about aspects that characterize knowledge workers. Knowledge workers can know more about their work than their managers (Li et al., 2023). Tacit knowledge is partially or fully subconscious, and even a knowledge worker may not realize or underestimate its importance for the organization. It is the employee who owns the knowledge, not the organization. When employees leave the organization, their knowledge leaves them (Davenport, 2005; Mládková et al., 2015). Therefore, according to Lee and Suzuki (2020), reciprocity is essential in motivating "information exchange" between an organization and a knowledge worker. Moreover, according to Lee and Kim (2021), symmetrical internal communication and leadership communication enhance creativity, with feedback-seeking behaviour mediating the relationship. These findings are supported by the work of Li et al. (2021), who claim that multisource information exchange partially mediates the relationship between an employee's personality and his or her creativity.

Based on qualitative research and literature review, Mládková et al. (2015) state that the essential motivational factors for knowledge workers are achieving goals, work character, and independence. Significant demotivating factors are the inefficient use of the worker's energy and the manager's low morals (Li et al., 2023).

### ***The motivation of aging employees***

As a result of increased life expectancy and declining fertility rates, the workforce's composition is changing in developed countries. Older employees often leave their jobs before the retirement age. However, fewer younger employees are available to replace them entirely. States are coping with rising retirement costs and anticipate labour shortages by encouraging employees to work later, e.g., by increasing their mandatory retirement age and discouraging early exit from the labour market (Ng, 2017). Therefore, organizations should design work so that older workers would continue working and be motivated to do so (Siu et al., 2014; Pak et al., 2018).

Pak et al. (2018) suggest that employee management based on the ability-motivation-opportunity theory (Marin-Garcia & Martinez, 2016) can positively affect older employees' performance. Employees must be able and motivated to work longer (Armstrong-Strassen, 2008; Armstrong-Strassen & Ursel, 2009). Also, they should be given the right opportunities (Pak et al., 2018). Similarly, being in a "learning mode" may enable aging employees to sustain their working careers. Heslin et al. (2019) state that identifying prime sustainable career challenges via self-regulatory career meta-competency is vital. Therefore, constant self-actualization and updating may help employees foster sustainable career development across their lifespan.

According to Kooij et al. (2014), the possibility of continuing work is conceptualized as an organizational climate towards work until a later age. An organizational climate towards work until a later age is defined as the perception of justice or injustice of business processes, practices, and behaviour towards different age groups shared by the "members of a group." People who experience a hostile climate longer want to retire earlier (Schermyly et al., 2013). Alternatively, e.g., the employees' "fear of missing out" does not predict work well-being but higher work burnout and frequent message-checking behaviour (Budnick et al., 2020).

Kooij et al. (2014) constructed a set of personnel procedures to increase the motivation to continue working in older age. The set includes development, maintenance, utility, and adaptation procedures. Development procedures, such as education, internal support, and continuous development, help employees achieve a higher level of performance. Personnel maintenance procedures allow for maintaining their current performance level despite age-related changes, such as health check-ups, reduced working weeks, and ergonomic workplace modifications. Personnel utility practices consider older employees' knowledge, experience, and competencies, such as mentoring roles, participation in decision-making, and second careers. Personnel adaptation procedures help employees work less when maintenance or utility is no longer possible, e.g., partial

retirement or exclusion from overtime.

In conclusion, to improve the skills and motivation of aging employees, practitioners must ensure a sufficient balance between job requirements and job resources, either by reducing job requirements or providing adequate resources to help employees face high workloads. Suppose organizations do not have the means to measure current levels of ability, motivation, and employment opportunities. In that case, they can focus on improving the level of proximal and distal labour resources, which positively impacts the ability, motivation, and willingness to continue working till a later age. According to Pak et al. (2018), autonomy is an example of a proximal labour resource, and managerial support is an example of a distal job resource.

### ***Motivation for pro-environmental behaviour of employees***

According to Yuriev et al. (2018), there has yet to be a definitive conceptualization of pro-environmental employee behaviour. Graves and Sarkis (2018) define pro-environmental behaviour as a broad set of environmental responsibilities such as learning more about the environment, developing and implementing ideas to reduce negative environmental impact, developing environmental processes and products, recycling, and questioning practices that harm the environment. Graves and Sarkis (2018) distinguish between basic behaviour, such as recycling or reducing energy consumption, and advanced behaviour, which requires a proactive approach, such as finding new environmentally friendly ways of working or enhancing environmental knowledge. Basic pro-environmental behaviour is short-term, less demanding, and relatively common. Advanced behaviour is more prolonged, more challenging, and less common. Although basic and advanced pro-environmental behaviour tends to be linked, motivation is differentiated (Aitken et al., 2016).

Based on their findings, Graves and Sarkis (2018) claim that internal motivation is positively related to basic and advanced pro-environmental behaviour. On the other hand, external motivation is not positively linked to basic or advanced pro-environmental behaviour, which is a finding contrary to other studies (Gagné & Deci, 2005; Moran et al., 2012; Aitken et al., 2016). External motivation places minimal demands on employees. Therefore, it is unclear whether focusing on external rewards and motivation effectively facilitates pro-environmental behaviour. The effectiveness of such rewards may depend not only on their nature but also on how they are handled (Deci et al., 2016; Maki et al., 2016; Graves & Sarkis, 2018).

The self-determination theory argues that behaviour depends on the type of motivation, not just the amount of motivation and that external and internal motivation coexist because employees have multiple reasons for pro-environmental behaviour (Deci & Ryan, 2000; Deci et al., 2016). Similar results are reported by Ahmed et al. (2021),

whose findings from the hospitality industry setting reveal that green HR practices positively relate to extrinsic and extrinsic motivation. Regarding external motivation, employees behave pro-environmentally because of external incentives, e.g., they expect rewards or praise or want to avoid sanctions (Graves et al., 2013; Zhang & Huang, 2019). In contrast, internal motivation partially stems from the employee and includes introjected, identified, and introspective motivation. Employees with the introjected motivation partially internalized external reports. They believe they should behave pro-environmentally and feel guilty if not (Graves et al., 2013; Zhang & Huang, 2019). For example, in the study of motivational factors of hospitality industry employees (Goh & Ferry, 2019), most respondents reported feelings of guilt when expressing attitudes toward food waste. When motivation is identified, employees behave in line with their values. They fully advocate the importance of sustainability. Those who are motivated introspectively see pro-environmental behaviour as entertaining, interesting, or challenging and find pleasure in, for example, streamlining the waste reduction process. Although the three internal motives for pro-environmental behaviour are theoretically different, they are similar and related to each other due to the common origin of the individual (Sheldon et al., 2016; Giocirlan, 2023).

However, Graves and Sarkis (2018) suggest that employees with strong environmental sensitivity respond more positively to environmental initiatives than those with weak ones. Thus, “top-down” green programs may not work uniformly for green and non-green employees. Organizations committed to sustainability should identify and recruit employees with strong environmental values (Appiah, 2019; Macke & Genari, 2019; Davis et al., 2020). Another option is to shift employee values, but the level of change in values is unclear (Graves & Sarkis, 2018). In this respect, Ahmed et al. (2021) suggest pro-environmental training as the most effective practice. Seemingly, Hu et al. (2016) propose learning as a moderating tool between, e.g., corporate volunteering and work performance. The positive effect of learning might be even strengthened by social support from, e.g., family and friends (Hu et al., 2016).

### 3.2 Summary of the results on the motivation of contemporary employees (RQ)

To evaluate what motivates current employees' efficiency and productivity appraisal (e.g., work performance, job satisfaction, organization commitment, or voluntary retention), there was a need to divide the selected articles into five thematic sub-sections, which demonstrate the tendencies in current research (Internal and external motivation, Generation Y, Knowledge workers, Aging employ-

ees, and Pro-environmental behaviour). The summarised findings suggest that Mayo's assumptions are a recurrent issue (Table 2).

As a result, we can say that 34 % of works (N = 28/83) deal with extrinsic and intrinsic motivation, which could be assigned to no consensus on the co-existence of internal and external motivation as agreement upon their synergetic effect has not been reached so far. Hence, employees in the same organization may “experience” the same motivation factors differently. To increase employees' performance efficiency, internal motivation or internalization of external motivation is the most efficient and universal solution. Thus, to homogenize workplace values, we suggest the most suitable learning techniques like role-play, gamification, or learning through practical experience (e.g., volunteering). Likewise, we recommend employees' participation in decision-making or getting positive feedback (if successful) and emotionally neutral (in the case of failures). Organizations should address rewards or punishments with sensitivity and caution when benchmarking or assessing employees' performance. These measures indeed call for managers to be trained in techniques from psychology (e.g., cancelling or psychoanalysis) and high morals (e.g., ethical management, spiritual leadership).

Almost the same percentage of work deals with pro-environmental behaviour (20%) and knowledge workers' motivation (19%). This could be credited to increased demand for innovative behaviour, pro-environmental-minded behaviour, and a shift in skill demand (need for soft skills and technical skills due to automatization, digitalization, and robotization across organizational structures and industries).

Surprisingly, only 10 % of work (N = 8/83) deals with finding the right stimuli for aging employees. Organizations should provide employees with suitable motivation stimuli, matching opportunities, and corresponding resources to support their affirmative work attitudes across their lifespan. Employees should work on their self-actualization to be adaptable to changing work environments. Thus, their work-life balance is manageable. This could be managed by being in a “learning mode” across one's lifespan.

If we look carefully at the Identified motivation drivers across the five Thematic subsections (Table 2), we can detect the deep need for autonomy and competence, meaningful work, development and learning, social bonding, feedback-seeking behaviour, and work-home balance, which could be translated into respect seeking behaviour, recognition, forgiveness, and tolerance in case of employee's failure and urge for praise and honour in case of success, and maintaining fulfilling relationships, which we believe make the true essence of every individual, yet at the same time make him or her very fragile, especially in a highly competitive environment, which workplace is. This is why we firmly believe that ethical management



and management practices based on sociopsychology are needed. As a result, for more straightforward practical implications, the motivation drivers were unified into five motivation sets (social bonding, nature of work, flexibility, internalization of extrinsic motivation, and management support). Likewise, an urgent need for life-long learning can be traced in all five thematical subsections under research. Therefore, the suggested practical implications (Social bonding, Nature of work, Flexibility, Internaliza-

tion of extrinsic motivation, and Management support) could be achieved through learning mode, which benefits both the organization (e.g., increased work productivity, job satisfaction, organizational commitment), and the employees (e.g., increased employability, self-realization, self-actualization, social bonding) (Table 2).

These conclusive recommendations are not only in line with the original Mayo's findings (1933) but also with the latest findings of Siu et al. (2014), Hanaysha & Tahir

Table 2: Summary of motivation drivers and suggested implications (authors' own work)

Motivation pursues	Thematic subsections under research	Identified motivation drivers	Authors' suggestions for practical implications
	Internal and external motivation (N =28/83, 34%)	Interpersonal relationships, meaningful work, autonomy, competence, decision-making, feedback, internalization of external motivation	
Employee efficiency and productivity appraisal	Generation Y (N = 14/83, 17%)	Interpersonal relationships, meaningful work, self-actualization, work-life balance, competency, feedback, highly competent and ethical management, tangibles	<b>Social bonding</b> (personalized and shared values, two-way symmetrical communication, ethical management, knowledge-sharing behaviour)  <b>Nature of work</b> (self-realization, self-actualization, autonomy, competence, goal achieving, decision-making)  <b>Flexibility</b> (work flexibility, employability, self-actualization, work-home boundaries, work-life balance)  <b>Internalization of extrinsic motivation</b> (personalizing values)
	Knowledge workers (N = 16/83, 19%)	Interpersonal relationships, meaningful work, autonomy, competence, learning, goal achievement, highly competent and ethical management	<b>Management support</b> (highly ethical and competent management, feedback, adequate resources, and requirements distribution, two-way symmetrical communication)
	Aging employees (N = 8/83, 10 %)	Self-actualization, work-home binderies, internal support and friendly work environment, decision-making, autonomy	
	Pro-environmental behaviour (N = 17/83, 20 %)	Internalization of external motivation, support from family, shared values, learning	

(2016), Lutz et al. (2020), Mitchell et al. (2020), Budnick et al. (2020), and Li et al. (2023).

### 3.3 Summary of the theoretical background of current scientific research (SQ 1)

The articles ( $N = 73$ ) analysed for this study employed mainly classical (traditional) theories for theoretical background and further implications. In particular, those are the theory of self-determination (Deci, 1971) - 42%, Herzberg's two-factor motivation theory (Herzberg et al., 1959) - 9%, or the combination of two or more motivational theories - 15%, e.g., Maslow's hierarchy of needs (Maslow, 1943) and McGregor's Motivational theory X and Y (McGregor, 1960). The interdependence of these four theories is depicted in Table 3.

Based on the review results (3.1), we can say that, e.g., knowledge workers, creative employees, executives, or millennials are motivated primarily by factors such as independent and creative work, use of their expertise, or self-actualization. Using Maslow's theory of needs, this could be explained by the fact that such employees are on "the upper salary scale." Therefore, their core needs have

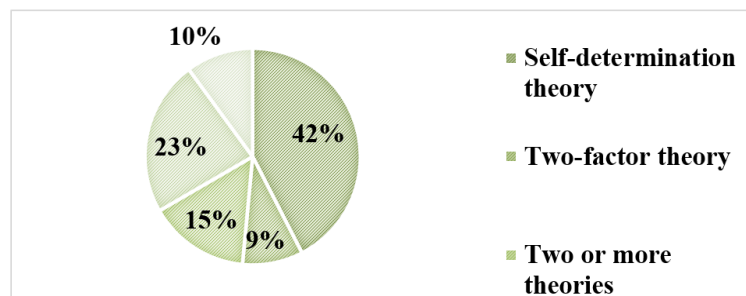
already been met, or these motivation factors resonate with their values. Applying the terminology of Deci's motivational theory of self-determination (Deci, 1971), these factors can be considered "internal" or "motivational," if based on the two-factor motivational theory by Herzberg et al. (1959). Analogically, employees, e.g., on "a lower salary scale" or deprived of satisfying their core needs, are motivated mainly by, e.g., financial remuneration, job security, or a well-defined reward and punishment system. These factors can be described as "external" according to Deci's theory of self-determination (Deci, 1971) or hygienic according to Herzberg's two-factor motivation theory (Herzberg et al., 1959).

Several analysed works (23%) were based on the above-mentioned classical motivational theories, supplemented with knowledge from behavioural economics or social psychology (e.g., signalling theory, social exchange theory, or social identity theory). 10% of the analysed works did not specify their theoretical grounds (Graph 1).

Those and many other so-called "Classical Theories" (e.g., McClelland, 1951; Vroom, 1964; Skinner, 1965) are, according to Ryan (2017), the "product" of the golden era of social psychological research (the 1950s - 1970s). They were based on long-term and thoughtful theorizing, observation, and experimentation (Ryan, 2017). Therefore, it

Table 3: Interdependence among the most cited motivational theories (authors' own work)

Maslow (1943)	Herzberg (1959)	McGregor (1960)	Deci (1971)
Hierarchy of needs theory	Theory of two factors	Motivational theory X and Y	Self-determination theory
Physiological needs Security and safety needs Need for togetherness and belonging	Source for hygiene factors	Source for employee's "X" motivation	Source for external motivation
Recognition needs Self-actualization needs	Source for motivation factors	Source for employee's "Y" motivation	Source for internal motivation



Graph 1: Used classical motivation theories in analysed articles (authors' own work)

may not be surprising that recent research based on statistical analytical methods has yielded little or no benefit in developing employee motivation theory. The solution might be, for example, to find better methodological approaches to the study of organizational processes and managing employee motivation. Several studies reached this conclusion (e.g., Woodside, 2013; Lee & Raschke, 2016; Ryan, 2017).

Although the vast majority of works are grounded in theory, the mixed results, absence of micro and macro environment variable influence, and fragmented focus of each investigation call for the clarification of existing theories or for the initiation of a search for a new theory or conceptual approach which would be more comprehensible and universal, and thus easier to follow and apply into practice. Based on the findings, the authors of this paper suggest that the newly formed concepts should be grounded in scientific disciplines such as psychology, psychiatry, or social psychology to depict contemporary employees' true needs, e.g., by adopting such techniques as psychoanalysis or counselling. Unfortunately, these techniques are being paid little or no attention by today's management scientists. On the more conventional side, the Wong et al. (2017) model seems to be the most versatile and flexible. It replicates Maslow's hierarchy of human needs but operates like a dashboard. It considers the employees' demand to meet multiple needs simultaneously or the need to meet different needs regardless of their "location" in the hierarchy. Thus, this model respects the changing needs of employees and the micro- and macro-environment conditions of the organization. To make this model function in practice and not represent only a sunk cost, managers must be empathetic and responsive to employee needs using, e.g., regular monitoring or personnel counselling, as suggested by Elton Mayo almost a century ago (Mayo, 1933). Therefore, managers' training in the principles of employee motivation, cancelling, and the basics of psychoanalysis is more than suggested. Interestingly, although motivation theories support Mayo's thesis, none of the researched

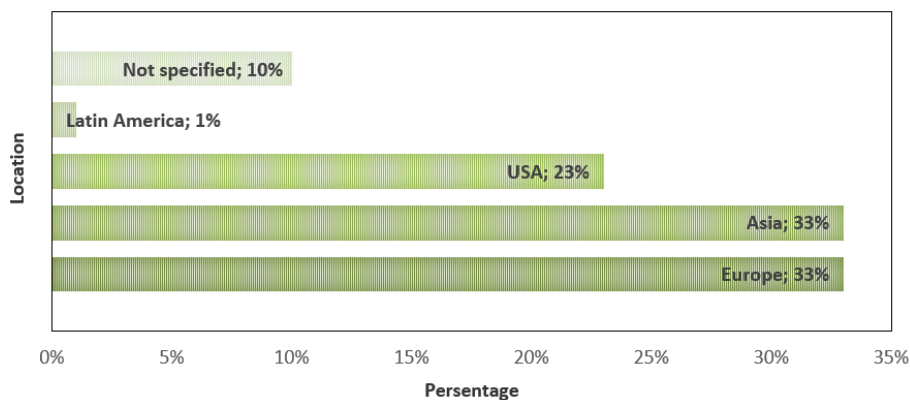
works use it as a theoretical background.

### 3.4 Summary of current trends in the methodology of scientific research (SQ 2)

Research on the causal relationship between employee motivation and employee affirmative work attitudes is mainly applied to the service sector (68%), namely tourism, hospitality, and health care.

Geographically, most of the research is located equally in Asia and Europe (33%). 23% of research was conducted in the USA. Latin America as a research location was represented by one work only (Campos Monteiro et al., 2015), and Africa as a research location was not presented in the analysed sample (Graph 2).

The investigated works were based on quantitative ( $N = 57/73$ ) and qualitative ( $N = 16/73$ ) analyses. Hence, the predominant method of conducting empirical research is a quantitative analysis ( $N = 57/73$ , 78%), especially multiple regression, correlation, or factor analysis, which are currently the prevailing methods of conducting social research (Woodside, 2013; Lee & Raschke, 2016). However, Lee and Raschke (2016) believe that these methods aim to find associations (correlations) that are symmetrical and linear but are not the only ways to understand employee motivation and performance. The symmetric analysis assumes that the effects of independent variables are linear and additive. The key to understanding the relationship between motivation and employee performance is not to determine which variable has the most significant impact but whether there is only one combination or several different combinations of conditions capable of generating the same result and how those combinations arise (Delery & Doty, 1996; Lee & Raschke, 2016). Employee performance is a "function" of many factors: motivation, individual abilities, or the work environment (Ryan, 2017). Thus, for



Graph 2: Geographical location (authors' own work)

example, the configuration approach allows organizations to be seen as clusters of interconnected structures and procedures rather than modular or loosely connected entities whose sub-elements can be understood and examined separately (Fiss, 2007). The configuration approach is a holistic and systematic approach to organizations (Delery & Doty, 1996) and is, therefore, more compatible with the so-called “new” motivational theories based on an interdisciplinary approach (Lee & Raschke, 2016; Ryan, 2017).

### Conclusion

Even though our literature review simplifies the complexity of motivation, it allows us to trace current tendencies and trends. Despite the diversity of employees, we identified five key motivation drivers (Social bonding, Nature of work, Flexibility, Internalization of extrinsic motivation, and Management support) to homogenize the organization's approaches and to provide employees with efficient stimuli. The unfolded results demonstrate that the best way to increase employees' efficiency (e.g., work performance, job satisfaction, or organizational commitment) and to homogenize workplace goal ambiguity is to internalize extrinsic motivation (e.g., through perceived personal values). Thus, development training techniques such as gamification, role-playing, or simulation-based learning designs are suggested. Findings also indicate that self-development programs serve employees' efficiency and personal interests (e.g., lifespan flexibility, work-life balance, career growth, and self-actualization). To understand the motivation drivers and to unify the pluralistic goals, managers are recommended to be educated and practically trained in techniques from social psychology and psychology (e.g., counselling, mentoring, ethical management, spiritual leadership, or communication).

The studies under investigation rely on traditional approaches to employee motivation. Thus, it would be interesting to find out how much practicing managers know about various motivational theories and how and why they implement them into organizational practice.

As advocates of Mayo's thesis, we encourage future research on using ethics (e.g., management's ethical behaviour or an organization's ethical principles) as employee motivation drivers. The studies under review do not consider organizations' disposable resources, which might hinder adopting the proposed suggestions. Likewise, we challenge researchers to control both endogenous and exogenous variables, as the effect of exogenous variables on the macro-level was often neglected. We identified a trend towards quantitative studies taking place at the sub-national level. Therefore, we would like to encourage researchers to conduct studies on the national and transnational levels. Conclusively, to advance the motivational theory, a configurational approach (a cluster and fuzzy logic qualitative comparative analysis) could be proposed to analyse and capture the complexity of employee motivation.

## Literature

- Ahmed, M., Guo, Q., Qureshi, M.A., Raza, S.A., Khan, K.A., & Salam, J. (2021). Do green HR practices enhance green motivation and proactive environmental management maturity in the hotel industry? *International Journal of Hospitality Management*, 94, 102852. <https://doi.org/j.ijhm.2020.102852>
- Aitken, N.M., Pelletier, L.G., & Baxter, D.E. (2016). Doing the difficult stuff: influence of self-determined motivation toward the environment on transportation pro-environmental behaviour. *Ecopsychology*, 8, 153–162. <https://doi.org/10.1089/eco.2015.0079>
- Allen, P. (2004). Welcoming Y. *Benefits Canada*, 28(9), 51–53.
- Appiah, J.K. (2019). Community-based corporate social responsibility activities and employee job satisfaction in the US hotel industry: An explanatory study. *Journal of Hospitality and Tourism Management*, 38, 140–148. <https://doi.org/10.1016/j.jhtm.2019.01.002>
- Armstrong-Stassen, M. (2008). Human resource practices for mature workers - And why aren't employers using them? *Asia Pacific Journal of Human Resources*, 46(3), 334–352. <https://doi.org/10.1177/1038411108091755>
- Armstrong-Stassen, M., & Ursel, N.D. (2009). Perceived organizational support, career satisfaction, and the retention of older workers. *Journal of Occupational and Organizational Psychology*, 82(1), 201–220. <https://doi.org/10.1348/096317908X288838>
- Aycan, Z., & Fikret-Pasa, S. (2003). Career choices, job selection criteria, and leadership preferences in a transitional nation: The case of Turkey. *Journal of Career Development*, 30(2), 129–144. <https://doi.org/10.1023/A:1026112127918>
- Baker, J.D. (2016). The Purpose, Process, and Methods of Writing a Literature Review. *AORN Journal*, 103(3), 265–269. <https://doi.org/10.1016/j.aorn.2016.01.016>
- Benabou, R., & Tirole, J. (2003). Intrinsic and extrinsic motivation. *The Review of Economic Studies*, 70(3), 489–520. <https://doi.org/10.1111/1467-937X.00253>
- Bowles, S., & Polanía-Reyes, S. (2012). Economic incentives and social preferences: Substitute or complements? *Journal of Economic Literature*, 50(2), 368–425. <https://doi.org/10.1257/jel.50.2.368>
- Budnick, C.J., Rogers, A.P., & Barber, L.K. (2020). The fear of missing out at work: Examining costs and benefits to employee health and motivation. *Computers in Human Behaviour*, 104. <https://doi.org/10.1016/j.chb.2019.106161>
- Campos Monteiro, D.L., Penaloza, V., Pinto, F.R., & Coria, M.D. (2015). Attitudes towards money and motivational orientation to work in Brazilian young workers. *Contaduría y Administración*, 60, 11–30. [https://doi.org/10.1016/S0186-1042\(15\)72145-5](https://doi.org/10.1016/S0186-1042(15)72145-5)



- Chapman, D.S., Uggerslev, K.L., Carroll, S.A., Piasentin, K.A., & Jones, D.A. (2005). Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes. *Journal of Applied Psychology*, 90(5), 958–944. <https://doi.org/10.1037/0021-9010.90.5.928>
- Chatzopoulou, M., Monovasilis, T., & Vlachvei, A. (2015). Employees' Motivation and Satisfaction in Light of Economic Recession: Evidence of Grevena Prefecture – Greece. *Procedia Economics and Finance*, 24, 136-145. [https://doi.org/10.1016/S2212-5671\(15\)00633-4](https://doi.org/10.1016/S2212-5671(15)00633-4)
- Contiu, L.A., Gabor, M.R., & Oltean, F.D. (2012). Employees' Motivation from a Cultural Perspective – A Key Element of the Hospitality Industry Competitiveness. *Procedia Economics and Finance*, 3, 981-986.
- Davenport, T. (2005). Thinking for Living. *HVB School Publishing*.
- Davis, M.C., Unsworth, K. L., Russell, S.V., & Gavon, J. (2020). Can green behaviours be increased for all employees? Trade-offs for “deep greens” in a goal-oriented green human resource management intervention. *Business Strategy and the Environment*, 29(2), 335–346. <https://doi.org/10.1002/bse.2367>
- Deci, E.L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105–115. <https://doi.org/10.1037/h0030644>
- Deci, E.L. & Ryan, R.M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11, 227–268. [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01)
- Deci, E.L., Olafsen, A.H., & Ryan, R.M. (2016). Self-determination theory in work organizations: the state of the science. *Annual Rev. Organ. Psychol. Organ. Behaviour*, 4, 19-43. <https://doi.org/10.1146/annurev-orgpsych-032516-113108>
- Delery, J.E., & Doty, D.H. (1996). Modes of strategic human resource management theorizing: Test of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4), 802-835. <https://doi.org/10.2307/256713>
- Donze, J., & Gunnes, T. (2018). We are becoming “We” instead of “I” identity management and incentives in the workplace. *Journal of Economic Behaviour and Organization*, 148, 105-120.
- Eisner, S.P. (2005). Managing generation Y. *SAM Advanced Management Journal*, 70(4), 4-15.
- Elizur, D., & Koslowsky, M. (2001). Values and Organizational Commitment. *International Journal of Manpower*, 22, 593-599.
- Ferrari, R. (2015). Writing narrative styles literature reviews. *Medical Writing*, 24(4), 230–235. <https://doi.org/10.1179/2047480615Z.000000000329>
- Fiss, P.C. (2007). A set-theoretic approach to organizational configurations. *Academy of Management Review*, 32(4), 1180–1198. <https://doi.org/10.5465/amr.2007.26586092>
- Francis-Smith, J. (2004). Surviving and thriving in the multigenerational workplace. *The Journal Record*, Available via <https://journalrecord.com/2004/08/26/surviving-and-thriving-in-the-multigenerational-workplace/>. Accessed 17 January 2020
- Frey, B., & Jegen, R. (2001). Motivation crowding theory. *Journal of Economic Surveys*, 15(5), 589-611. <https://doi.org/10.1111/1467-6419.00150>
- Frye, W.D., Kang, S., Huh, C., & Lee, M.J. (2019). What factors influence generation Y's employee retention in the hospitality industry? An internal marketing approaches. *International Journal of Hospitality Management*, available via [https://e-tarjome.com/storage-panel/fileuploads/2019-12-21/1576933826\\_E14114-e-tarjome.pdf](https://e-tarjome.com/storage-panel/fileuploads/2019-12-21/1576933826_E14114-e-tarjome.pdf). Accessed 17 January 2020
- Gagné, M., & Deci, E.L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behaviour*, 26, 331-362. <https://doi.org/10.1002/job.322>
- Gagné, M., Forest, J., Gilbert, M.H., Aubé, C., Morin, E., & Malorni, A. (2010). The motivation at work scale: Validation evidence in two languages. *Educational and Psychological Measurement*, 70(4), 628-646. <https://doi.org/10.1177/0013164409355698>
- Giocirlan, C.E. (2023). “Have me do, and I'll always be true”: Exploring the match between green employees and their jobs. *Journal of Cleaner Production*, 383, 135471. <https://doi.org/10.1016/j.jclepro.2022.135471>
- Goh, E., & Ferry, J. (2019). To waste or not to waste: Exploring motivational factors of generation Z hospitality employees towards food wastage in the hospitality industry. *International Journal of Hospitality Management*, 80, 126–135. <https://doi.org/10.1016/j.ijhm.2019.02.005>
- Graves, L.M., & Sarkis, J. (2012) Fostering employee pro-environmental behaviour: the role of leadership and motivation. *Environmental leadership: A Reference Handbook* (1). Sage, Thousand Oaks, CA, 161 – 171.
- Graves, L.M., Sarkis, J., & Zhu, Q. (2013). How transformational leadership and employee motivation combine to predict employee pro-environmental behaviours in China. *Journal of Environmental Psychology*, 35, 81-91. <https://doi.org/10.1016/j.jenvp.2013.05.002>
- Graves, L.M., & Sarkis, J. (2018). The role of employee's leadership perceptions, values, and motivation in employee's pro-environmental behaviours. *Journal of Cleaner Production*, 196, 576-587. <https://doi.org/10.1016/j.jclepro.2018.06.013>
- Gupta, M., Behl, A., Pereira, V., Yahiaovi, D., & Varma,

- A. (2023). From full-time to part-time: Motivation model for the turbulence -hit knowledge workers. *Journal of Business Research*, 163, 113926. <https://doi.org/10.1016/j.busres.2023.113926>
- Haghighatian, M., & Ezati, Y. (2015). An investigation into effective factors on human resources productivity (Case study: Region 11, Islamic Azad University, Iran). *Procedia – Social and Behavioural Sciences*, 205, 601-607.
- Hanaysha, J., & Tahir, P.R. (2016). Examining the Effects of Employee Empowerment, Teamwork, and Employee Training on Job Satisfaction. *Procedia - Social and Behavioural Sciences*, 219, 272-282. <https://doi.org/10.1016/j.sbspro.2016.05.016>
- Hansson, M., & Wigblad, R. (2006). Recontextualising the Hawthorne effect. *Scandinavian Journal of Management*, 22, 120-137. [10.1016/j.scaman.2005.12.003](https://doi.org/10.1016/j.scaman.2005.12.003)
- Herzberg, F., Mausner, B., & Snyderman, B.B. (1959). The motivation to work. *NY: John Wiley*.
- Heslin, P.A., Keating, L.A., & Ashford, S.J. (2019). How being in learning mode may enable a sustainable career across the lifespan. *Journal of Vocational Behaviour*; Available via <https://doi.org/10.1016/j.jvb.2019.103324>. Accessed 17 January 2020
- Highhouse, S. (1999). The Brief History of Personnel Counselling in Industrial-Organizational Psychology. *Journal of Vocational Behaviour*, 55, 318-336. <https://doi.org/10.1006/jvbe.1999.1685>
- Hitka, M., & Balážová, Ž. (2015). Comparison of Motivation Level of Service Sector Employees in the Regions of Slovakia and Austria. *Procedia Economics and Finance*, 23, 348-355.
- Howard, J., Gagné, M., Morin, A.J., & Van den Broeck, A. (2016). Motivation profiles at work: A self-determination theory approach. *Journal of Vocational Behaviour*, 95/96, 74-89. <https://doi.org/10.1016/j.jvb.2016.07.004>
- Hu, J., Jiang, K., Mo, S., Chen, H., & Shi, J. (2016). The motivational antecedents and performance consequences of corporate volunteering: When employees volunteer and when does volunteering help versus harm work performance. *Organisational Behaviour and Human Decision Processes*, 137, 99-111. <https://doi.org/10.1016/j.obhdp.2016.08.005>
- Izvercian, M., Potra, S., & Ivascu, L. (2016). Job satisfaction variables: A grounded theory approach. *Procedia – Social and Behavioural Sciences*, 221, 86-94.
- Johns, K. (2003). Managing generation diversity in the workforce. *Trends & Tidbits* (April 11).
- Judge, T.A., Piccolo, R.F., Podsakoff, N.P., Shaw, J.C., & Rich, B.L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behaviour*, 77, 157-167. <https://doi.org/10.1016/j.jvb.2010.04.002>
- Khoshnevis, H., & Tahmasebi, A. (2016). The Motivation System in Governmental Organization. *Procedia - Social and Behavioural Sciences*, 230, 212-218.
- King, C., Murrillo, E., & Lee, H. (2017). The effects of generational work values on employee brand attitude and behaviour: A multi-group analysis. *International Journal of Hospitality Management*, 66, 92-105. <https://doi.org/10.1016/j.ijhm.2017.07.006>
- Kooij, T.A.M., Jansen, P.G.W, Dijkers, J.S.E., & De Lange, A.H. (2014). The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *Journal of Organizational Behaviour*, 31(8), 1111-1136. <https://doi.org/10.1002/job.666>
- Kuivas, B., Buch, R., Weibel, A., Dysvik, A., & Nerstad, C.G.L. (2017). Does intrinsic and extrinsic motivation relate differently to employee outcomes? *Journal of Economic Psychology*, 61, 244-258. <https://doi.org/10.1016/j.joep.2017.05.004>
- Lee, G., & Suzuki, A. (2020). The motivation for information exchange in a virtual community of practice: Evidence from a Facebook group for shrimp farmers. *World Development*, 125. <http://www.akes.or.kr/conf/papers/2018/33.full.pdf>. Accessed 17 January 2020.
- Lee, M.T., & Raschke, R.L. (2016). Understanding employee motivation and organisational performance: Arguments for a set-theoretic approach. *Journal of Innovation & Knowledge*, 1(3), 162-169. <https://doi.org/10.1016/j.jik.2016.01.004>
- Lee, Y., & Kim, J. (2021). Cultivating employee creativity through strategic internal communication: The role of leadership, symmetry, and feedback-seeking behaviours. *Public Relations Review*, 47, 1011998. <https://doi.org/10.1016/pubrev.2020.101998>
- Li, B., Yu, W., Lei, Y., & Hu, M. (2023). How does spiritual leadership inspire employees' innovative behaviour? The role of psychological capital and intrinsic motivation. *European Review of Applied Psychology*, 73(6), 100905. <https://doi.org/10.1016/j.erap.2023.100905>
- Li, X., Zhang, A., & Guo, Y. (2021). Are proactive employees more creative? The roles of multisource information exchange and social exchange-based employee-organization relationships. *Personality and Individual Differences*, 170, 110484. <https://doi.org/10.1016/j.paid.2020.110484>
- Lo, K.I.H., Wong, I.A., Yam, C.M.R., & Whitfield, R. (2012). Examining the impact of community and organization embeddedness on self-initiated expatriates: The moderating role of expatriate-dominated private sector. *International Journal of Human Resource Management*, 23(20), 4211-4230.
- Lu, T., & Adler, H. (2009). Career goals and expectations of hospitality and tourism students in China. *Journal of Teaching in Travel & Tourism*, 9(1/2), 63-80. <https://doi.org/10.1080/15313220903041972>

- Lutz, S., Schneider, F. M., & Vorderer, P. (2020). On the downside of mobile communication: An experimental study about the influence of setting inconsistent pressure on employees' emotional well-being. *Computers in Human Behaviour*, 105. <https://doi.org/10.1016/j.chb.2019.106216>
- Macke, J., & Genari, D. (2019). Systematic literature review on sustainable human resource management. *Journal of Cleaner Production*, 208, 806-815.
- Mahjoub, M., Atashsokhan, S., Khalilzadeh, M., Aghajanoloo, A., & Zahrehvandi, S. (2018). Linking "Project Success" and "Strategic Talent Management": satisfaction/motivation and organizational commitment as mediators. *Procedia Computer Science*, 138, 764-777. <http://doi.org/10.1016/j.procs.2018.10.100>
- Mamun, A.M. (2023). Motivating green behaviour in Bangladeshi employees: Self-determination theory application. *Heliyon*, 9(7), el 181555. <https://doi.org/10.1016/j.heliyon.2023.el18155>
- Maki, A., Burns, R.J., Ha, L., & Rothman, A.J. (2016). Paying people to protect the environment: a meta-analysis of financial incentive interventions to promote pro-environmental behaviour. *Journal of Environmental Psychology*, 47, 242-255. <https://doi.org/10.1016/j.jenvp.2016.07.006>
- Marin-Garcia, J.A., & Martinez, J.T. (2016). Deconstructing AMO framework: A systematic review. *Intangible Capital*, 12(4), 1040-1087. <http://dx.doi.org/10.3926/ic.838>
- Maslow, A.H. (1943). A Theory of Human Motivation. *Psychological Review*, 50, 394-395.
- Maxwell, G.A. (2005). Checks and balances: The role of managers in work-life balance policies and practices. *Journal of Retailing and Consumer Services*, 12(3), 179-189. <https://doi.org/10.1016/j.jretconser.2004.06.002>
- Mayo, E. (1933). The human problems of industrial civilization. NY: MacMillan.
- McClelland, D.C. (1951). Personality. NY: Dryden Press.
- McGregor, D. (1960). The Human Side of Enterprise. NY: McGraw Hill.
- Mitchell, R., Schuster, L., & Jin, H.S. (2020). Gamification and the impact of extrinsic motivation on needs satisfaction: Making work fun? *Journal of Business Research*, 106, 323-330. <https://doi.org/10.1016/j.jbusres.2018.11.022>
- Mládková, L. (2012). Management of Knowledge Workers. Bratislava: Wolter Kluweer Business.
- Mládková, L. (2013). Management of Knowledge Workers. Academic Publishing International Limited, 766-773.
- Mládková, L., Zouharová, J., & Nový, J. (2015). Motivation and Knowledge Workers. *Procedia - Social and Behavioural Sciences*, 207, 768-776. <https://doi.org/10.1016/j.sbspro.2015.10.163>
- Moran, C.M., Diefendorff, J.M., Kim, T.Y., & Liu, Z.Q. (2012). A profile approach to self-determination theory motivations at work. *Journal of Vocational Behaviour*, 81(3), 354-363. <https://doi.org/10.1016/j.jvb.2012.09.002>
- Ng, T.W.H. (2017). Transformational leadership and performance outcomes: analyses of multiple mediation pathways. *Leader Quarterly*, 28, 385-417. <https://doi.org/10.1016/j.leaqua.2016.11.008>
- Nohria, N., Groysberg, B., & Lee, L.E. (2008). Employee motivation: A powerful new model. *Harvard Business Review*, 86(7/8), 78-84.
- Ozkeser, B. (2019). Impact of training on employee motivation in human resources management. *Procedia Computer Science*, 158, 802-810. <https://doi.org/10.1016/j.procs.2019.09.117>
- Pak, K., Kooij, T.A.M., De Lange, A., & Van Veldhoven, M. (2018). Human Resource Management and the ability, motivation, and opportunity to continue working: A review of quantitative studies. *Human Resource Management Review*, 7(2), 1-17.
- Pohle, A., Villani, E., & Grimaldi, R. (2022). Personnel motivation in knowledge transfer offices: The role of university-level and organizational-level antecedents. *Technological Forecasting and Social Change*, 181, 121765. <https://doi.org/10.1016/j.techfore.2022.121765>
- Reboul, C., Horel, G., Krtousova, Z., & Lanthier, T. (2006). Managing Knowledge Workers: The KWP Matrix. *Conference Proceedings MOMAN 6*, Praha.
- Rosenbaum, M.S., & Wong, I.A. (2012). The effect of instant messaging services on society's mental health. *Journal of Services Marketing*, 26(2), 124-136. <https://doi.org/10.1108/08876041211215284>
- Rusu, G., & Avasilcai, S. (2014). Linking human resources motivation to organizational climate. *Procedia - Social and Behavioural Sciences*, 124, 51-58.
- Ryan, J.C. (2017). Reflections on the conceptualisation and operationalisation of a set-theoretic approach to employee motivation and performance research. *Journal of Innovation and Knowledge*, 2, 45-47. <https://doi.org/10.1016/j.jik.2016.12.001>
- Safari, I. (2020). A Study on the Relationship between Burnout and Job Satisfaction of Iranian EFL Teachers Working in Universities and Schools. *Journal on Efficiency and Responsibility in Education and Science*, 13(4), 164-173. <https://doi.org/10.7160/eriesj.2020.130401>
- Sheldon, K.M., Wineland, A., Venhoeven, L., & Osin, E. (2016). Understanding the motivation of environmental activities: a comparison of self-determination theory and functional motives theory. *Ecopsychology*, 8, 228-238. <https://doi.org/10.1089/eco.2016.0017>
- Schermuly, C. C., Meyer, B., & Dammer, L. (2013). Leader-member exchange and innovative behaviour: The mediating role of psychological empowerment.



- Journal of Personnel Psychology*, 12(3), 132-142. <https://doi.org/10.1027/1866-5888/a000093>
- Siu, O.L., Cooper, C., & Phillips, D.R. (2014). Intervention studies on enhancing work well-being, reducing burnout, and improving recovery experiences among Hong Kong health care workers and teachers. *International Journal of Stress Management*, 21(1), 69-84. <https://doi.org/10.1037/a0033291>
- Skinner, B.F. (1953). *Science and human behaviour*. NY: Macmillan.
- Stajkovic, A.D., & Luthans, F. (2003). Behavioural management and task performance in organizations: Conceptual backgrounds, meta-analysis, and the test of alternative models. *Personnel Psychology*, 56, 155-194. <https://doi.org/10.1111/j.1744-6570.2003.tb00147.x>
- Steers, R.M., Mowday, R.T., & Shapiro, D.L. (2004). The future of work motivation theory. *Academy of Management Review*, 29(3), 379-387.
- Stewart, J.S., Goad, O.E., Cravens, K. S., & Oishi, S. (2017). Managing millennials: Embracing generational differences. *Business Horizons*, 60, 45-54. <https://doi.org/10.1016/j.bushor.2016.08.011>
- Supanti, D., & Butcher, K. (2019). Is corporate social responsibility (CSR) participation the pathway to foster meaningful work and helping behaviour for millennials? *International Journal of Hospitality Management*, 77, 8-18. <https://doi.org/10.1016/j.ijhm.2018.06.001>
- Vetráková, M., & Mazúchová, L. (2016). Draft of Management Model of Work Motivation in Hotels. *Procedia - Social and Behavioural Sciences*, 230, 422-429.
- Voegtlin, Ch., & Greenwood, M. (2016). Corporate social responsibility and human resource management: Systematic review and conceptual analysis. *Human Resource Management Review*, 26, 181-197.
- Vroom, V.H. (1964). *Work and Motivation*. NY: Wiley.
- Wong, I.A., Wan, Y.K.P., & Gao, J.H. (2017). How to attract and retain Generation Y employees? An exploration of career choice and the meaning of work. *Tourism Management Perspectives*, 23, 140-150. <https://doi.org/10.1016/j.tmp.2017.06.003>
- Wood, F.B. (2004). Preventing post parchment depression: A model of career counselling for college seniors. *Journal of Employment Counselling*, 41(2), 71-79.
- Woodside, A.C. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Research*, 66(4), 463-472. <https://doi.org/10.1016/j.jbusres.2012.12.021>
- Xiong, L., & King, C. (2019). Aligning employee's attitudes and behaviour with hospitality brands: The role of employee brand internalization. *Journal of Hospitality and Tourism Management*, 40, 67-76. <https://doi.org/10.1016/j.jhtm.2019.06.006>
- Yuriev, A., Boiral, A., Francoeur, V., & Paillé, P. (2018). Overcoming the barriers to pro-environmental behaviours in the workplace: a systematic review. *Journal of Cleaner Production*, 182, 379-394.
- Zámečník, R. (2014). The measurement of employee motivation by using multi-factor statistical analysis. *Procedia - Social and Behavioural Sciences*, 109, 851-857. <https://doi.org/10.1016/j.sbspro.2013.12.553>
- Zhang, J., & Huang, R. (2019). Employee's pro-environmental behaviours (PEBs) at international hotel chains (IHCs) in China: The mediating role of environmental concerns (ECS). *Journal of Hospitality and Tourism Management*, 39, 129-136. <https://doi.org/10.1016/j.jhtm.2019.03.007>
- Zhang, Y., & Liu, S. (2022). Balancing employees' extrinsic requirements and intrinsic motivation: A paradoxical leader behaviour perspective. *European Management Journal*, 40(1), 127-136. <https://doi.org/10.1016/j.emj.2021.11.008>

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