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Towards a better understanding of the way antecedents influence the transfer of training content to work practice

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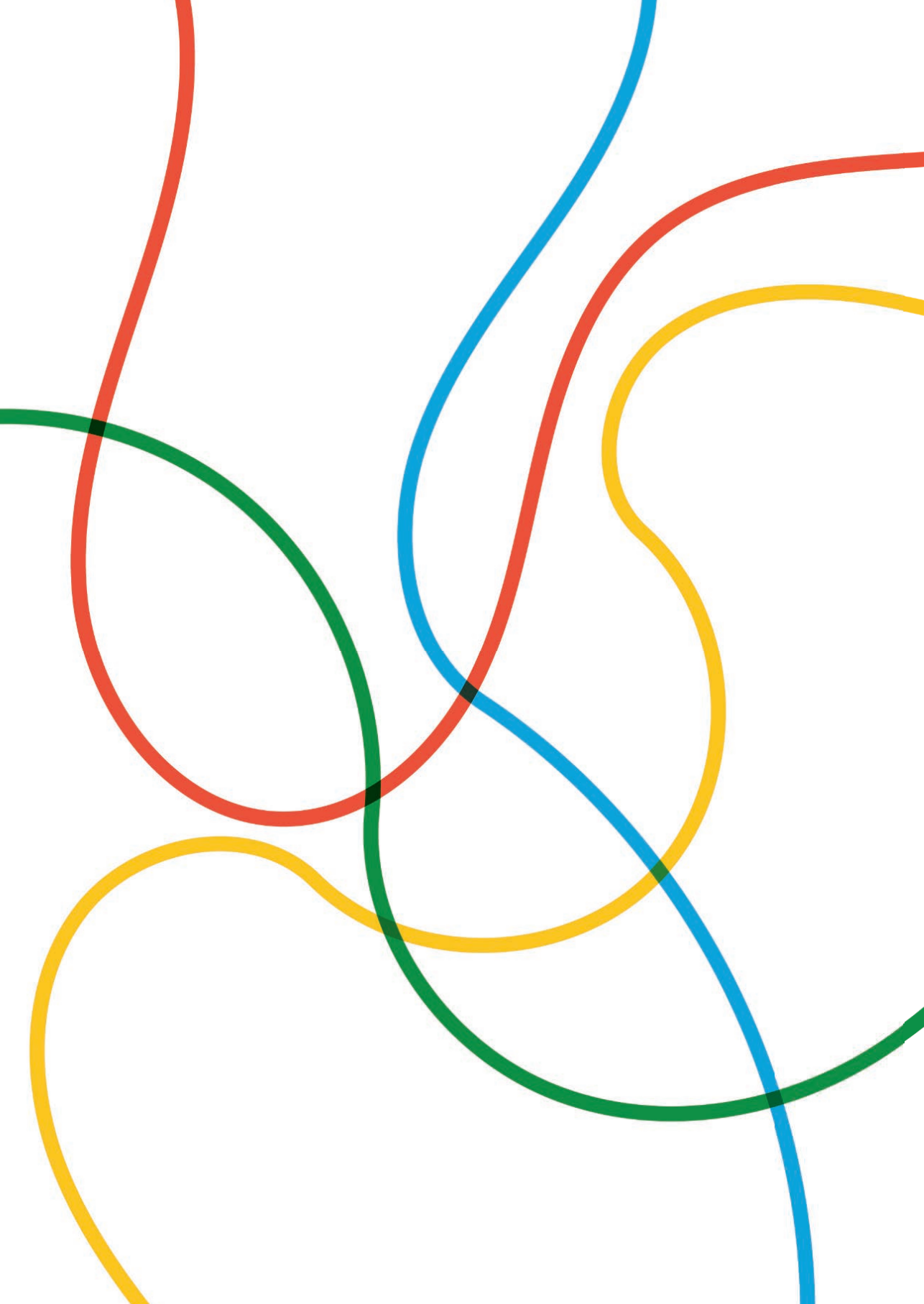
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CHAPTER 1

Introduction

1.1. Introduction

It is a matter of urgency that employees and citizens are equipped with the necessary skills and competences to live and work in the 21st century (Van Merriënboer et al., 2009). In the work context, knowledge acquired by individuals during initial education (i.e., pre-school through graduate school) becomes partially outdated due to the establishment of the knowledge society with its focus on ongoing knowledge and technology developments (Van Merriënboer et al., 2009; Laal & Salamati, 2012; Manuti et al., 2015; Noe et al., 2014). To keep up with these developments in society, lifelong learning has become increasingly important (Laal & Salamati, 2012), i.e. individuals need to continuously acquire and update their knowledge, skills and insights (Aguinis & Kraiger, 2009; Grossman & Salas, 2011).

If lifelong learning is effective, it can increase work motivation, enhance productivity, improve work quality and diminish the number of errors made in work (Grossman & Salas, 2011). This can make organizations more effective, leading to a better competitive position in comparison to other organizations, or better quality service towards society (Van Merriënboer et al., 2009). Furthermore, it can help individuals with adjusting to developments in the labour market (Evans et al., 2013), enhance their work satisfaction, stimulate job related self-efficacy and lead to more work promotions (Drewery et al., 2020).

It therefore does not come as a surprise that lifelong learning has become a paramount concern of organizations (Noe et al., 2014). Lifelong learning can occur through informal and formal learning (Cheng & Hampson, 2008; Manuti et al., 2015). Informal learning can be defined as learning that is mostly unstructured, noninstitutional and experiential (Marsick & Volpe, 1999). Acquiring knowledge, skills and insights through informal learning happens in interaction with the (work)context (Manuti et al., 2015). Learning therefore cannot be seen as distinct from the environment (Stein, 2001). Formal learning, on the other hand, is defined as acquiring new skills, knowledge and insights in an organized manner (Cheng & Hampson, 2008; Manuti et al., 2015). Formal learning often occurs through employee trainings in an off the job setting outside the work context, under supervision of a trainer (Cheng & Hampson, 2008; Manuti et al., 2015).

It is clear that both formal and informal learning are valuable and necessary for lifelong learning (Cheng & Hampson, 2008; Manuti et al., 2015). Yet, for many organizations formal learning remains the dominant mode of providing employee training. It has been estimated that organizations in the Netherlands invest more than 1.7 billion euros in employee trainings annually (Groot, 2016) and globally these investments mount up to 356 billion dollars per year (Baldwin et al., 2017). To ensure that these investments in employee trainings have their intended impact on work practice, it is important that transfer of training content to work practice occurs (Grossman & Salas, 2011). Transfer of training is defined as the degree to which trainees apply knowledge, skills and insights acquired in employee trainings at their jobs (Wexley & Latham, 2002). A major concern regarding transfer of training is that it is often much lower than desirable (Baldwin et al., 2017; Blume et al., 2010; Gegenfurtner et al., 2009b; Grossman & Salas, 2011). It has been estimated that only 15% of the acquired training content still transfers to the work context after one year (Wexley & Latham, 2002). As such, the transfer of training is regarded the “Achilles heel of the training process” (Botke et al., 2018, p. 130).

1.1.1. Transfer of Training and its Antecedents

In the past decades, an increasing amount of research has been devoted to predictors of transfer of training (Poell et al., 2017). This research has identified transfer motivation as a pivotal predictor of transfer of training (Burke & Hutchins, 2007; Gegenfurtner et al., 2009b; Grohmann et al., 2014; Massenbergh et al., 2015, 2017). When employees are more motivated to transfer, there is also a higher probability that they will put the learned content into practice (Gegenfurtner et al., 2009b). Transfer motivation is defined by Noe and Schmitt (1986) as the individuals’ desire to transfer knowledge acquired during training to their work practice. The transfer of training literature used this definition for a long time to conceptualize transfer motivation as a one-dimensional construct (see Gegenfurtner et al., 2009b for a review). When this definition is operationalized, individuals can only differ in amount or quantity of transfer motivation (Gegenfurtner et al., 2009b). However, when operationalized in this way, the influence of transfer motivation on transfer of training varies considerably per study, with correlation coefficients ranging between .04 and .63

(Gegenfurtner et al., 2009b). As such, the influence of transfer motivation on transfer of training is not well understood.

One reason for this heterogeneity in findings could be that past research unjustly assumes that transfer motivation only differs in quantity (Gegenfurtner, 2013). Based on motivational theories such as self-determination theory and expectancy-value theory, it can be argued that motivation is multidimensional and that different types of motivation exist. As such, motivation not only differs in quantity, but also in quality (Wigfield & Eccles, 2000; Ryan & Deci, 2020). For example, the self-determination theory distinguishes between autonomous and controlled motivation (Ryan & Deci, 2020), whereas the expectancy-value theory differentiates between intrinsic value, attainment value, utility value and cost (Wigfield & Eccles, 2000). Empirical evidence shows that the manifestation of these types of motivation matter for outcome variables such as wellbeing, work performance, learning performance and work satisfaction, for which it is especially important that individuals experience autonomous forms of motivation (Howard et al., 2016; Tóth-Király et al., 2021; Vansteenkiste et al., 2009). It therefore seems that not only the quantity, but also the quality of motivation matters (Vansteenkiste et al., 2009).

Recent studies into transfer motivation acknowledge this and conceptualize transfer motivation as multidimensional and distinguish different types of transfer motivation that have different effects on transfer of training (Gegenfurtner, 2013; Gegenfurtner et al., 2016; Gegenfurtner & Quesada-Pallarès, 2022; Tafvelin & Stenling, 2021). Thus, it seems that not only the amount, but also the kind of transfer motivation matters (Gegenfurtner, 2013; Gegenfurtner & Quesada-Pallarès, 2022). It is therefore proposed that transfer motivation should be conceptualized in line with motivational theories who consider motivation to be multidimensional (Gegenfurtner, 2013; Gegenfurtner & Quesada-Pallarès, 2022).

Navigating through contemporary motivational theories creates a challenge, as there are many theories of motivation that all have a different focus (see Eccles & Wigfield, 2002 for a review). For example, the self-determination theory and the flow theory focus on affective types of motivation (Csikszentmihalyi, 1990; Ryan & Deci, 2000), whereas the expectancy-value theory and the social cognitive theory focus

primarily on cognitive types (Bandura, 1989; Wigfield & Eccles, 2000). This makes it difficult to choose which theory of motivation should be employed to investigate different types of transfer motivation in predicting transfer of training.

Another challenge in the current transfer of training literature lies in theorizing about antecedents of transfer motivation and/or transfer of training. Previous research has identified multiple characteristics of trainees (e.g., self-efficacy) and their work environments (e.g., supervisor support) as antecedents of transfer of training (e.g., Blume et al., 2010; Gegenfurtner et al., 2009b; Grossman & Salas, 2011; Tonhäuser & Büker, 2016; Velada et al., 2007), for which transfer motivation seems to play a mediating role in predicting transfer of training (Grohmann et al., 2014). These antecedents are included in multiple transfer of training frameworks. Well known frameworks are the learning transfer system inventory (Holton et al., 2000) and model of the transfer process (Baldwin & Ford, 1988). However, these models do not take the interrelationships between the different antecedents of transfer of training into account. This is important, as this can provide more insight in the unique predictive value of different components in (indirectly) predicting transfer of training. Moreover, these frameworks do not consider the multidimensionality of transfer motivation either. Incorporating these aspects is important to obtain a better understanding of the way transfer of training is influenced by its antecedents.

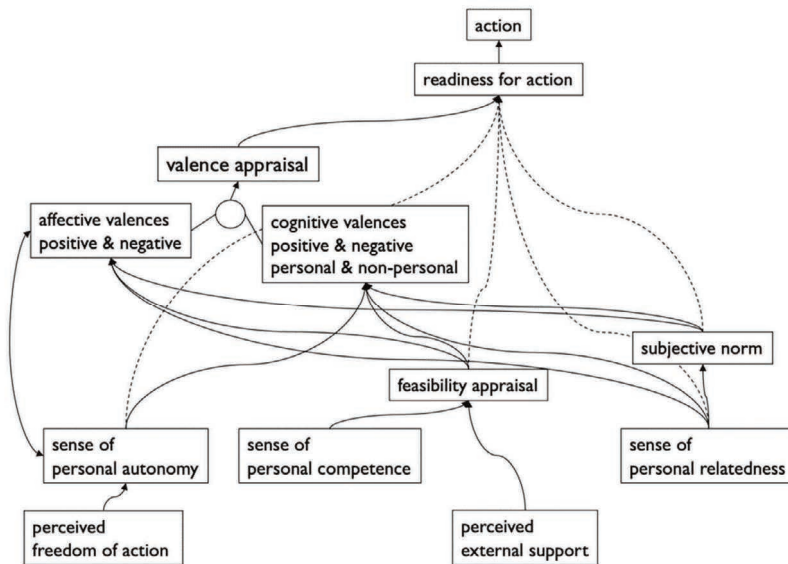
1.1.2. The Unified Model of Task-specific Motivation

A framework that can address these challenges is the unified model of task-specific motivation (UMTM), developed by De Brabander & Martens (2014). The UMTM describes components that influence motivation of individuals at a given point in time to put task-specific behavior into action. The UMTM integrates different motivational theories, namely: person-object theory of interest (Krapp, 2002), theory of planned behavior (Ajzen, 1991), social cognitive theory (Bandura, 1989), expectancy-value theory (Wigfield & Eccles, 2000), flow theory (Csikszentmihalyi, 1990) and self-determination theory (Ryan & Deci, 2000). The UMTM incorporates the multidimensionality of motivation by acknowledging that the origin of motivation lies in both affective and cognitive types of motivation. The model also accommodates characteristics of individuals (i.e., personal antecedents) and their environments (i.e.,

contextual antecedents) as components influencing motivation and takes the interrelationships between them into account in predicting task-specific behaviour. Below, each UMTM component will be discussed (see Figure 1.1. for an overview of the model).

Figure 1.1.

The Unified Model of Task-specific Motivation (De Brabander & Martens, 2014, Adapted by De Brabander & Glastra, 2021).



Affective and cognitive types of motivation are represented in the UMTM as affective and cognitive valences. *Affective valences* are feelings individuals expect to experience when they perform an activity. These feelings are activated automatically when individuals consider activities (De Brabander & Martens, 2014). *Cognitive valences* are values that individuals ascribe to the consequences of performing an activity (e.g., making less errors in work as a result of applying training content). Cognitive valences emerge by means of active reflection when individuals consider activities. The value of executing an activity can be considered for individuals themselves, but also for significant others (e.g., colleagues, supervisors, or the organisation as a whole). As such, cognitive valences can be personal and non-personal (De Brabander & Martens, 2014).

Affective and cognitive valences can be positive and negative. When they are positive, individuals have positive feelings and/or expect valued consequences as a result of performing activities. The opposite is the case when the valences are negative. It is theorized that all valences can be relatively independent and, in interaction, form an overall valence appraisal (De Brabander & Martens, 2014). Table 1.1. gives an overview of examples of the different valences in the transfer of training context.

Positive valences are expected to be positive predictors of readiness for action, whereas negative valences are expected predict readiness for action negatively (De Brabander & Glastra, 2018). *Readiness for action* is conceptualized as the intention of individuals to perform an action (De Brabander & Glastra, 2018). Transfer intention is an example of readiness for action, which can be considered to be similar to the original transfer motivation construct of Noe & Schmitt (1986). *Action* is defined as enacting task-specific behaviour and is predicted positively by readiness for action (De Brabander & Glastra, 2018). An example of action is transferring training content to work practice.

Table 1.1.

An Overview of Examples of Valences in the Transfer of Training Context

Valence type	Positive	Negative
Affective valence	The prospect of applying a new procedure in work practice leads to feelings of excitement.	The prospect of applying a new skill in work practice leads to feelings of insecurity.
Cognitive valence personal	Using the recently learned skill would lead to making less errors in work by the individual.	Applying a new procedure would require additional effort on top of the regular work burden.
Cognitive valence nonpersonal	Applying a recently learned technique would improve the cooperation between colleagues.	Using new skills would require organisational investments.

1.1.3. Task-Specific Antecedents of Transfer Motivation

The UMTM also categorises antecedents of affective and cognitive valences (De Brabander & Martens, 2014). The UMTM differentiates between feasibility appraisal, social antecedents and autonomy related antecedents, which are also derived from the above-mentioned theories of motivation. *Feasibility appraisal* is conceptualized as appraisals of individuals about being able to perform behavior successfully (De Brabander & Martens, 2014). Feasibility appraisal consists of a personal component (De Brabander & Martens, 2014), referred to as *sense of personal competence*. This component describes judgements of individuals about the extent to which they themselves have the capacities to perform tasks successfully. An example of this component is that individuals expect themselves to be sufficiently skilled to apply training content in practice. De Brabander and Martens (2014) argue that showing specific behavior is impeded if individuals are hampered by the environment in which they aim to show the specific behavior. As such, feasibility appraisal also consists of a contextual component named *perceived external support*. This component is defined as judgements of individuals about whether their context hinders or facilitates them in performing behaviour. Examples of such contextual circumstances are the extent to which there is suitable work equipment to put training content in practice, but also the amount of support provided by colleagues to do so (De Brabander & Martens, 2014; Grossman & Salas, 2011).

It is expected that feasibility appraisal is a positive predictor of positive valences and a negative predictor of negative valences. This is in line with effects of competence components of for example self-determination theory, expectancy-value theory and social cognitive theory, which in these theories are predictors of different types of motivation (Bandura, 1989; Ryan & Deci, 2000; Wigfield & Eccles, 2000). The theory of planned behaviour argues that feasibility appraisal also has direct positive effects on readiness for action (Ajzen, 1991). The UMTM therefore hypothesizes that direct positive effects of feasibility appraisal on readiness for action are possible as well (De Brabander & Martens, 2014).

The second category of antecedents are social antecedents, which are subdivided into sense of personal relatedness and subjective norm. *Sense of personal*

relatedness refers to the extent to which individuals feel connection to other people participating in the context of the task-specific behaviour (De Brabander & Martens, 2014). An example of this component in the transfer of training context is the extent to which individuals experience a sense of belonging towards colleagues with which they cooperate to apply training content. Unlike the other components of the UMTM, sense of personal relatedness is considered less task-specific across different tasks, as often the same people are involved across different task-specific behaviours (De Brabander & Martens, 2018). *Subjective norm* is defined as the propensity of individuals to abide by the judgement of important others regarding the performance of behaviour (De Brabander & Martens, 2014). An example of subjective norm is when individuals refrain from applying training content in practice if colleagues discourage this application. Sense of personal relatedness is expected to predict subjective norm. If individuals feel more connection with significant others in the context of the task-specific behaviour, they will also abide more by the approval of others (De Brabander & Martens, 2014).

In line with the self-determination theory, it is expected that sense of personal relatedness and subjective norm are positive predictors of positive valences and negative predictors of negative valences (De Brabander & Martens, 2014). Moreover, similar to feasibility appraisal, the theory of planned behaviour argues that there are direct positive effects of subjective norm on readiness for action (Ajzen, 1991). As such, direct positive effects of subjective norm on readiness for action are possible as well (De Brabander & Martens, 2014). Moreover, previous research showed that sense of personal relatedness can have direct positive effects on readiness for action as well (De Brabander & Martens, 2018). Therefore, direct positive effects of this component on readiness for action are also expected.

The third category of antecedents are autonomy related and can be distinguished into a contextual and personal component as well. The contextual component involves *perceived freedom of action* which is defined as the individuals' experienced freedom to make choices about the selection and performance of behaviour (De Brabander & Martens, 2014). An example of this component in the transfer of training context is the freedom to make choices about situations in which

individuals want to apply training content. Consistent with the self-determination theory, the UMTM argues that if individuals are granted more choices within the context of the task-specific behaviour, there is a bigger likelihood that individuals will feel more autonomous in enacting that behaviour. As such, perceived freedom of action is expected to positively predict the personal component; *sense of personal autonomy* (De Brabander & Martens, 2014). This component is defined as the extent to which individuals experience volition and an internal locus of causality for choosing and performing behaviour (De Brabander & Martens, 2014). A transfer of training example of sense of personal autonomy is experiencing no pressure in applying acquired skills in practice.

The UMTM posits that sense of personal autonomy positively predicts positive cognitive valences and negatively predicts negative cognitive valences (De Brabander & Martens, 2014). For affective valences, reciprocal associations are expected with personal sense of autonomy. De Brabander and Martens (2014) theorize that if individuals experiences themselves as the origin of actions, they also experience pleasure while performing the activity. Reversely, if individuals experience pleasure during the activity, they are also expected to feel personally responsible for enacting the activity. The opposite would be the case if individuals experience many negative feelings or a low amount of autonomy to enact specific behaviour. As such, a negative association of sense of personal autonomy is expected with negative affective valence, and a positive association with positive affective valence (De Brabander & Martens, 2014). Moreover, previous research has provided evidence for direct positive effects of personal sense of autonomy on readiness for action (De Brabander & Glastra, 2018, 2021; De Brabander & Martens, 2018). As such, direct positive effects of sense of personal autonomy on readiness for action are expected as well.

1.1.4. The UMTM in the Transfer of Training Context

The UMTM is a potentially suitable model to predict transfer of training and to show whether personal and contextual antecedents predict transfer of training via different types of transfer motivation. Components of the UMTM have a clear overlap with antecedents of transfer of training that have been identified in previous studies (see Blume et al., 2010 for an overview). Affective and cognitive valences of the UMTM

can be considered a multidimensional conceptualization of transfer motivation (Gegenfurtner, 2013; Gegenfurtner et al., 2016; Gegenfurtner & Quesada-Pallarès, 2022; Tafvelin & Stenling, 2021). Readiness for action and action translate directly to transfer intention and transfer of training, respectively (Gegenfurtner, 2013). In addition, individual characteristics like self-efficacy and perceived autonomy are retraceable to sense of personal competence and sense of personal autonomy in the UMTM (Gegenfurtner, 2013; Weisweiler et al., 2013). Finally, characteristics of the work environment that influence (motivation to) transfer, like approval among colleagues, freedom to use the newly gained knowledge in practice and availability of resources (Gegenfurtner, 2013; Gilpin-Jackson & Bushe, 2007; Grossman & Salas, 2011; Tonhäuser & Büker, 2016) are compatible with subjective norm, perceived freedom of action and perceived external support, respectively.

Since the UMTM is relatively new, empirical evidence for its propositions is scarce. Yet, studies that examined its empirical support showed promising outcomes. For instance, these studies showed that the UMTM components could be modelled in line with the dynamics of the UMTM in the teacher professionalization context (De Brabander & Glastra, 2018, 2021; De Brabander & Martens, 2018). As such, there is support underlining the dynamics of the UMTM. However, the UMTM is yet to be tested in the transfer of training context. Moreover, previous research did not yet investigate to what extent components of the UMTM are able to predict task-specific behavior (e.g., transfer of training). Therefore, more research is required.

1.1.5. Empirical Gaps in the Transfer of Training Literature

In the transfer of training literature there are multiple knowledge gaps that warrant additional attention which potentially can be examined with the UMTM. Based on previous review studies (Baldwin et al., 2017; Blume et al., 2010; Ford et al., 2018; Rahyuda et al., 2014), four gaps can be identified: (1) it is unclear how personal and contextual antecedents and types of transfer motivation develop over time, (2) it is unclear how patterns in personal and contextual antecedents and types of transfer motivation that differ between individual trainees influence transfer of training of these trainees, (3) it is unclear whether different training characteristics influence experiences in personal and contextual antecedents and types of transfer motivation,

and (4) it is unclear which personal and contextual antecedents and types of transfer motivation are influenced by transfer of training interventions.

Firstly, previous research often measured personal and contextual antecedents and transfer motivation once and did not examine the effects of changes in these components on transfer of training over time (Huang et al., 2017). Therefore, there is a call for more within-person research into personal and contextual antecedents and transfer motivation and what the effects are of actually engaging in transfer of training on these components (Ford et al., 2018; Huang et al., 2017). Based on these insights, it can be examined whether going through transfer of training opportunities affects these components and, as such, how transfer of training can be sustainably stimulated.

Secondly, previous research often overlooked the fact that trainees can differ in terms of the combinations of goals, reasons, expectations, and needs they have when participating in trainings, which possibly affect the extent to which transfer does or does not occur (Baldwin et al., 2017). As such, there is a need for more person-centred research in which such differences explain differences in transfer of training (Baldwin et al., 2017). In this respect, the role of differences between groups of trainees in combinations of types of transfer motivation has been largely overlooked in the transfer of training literature. Previous studies in the work context suggest that such profiles exist for work motivation (see Spurk et al., 2020 for an overview), but, so far, only one study investigated profiles of transfer motivations (Quesada-Pallarès et al., 2022). This study showed that transfer motivation profiles exist and that members of these profiles score differently on transfer of training. More transfer motivation profile research is needed, as this can reveal which combination of different types of transfer motivation is associated with more transfer of training in comparison to other combinations. Eventually these insights can support trainers and practitioners in tailoring their training design and work contexts to specific groups of trainees to increase their (motivation for) transfer of training.

Thirdly, previous research only paid limited attention to the influence of training characteristics on transfer motivation and transfer of training (Burke & Hutchins, 2008). Yet, it might matter for types of transfer motivation, transfer intention, and transfer of training whether training attendance is voluntary or

mandatory (Curado et al., 2015; Gegenfurtner, 2013; Gegenfurtner et al., 2016; Salamon et al., 2021). In addition, it might matter whether trainings focus on hard- or soft-skills. Hard-skill trainings involve technical and procedural knowledge (e.g., typing speed, knowledge about specific regulations, steps that need to be set for procedures), whereas soft-skill trainings focus on inter- and intrapersonal knowledge and skills (e.g., communication, time management, teamwork; Laker & Powell, 2011). Laker and Powell (2011) argued that differences between soft- and hard-skill trainings might explain differences in types of transfer motivation and transfer of training. Also, it is unknown if trainings provided online or in-person have an effect on types of transfer motivation and transfer of training, nor on transfer of training itself. Yet, Martins et al. (2019) found that motivation to learn depends on whether trainings are offered online or in-person, which eventually can influence motivation to transfer (Gegenfurtner et al., 2009b). As such, whether trainings are taught online or in-person might also matter for types of transfer motivation and transfer of training. More insight into effects of training characteristics can show whether trainers and practitioners should pay more attention to specific antecedents in the case of specific training characteristics to enhance transfer motivation and/or transfer of training.

Fourthly, previous research has studied multiple interventions for enhancing transfer of training (see Blume et al., 2010 for an overview). However, the meta-analysis of Blume (2010) showed that effects of such interventions are only modest. One reason for this could be that transfer of training interventions foster some personal and contextual antecedents and some types of transfer motivation, but not others. However, to date there is limited research that investigated to what extent transfer of training interventions affect components that (indirectly) predict transfer of training and how changes in these components eventually affect transfer of training (Baldwin et al., 2017; Brown & McCracken, 2010; Rahyuda et al., 2014). Insight in this can show which personal and contextual antecedents and types of transfer motivation are fostered by specific interventions, and whether other interventions might need to be used to stimulate other components. Ultimately, research into this can provide guidelines for policy makers and trainers about cases in which particular interventions are most fruitful to enhance transfer of training.

1.1.6. Outline of this Dissertation

Based on these gaps in the literature, the aim of this dissertation is to get more insight into the interplay between personal and contextual antecedents of transfer motivation and different types of transfer motivation in (indirectly) predicting transfer of training. In pursuing this aim, the UMTM is employed as a framework to explain the influence of these components in predicting transfer of training. This leads to the following overall research question for this dissertation: *How is transfer of training influenced by its antecedents as seen through the lens of the UMTM?*

To answer this research question, four studies were conducted. Across the chapters, a cross-sectional design was used to examine to what extent the different components of UMTM are related to each other. Moreover, across all chapters a longitudinal design was employed to investigate whether components of the UMTM are able to (indirectly) predict transfer of training when trainees actually engage in applying training content. In addition, also a person-centered approach was employed to examine whether different types of transfer motivation manifest themselves differently across different groups of trainees (chapter four). With this approach it was also examined whether the distribution of these types of transfer motivation matter for transfer intention and transfer of training. Also a quasi-experimental design was used (chapter five) in which an intervention group was compared with a control group to investigate whether personal and contextual components of the UMTM can be affected and whether this affects types of transfer motivation and eventually transfer of training.

Secondly, transfer of training was measured differently throughout the dissertation. A self-reported transfer measure was used and it was investigated whether components of the UMTM are able to (indirectly) predict this operationalization of transfer (chapters, two and five). Since self-reports can be subject to social desirability, upward bias and leniency (Chiaburu et al., 2010; Gegenfurtner, 2011; Segers et al., 2003), also external indicators of transfer (i.e., trainers) were used (chapter three), which are considered to be more objective estimators of transfer of training (Taylor et al., 2009).

Thirdly, throughout the different chapters, different variables that can play a role in predicting types of transfer motivation and/or transfer of training were controlled for. Specific training characteristics were included, such as whether training participation is mandatory or voluntary, whether they cover soft- or hard-skill content and whether they are provided online or in-person (chapter three and five). Prior knowledge was also included as control variable (chapter three), which in previous research already has been found to matter for transfer motivation (Gegenfurtner, 2013). Finally, also personal characteristics, such as age, gender and experience were included (chapter four) as these variables have been found to be predictors of transfer motivation and/or transfer of training in previous research (Gegenfurtner, 2020; Gegenfurtner et al., 2020; Gegenfurtner & Quesada-Pallarès, 2022; Gegenfurtner & Vauras, 2012). Below the four different studies are introduced.

Chapter two focused on investigating whether the dynamics of the UMTM can be replicated in the transfer of training context, and to what extent components of the UMTM are able to (indirectly) predict self-reported transfer of training. In addition, within-person dynamics were examined by investigating whether personal and contextual antecedents and types of transfer motivation of the UMTM change over time, whether these changes relate to each other and if these changes predict transfer intention and transfer of training.

Chapter three examined whether components of the UMTM can predict transfer of training as indicated by external sources (i.e., trainers). Furthermore, in this chapter it was also examined whether prior knowledge of training content has an effect on the association between transfer intention and transfer of training. Finally, it was examined to what extent mandatory or voluntary training participation and trainings provided online or in-person moderated the effects of transfer motivation on transfer of training.

Chapter four investigated whether it is possible to distinguish groups of trainees that score differently on different types of transfer motivation (i.e., transfer motivation profiles). Moreover, it was investigated whether members of these profiles score differently on personal and contextual antecedents of transfer motivation, and score differently on transfer intention and transfer of training. In addition, it was

investigated whether it is possible to explain profile membership based on personal characteristics, such as age, gender, experience and type of work.

Chapter five explored the effects of a goal-setting intervention on personal and contextual antecedents, types of transfer motivation, transfer intention and transfer of training for different types of trainings. Previous research has shown promising effects of setting goals at the end of trainings as to what one wants to achieve by applying training content in practice (i.e., goal-setting; Brown & Warren, 2009; Johnson et al., 2012; Richman-Hirsch, 2001). It was examined whether effects on personal and contextual antecedents have an effect on types of transfer motivation, and, eventually, transfer of training. Finally, it was investigated whether the effects of a transfer of training intervention depends on specific training characteristics (i.e., online versus in-person, hard-skill versus soft-skill and mandatory versus voluntary).

Chapter six provided an answer to the main question of this dissertation. Furthermore, it also provided insight into the theoretical implications of the dissertation, offered directions for future research for scientists and practical implications for policy makers and trainers. Lastly, it provided a summary of the limitations of this dissertation.

1.1.7. Research Context

Studies of this dissertation have been primarily conducted at the Dutch judicial training institute (SSR), which is the training institute for the judiciary in the Netherlands. SSR offers more than 2000 trainings per year for employees working within the judiciary (e.g., public prosecutors, judges, legal assistants). These trainings are both for initial and permanent educational purposes. Like other organisations, SSR invests large amounts of time and money on training activities with the aim to improve the quality of the judiciary. Yet, the evaluation of trainings in the judiciary rarely considers the impact of these trainings on work practice (Hammergren, 1998; Thomas, 2006). The studies in this dissertation connect to the need to get more insight in the impact of these trainings as (continuing) training is important to ensure that judicial employees keep up with new methods, laws and procedures, whereas it is also vital that uniformity and predictability in decision making by judges is

guaranteed (Hammergren, 1998). Ultimately, the insights from these studies may contribute to securing and improving the quality of the judiciary (Thomas, 2006).