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### Pathways from Role Identification Level to Attention Residue in Multiple Team Membership

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#### Abstract

More than two third of knowledge workers are assigned to multiple teams simultaneously. Participating in several teams can also mean enacting several roles. Psychosocial experiences like role switching have been neglected in research so far but are crucial for the success of multiple team membership (MTM) in organizations. Therefore, this paper considers the pathways from role identification level in one role to attention residue in another role. This relationship is explained with the role transition and self-regulation theory and two mechanisms: Personal engagement and interrole conflict. It is assumed, that the role identification level leads to personal engagement, moderated by role identification dispersion and to interrole conflict, moderated by interruptions. Personal engagement in the preferred role leads to attention residue in the other role, as well as interrole conflict leads to attention residue. This conceptual model shows that unbalanced person-role matches can result in a negative, cognitive outcome of MTM.

Keywords: Multiple team membership; attention residue; role identification; role transition; self-regulation.

#### 1. Introduction

"Paying attention and awareness are universal capacities of human beings." (Jon Kabat-Zinn). Nowadays, 65% - 95% of knowledge workers are assigned to two or more teams simultaneously for a certain time period and divide their attention to several contexts (O'Leary, Mortensen, & Woolley, 2011, p. 461). In literature, this is referred to as Multiple Team Membership (MTM) or multi-teaming (K. M. Chudoba, Wynn, Lu, & Watson-Manheim, 2005, p. 20; O'Leary et al., 2011, p. 461). Organizations implemented MTM in the last three decades to leverage their employees' expert knowledge more effectively and to respond with higher flexibility to a constantly changing environment (Espinosa, Cummings, Wilson, & Pearce, 2003, p. 157; O'Leary, Woolley, & Mortensen, 2012, pp. 144-145). That is one reason why MTM is particularly common in knowledge intensive industries, where information access is unlimited, whereas cognitive resources are limited (Kahneman, 1973, pp. 7-11). Besides beneficial factors on the organizational level, there are also challenges MTM creates for organizations, teams or employees. Many scholars have recognized structural and systematic challenges like managing the effectiveness

of MTM, some others have focused on psychosocial challenges like dealing with project overload (Margolis, 2020, p. 2; Patanakul & Milosevic, 2008, p. 118; Zika-Viktorsson, Sundström, & Engwall, 2006, p. 392). However, hardly anyone has focused on challenges like how to handle multiple identities and its effect on time or attention allocation (Mathieu, Maynard, Rapp, & Gilson, 2008, p. 442; O'Leary et al., 2011, p. 471; Ramarajan, 2014, p. 591). Although multiple identities often come with working in multiple teams. Especially a role perspective is rarely taken even though it is highly related to multiple identities (Chen, Jiao, Yang, & Wang, 2020, p. 2). Roles are known "as a position in a social structure" (Ashforth, 2001, p. 4). Those social structures can be society, but also sub-systems like organizations. The importance of roles in an organizational context grows, so does the interaction between work roles and organizations as well (Ashforth, 2001, p. 1). One crucial factor is the institutionalization of roles in organizations, the "colonization of the private" (Ashforth, 2001, p. 2). This means that many activities are nested in organizational settings and mediated through roles, which were handled private or communal in earlier times. Individuals who want to train their fitness enrol in online courses and are fitness members nowadays,

and employees are rather known by their role description like developer or manager than by their name. Therefore, individuals must interact with different kind of roles and adapt these roles on a daily basis (Ashforth, 2001, pp. 1-2)). Institutionalization results in interchangeable positions (Ashforth, 2001, pp. 1-2). The role of a data analyst in an organization for example is crucial and will be needed for the following years but the person, filling out this position can be substituted which strengthens the organizations stability. However, employees may be hindered to completely identify with this specific role, that they only hold for limited time (Ashforth, 2001, p. 3). Globalization and the trend towards a fast-changing environment leads to a new understanding of jobs – from the traditional perception of stable and long-lasting jobs towards unstable and changing jobs. Additionally the arrangement of those jobs in multiple teams keep changing (Ashforth, 2001, pp. 1-3). Because of this development, there is a call for a better understanding of multiple role identities in combination with MTM (Chen et al., 2020, pp. 13-14; Pluut, Flestea, & Curşeu, 2014, p. 343). Chen et al found in their study that multiple identities in multiple innovation teams can lead to identity conflict or identity synergies (Chen et al., 2020, p. 2). Identity conflict can arise through impeding roles which can hinder innovation, whereas identity synergies can come from overlapping and mutual inspiring experiences and enhance innovation (Chen et al., 2020, p. 5). Rapp and Mathieu mentioned in their paper research concerns about the pathways from high team identification with one team, to which attention and effort are aimed, to potential negative impacts on the other teams (Rapp & Mathieu, 2019, pp. 314-315). A similar issue on task level was studied by Leroy (2009, p. 169), named as attention residue and defined as the difficulty of switching the attentional focus on the current task, because the prior task is still in mind. For an individual, having a MTM means fulfilling several roles and being confronted with the roles' perceived requirements (Ashforth, Kreiner, & Fugate, 2000, p. 475). The requirements, goals, values and beliefs of a role are called role identity (Ashforth, 2001, p. 6). During a workday, employees need to switch between their roles, dependent on the current team, they work in (O'Leary et al., 2011, p. 463). The process, to physically and psychologically disengage from the current role and engage in the next role is called role transition (Ashforth et al., 2000, p. 472). To transition between roles entails overcoming difficulties such as switching the attentional focus from one role to another (Ashforth et al., 2000, p. 475). The difficulty of the transition process depends on the extent of the employees' role identification (Ashforth, 2001, p. 13). This raises the question, how role identification level in MTM relates to attention residue. To reduce complexity this question is examined as a theoretical concept looking at individuals participating in two teams and occupying two different roles. It will be assumed that employees split their time autonomously and evenly between two teams. The theoretical contribution of this paper is the convergence of the role transition theory on individual level and the self- and attention regulation theory

which is so far just implemented on task level. To my knowledge, this is the first thesis about the role identification in MTM situations and the connection to negative outcomes on attentional level. Several sub-theories and interviews will underline the relationship between role identification level and attention residue. They will lead to the theory that a high role identification level in one role can lead to attention residue in another role with respect to the personal engagement theory (Kahn, 1990), the role and role boundary theory (Ashforth, 2001) and the self-regulation theory (Muraven & Baumeister, 2000) as well as the attention residue theory (Leroy, 2009). In the beginning of this thesis, there will be a short overview over the MTM framework, the trend towards this way of collaboration and the benefits and challenges that can arise. In the third chapter, the relationship of role identification level to attention residue, moderated by engagement and interrole conflict will be explained while integrating the mediators role dispersion and interruptions. The conceptual thesis will end with a discussion, practical implications and limitations of the developed model.

#### 2. Multiple Team Membership

Even though the majority of research still treat teams as stable and clear workgroups, without considering the appearance of MTM, employees often participate in two or more teams for a certain time period (K. Chudoba & Watson-Manheim, 2007, p. 67; Mathieu et al., 2008, p. 442; Zika-Viktorsson et al., 2006, pp. 391-393). Therefore, MTM has been mentioned as one of the most important topics to be researched (Mathieu et al., 2008, p. 442). Latest paper showed, that organizations feel the need to increase productivity and enhance individual and team learning through assigning them to multiple teams (O'Leary et al., 2011, pp. 461-462). Besides these positive outcomes, MTM brings additional benefits with it, as well as challenges (O'Leary et al., 2012, p. 158). To understand the new possibilities and potential downsides of MTM, it is crucial to have a look on the streams that lead to that new state of work arrangement and in which forms MTM can emerge.

#### 2.1. Trend toward MTM

In recent years, the understanding of what should be regarded as team, changed (Wageman, Gardner, & Mortensen, 2012, p. 301). Traditionally a team was defined as a "bounded and stable set of individuals for a given time period, interdependent for a common purpose" ("Handbook of organizational behavior", 1987, pp. 366-367). In the last two decades, following simultaneously developed trends led to a new understanding of teams and the emergence of MTM (Wageman et al., 2012, pp. 1-2). Firstly, the environment in which organizations operate became more complex. The complexity comes from multinational organizations that have to operate within a fast changing environment and answer to its' diverse needs (Cummings & Haas, 2012, p. 316). Due to trends like the digitalization, globalization and

the dominance of communication technologies new forms of collaboration were possible that gave organizations the possibility to react flexible to the environment (Wageman et al., 2012, p. 303). Organizations can increase their flexibility through geographically dispersed employees with expert knowledge, who are assigned to several projects and participate in those when required (Cummings & Haas, 2012, p. 316; Hackman, 2012, p. 429). This results in collaborations of geographically dispersed members of different organizations who find encompassing solutions for complex problems (Hackman, 2012, p. 429). The employees' workloads are adjusted to current organizational needs which means that crucial projects can be developed faster through increasing the members workload in these projects while slowing down less crucial projects to reduce the members workloads in those projects (O'Leary et al., 2011, p. 467). As a second trend, the rise in the knowledge work economy lead to upturn in MTM (Higgs, Letts, & Crisp, 2019, pp. 154-155). Therefore, MTMs are most commonly used in highly competitive and knowledge intensive areas such as consulting, IT, new product development (O'Leary et al., 2011, p. 462; Wheelwright & Clark, 1992, p. 2) or academia (González & Mark, 2004, p. 113). In 1999, knowledge workers were expected to be the most important institution in the 21st century (Drucker, 1999, p. 79). Now, they are considered the most valuable competitive advantage of an organization (Dul, Ceylan, & Jaspers, 2011, pp. 715-716). Knowledge workers primary contribution is to create new knowledge and apply it to generate a new outcome (Mládková, Zouharová, & Nový, 2015, p. 768; Shujahat et al., 2019, p. 443). Knowledge workers are characterized by their specialized expertise in one field. They can deepen their expertise through using it in multiple, slightly different situations (O'Leary et al., 2012, pp. 144-145). Therefore, assigning them to multiple teams, means leveraging their knowledge best and supporting it by applying it to a broader spectrum of similar problems. Because of their scarce expertise and their increasing demand, organizations need to assign them in several teams to deploy their knowledge in an effective way (O'Leary et al., 2012, pp. 144-145). Therefore, the development of the knowledge work economy led to the growing usage of MTM. As the knowledge economy is a high competitive one and resources are scarce, there is a big competition for employees (O'Leary et al., 2011, p. 462). So, a third important trend towards MTM is the need to motivate and retain ones' employees (Dychtwald, Erickson, & Morison, 2006). One way to design the work of employees more attracting is to use MTM to create a compelling workplace (O'Leary et al., 2012, pp. 145-146). Hence, MTM is not only increasingly requested by organizations to leverage their resources more effectively, but also needed to retain their employees through an appropriate work environment. Besides the trends that see MTM as opportunity to adjust to environmental needs, MTM partly occurred incidentally. Due to new organizational structures such as flat hierarchies, dispersed work and matrixed organization, managers lack an overview over the projects and commitments their employees have (O'Leary et al., 2012,

p. 146). There may be situations in which employees are subordinated to two or three managers who independently assign them to projects and teams. Therefore, some employees are assigned to multiple teams unintentionally. Due to the development towards fluid, overlapping and geographically dispersed team members, the traditional definition of teams with clear and stable boundaries is not suitable anymore (Mortensen & Haas, 2018, p. 1). A more suitable definition of teams nowadays was mention by Pluut et al. (2014) describing teams as "flexible working units that help organizations to gain and maintain a competitive advantage" (p. 333). Although the new understanding and allocation of teams increases flexibility, innovative-thinking and more efficient work-styles in organizations, the resulting blurring of team boundaries create a challenge for individuals, teams and the organization itself (Mortensen & Haas, 2018, p. 1). Once MTM is implemented, it is hard for organizations to go back to traditional work situations (O'Leary et al., 2012, pp. 159-160). Once organizations notice the benefits through allocating their experts to certain projects with a requested skill set, organizations will not be willing to give this opportunity up (O'Leary et al., 2012, p. 161). There are different kinds of MTM allocations, that can occur in organizational contexts. Before the challenges and benefits of MTM are highlighted, the variety of MTM is going to be outlined.

#### 2.2. Role Allocations within MTM

Due to the broad definition of MTM, different contexts can be interpreted as MTM. A very broad understanding of MTM is the concept of side-hustles, also called multiple jobholding (Caza, Moss, & Vough, 2018, pp. 703-704; Sessions, Nahrgang, Vaulont, Williams, & Bartels, 2020, p. 42). This concept emerged with the rise of communication and information technology and due to a trend towards the gig economy (Ashford, Caza, & Reid, 2018, p. 23; Wood, Graham, Lehdonvirta, & Hjorth, 2019, pp. 64-71). The gig economy offers the opportunity to supply labour via platforms and exercise it remotely or locally (Wood et al., 2019, p. 57). Employees can easily supplement their full-time job with one or more side-hustle jobs like being an Uber-driver or being a freelancer in blogpost writing (Ashford et al., 2018, pp. 24-25). In the US for example, around 44 million workers have additional jobs besides their core work (Clark, 2018). These side-hustles are chosen autonomously by the individuals in regard to the working time, the workplace, what kind of work and the amount of work (Sessions et al., 2020, p. 7). Sessions et al. (2020, p. 36) found, that the feeling of empowerment in a side-hustle has effects on the affective and cognitive behavioural states in full-time work through work engagement. The effects on the full-time job are positive if there is increasing motivation in the side-hustle and a spill over from side-hustle empowerment to the full-time job (Sessions et al., 2020, pp. 22-23). But also negative effects can occur if potential conflicts with the core-job exist, like time constraints (Sessions et al., 2020, p. 44). All in all, the positive influences of side-hustle outweigh the negative ones (Sessions et al., 2020, p. 36). Side-hustles cannot directly be

referred to MTM but help to understand the concept. A narrower form of MTM within one organization instead of two is operationalized with employees being assigned to one team in which they spend most of their time with, and work with colleagues who allocate their time among multiple teams infrequently (Margolis, 2020, p. 5). In this scenario, employees are assigned to one core team with which they work on one core project and have a few side tasks to exercise. A third type and the most common form of MTM is often used in consulting firms for instance (O'Leary et al., 2011, p. 462). Here employees are assigned to two or more teams and divide their time on each team equally (Margolis, 2020, p. 5).

Those kinds of MTM differ in their structure of time fragmentation, the focus on teams and number of teams. To get a better understanding of the consequences of MTM, the individual differences in these settings must be regarded as well. Individuals differ in their characteristics and in the subjects, they value the most (Ashforth, 2001, p. 30). One consequence that received less attention yet, is the transition process within MTM. If so, mainly transitioning between tasks is studied, but there is a range within team contexts in which transition processes play an important role (Newton, LePine, Kim, Wellman, & Bush, 2020, p. 3). "Those team contexts often include different tasks, roles, routines, technologies, locations, and so forth, which make switching between them both more effortful (in terms of time and attention) [...]" (O'Leary et al., 2011, p. 463). As the relevance of roles gains in importance, simultaneously with the emergence of MTM, a closer look into the mutual interaction may give helpful insights. Pluut et al. (2014, p. 333) underlined that the transition between teams means employees enact different roles. Looking at role identification and MTM in combination provides two possible scenarios: Employees take the same role in several teams or employees take several roles in several teams. The first scenario is more common today, because employees nowadays are rather trained with specific skills that belong to one role, instead of general skills that can be used for several roles (Drucker, 1999, pp. 84-87). But there are still working fields, in which one person takes different roles, such as in academic research (González & Mark, 2004, p. 113). In academia, a broad range of activities must be fulfilled. One part of academic work is the teaching assignment, either as professor or as an assistant. This requires the design and preparation of study material courses which is organized in different team constellations. Additionally, they participate in several research projects (González & Mark, 2004, p. 113). These various projects require them to hold several different roles, depending on their research focus and their personal traits of analysing data, leading interviews or preparing information, for instance (González & Mark, 2004, p. 113). All of the five interview candidates who work in academia stated, that they fulfil several roles as researcher and research and teaching assistants like being a supervisor for bachelor or master students, being a data analyst or a project lead during the same time period within different teams (Interviewee I1-I5, personal communication, October 19, October 21, 2020, Appendix 1). Besides in academia, also in start-ups or

in the function of being a manager multiple roles in multiple teams is common (González & Mark, 2004, pp. 113-114). So far, less is known about how employees handle multiple roles in organizational settings (Rapp & Mathieu, 2019, p. 442). This paper assumes the possibility, that holding different roles in multiple teams has an impact on the outcome of MTM. This impact is provoked by the person-role match within the role theory, which perceives, that it makes a difference in ones' cognitions whether employees can express themselves in the role or not. Before the relationship of role identification in MTM and the negative outcome of attention residue is studied, general positive and negative outcomes in MTMs are mentioned. These following external factors in the success of MTM in organizations should be known, because they are hold at an optimal level when focusing on the internal processes in the third chapter.

#### 2.3. Benefits and Challenges of MTM

To gain insights in internal processes of individuals, the external conditions that facilitate or hinder a successful MTM should be regarded. The implementation of MTM nearly always comes with both, challenges and benefits (O'Leary et al., 2012, p. 158). In the US for example, around 70 million employees are faced with opportunities and risks of MTM and from a management perspective, it is a key to success to manage them accordingly (Chen et al., 2020 in Margolis, 2020). To control external conditions, the individual level, the team level and the organizational level should be considered separately.

For Individuals, being assigned to multiple teams subsequently means managing and completing tasks on their own while balancing time or schedule conflicts (Mortensen, Woolley, & O'Leary, 2007, pp. 218-219). MTM is often perceived as job demand for individuals, because it is effortful to allocate time and energy to different teams, communicate to a range of team members and coordinate team activities. Therefore, teamwork can be perceived as exhausting and team conflict can occur, especially if the communication is not supported by team leads or managers (Pluut et al., 2014, p. 343). The strain from coordination issues employees accept, may be compensated by having autonomy to work in projects they are interested in and strive for (Mortensen et al., 2007, p. 219). Moreover, job strain can be reduced over time, when employees learn to balance their workload and implement routines and opportunities for more efficiency between team contexts. However, this can lead to a "more task-focused and less relationship-focused" (p. 344) work which therefore reduces social support between team colleagues (Pluut et al., 2014, p. 344). Related to the attention and social network theory, productivity and learning as potential benefits of MTM arises (O'Leary et al., 2011, p. 461). Thereby, attention theories deal with competing demands that ask for ones limited attention, whereas social network theories cover the question how the wide access to information influences individuals' learning and productivity (O'Leary et al., 2011, p. 464). O'Leary et al. dealt with the problem of

infinite access to knowledge and information, but limited resources to process and handle this information, pending on the number of teams and the variety within them (O'Leary et al., 2011, pp. 471-474). The productivity of a single employee can increase with the number of teams he or she is assigned to, but only until a certain saturation point is reached (O'Leary et al., 2011, p. 466). More teams enhance individuals to focus on priorities and develop mechanisms to work more efficiently to master the workload. However, at some amount of team assignments fragmented attention, coordinating problems, and waiting lines outweigh the achieved efficiency which can lead to decreasing productivity (Chan, 2014, pp. 82-83; O'Leary et al., 2011, p. 466). Regarding the variety of the different teams, a higher variety leads to lower productivity because of the information and management overload and costs of switching contexts, work roles or styles (O'Leary et al., 2011, p. 468). However, moderate differences in the teams enhance employee learning because of new or more diverse information access (Mark, Gonzalez, & Harris, 2005, pp. 321-322; O'Leary et al., 2011, pp. 469-470). Related to innovation related theories, with increasing team memberships individuals cannot take time for finding creative solutions and applying new knowledge because of time pressure (Amabile & Mueller, 2008, pp. 33-35). Therefore, MTM may not enhance creativity processes. The impact of MTM on an employee's effectiveness depends on the level of MTM. If individuals are assigned to a minimal or maximal amount of teams at the same time, they will perform less than at a moderate level of MTM (Chan, 2014, pp. 82-83).

At the team level, it can be difficult to manage the team members time and attention on several projects or tasks for a given period (Mortensen et al., 2007, p. 219). However, working across teams can enhance team learning and lead to spill over effects but only at a moderate degree of simultaneously running teams and with less overlapping memberships (O'Leary et al., 2011, p. 270). In this case, the different backgrounds of team members spill over and facilitate the team with backgrounds and expertise that can be used to create new solutions (O'Leary et al., 2011, p. 469). Boundary spanning activities can increase the teams' cognitive ability by learning from each other and therefore increase their productivity (Ancona & Caldwell, 1992, p. 656; Pluut et al., 2014, p. 334). Based on social network theories, team productivity also increases with the number of teams, due to the effort taken as a whole team to manage their team work in a more efficient way (Chan, 2014, p. 84). Like on individual level, also on team level the focus shifts from relationships to tasks and routines that are implemented to design the work process more efficient (O'Leary et al., 2011, p. 467). By the same amount of simultaneously running teams but higher variety, team productivity decreases because of the higher coordination and management effort of time schedules or information processing (O'Leary et al., 2011, p. 469). Working across varying teams can enhance team learning. New knowledge acquired in one team can be adopted to a problem in another team to find solutions in a creative way under the condition of a moderate degree of overlapping memberships (O'Leary

et al., 2011, p. 470). The more teams work simultaneously, the less teams can integrate new knowledge due to time constraints and rare opportunities to share learning and opinions (Wilson, Goodman, & Cronin, 2007, pp. 1054-1056).

Looking at the organizational level, managing and coordinating multiple teams is complex, because a clear overview of the work schedules and team assignments of every employee is essential (Mortensen et al., 2007, pp. 219-220). Unpredictable time lags in one project can lead to huge consequences in other projects and to a new bundle of work to manage and reorganize time schedules (Mortensen et al., 2007, p. 220). Organizational mismanagement of teams can lead to less organizational productivity and a stressful work environment (Mortensen et al., 2007, p. 225). A stressful and therefore unattractive work environment will not attract high performing knowledge workers which are a key resource for organizations (O'Leary et al., 2011, p. 146). However, managing MTM right, organizations can benefit from MTM through increasing social networks across work units (Mortensen et al., 2007, p. 220). Overlapping, and sometimes even geographically dispersed memberships create networks through teams and locations and offer ways to leverage expertise the best (Mortensen & Haas, 2018, p. 1). Through unique networks, organizations can gain a competitive advantage as highly valuable resource (O'Leary et al., 2012, pp. 160-161). The intra-organizational connectivity is higher, the more projects or teams share the same members and the more connected the projects and teams are (O'Leary, Mortensen, & Woolley, 2009, p. 23). MTM in general leads to intra-organizational connectivity which therefore leads to lower redundancy and efficient use of information but also decreases information diversity through tightly coupled team structures (Lazer & Friedman, 2007, pp. 689-692; Roloff, Woolley, & Edmondson, 2011, pp. 250-251). Team members, who work in several teams, may notice if another team deals with a similar question or has already found a solution for the problem one team seeks (Hansen, 1999, pp. 103-105). Moreover, they can share knowledge and information they gathered (Newell, Swan, Bresnen, & Obembe, 2008, p. 50; Roloff et al., 2011, pp. 263-264; Wimmer, Backmann, & Hoegl, 2019, pp. 710-711). On the other side, increased interconnectivity leads to tightly coupled teams. Trough tight couples, project or team failure can spill over to other teams as well as interruptions can occur (Hansen, 1999, pp. 103-105; Lazer & Friedman, 2007, pp. 689-692). These negative developments are assumed to occur only in high levels of interconnectivity. In general, high interconnectivity increases organizations productivity, but at some point the tight coupled teams result in costs like failure spill over, interruptions and time schedule conflict (O'Leary et al., 2011, pp. 23-26). Besides leveraging their knowledge workers efficiently, they also can attract new ones (O'Leary et al., 2012, pp. 145-146). Motivated and resilient employees select themselves in high compelling work environments. Organizations with MTM structures, offer this demanding environment for high performers and attract new high performing knowledge work-

Integrating MTM as collaboration option in organizations can lead to benefits in productivity, learning or motivation but can also give rise to a series of challenges in coordinating and managing these teams, allocating their attention and time and handling competing demands. Whether the advantages or disadvantages overweigh, is a question of managing and balancing the conditions of MTM (O'Leary et al., 2012, p. 158). Additional influencing factors can be the duration of the collaboration, the personal attitudes or characteristics of individuals like their work role, cognitive abilities and stress level or the members turnover (Dibble & Gibson, 2018, pp. 925-928). The fragmentation of time and task and the composition of team members also plays an important role (Cummings & Haas, 2012, p. 317). From transition perspective, it can be helpful, to assign employees to complementary teams to reduce schedule conflict and the amount of context switching (O'Leary et al., 2012, p. 162). Another way to reduce context switching is restructuring the tasks in larger bundles that can be accomplished as a whole (Interviewee I3, personal communication, October 19, 2020, appendix 1.1.). To minimize additional blocks in employees' time schedule, team meetings and strict working hours can be designed in a more flexible way. Thus, employees can focus on their work with less interruptions and meeting blocks in their workday (O'Leary et al., 2012, pp. 162-163). One negative outcome and new form of context switching could emerge through interruptions via short messages in skype, Microsoft teams or e-Mail from team colleagues to compensate the reduced team meetings (Jett & George, 2003, p. 494). Besides external conditions that influence organizations' success, the internal process of role-person match has been neglected in literature so far (Caza et al., 2018, p. 705). Holding the number of teams, their variety and context switching at an optimal level, the role allocation can still have a huge impact on an individuals' performance in multiple teams.

## 3. Conceptual Framework: Role Identification and Attention Residue

To understand roles and the role identification process, a closer look into the identity theory is useful (Ashforth, 2001, p. 23). The Identity Theory (IT) has its roots in the symbolic interactionism which claims that the self is a product of other's perceptions (Ashforth, 2001, p. 26). Further developed, the IT assumes that the self is socially constructed through the roles that are taken by every individual in the society. Every interaction takes place through the lens of a role, such as the role of an employee, a consumer, or a child. A role identity consists of values, goals, norms, interactions and beliefs that are defined and constructed by society (Ashforth, 2001, p. 27). A role identification means individuals define themselves with the role identity (Ashforth, 2001, p. 28). To identify with a role, they must know which role they have to fulfil and categorize themself in this role. Additionally, the individual has to be aware of the roles' requirements and values (Ashforth, 2001, p. 25). The stronger people are

affected by their role identity, the more they focus their attention on this role (Ashforth, 2001, p. 51). This goes so far, that individuals ascribe the roles' attributes to ones' self and strive for acting out this highly identified role (Ashforth et al., 2000, p. 483). Moreover, the individuals may decrease the boundaries, to integrate the preferred role into their other roles (Ashforth et al., 2000, p. 483). In that sense occupants will easily transition into the favoured role, often even psychologically with their thoughts before physically, like changing the work location, but find it difficult to exit the preferred role. Organizations should not underestimate the influence of role identification on their employees. Individuals decide for activities or tasks that are align with their identity (Ashforth, 2001, pp. 82-83). Employees with high role identification will show organizational commitment and citizenship, prosocial behaviour, higher job satisfaction as well as good performance. They may be better in decision making processes and will lead to lower turnover (Ashforth & Saks, 1996, pp. 155-162; Bullis & Tompkins, 1989, pp. 298-307; Cheney, 1983, pp. 350-357; Dukerich, Golden, & Jacobson, 1996, pp. 37-39; Mael & Ashforth, 1995, pp. 312-315; Pratt, 1998, pp. 196-198). Identifying with the role means doing good at and for the role, and this subsequently means doing well for the own self (Ashforth, 2001, p. 83). Combining the identity theory with the transition theory potential downsides become clear. Role transition processes can be divided into macro and micro role transitions (Ashforth, 2001, p. 7). Marco role transitions mean switching between "sequentially held roles" (Ashforth, 2001, p. 7) like transitioning into a promoted role, whereas micro role transitions means switching between "simultaneously held roles" (Ashforth, 2001, p. 7) like transitioning from the colleague role into the friend role. The special characteristics about micro role transitions are the duration of holding a role. Micro role transition processes occur frequently, therefore often temporary and recurrently (Ashforth, 2001, p. 261). The difficulty of frequent, temporal transitions is shifting the attention. Every transition consists of psychologically unfreezing the current role state, moving towards the following role with full attention and freezing the new state of role. Individuals try to minimize the difficulty of transitioning as well as the frequency of unwanted transitioning (Ashforth, 2001, p. 262). Role transition processes are determined by their difficulty and valence (Ashforth, 2001, p. 88). The difficulty describes the effort needed to exit one role and to enter the other role, whereas valence describes the attraction of the upcoming transition for the occupant. These two factors work together: If one perceives the valence as negative, the difficulty of transitioning will be higher and vice versa An employee who has a high role identification will perceive the transition process into another role as more difficult and negatively attracted (valence), because exiting a preferred role is exhausting and less attractive than exiting a less preferred role (Ashforth, 2001, pp. 88-89). As the identity theory states, the employee will focus effort and attention to the preferred, highly identified role, which can lead to less effort and attention within other roles in MTM. This phenomenon is called attention residue

(Leroy, 2009, p. 169). It builds on the assumption, that individuals have limited attentional capacity and that it is possible to pay attention to one issue, but difficult to split attention to multiple objects (Kahneman, 1973, pp. 4-7). Due to cognitive limitations, employees must completely transition their attention from one object, like a work role, to the other object (Leroy, 2009, p. 169). Because of the positive relationship between role identification and transitional effort, it is relevant to research the link between role identification and attention residue under the transition theory. In the following, this relation is studied under a conceptual model, assuming an employee having MTM, fulfilling a different role in each team and fragmenting his or her work time equally and autonomously on both teams. The conceptual model is shown in Figure 1.

#### 3.1. Role Identification Level and its Aftermaths

When speaking about role identification, the degree of identification should be made measurable with the term of role identification level. Throughout this paper, the extent of identification with one role and its requirements is called role identification level (Ashforth, 2001, p. 28). Ashforth (2001, p. 74) describes the identification as "a continuous variable ranging from zero to very high". In multiple teams the assigned roles are relatively stable. The extent of the role identification level does not vary from day to day but is a balanced state around an identification point (Ashforth, 2001, p. 7). Therefore, it can be assumed that the level is a state, balancing out around low, medium and high role identification (Ashforth, 2001, p. 74). A high role identification level means that the individuals can identify themselves with the position and the requirements, goals, values and beliefs and strive for fulfilling the role and integrating it into the other roles (Ashforth, 2001, pp. 27-28; 73). A low identification level stands for a mismatch between person and role (Ashforth, 2001, pp. 75-76). Whether one identifies with a role or not can influence the work behaviour (Ashforth, 2001, pp. 82-84). Within high role identification, the employee may show high personal engagement in this role and will tend to react to interactions from the preferred role while fulfilling another role. These two possible mechanisms are going to be explained in the following which will both lead to attention residue.

#### 3.1.1. Role identification and engagement

Academic research teams often face the situation in which several research topics are executed during the same time period (González & Mark, 2004, p. 113). As the interviewed researchers outlined, they usually work on three to five projects simultaneously (Interviewee I1-I5, personal communication, October 19, October 21, 2020, Appendix 1). Due to different specializations and preferences of researchers, everyone might fulfil several and varying roles. Besides, also age and experience from the other team members shape the role one fulfils, like being the less experienced often means doing data work, while being the most experienced means guiding the

team (Interviewee I3, personal communication, October 21, 2020, Appendix 1.3). In the following theoretical considerations, hierarchical differences will be not included, to reduce complexity. There could be a work situation, in which one employee has the role of a data coordinator in research team 1 and the role as regulatory coordinator in team 2. Both positions are on the same hierarchy level and differ in their tasks and requirements. It is assumed, that the employee has the same scope of work in both teams and can decide when to work on which task in which team. As stated in the interviews, all interviewees can organize 60-95% of their work time completely autonomously (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). We assume that individual A has a high role identification level with being the data coordinator. To understand the relation between the high identified role in team 1 and a potential attention residue in team 2, the theory about personal engagement and disengagement (Kahn, 1990) should be considered. Kahn (1990, p. 700) studied the issue that individuals vary in their investment of themselves in roles or tasks. Employees who personally engage in a role, express and employ their favoured self into the activity and attaches "personal presence" (p. 700) cognitively but also physically and emotionally in role performance. Individuals decide for every role and activity how much personal resources they want to engage and therefore how much of themselves they want to express and employ. If they decide to fully personally engage, they nearly merge themselves with the role and focus their cognitive attention on the related activities (Ashforth, 2001, p. 72; Kahn, 1990, pp. 700-701). Therefore, if the employee perceives a high role identification level with the role data coordinator, he or she will personally engage in this role. The high role identification level leads to personal engagement in this role, regardless of the identification level with roles in other teams. If employees do not perceive a high role identification level, they are somewhere between personal engagement and disengagement. Depending on their perception of emotional person-role fit, they engage more or less of their personal self into the work role (Kahn, 1990, pp. 699-700). Kahn's model is further developed and new antecedents of engagement were discussed (Rich, Lepine, & Crawford, 2010, p. 617). One of those antecedents is called value congruence and describes the situation in which the assigned work role and its requirements and expectations are congruent to the persons self (Rich et al., 2010, p. 621). Hence, employees engage in work roles, in which they can express their identity and therefore, experience a high role identification. Engaged employees tend to perceive a higher job satisfaction and seem to be more effective in their work. On organizational level, the individual effectiveness can be transferred to overall effectiveness and profitability (Harter, Schmidt, Killham, & Agrawal, 2009, pp. 25-28).

# 3.1.2. The moderating role of role identification dispersion If an individual highly identifies with one role, he or she will experience personal engagement in this role (Rich et al.,

will experience personal engagement in this role (Rich et al., 2010, p. 621). This effect can be strengthened, if the individ-

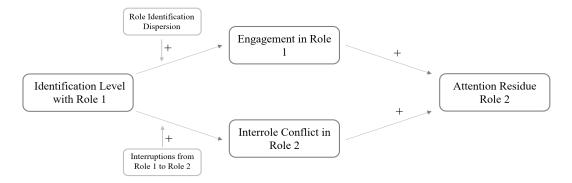


Figure 1: From role identification level to attention residue.

ual experiences a role identification dispersion between the assigned teams. A low identification dispersion means, the employee identifies with the role of a data coordinator and with the role of a regulatory coordinator both low, medium or high. In this first case there would be no preference for any of those two roles, as shown in Table 1. Therefore, the relation from role identification level in role 1 to engagement in this role would not be strengthened. A high identification dispersion would mean, the employee has a high role identification level with being data coordinator in team 1, but a low role identification level with being regulatory coordinator in team 2 or vice versa. In this second case, a high identification level with one role leads to personal engagement. Inversely, a low identification level can lead to personal disengagement under certain conditions, but not necessarily has to (Kahn, 1990, pp. 701-702). Personal disengagement occurs, when an individual is cognitively, emotionally and physically absent while taking the role. The individuals feel the need to distance themselves from the role and turn down any effort and energies from this role (Kahn, 1990, p. 702). Imagining the situation, in which the individual perceives a high identification level with being the data coordinator, and a low identification level with being a regulatory coordinator. In the first role, he or she would be personally engaged, and would focus attention and effort into this role performance. In the second role, he or she would potentially be personally disengaged, and would remove attention and effort from this role. It can be assumed, that the negative valence of the second role would strengthen the perceived positive valence of the first role. The positive valence of the first role strengthens itself and the individual even more identifies with it (Ashforth, 2001, p. 54) Thereby it might be, that the individual engages even more in the preferred role. Thus, through high role identification dispersion the positive relationship between role identification level and personal engagement would be strengthened for this identified role. Consequently, role identification dispersion functions as moderator.

#### 3.1.3. Role identification and interrole conflicts

Role Identification not only leads to personal engagement but can also lead to interrole conflict. Interrole conflict arises, when one experiences competing demands within their different roles (Kopelman, Greenhaus, & Connolly, 1983, p. 201; Pluut et al., 2014, p. 335). Whether an employee perceives interrole conflict or not depends on the roles' boundaries (Ashforth et al., 2000, pp. 474-475; 480-481). Role boundaries are defined in terms of their flexibility and permeability (Ashforth et al., 2000, p. 474). The role boundary characteristics facilitate or hamper the transition process (Ashforth, 2001, p. 263). Permeability means the roles' possibility to be psychologically in one role, while being physically in another role. Flexibility means that roles can easily be entered in terms of time and place (Ashforth, 2001, p. 263). The different roles an individual enacts are embedded within the same organization. Therefore, the location and time the roles are enacted is probably overlapping, thus flexible. Additionally, there are no predefined time slots when to engage in which role and no monitoring of the employees' thoughts therefore they could physically be in role 1 but actually think about role 2 activities, thus the roles are permeable. According to personal experiences from researchers and research assistants, it often occurs that the thoughts wander to another role which is not enacted currently (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). Flexible and permeable boundaries can facilitate the transition process and therefore weaken interrole conflict potential, because the employee can easily transition from one role to another without switching location or agreeing with someone about the time schedule. However, flexible and permeable boundaries can increase interrole conflict because the loose boundaries can confuse the employee when to engage in which role (Ashforth, 2001, p. 263; Ashforth et al., 2000, pp. 474-475). Besides role boundaries, team boundaries also must be considered. Especially through MTM, teams developed towards permeable boundaries in regard of knowledge- and information flows (Wimmer et al., 2019, p. 711). However, permeable team boundaries also lead to higher conflict potential because everyone is every time for all teams he or she is assigned to, available (Wimmer et al., 2019, p. 711). One reason for the trend towards permeable team boundaries is the modern work environment that facilitates open offices and information technology for fast and easy communication via E-Mail, Skype or Microsoft Teams (Jett & George, 2003, p. 494). Therefore, role bound-

**Table 1:** The Role Identification Dispersion Degrees Resulting from different Role Identification Levels.

	Scenario 1	Scenario 2	Scenario 3
Identification Level Role 1	Low	High	Medium
Identification Level Role 2	Low	Low	Low
Role Identification Dispersion	Low	High	Moderate

aries as well as team boundaries are permeable and offer the possibility of conflicting demands. All candidates interviewed, have already experienced conflicting demands from several teams (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). Due to their high percentage of autonomously choosing worktime, they regularly face the decision-process which role to enact. The role, with which one can identify more is therefore highly salient and pulls the employee to be fulfilled. The salience and identification are manifested through the personal investment, someone already gave (Interviewee I3, personal communication, October 21, 2020, appendix 1.3). Hence, role identification gives the employee a direction how to decide in case of interrole conflict but does not facilitate it. Not only the identification with a role, but especially the priority of the research project regarding deadline and importance helps researchers to decide for one project (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). In the following it will be discussed whether an interruption from the preferred role while being in the less identified role, will lead to interrole conflict.

#### 3.1.4. The moderating role of interruptions

In the case of permeable team and role boundaries crossrole interruptions are very common, because the individual fulfils the different roles in the multiple teams in the same organization with same internal information and communication technologies (Ashforth et al., 2000, pp. 478-480). All interview candidates are interrupted on a regularly basis (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). It is therefore likely, that a colleague from team 1 poses a question via Skype while an individual enacts a role in team 2. Sticking to the prior implemented example, role 1 has a higher identification level than role 2. Every few hours the individual decides which role activities to execute. Because of the higher role identification level of role 1, there is a motivational pull towards this role that may lead the individual rather fulfilling this role's activities (Leroy, 2009, p. 169). Nevertheless, the individual has the same amount of work in both roles and must allocate work and time equally. Within the decision-making process of which role to enact, there is not necessarily interrole conflict triggered by the identification level of the data coordinator role. Consider, the individual works in team 2, therefore enacts the role of the regulatory coordinator. As soon as this role enactment is disturbed through a cross-role interruption from a colleague in team 1, where the individual has the preferred role of data coordinator, an interrole conflict

may emerge. The individual should proceed with regulatory coordinator activities, but at the same time wants to help the colleague from their preferred role. The individual has to decide between two competing demands. This underpins that when being interrupted from the preferred role while being in the less preferred role, interrole conflict can emerge. The possible consequences of this decision-making process within the interrole conflict are outlined in the following.

#### 3.2. Attention Residue as cognitive Outcome

New forms of collaborations like MTM result in transitioning between several roles during a workday (O'Leary et al., 2011, p. 463). Transitioning from one role to another can probably affect the cognitions in the following role (Leroy, 2009, pp. 168–169). In the following two mechanism that influence attention residue are highlighted.

The self-regulation theory supports the assumption that managing cognitive behaviour and disengagement is effortful (Muraven & Baumeister, 2000, pp. 247-248). Selfregulation means overcoming an usual impulse and behaving the way a person should regarding rules, standards or ideals (Baumeister & Heatherton, 1996, p. 2; Baumeister, Schmeichel, & Vohs, 2007, p. 2). Leroy (2009, p. 170-178) transferred the self-regulation theory to an attention regulation theory, highlighting the shift of attention from one task to another. In the role context, this means for example that employees with high attention regulation can more easily shift attention, thoughts and behaviour towards another role, they are asked to (Leroy & Glomb, 2018, pp. 381–382). Self- or attention regulation as well as cognitions are limited (Baumeister & Heatherton, 1996, p. 3). Besides the effort and difficulty of regulating ones' behaviour and thoughts, irrelevant thoughts decrease performance (Leroy, 2009, pp. 169-170; 174). Irrelevant thoughts mean having less cognitive resources available for handling the amount of information and demands appropriately (Gilbert, Pelham, & Krull, 1988, p. 738). Therefore, to be fully present in every role, the employee must put off unrelated thoughts. Combining the difficulty of attention-regulation with the transition theory it becomes clear, that employees must fully transition their attention to the respective role to perform well. If the employee cannot fully transition the attention to the subsequent role, it is called attention residue (Leroy, 2009, pp. 168-170). The prior activity is still active in working memory and hinders the whole cognitive capacity to focus on the current activity. One reason for not being able to transition attention can be a strong motivational pull towards the current role (Leroy, 2009, p. 169). The motivational pull can

come from the high identification with a role for example and the resulting personal engagement.

#### 3.2.1. Engagement and attention residue

Being identified and engaged with a role, means the role may be a motivational pull factor for the employee. Bridging the gap to attention residue, a closer look on similar studies is useful. Newton et al. (2020, p. 4) transferred personal engagement on task level and researched spill-over from task engagement in one task, to task engagement in subsequent tasks. He studied a positive effect of task engagement on the engaging behaviour and performance in another task, but also found a negative effect of attention residue on the following task. Newton et al. (2020, p. 13) mentioned the possibility of transferring his results from task engagement to micro role transitions, because a role is a bundle of multiple tasks (Ashforth et al., 2000, p. 486). As the personal engagement and disengagement theory originally focuses on work role performance, the negative spill-over from engagement in one role to attention residue in another role can be argued with the transition theory. Kahn (1990, p. 700) already mentioned that high personal engagement comes with effort and attention and an intense attachment of the self with the role. An intense attachment of the self with the role increases the difficulty of the transition process, because the individual intrinsically strives for fulfilling this role (Ashforth et al., 2000, p. 483). Increased difficulty leads to increased negative valence of the transition process (Ashforth, 2001, p. 88). Within the role identification dispersion, the valence of the role 2 is negative, because the individual has a higher identification with role 1 and a lower identification level with role 2. Therefore, exiting the preferred role and entering the less preferred role is not attractive. Hence the higher difficulty, the more the transition process is impeded through negative valence. However, even if the employee transitions into role 2 the attention may not fully switch and the role 1 is still in his or her mind. This is due to the motivational factor of role identification. Motivation directs the individuals attention towards an activity that has the highest value for them (Locke, 2000, p. 411). As the personal value of an activity is subjectively perceived as something good, the attentional focus leads back to the role, with the highest identification (Locke, 2000, p. 411). To sum up, the role identification level of an individual leads to personal engagement. This effect is strengthened through identification dispersion as moderator. As one has a high identification dispersion and therefore can highly identify oneself with the role of being a data coordinator in team 1 and not identify oneself with the role of being a regulatory coordinator in team 2, he or she will even more personally engage in team 1. Because of the difficulty and negative valence of the transition process from role 1 to role 2 the cognition and attention may not fully switch to role 2. Due to limitations in cognitive resources, the individual will experience attention residue in role 2. A similar mechanism was found with side-hustle engagements. The individuals' engagement in side-hustles led to focusing the whole attention on this job while fulfilling

it, but still leaving attention and thoughts in this job while performing the full-time work (Sessions et al., 2020, p. 16). The side-hustle empowerment can at least to some parts be transferred to a high identification level and therefore support the assumption that personal role engagement through a high role identification level can lead to attention residue in the second team.

#### 3.2.2. Interrole conflict and attention residue

Not only the actual role and attention transition process can be effortful, but also the decision process whether to transition or not. Getting interrupted by a highly identified role activity can lead to interrole conflict while enacting a second role activity. That is because of the confusion the role occupant experiences while deciding which role to fulfil. It can be more relevant for the individual to stay in the current role activity even if he or she strives for fulfilling the interrupted demand. If this is the case, the individual has to self-regulate to resist the intrinsic motivational pull to follow the interrupted role activity and direct the behaviour and thoughts towards the current role activity (Muraven, Tice, & Baumeister, 1998, p. 774). The self-regulation process also includes regulating attention (Muraven et al., 1998, p. 775). Regulating the attention from the highly identified role to the current role activity, is effortful (Leroy, 2009, pp. 168-170). This makes self-regulation a limited resource, because there is less self-regulation and also less attention remaining for actually fulfilling the current role activity (Muraven & Baumeister, 2000, p. 248). Considering again the example from above this would mean, that withstanding an interruption from a colleague who operates in team 1, while being in role 2 leads to attention residue in team 2 for the following activities.

The preceding argumentation assumes, that a high role identification level in one role can lead to attention residue in the second role. This relationship is mediated by personal engagement in highly identified roles and interrole conflicts that can emerge through interruptions. All of the five interviewees already experienced the situation in which they thought about a role while fulfilling another role (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). The identification with a role and the therefore resulting motivational pull toward this role is one possible explanation for this. However, the conceptual model is based on theories and therefore, several limitations and have to be considered. Nonetheless, the model can give implications on how the relevance and handling with multiple roles in multiple teams. Those implications and limitations are outlined in the following discussion.

## 4. Discussion: Practical Implications and Limitations of the Model

Many researchers highlighted the lack of understanding of individuals' psychosocial experiences when working in MTM settings (Pluut et al., 2014, p. 343). This paper

examined the development towards MTM and its impact on individuals. Employees nowadays fulfil several roles in several teams during their workday. They can identify themselves with some of their roles more than with other roles, which impacts their engagement in the preferred role and their attention on the other roles. Moreover, their role identification level can lead to interrole conflict, if interruptions from the higher identified role occur. This interrole conflict can lead to attention residue in the other roles. This conceptual framework outlines, that even if external conditions, like time fragmentation or the number and variety of teams are kept at an optimal level, individuals' internal processes still can influence the success of MTM in organizations. The interviews underlined the impact of role identification but raise new factors that determine work behaviour. In research teams, individuals can define the scope of their role and the projects they participate in. Through the self-selection of employees in projects and roles, the person-role match is high, by default. That is why the interviewed researchers named the hierarchical position of team members, the stage of the project, the personal involvement and the quality of the project as factors that influence their work behaviour (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). Due to a lack of empirical data about the actual impact of role identification on attention residue, a field study would provide greater insights. In this study, factors like the team member constellation, the project-stage and the quality of the project, as well as the personal importance of the project regarding career possibilities can be captured and their correlation and stand-alone impact researched. Besides academia as work field, a similar empirical field study would make sense in economic sectors like in consulting agencies. In this work field employees have less opportunity to self-select in projects and to define their role, wherefore the role identification may have more impact. The thesis showed that the switching processes are not only relevant on structural levels like tasks or jobs, but that the transitioning between team contexts like roles should not be neglected. The match between person and role is more important than ever before, especially in economic sectors. To sustain their competitive advantage, organizations should try to retain their qualified workers and one possibility to do this is through offering them a suitable role. This implies, that organizations should invest in person-job and personorganization fittings to select employees that have the right starting conditions, by default. If employees are already recruited into an organizational setting, the team assignments should be selected by the employees' manager in the same diligence as the recruiting assignment. Ideally, employees should have a voice in the decision process in which teams they are assigned. But even after taking care of a good matching between the employee and the several roles, role switching and differences in the role identification can occur. Then, organizations should keep an eye on minimizing the role transitions. This can be achieved through encouraging employees to coordinate their time slots for certain role activities accordingly. The interviewed researchers try not

to enact several roles within one workday to prevent distracting thoughts and exhausting switches (Interviewee I1, personal communication, October 19, 2020, appendix 1.1; Interviewee I3, personal communication, October 21, 2020, appendix 1.3). Organizations could offer time and selfmanagement trainings for employees to assess their work and attention behaviour and learn to manage it. Possible key takeaways for employees could be to plan time slots in their calendar in which they do not want to be interrupted to focus on less satisfying activities. Even if this conceptual framework about the relationship from role identification level to attention residue gave meaningful insights into the role and transition theory within MTM, there are also a few limitations to mention. Firstly, this model was simplified regarding the amount and time fragmentation of teams. Employees will not have the possibility to manage their complete working hours per week autonomously but will have already organized team events or meetings during their workday. Therefore, a few interruptions and transitions are prescribed. Additional interrole conflicts may emerge trough deadlines in a team project which are not predictable. Moreover, there will be rare situations in which the time allocation to each team is clearly communicated, but often blurred and changing. MTM will often come together with multiteam systems (MTS), which mean the interdependence of inputs like team members, several team processes and outcomes. Taken MTM and MTS together, the relationship of role identification is more complex because one employee can take several roles in several teams which are dependent from each other and work together to a common goal (O'Leary et al., 2012, p. 141). This situation may be an interesting topic for future research regarding role blurring and the resulting interrole conflict that could occur. Attention residue is experienced by employee's day by day but positive spill-over from one role to another role, too (Interviewee I1-I5, personal communication, October 19, October 21, 2020, appendix 1). It is still not clear, if attention residue or learning spill-over overweighs. Research about MTM should not slow down, because the increasing gig economy and knowledge industry will offer even more opportunities for employees to work in several teams or in several projects simultaneously. It is assumed, that online labour platforms will grow at a rate of 14% per year which will increase the side-hustle employments (Kässi & Lehdonvirta, 2018, p. 12). This example shows that the increasing trend towards digitalization and the steady improvements in communication and information technology leads to the necessity of implementing new forms of collaboration like MTM to keep up with the rapidly changing environment. Attention and awareness are human capacities, wherefore psychosocial experiences and effects on attention should not be neglected.

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