Diversity and social acceptance

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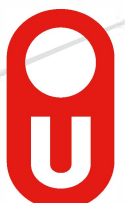
Diversity and
social acceptance

Petru Lucian Curșeu

Open Universiteit

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Abstract inaugural address Petru L. Curşeu

Modern societies and organizations in Western Europe became more diversified than ever. Diversity is the social differentiation present in a social system and is considered an organizational asset that is expected to bring innovative benefits, support organizational growth, facilitate the diversification of the client base, ultimately making organizations more effective. Diversity is also vilified as a constant source of social conflict, misunderstandings, unrest and disharmony that ultimately hamper organizational effectiveness. In this inaugural address I will offer a systemic overview on what social diversity is, how does it work in organizational contexts and which contingencies help organizations reap the benefits of diversity. In particular, I will focus on research results showing that social acceptance is a group and organizational climate in which the promises of diversity can be realized. This talk will also include some remarks on how diversity and social acceptance, embodied in multidisciplinary research programs can serve in dealing with some of the grand societal challenges.

Samenvatting oratie Petru L. Curşeu

Moderne West-Europese samenlevingen en organisaties zijn gediversifieerder dan ooit. Diversiteit is de sociale differentiatie die aanwezig is in een sociaal systeem. Diversiteit wordt gezien als een organisatorische meerwaarde en wordt verwacht innovatieve voordelen op te leveren, organisatiegroei te ondersteunen, de diversificatie van het klantenbestand te vergemakkelijken en organisaties uiteindelijk effectiever te maken. Diversiteit wordt er ook van beticht een constante bron te zijn van sociale conflicten, misverstanden, onrust en disharmonie, die uiteindelijk de effectiviteit van de organisatie belemmeren. In deze inaugurele rede zal ik een systemisch overzicht bieden van wat sociale diversiteit is, hoe het werkt in organisatorische contexten en welke omstandigheden organisaties helpen de vruchten van diversiteit te plukken. In het bijzonder zal ik me richten op onderzoeksresultaten die aantonen dat sociale acceptatie gaat over een groeps- en organisatieklimaat waarin de beloften van diversiteit kunnen worden gerealiseerd. Deze lezing zal ook enkele opmerkingen bevatten over hoe multidisciplinair onderzoek naar diversiteit en sociale acceptatie bij kan dragen aan het adresseren van grote maatschappelijke uitdagingen.

Mijnheer de Rector Magnificus,
Geacht College van Decanen,
Distinguished colleagues,
Ladies and gentlemen,

Diversity became a constant in our modern lives. Modern societies and organizations in Western Europe became more diversified than ever. On the research front, a wealth of studies have explored diversity so far and focused on individual, group, organizational or societal levels of analysis. Studies at the individual level chiefly focused on social categorization as a cognitive process engaged to make sense of our diverse social world by simplifying and organizing relevant information about other individuals we interact with (Tajfel et al., 1971; Crisp & Hewstone, 2007). Societal level analyses of diversity explored issues such as inclusion of minorities and equity in social practices (Chen & Hamilton, 2015). In my talk I will refer only marginally to these two streams of research and I will mainly focus on diversity as it was studied in groups and organizations. Diversity scholars have identified two mainstream research directions, often distinguished as the optimistic and the pessimistic views on diversity in organizational settings (Mannix & Neale, 2005; Milliken & Martins, 1996). The optimistic outlook states that diversity increases the pool of task-relevant resources (including knowledge, skills and expertise) and fosters effectiveness and innovative performance in groups and organizations. The pessimistic view, on the other hand focuses on the conflict and misunderstandings generated by diversity that ultimately reduce group and organizational effectiveness. A remaining challenge of diversity research is to find ways to integrate or even reconcile the optimistic and pessimistic views on diversity. It is my aim to build on a systemic view on diversity in order to provide a tentative integrative framework that explains the optimistic and pessimistic views on diversity and in order to do so, I will build on the ways in which some of my own research contributed so far to the group diversity debate.

We all experience diversity in our daily lives, we hear about it in the news, we talk about it with our friends, it is almost omnipresent! Exactly because diversity is a constant in our modern lives and we all believe we know what it means, it is important to clearly define it and put it in context. As I mentioned, I will focus in my talk on the diversity of organizational groups. Imagine a research group that has the task of developing scientific models to predict pandemic outbreaks and improve hospital performance under turbulent conditions. Such a complex task requires the integration of insights from various disciplines, therefore the research group needs researchers from epidemiology, healthcare, computer science and management working together. Imagine further that this research group is heterogeneous with respect to gender, it includes employees working in different organizations (hospitals, universities), with different ethnic backgrounds that also vary in their academic qualifications. All these differences in members' attributes represent elements of group diversity and reflect what is called *differentiation* in social systems research. The members of the research group described above are specialized in different fields so they vary in their knowledge, expertise and skills and I will further on refer to

such knowledge-based differences as *cognitive differentiation*. The members of this group however also differ in attributes based on which they are typically placed in different social categories (gender, ethnic background or age), that differ in their ascribed social status and power to influence the group outcomes and I will refer to such differences as *social differentiation*. I will further on build on a systemic perspective on diversity (Brah, 1991) and define diversity as the *socio-cognitive differentiation present in an organizational group or organization*.

A social system is composed of interacting social agents (individuals, groups) governed by normative or institutional frameworks to achieve collective goals (Luhman, 1995). A social system therefore has three core components, namely: (1) social agents (individuals, groups, organizations), (2) interactions or relationships (patterned in the form of social structures) and (3) governing rules (that can be organized in larger social systems as institutional frameworks) towards goal achievement. Horizontal or cognitive differentiation is directly tied to goal achievement and it reflects the division of labor in terms of role differentiation and specialization that is required to fully absorb the complexity of the task. Vertical or social differentiation emerges from social categorization processes and takes the form of status or power differences inherent to social organization and hierarchy in any society. The two forms of differentiation, namely horizontal and vertical coexist in most species that evolved to develop social organization and social structure (Gordon, 2016; Wilson, 1978; Franks, 1986). This systemic conceptualization of diversity makes a plea to move away from considering diversity simply as a relative distribution of members attributes and characteristics within a social group or organization and calls for a broader approach to diversity as stemming from interactions unfolding in the group as a social system as well as from the interactions between the group and the characteristics of its task environment.

Social differences are often subsumed to social categories and the human mind evolved to use readily observable facial features to automatically categorize others based on gender, age and race (Karnadewi & Lipp, 2011). Additional evidence shows that we also use less salient cues to place others in social categories, in particular, language provides important cues related to the accent, dialect, intonation that are used to differentiate among various individuals and place them in social categories (Kinzler, Shutts & Correll, 2010). Such social differentiation based on observable or visible (Milliken & Martins, 1996) attributes was also labeled relation-oriented diversity (Joshi & Roh, 2009) as it is expected to have rather detrimental effects on the quality of interpersonal relations that emerge within groups. In other words, the vertical or social differentiation within a social group is the result of social perception and social categorization processes unfolding during interpersonal interactions in the group. Other less visible attributes like expertise, knowledge, professional specialization are also aspects that differentiate among group members. Differentiation based on less visible (cognitive) attributes (Milliken & Martins, 1996) was also labeled task-oriented diversity (Joshi & Roh, 2009) and it was hypothesized to enrich the knowledge repertoire of groups. Such a horizontal or cognitive differentiation

is dependent on the task environment in which the group operates and it has to be aligned with and serve the aim of the group. In line with the above conceptualizations of diversity, the same individual attribute, say gender, can be simultaneously rated as a form of horizontal differentiation (a group that has to decide on gender policies in society) as well as vertical differentiation (a group in which men have higher status and hold more power than women). I therefore include social-relational as well as cognitive differences as the core defining dimensions based on which diversity and its systemic consequences are to be studied and understood.

In some of my early work I have conceptualized groups as social systems with cognitive and emotional properties. I have argued that groups are social entities that acquire, store and process knowledge and through interpersonal interactions develop emergent cognitive and affective (emotional) properties (Curşeu, Pluut, Boros & Meslec, 2015). I have explored the way in which groups generate collectively, knowledge and understanding that transcend the cognitions of their individual members (cognitive emergence, Goldstone & Theiner, 2017) and the way in which collective emotions emerge in groups (emotional emergence, Huebner, 2011). Emergent properties of groups mean that groups have cognitive and emotional competencies that go beyond the ones of the members composing them. As individuals, we are ourselves thinking and feeling entities or systems, therefore it is difficult for us to represent, understand or accept that groups share these capacities as well. My research has explored these two forms of emergence in groups. In more common terms in my research I have explored how groups think and how they generate as well as regulate emotions. The distinction between horizontal and vertical differentiation allows on the one hand, a parsimonious explanation of the interplay between cognitive and emotional emergent processes in groups and it provides a systemic understanding of the advantages and disadvantages of group diversity as coexisting horizontal and vertical differentiation in groups.

Horizontal or cognitive differentiation as a necessary condition for adaptive group performance

Groups are called to perform a wide variety of tasks in organizational settings, ranging from production, to decision-making and innovation. As the complexity of the tasks increases so does the required differentiation needed in the system that has to perform it. In systems thinking, this proposition is captured in the law of requisite variety (Ashby, 1962) stating that in order for groups to achieve adaptive performance, their internal differentiation has to exceed the differentiation tied to the complexity of the environment in which the group operates (Curşeu, 2006). In line with this systemic law, I state my first proposition that *groups dealing with complex cognitive tasks require cognitive differentiation in order to perform well*, or in other words, horizontal differentiation is a necessary condition for adaptive performance in complex tasks. This claim received some weak support in the meta-analytic integration of diversity research published by Joshi and Roh (2009) showing

that the strength of the association between task-oriented diversity has a slightly stronger association with performance in high-tech industries than in service or manufacturing industries. Moreover, Joshi and Roh (2009) reported that the benefits of task-oriented diversity slightly increased with task, goal and outcome interdependence.

In my own research I have attempted to explore the plausible mechanisms that could, more directly and specifically, test the predictions of requisite diversity in teams. One of the core claims of diversity-related benefits is that it increases the pool of knowledge and expertise within groups, or in other words it enriches the cognitive repertoire of the group. In some of my early work I have used the term group cognitive complexity to define the extent to which groups, as social systems build collectively, richly differentiated and integrated cognitive structures (Curşeu, Schruijer & Boroş, 2007; Curşeu, Schalk & Schruijer, 2010). Group cognitive complexity reflects therefore the richness of the collective knowledge structures that are generated through group interactions. In lay terms, it reflects how complex group thinking actually is. Rich collective knowledge structures comprise many distinct elements that are richly interconnected. In line with the law of requisite variety in groups, one would expect that diversity fosters the emergence of group cognitive complexity, which in turn improves group performance. In a study on student groups, we show that indeed group cognitive complexity mediates the association between group diversity and group performance (Curşeu, Schalk & Schruijer, 2010). Moreover, in another empirical study on collaborative learning groups (Curşeu & Pluut, 2013), we have investigated the effect of demographic diversity on the cognitive complexity of students groups and show a direct and positive effect of gender and nationality diversity on group cognitive complexity. In some additional studies we have replicated a positive association between gender diversity and group cognitive complexity (Curşeu, Schruijer & Boros, 2007; Coman et al., 2019) as well as a positive association between the percentage of women in groups and GCC and performance (Meslec & Curşeu, 2015; Curşeu, Schruijer & Fodor, 2017; Curşeu, Chappin & Jansen, 2018), a result in line with the positive association between the percentage of women in groups and the collective intelligence of groups (Woolley et al., 2010). In addition, in a study on student groups asked to design a web-site, I show that composite (gender and nationality) diversity (indicating here cognitive differentiation) had a direct and positive association with the creativity of the web sites (Curşeu, 2010). Gender diversity in student groups is therefore an antecedent of group creative performance (Lee, Choi & Kim, 2018) and in a study on collaborative learning groups we show that gender diversity fostered collaborative creativity especially when the group members scored high on diversity mindsets derived from varied life experiences (Pluut & Curşeu, 2013). These results have important implications for the design of student groups, often used in higher education, making a plea for diversifying the composition of student groups engaged in collaborative learning. Overall, the cognitive differentiation association with gender and nationality diversity stems from qualitatively different life experiences and seems to be conducive for group cognitive complexity and group creativity. In what follows I would like to expand this view to teams working in academic settings, in particular research teams.

During my employment at the Open Universiteit, I had the opportunity to contribute to and coordinate the multi-disciplinary research program Learning and Innovation in Resilient Systems (LIRS). The research program was successfully audited by an international committee in 2021 and was regarded as a successful attempt to organize research across disciplinary boundaries. One of the key tenets of the LIRS research program is that in order to find solutions for and to tackle modern global challenges a multi-disciplinary approach is required. Issues faced by our modern society are complex, multi-layered and dynamic in nature, therefore only by integrating insights stemming from multiple disciplines we can hope to successfully understand and address such grand challenges. The fact that LIRS was regarded a success by the international research audit committee, is a testimony for the importance of disciplinary diversity in science. However, an important question remains regarding the real impact of multi-disciplinarity approaches in LIRS or any other multi-disciplinary research program for that matter.

While the societal impact of multidisciplinary research is often difficult to capture in meaningful metrics, scientific impact and relevance in the academic community is accurately captured in citation metrics (Aksnes, Langfeldt & Wouters, 2019). In order to explore the academic impact of multidisciplinary research carried out in LIRS, I have analyzed 576 papers published in peer-reviewed journals by LIRS researchers between 2015 and 2020 and I have coded several compositional features of the groups authoring these papers. For each authorship group of these papers I have coded its size, gender diversity, university and disciplinary diversity. I then recorded the number of citations each paper attracted in Web of Science and Google Scholar and used regression analysis to predict the number of citations based on gender diversity, university diversity (authors from single versus multiple universities represented in the authorship group) and disciplinary diversity (authors from similar departments versus dissimilar departments represented in the authorship group). I have also controlled for variables that typically influence the citation patterns (Aksnes, Langfeldt & Wouters, 2019), the publication year (as older papers tend to attract more citations), the impact factor of the journal, the type of paper (typically review and meta-analytic studies attract more citations). The results of the regression analyses are presented in Table 1.

Table 1. Stepwise regression results for the number of citations in Web of Science (WoS) and Google Scholar (GS)

Variable	Citations in Web of Science		Citations in Google Scholar	
	Model 1	Model 2	Model 1	Model 2
Authorship group size	.219***	.105**	.169***	.070†
Year of publication	-.124**	-.087*	-.222***	-.190***
Review/Meta-analysis	.217***	.184***	.215***	.187***
Journal impact factor	.221***	.164***	.152***	.102**
Diversity indices				
Gender diversity		-.028		-.056
University diversity		.088*		.125**
Disciplinary diversity		.360***		.302***
N	576	576	576	576
R²	.179	.312	.156	.264
F change	31.11***	36.45***	26.34***	27.78***

Note: standardized regression coefficients are shown in the table; ***p<.001, **p<0.01, *p<.05 and † p<0.10; the number of citations was log transformed before the analyses; group size was coded as the number of authors on each paper; the years of publication ranged from 2015 to 2020; review/meta-analysis was coded based on the Web of Science categorization as a dummy variable (0=regular article, 1=review/meta-analysis); journal impact factors were retrieved from the Web of Science in October 2022; gender diversity of the authorship groups was computed using Teachman's index; university diversity was coded as a dummy variable (0=authors from the same university, 1=authors from multiple universities); disciplinary diversity was coded as a dummy variable based on the type of disciplinary areas of the authors' department (0=authors from departments in the same disciplinary area, 1=authors from departments in different disciplinary areas)

First, before I will discuss the group diversity influences, I would like to reflect on some emergent findings. As illustrated in Table 1 all control variables have a significant association with the number of citations attracted by the papers published in the LIRS research program. The number of citations tends to be higher for older papers, papers published in journals with higher impact factors, and for review or meta-analytic papers. Such results are not surprising and replicate previous analyses of scientific impact across different disciplines and across time. The size of the author group has a significant positive association with the number of citations, a result that is aligned with previous research that spans multiple years and disciplines (Larivière et al., 2015). The association between the group size and scientific impact tends to be decreasingly positive however, such that as the size of the author team increases over a particular threshold, the positive association reaches a plateau. I have used a heuristic approach for identifying such inflection points introduced by Simonsohn (2018) and the results for the log-transformed number of citations in Web of Science and Google Scholar are presented in figures 1 and 2 respectively.

Figure 1. The decreasing positive association between the number of authors in the group and the log-transformed number of citations in Web of Science
Note: LogWoS = log-transformed number of citations in Web of Science; Size = author group size; graph generated at: https://webstimate.org/twolines/run.php

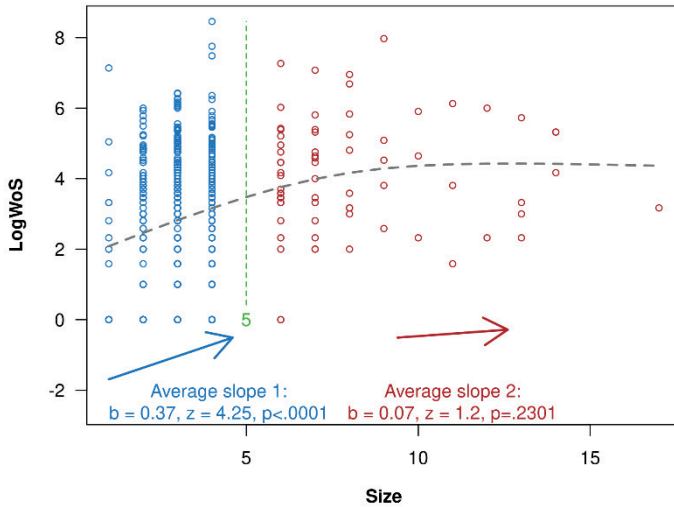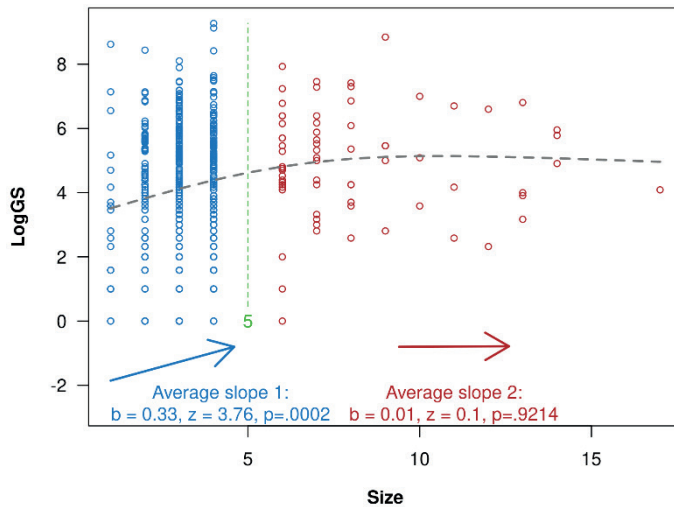**Figure 2.** The decreasing positive association between the number of authors in the group and the log-transformed number of citations in Google Scholar
Note: LogGS = log-transformed number of citations in Google Scholar; Size = author group size; figure generated at: https://webstimate.org/twolines/run.php

As indicated in both figures, the inflection point at which the positive association between the author group size and number of citations becomes not significant is 5 authors. This inflection point in group size replicates some of our previous findings concerning the association between group size and group cognitive complexity, showing that the positive association between group size and group cognitive complexity reaches a plateau in groups composed of 5 to 6 members (Curşeu et al., 2017). Another comprehensive study that looked at the relation between group size and the disruptive (radical innovations) versus developmental contributions (incremental innovations) to science, shows that at around 5 members in the co-author group, papers as well as patents reach the optimal combination on the disruption and development metrics (Wu, Wang & Evans, 2019). Whether such an inflection point at around 5-6 members in the co-author team reflects the ideal size to strive for in "team science" remains to be further explored.

Both university diversity and disciplinary diversity have a significant and positive association with the number of citations in Google Scholar and Web of Science. Papers co-authored by researchers from several universities receive more citations than papers co-authored by researchers from a single university. This result is fully aligned with previous more comprehensive analyses that span multiple research fields (Jones, Wuchty & Uzzi, 2008). Most importantly however is the significant effect of disciplinary diversity on the number of citations, showing that papers co-authored by researchers working in departments from different disciplinary domains receive more citations than papers co-authored by researchers working in departments from the same disciplinary domain. I am aware that the citation metric is barely one of the multiple indicators of scientific impact, and the way in which I have coded the diversity indices is rather coarse. However, university and disciplinary diversity explain significant additional variance in the number of citations received by papers published by LIRS researchers, after the most important factors driving citation patterns (year of publication, the impact factor of the journal, type of paper) are controlled. Given the fact that both university diversity and disciplinary diversity seem to have a positive association with the number of citations, I have explored the interplay of the two forms of diversity and an interesting pattern of results emerged, showing that university diversity seems to pay off especially if the author group lacks disciplinary diversity. This interaction pattern is presented in figures 3 and 4. Although the interaction effects are not statistically significant, the groups that benefit from university diversity, in terms of number of citations attracted are the groups that lack disciplinary diversity (see the pattern in the left side of the graphs). *Disciplinary and university diversity in these analyses reflect the degree of cognitive differentiation in research teams*. As indicated by the results, de degree of cognitive (or horizontal) differentiation significantly increases the academic impact of the papers written by researchers. Of course various metrics have to be taken into account in order to judge the novelty and true social impact of research, yet the number of citations (unidimensional as it is) reflects the academic attention received by the papers in the academic community. Moreover, the results presented in figures 3 and 4 point towards multiplicative effects of different forms of cognitive differentiation in research groups. The cognitive differentiation captured in the university diversity metric

seems to be useful especially when the disciplinary differentiation is not present. Such a pattern of result deserves further attention and exploration.

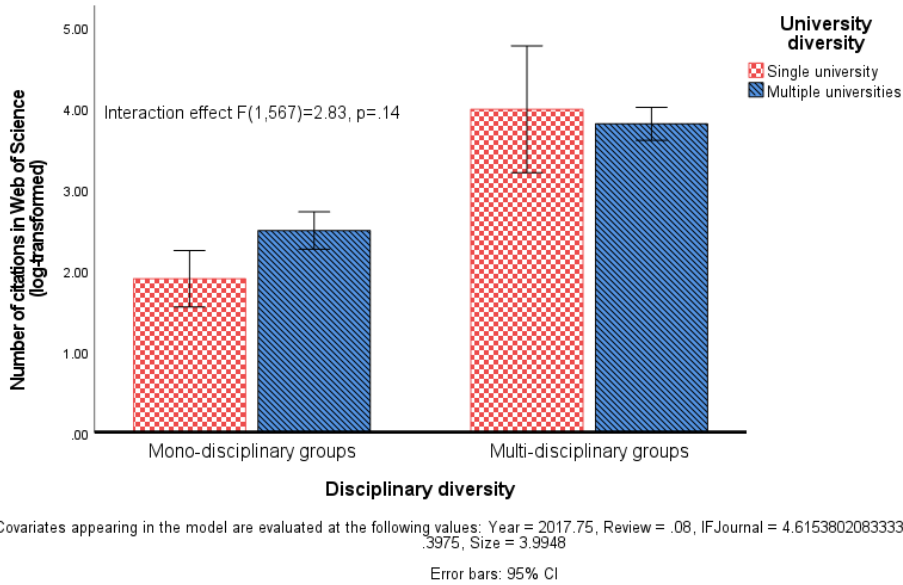**Figure 3.** Number of citations in Web of Science (log-transformed) as a function of disciplinary and university diversity
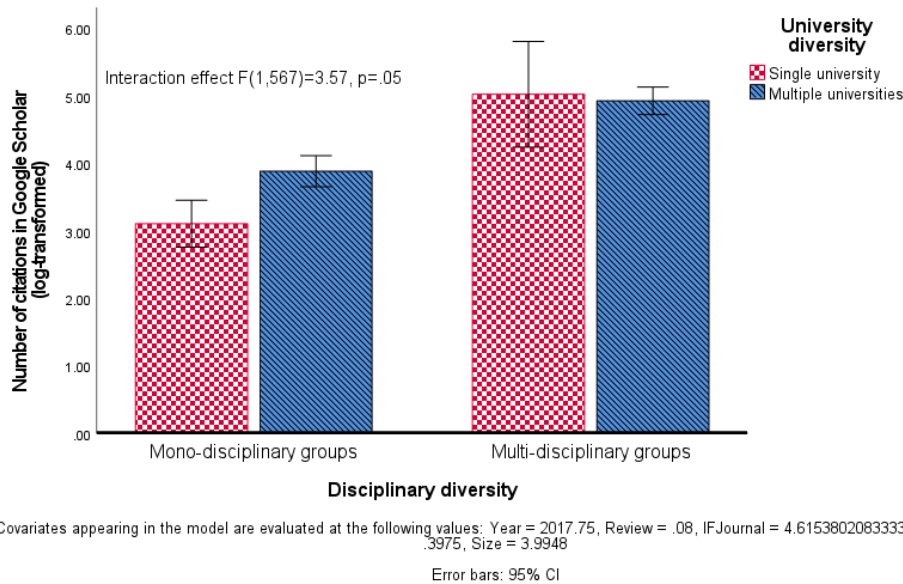

Figure 4. Number of citations in Google Scholar (log-transformed) as a function of disciplinary and university diversity

Corroborating these results on diversity and scientific impact with the other insights reflecting the benefits of diversity as variety (horizontal differentiation) in more controlled settings, fully supports the relevance and importance of working in multi-disciplinary research teams in order to achieve greater academic impact and recognition. We could envisage cognitive differentiation on a continuum ranging from cognitive similarity (group members share the same cognitive attributes and are perceived by others as being similar, thus reflecting high group distinctiveness) to cognitive differentiation (group members differ in terms of cognitive attributes, thus reflecting high individual distinctiveness). As such cognitive, or horizontal differentiation is also aligned with the distinction between individual and group distinctiveness as two key forces that drive group behavior (Hornsey & Jetten, 2004). Group distinctiveness ultimately fulfils the need to be the same with others and motivates the maintenance of status quo in cohesive groups, while individual distinctiveness fulfils the need to be different and fosters innovation, creativity and change. To conclude, cognitive diversity reflecting horizontal differentiation within groups with respect to the type of knowledge, skills and expertise is therefore beneficial for group performance in intellectual and creative domains.

Proposition 1: Horizontal (or cognitive) differentiation reflecting differences in knowledge, skills and expertise within groups fosters cognitive emergence and is beneficial for group cognitive complexity, group creativity, innovation and effectiveness
(proposition supported in Curşeu, 2010; Curşeu et al., 2007, 2010, 2017, 2018; Curşeu & Pluut, 2013; Meslec & Curşeu, 2015; Pluut & Curşeu, 2013).

Vertical or social differentiation as a source of conflict

Diversity was often called "a double edged sword" (Milliken & Martins, 1996) as next to its benefits, diversity also generates group and organizational negative outcomes. Various diversity taxonomies (visible vs less visible, task-related vs relations oriented) were used to differentiate between the positive and the detrimental effects of diversity on group dynamics and outcomes. Meta-analytic evidence that investigated whether such taxonomies of diversity are useful in differentiating the positive from the negative facets of diversity, found rather mixed support for the influence of diversity on group outcomes. An influential meta-analysis that distinguished between job-related and not job related diversity found no evidence for a systematic association of the two types of diversity with group performance (Webber & Donahue, 2001). A follow-up that included more studies (Donahue, Horwitz & Horwitz, 2007) did report a positive association between task related demographic diversity and team performance, while less job-related demographic diversity had no significant association with group performance. Another way of looking at diversity included a distinction between relations-oriented diversity (gender, race, age) and task-oriented diversity (function, education, tenure). The relations oriented diversity are expected to be associated with social categorization processes ("us vs them" dynamics, Tajfel & Turner, 1986) endangering interpersonal relations, while

the task-oriented diversity is expected to enrich the cognitive repertoire of the groups, improve performance and innovation. Meta-analytic results indeed suggest that the overall association between relations-oriented diversity and performance is negative (especially when team interdependence was high), while the overall association between task-oriented diversity and performance is positive (Joshi & Roh, 2009). A more recent meta-analysis on group diversity (Triana et al., 2021) shows that cultural, personality and value diversity reduce cohesion, collective self-efficacy as well as effective collaboration and coordination in groups, it generates relationship conflict and thus indirectly impacts effectiveness via these emergent states and group processes. The detrimental effects of diversity are explained by increased conflict and less harmonious team interactions (Triana et al., 2021). Diversity it seems, troubles the social harmony of groups.

Why is interacting with different others a challenge for harmonious interpersonal interactions? One of the plausible answers to this question stems from the influential Social Identity Theory (SIT, Tajfel, 1974; Tajfel & Turner, 1986). In the initial SIT studies, the mere differentiation of group members based on random procedures (e.g., flipping a coin) generated in-group favoritism, that is members tended to preferentially allocate more resources to the ones that were perceived as being similar (sharing the same group membership) than to the ones that were perceived as being dissimilar (being members of different groups). In-group favoritism is one of the mechanisms that could explain the detrimental influence of diversity on interpersonal relations in groups. Meta-analytic evidence on status differences and in-group favoritism (Beterncour et al., 2001) showed substantial support for the initial predictions of the SIT. Overall these results showed that members of high status as well as low status groups have a tendency of evaluating the similar ones more positively than the dissimilar ones (based on group membership) and to preferentially allocate socially valued resources to the ones that are perceived to be the same, rather than different from themselves. Such tendencies for in-group favoritism reflect a form of vertical differentiation that ultimately fractures the relational structure of diverse groups and generate frictions, conflicts and interpersonal clashes.

Vertical differentiation in groups was explicitly discussed in a taxonomy of diversity put forward by Harrison and Klein (2007). The authors distinguish between diversity as separation (fragmentation in terms of opinions, values or beliefs), disparity (inequality in possession or access to socially valued assets, capabilities or resources) and variety (horizontal differentiation in terms of knowledge, experience, specialization). This taxonomy of diversity opened ways for a better refinement of what diversity actually is and how it relates to interpersonal interactions and ultimately effectiveness. A meta-analysis (Bell et al., 2011) that used the distinction between diversity as variety, disparity and separation as a guiding taxonomy to further refine the inconclusive findings of the diversity showed that from the three forms of diversity, only variety had a positive and significant association with group performance, creativity and innovation. In other words the horizontal differentiation within a group seems to be beneficial for the knowledge integration in groups. Diversity as disparity and separation reflect inequality in access to

socially valued resources and structural fragmentation in groups, therefore disparity and separation are more likely than variety to reduce the quality of interpersonal interactions in groups. In line with these arguments, in a study on 40 healthcare groups, I have shown that age and education disparity (vertical differentiation in age and education) reduce the frequency of communication within groups, interpersonal trust as well as psychological safety and indirectly impact on group members' engagement in learning behaviors (Curşeu, 2013). In other words, diversity as disparity is detrimental for the quality of interpersonal relations within groups, ultimately reducing their engagement in learning. In another empirical study on student groups, we show that disparity in cognitive motivation in collaborative learning groups, decreases the quality of teamwork interactions and ultimately reduces group cognitive complexity (Curşeu & Pluut, 2013). Moreover, in a series of studies, Lee, Choi and Kim (2018) show that gender diversity mitigates the detrimental influence of status conflict on group creativity. More specifically status differences are less threatening for psychological safety in gender diverse groups and as a consequence less detrimental for creativity. In a similar study (Curşeu & Sari, 2015), we explored the interaction between power disparity and gender diversity in collaborative learning groups. We show that power disparity is detrimental for satisfaction with the group as well as for group cognitive complexity only in groups in which gender diversity is low. In a study in which we explored differences in individual cognitive complexity and the way they relate to emergent group level cognition, we show that cognitive disparity has a negative impact on group cognitive complexity (Curşeu, Schruijer & Boros, 2007). All in all vertical differentiation in groups, in terms of members' access or possession of socially valued resources is detrimental for cognitive emergence.

When and why is vertical differentiation threatening? Vertical differentiation is inherently associated with the variety of emotions experienced by group members. Our self-esteem, one of the key indicators of wellbeing and adaptation, is directly associated with the extent to which we are socially accepted, valued and embedded in social groups (Leary & Baumeister, 2000). We seek for acceptance and a high status in the groups we belong to. Feelings of being rejected, not fitting in, being marginalized are often experienced by "the different ones" or by the ones with a low status in the group. Group members with a higher perceived status or the ones in leading positions are prone to experience more positive emotions than the other group members (Lovaglia & Houser, 1996). Group members tend to resist group disparity if they perceive inequality as undesirable and under such conditions, vertical differentiation is threatening and it triggers emergent negative group emotions (Boros, Meslec & Curşeu, 2009). Previous research has already established that diversity is a required pre-condition for emergence in social systems (Han et al., 2017; Santos, Santos & Pacheco, 2008). Overall, results we have reported in various studies show that group diversity as disparity tends to be associated with relationship conflicts (Curşeu, Kenis & Raab, 2012), lower quality of teamwork and communication frequency (Curşeu & Pluut, 2013; Curşeu, 2013; Curşeu, 2010), lower group cognitive complexity and creativity (Curşeu, Schruijer & Boros, 2007; Curşeu & Sari, 2015; Curşeu, 2010) as well as lower group satisfaction and viability (Curşeu et al., 2010). Such vertical differentiation seems to be

conducive for the emergence of (negative) emotionality within groups that can override the benefits of cognitive emergence.

Another theoretical framework that could help us understand vertical differentiation is the idiosyncratic credit theory of status (Hollander, 1958). This particular theoretical framework addresses the way in which status differences play out in groups by using the "credit" analogy to explain unconventional or noncompliant behavior in groups. Individual group members oscillate between the need to belong to the group (Baumeister & Leary, 1995) and the need to be different, to be recognized as individuality (Hornsey & Jetten, 2004). Because social norms are essential for the functioning and survival of social groups, members who comply with the group's normative framework are valued, accepted and rewarded. The social benefits tied to such loyal behavior was labeled by Hollander (1958) as *idiosyncrasy credit*. Sometimes however, some of group members' personal views, opinions and values come at odds with the ones shared by the majority of the group. Acting in a way that bolster one's individuality and behaving in a way that contradicts the majority of the group is taxing on the accumulated idiosyncrasy credit. Although reductionist to some extent, the idea of accumulating and exchanging idiosyncrasy credits in groups captures some of the most important dynamics of the social exchanges that emerge among the group members in diverse groups. First, it captures the way in which social capital is allocated among the group members such that group members can accumulate idiosyncrasy credits through loyalty and contributions to the group task and can lose idiosyncrasy credits by behaving in ways that contradicts the norms of the group (Hollander, 1958). Building on the SIT predictions of in-group favoritism (Tajfel & Turner, 1986), in diverse groups idiosyncrasy credit is likely to be unequally allocated to members as not all members are perceived to be equally prototypical of the group (to represent an embodiment of the groups normative framework) (Packer, Miners & Ungson, 2018). The ones that are perceived as different are likely to receive less idiosyncrasy credit and as such any form of social differentiation will structurally be tied to asymmetric allocation of idiosyncrasy credits within groups. Second, it can explain the interplay between social acceptance and social rejection tendencies in diverse groups (DeWall & Bushman, 2011). Social rejection emerges when members with little idiosyncrasy credit behave in ways that are not aligned with the normative system of the group, or express views that contradict the ones shared by the majority. Social acceptance reflects the tendency to allocate the idiosyncrasy credit in a uniform manner across the members of the group. Third, it is fully aligned with the social interdependence propositions (Deutsch, 1949) such that positive interdependence describes a situation conducive for credit accumulation, while negative interdependence describes a situation in which group members cannibalize on each other's idiosyncrasy credits. To conclude, the concept of idiosyncrasy credit allows a parsimonious integration of concepts used so far to discuss the vertical differentiation in groups. I would argue that because idiosyncrasy credits stem from task-oriented contributions, resources or assets as well as from relation-oriented resources such as loyalty to the group and altruism (Hollander, 1968), they are the ideal way of describing

the vertical differentiation within groups. Such a vertical differentiation reflects the relative distribution or accumulation of idiosyncrasy credit within the group.

A particular condition that could also illustrate high vertical differentiation within a group could be an inspirational leader exerting influence. Such a leader communicates an empowering vision to the group members, vision that will ultimately create a positive emotional climate in the group. As such, when vertical differentiation is accepted (as the inspirational leader would be a perceived as a prototypical group member ascribed with substantial idiosyncrasy credit) the emotional emergence could generate positive emotions that are not expected to generate negative interferences with the cognitive emergence and hamper task accomplishment. As Garcia-Prieto, Bellard and Schneider (2003) argue in their theoretical model of diversity and emotions in groups, group diversity boils down to the individual emotional experiences in relation to group diversity. They advocate that group diversity should not be understood by using exact metrics such as ratios, percentages or other indicators of individual differences within groups, but rather as the range of emotional experiences triggered by such within group differences. Building on these theoretical insights, I would like to argue that group diversity is also reflected in the collective emotional experiences that emerge from interpersonal interactions unfolding in groups. In their integrative model of group emotions Barsade and Gibson (1998) describe such emergent collective emotional experiences as powerful interpersonal forces that shape (and prescribe) individual experiences of emotions, hold the group together reflecting and signaling its developmental transitions. Social or vertical differentiation in groups is therefore one of the driving forces of group emotion and at the same time, groups as emotional entities (Barsade & Gibson, 1998) shape the experience of group diversity.

Although the cognitive and emotional emergence are seen as intertwined processes, I would like to argue that the type of group differentiation (horizontal versus vertical) differentially impacts these two forms of emergence in groups. Overall, horizontal differentiation in the type of knowledge and expertise in groups seems to generate complex thinking patterns in groups, thus fosters cognitive emergence. A key argument here is that horizontal and vertical differentiation tied to group diversity always coexist. I believe that in order to better understand the workings of diversity in group and organizational settings, researchers have to directly investigate the two forms of differentiation when they evaluate any form of diversity. Such a plea is also in line with the recent calls to move beyond compositional features and attributes in diversity research and investigate more closely the way in which group members perceive group diversity (Homan, 2019; Gündemir et al., 2019).

The distinction between emotional and cognitive emergence, helps us to further understand the dual effects of group diversity. When cognitive emergence dominates, the cognitive benefits tied to group diversity are maximized, while when negative emotion emergence dominates the relational costs associated with group diversity are amplified

and they interfere with the cognitive emergence. I expect that cognitive emergence dominates in situations in which horizontal differentiation is high while the vertical differentiation is low and I also expect that negative emotion emergence dominates when horizontal differentiation is low and the vertical differentiation is high. Of course the two forms of emergence coexist for all four conditions resulting from crossing vertical and horizontal differentiation in groups, yet in the two conditions described above the dominance of cognitive emergence may explain the cognitive benefits of diversity as variety, while the dominance of emotion emergence may explain the relational costs of diversity as disparity. When the group is highly diverse in terms of cognitive resources (horizontal differentiation is high) and the idiosyncrasy credits are evenly allocated across the group members (vertical differentiation is low), group members have more degrees of freedom to capitalize on the diversity. When the group has little cognitive differentiation (members have the same type of knowledge, skills expertise), yet the idiosyncrasy credits are not evenly distributed in the group (high vertical differentiation) relational frictions and conflicts are likely to emerge and as such I expect that negative emotionality tends to override the cognitive emergence in groups with such configurations. The overall relation between horizontal and vertical differentiation on the one hand and the cognitive and emotion emergence on the other is presented in Figure 5.
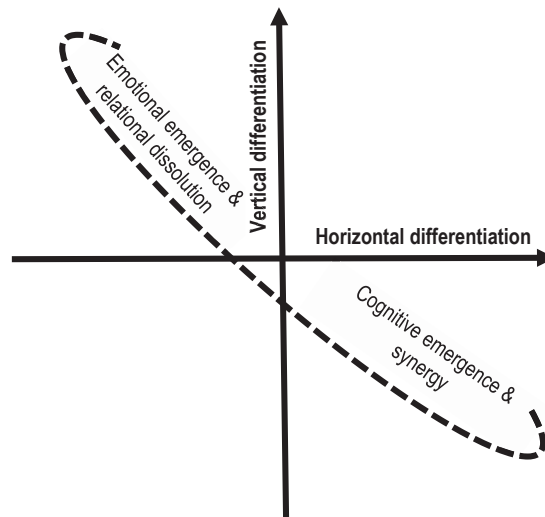

Figure 5. Diversity and emergence in groups

This distinction between cognitive and emotional emergence in social settings is also supported by a review study in which we have explored the factors that impact on the comprehensiveness of sustainability decisions made by complex multiparty groups (Curşeu & Schruijer, 2017). We have reviewed the literature on multiparty

systems, engaged in making sustainability decisions in complex settings such as urban development, natural resource use ecological issues. In our integrative model of this research, stakeholder diversity was a key required condition for comprehensive decisions in such complex multiparty systems. In our analysis however, we have identified two paths of how diversity was managed in such complex settings. On the one hand, we found cases in which diversity was expressed and generated task related disagreements (labeled as task conflict), a requisite condition for effective collaboration. We labeled this path cognitive synergy path – namely the path in which cognitive emergence dominates and the cognitive benefits of diversity are capitalized on, through collaboration. On the other hand, we found cases in which diversity was suppressed. There are different ways in which stakeholder diversity in such settings could be suppressed, either by having powerful parties in charge of the collaborative process that push the collaborative agenda to fit their own interest, or by simply assuming that everyone is "on the same page and all want the same" (assuming vertical and horizontal similarity). Such a false consensus eventually materializes in feeling of being excluded, rejected or not seen, when the stakeholder differences kick in the process and differences in interests and positions may loom as irreconcilable. We have labeled this destructive path, the relational dissolution path (Curşeu & Schruijer, 2017) a path in which emotion emergence and dynamics dominates and distracts the system from its problem solving goals. In line with these insights I put forward the second proposition:

Proposition 2: Vertical (or social) differentiation reflecting questionable allocation of idiosyncrasy credits within groups fosters emotional emergence and triggers conflict, reduces teamwork quality and ultimately has a negative effect on group cognitive complexity, creativity and effectiveness
(proposition supported in Curşeu, 2013; Curşeu & Pluut, 2013; Curşeu et al., 2015).

The coexistence of cognitive and social differentiation in groups

I have put forward the distinction between cognitive and social differentiation as a parsimonious way of integrating research on the outcomes of diversity in social groups. I have provided theoretical and empirical arguments supporting the fact that the optimistic and pessimistic views on diversity can actually be explained if we use a bi-dimensional conceptualization of diversity as the horizontal and vertical differentiation within groups. A corollary of this distinction is the fact that the two forms of differentiation always coexist and overlap to some extent in any social group. Previous literature has put forward different conceptualizations of coexisting forms of diversity in groups, take for example the faultlines stream of literature (Thatcher & Patel, 2012), the distinction between separation, variety and disparity (Harrison & Klein, 2007), or the metatheoretical framework of diversity (Mayo et al., 2017), yet none of the approaches focused on the type of differentiation the coexisting diversity forms reflect and represent. I argue that by focusing on the co-existence of cognitive and social differentiation in groups we can: (1)

integrate most of the previous taxonomies and classifications of diversity and (2) explain the optimistic and pessimistic perspectives on diversity in groups and organizations. My argument is based on the core observation that the two forms of differentiation trigger different systemic dynamics, processes and emergent states, which in turn impact on group outcomes and effectiveness. Therefore cognitive or horizontal differentiation tends to foster cognitive emergence in groups, while, social or vertical differentiation tends to stimulate the emergence of emotional states and processes and the interplay between the two forms of emergence ultimately shapes group dynamics and outcomes. For the sake of illustration, let's go back to the initial research group example describing the multidisciplinary groups with the task to improve hospital performance and imagine two possible configurations as depicted in Figure 6. Each group is composed of three men and three women and each member has a different disciplinary background, as illustrated by the different colors in the figure.
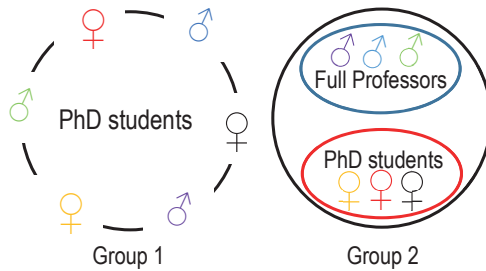
Figure 6. Two group configurations with the same level of gender and disciplinary diversity

These two groups are equally diverse in terms of gender and disciplinary background, and we could say they display the same level of cognitive differentiation. The two configurations also differ in the way academic position or status differences are represented in the group. Such status differences reflect the way in which idiosyncrasy credits are concentrated in the two groups and ultimately reflect different levels of vertical differentiation as illustrated in Figure 7.

Figure 7. Two group configurations placed in the quadrant of horizontal and vertical differentiation

The two group configurations depicted in Figure 7 may experience completely different dynamics and ultimately performance. In the combined framework of diversity as horizontal and vertical differentiation, the two groups are placed in two different quadrants of the model, a positioning that is likely to predict more accurately their dynamics and outcomes. I believe that a bi-dimensional evalu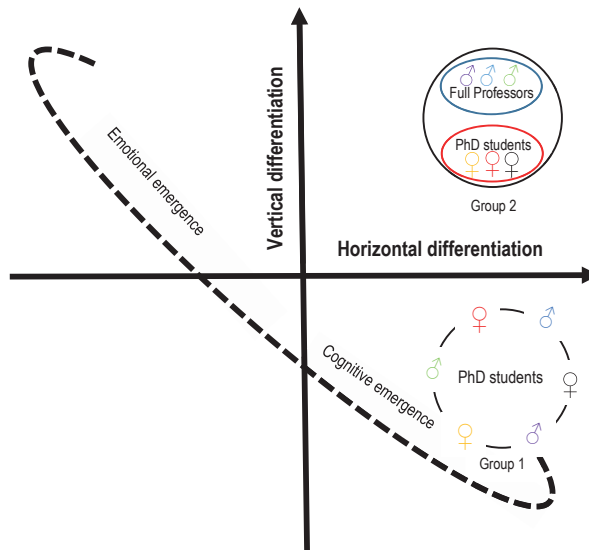ation of group diversity as horizontal and vertical differentiation provides a more dynamic perspective on group diversity and could shed more light into the likely consequences of diversity.

A particularly interesting issue associated with the conceptualization of diversity as social and cognitive differentiation refers to the interplay of these two forms of differentiation. One relevant question is what happens with group configurations in which both cognitive and social differentiation are high. Such a group configuration is clearly reflected in groups that experiences minority dissent (Moscovici et al., 1969). When one group member or a minority within a group or organization state opinions and express views that contradict the ones shared by the majority, cognitive diversity really becomes visible (Nemeth, 1986). Disagreeing with the opinions shared and firmly supported by majority is however not easy! Dissenters may challenge the status hierarchy in the groups and as such they influence the way in which idiosyncrasy credits are reallocated. As a consequence, dissenters risk of being ridiculed or even being rejected and marginalized by the other group members as they are perceived of not conforming to the group norms. Groups in general are motivated to build and maintain harmonious interpersonal relations and their individual members tend to seek acceptance and bundle in the comfort of majority

support. It is reassuring to know that you and your colleagues "are on the same page", "speak the same language" or that "your noses point in the same direction". It is rather disconcerting for the individual group members to openly express views they know the others in the group do not share or agree with.

A wealth of scientific empirical evidence, starting with the influential work of Solomon Asch in the 50s (Asch, 1956), shows that individual group members tend to conform to views, ideas and opinions shared by the majority in the group. So how can diversity ever be manifested if group members tend to (sometimes indiscriminately) follow the crowd? The pioneering work of Serge Moscovici in the 60s pointed to a different kind of social influence that emerges in small groups, namely minority influence or minority dissent (Moscovici et al., 1969). Originally, much like Asch's conformity experiment studies on minority influence focused on the impact of dissent on individual group members. The core question that was asked was what happens with the members of the majority when their views and ideas are openly challenged by another group member? Meta-analytic integrations and review studies on minority dissent (Wood et al., 1994; Gardikiotis, 2011) show that majority members start to question the views they originally expressed and shared during group meeting. So if majority pressure tends to generate public conformity without really changing the cognitions held by the ones that conform, minority pressure triggers reflective thinking and exploration, although openly the majority members may still disagree with the dissenter (Nemeth, 1986). Such a persistent public resistance towards the dissenting views of the minorities, may often lead to rejection and marginalization. Paradoxically, although the dissenters may successfully induce cognitive change in the majority, they risk of being socially rejected and marginalized (Curşeu, Schruijer & Boros, 2012). It is not my aim here to provide an extensive integration of social influence in the form of majority and minority influence, I just want to make the point that when group members are exposed to views that differ from the ones they share within a majority, they engage in effortful processing of the dissenting views, yet they tend to openly distance themselves from the dissenter. More recent experimental evidence shows that minority dissent triggers systematic information processing only when the dissenting message does not induce defensive reactions motivated by self-interest (Martin & Hewstone, 2003). In other words, members of the majority engage in effortful information processing of the message expressed by the dissenter especially when they do not feel personally threatened by it. Building on these observations, in a number of studies we have tried to extrapolate the effects of minority dissent for groups as entities (socio-cognitive systems, or systems that acquire, store and process information). In particular we were interested in separating the beneficial cognitive from the detrimental social consequences of minority dissent. Of particular interest of course was the identification of those conditions in which a divergent point of view expressed by a deviant does not trigger a defensive reaction in the majority. In an experimental study (Curşeu, Schruijer & Boros, 2012), we asked groups to engage in a debate and summarize their collective insights in the form of a cognitive map. Prior to the real debate, we evaluated the attitudes of the group members and then they had the chance to briefly summarize their views during a preliminary session in which

we placed a dissenter in half of the groups. The dissenter was trained to express, during this preliminary session a number of arguments that directly contradicted the opinions initially reported by the naïve participants. After the preliminary session, the dissenter in half the groups was removed, while in the other half the dissenter actively participated in the debate. In the control condition (no dissenter present) a random member was excluded in half the groups to account for membership change. We have investigated the complexity of the arguments that resulted from the group debate (a construct labeled as group cognitive complexity) and observed that groups that had a dissenter produced more complex collective insights on the matter than groups that did not have a dissenter. Moreover, the groups in which the deviant expressed its views and then left the group had the highest group cognitive complexity. Our results are a direct illustration of the cognitive benefits of minority dissent as the open expression of diversity when the "threat" of the ones that think differently is not present anymore.

In a series of subsequent studies, we have worked with social acceptance as a group climate that fosters the positive effects of cognitive emergence and reduces the detrimental consequences of emotional emergence. In our studies we have used three key elements to define social acceptance. First, social acceptance reflects a group context in which the idiosyncrasy credits are uniformly distributed, creating an egalitarian group climate. Second, we focus on the extent to which the contributions and individuality of each group member is welcomed in the group, with social acceptance describing a climate that is open and safe for expressing personal viewpoints even when they are diverging from what the majority supports. Finally, a in a socially accepting climate each group member is perceived as a desirable interacting partner and individuals are not marginalized or excluded because they are different or because they hold views that are not shared by the majority (Curşeu & Schruijer, 2022; Curşeu et al., 2017). Such a socially accepting climate reduces the interference between the emotional and cognitive emergence and as a consequence allows full capitalization on the cognitive benefits of minority dissent. In a recent study in multiparty systems, we show that minority dissent triggers indeed relationship conflict (a direct reflection of the emotional emergence in groups), yet this positive association is not significant anymore when social acceptance is high (Curşeu & Schruijer, 2022). In another study we have investigated the spontaneous occurrence of minority dissent in 92 groups engaged in collaborative learning. We aimed to investigate the extent to which minority dissent enhances the cognitive complexity of groups and our results show that minority dissent fosters group cognitive complexity only when groups develop a socially accepting interpersonal climate (Curşeu, Schruijer & Fodor, 2017). In addition we also showed in a quasi-experimental study on 57 groups that group creativity is fostered by minority dissent when groups perceive they perform in organizational settings that are open for innovation (Curşeu, Schruijer & Fodor, 2022). In other words, social acceptance and a supportive organizational climate reduces the detrimental effects of emotional emergence and allows the groups to capitalize more fully on the benefits of minority dissent as open expression of divergent viewpoints that ultimately enrich the cognitive repertoire of the group.

Proposition 3: Social acceptance reduces the detrimental interference of (negative) emotional emergence with the cognitive emergence in groups and allows the groups to fully capitalize on diversity
(proposition supported in Curşeu, Schruijer & Boros, 2012; Curşeu, Schruijer & Fodor, 2017, 2022; Curşeu & Schruijer, 2022)

Some concluding thoughts on cultivating social acceptance

In an influential paper that addressed the diversity and inclusion practices in academic and business contexts in the United States of America, Chen and Hamilton (2015) showed that diversity inclusive organizational practices are not sufficient for fully capitalizing on diversity. Inclusion practices are essential for increasing the organizational diversity and in particular the numeric representation of minorities in university campuses and companies, yet only when such inclusion practices are supported by a climate of social acceptance, the benefits of diversity are truly visible. In line with these results, the authors plea for social acceptance as a key precondition for diversity management. As illustrated in this study, inclusion is a necessary, yet not sufficient pre-condition for diversity to work and it requires the supportive function of a social acceptance climate (Chen & Hamilton, 2015). Similar insights are presented in a recent systematic review of diversity ideologies by Gündemir, Martin and Homan (2019). The authors show that diversity aware organizational ideologies promote a climate of social acceptance that is ultimately conducive for work engagement, feelings of inclusion and work satisfaction of racial minorities. Building on these insights as well as on my previous arguments concerning the key role of social acceptance in diversity management we could set the following formula for effectuating diversity in organizations:

Effectuating diversity = Inclusion/Representation + Social Acceptance
(Chen & Hamilton, 2015, p.594; Gündemir et al., 2019; Curşeu & Schruijer, 2022; Curşeu & Schruijer, 2017)

I would like to conclude with a few strategies derived from our research that could be used to foster social acceptance. Also I would like to mention a few research valorization initiatives and sketch some future research plans on diversity and social acceptance in group and organizational settings.

Explicit norms for social acceptance
I have conceptualized social acceptance as a group climate and in line with others (Chen & Hamilton, 2015) some of the empirical results presented in papers I have co-authored show that social acceptance can be nourished through supportive social norms. We have used a normative framework to stimulate a collaborative climate building on the norms presented in Hall and Watson (1970) and we have showed in various empirical studies that groups that follow such norms make more rational choices (Curşeu, Jansen & Chappin,

2013) and develop higher group cognitive complexity (Curşeu & Schruijer, 2012; Hojbota et al., 2020). In terms of future research plans, together with Albert Bril we investigate the way in which normative and institutional changes related to some of the modern developments, including the diversification of society impact in the organizational functioning, including learning and adaptation.

Organizational and leadership support for social acceptance
Another key variable to support diversity effectuation is organizational support. As we show in a recent study, minority dissent benefits creativity only when organizations are supportive of change (Curşeu & Schruijer, 2022). Moreover, inclusive leadership was already shown to play a key role in supporting the synergetic effects of diversity (Van Knippenberg & van Ginkel, 2022), therefore I believe that empowering leadership is a key organizational resource that should be mobilized in order to capitalize on diversity. Beyond the empirical support reported in the academic literature, as a research coordinator I have seen first-hand how organizational support can increase the involvement in, as well as he success of multidisciplinary research. Since 2017 various organizational support initiatives within the Open Universiteit, the Faculty of Management, Science and Technology and more recently Faculty of Management Science have stimulated multidisciplinary research programs and initiatives and have contributed greatly to increasing the visibility and success of multidisciplinary research. The international audit committee that evaluated the LIRS research program applauded the supportive leadership for multidisciplinary research at the Open Universiteit and considered it as a key success factor for the LIRS multidisciplinary research program. As future research plans, in a research project with Andre Blom we focus on the ethical culture and organizational support as facilitating factors for psychological safety and social acceptance in a large governmental organization that aims at improving its supportive climate for a better use of human capital. Moreover, in a research project with Erik Cremers we explore, in a large Dutch organization, the beneficial effects of empowering leadership (as a supportive organizational practice) for absorbing disturbances and capitalizing on diversity.

Openness to diversity and social acceptance mindsets
Previous research has already pointed out that a climate open for diversity (Homan, 2019) and diversity mindsets (Van Knippenberg, Van Ginkel & Homan, 2013) are conducive conditions for diversity to work. It is therefore important to cultivate such mindsets in organizational settings. In an initiative started in 2020 in the Brightlands Smart Services Campus, we engage with members of various organizations that activate in the campus and Limburg region in the dialogue series "Cultivating innovation mindsets". Among other topics, some of the dialogues aimed to increase awareness of the relevance of diversity and social acceptance in diverse organizations in order to foster creativity and innovation. Moreover, as future research plans, together with Jan van Rijswijk and Lise van Oortmerssen we focus on social acceptance, cognitive reflection and social skills that could help groups and organizations capitalize on the benefits of neurodiversity as a specific form of cognitive differentiation in groups.

All in all, based on the arguments presented so far, I would like to end my presentation with an appeal to organizational and societal leaders to: *welcome diversity and cultivate social acceptance,* as in conjunction they seem to be rather elusive to the human nature*!*

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I would like to conclude by thanking people who supported me along the way. My PhD supervisors Sandra and René were the ones that brought substantial cognitive differentiation in my academic journey. René thank you for helping me, instrumentally and academically, to begin the "Dutch part" of my academic journey and to adapt to the cultural shock in the first 45 days I have spent in the Netherlands. Sandra thank you for being a constant source of inspiration and support, on a personal as well as academic level. Thank you for always bringing healthy horizontal differentiation in our collaborative relation and for helping me appreciate and cherish both cognitive, but especially emotional emergence in complex systems. I would like to thank all my co-authors, none of these insights I presented here today would have been possible without them and the cognitive emergence processes we jointly embarked on. I am grateful to all my former and current PhD students for entrusting me as a partner in their academic journey and for dealing gracefully with, what sometimes seems to be, vertical differentiation among us. My employment at the Open Universiteit and my involvement in the faculty research management would not have happened without Gerard and Judith, thank you both for this great opportunity, for all your support and for the substantial idiosyncrasy credit you gave me all these years! I thank all my colleagues in the Organization Department at the Open Universiteit, and in the Faculty Management Team, I felt more social acceptance in these groups than in any other previous work groups! I would like to say a few words to my family as well. My mother and my brother, thank you both for keeping me close to my roots! My children, you are are my strength! Somewhere I once read what was supposed to be a funny quote, it said: "*Nothing scares me, I have my own kids*". I slowly discovered that when I feel there is no more energy left, you show me that it is plenty more to rely on and you help me find resources I did not know existed. You are my "raison d'être" and you have my love, whether I am with you or not. My wife has always been my companion and my source of inspiration to become a better version of myself. Allegedly marriage is a tough and sometimes a perilous journey, and our degrees of differentiation too can be mapped (dynamically), on the horizontal and vertical dimensions, yet we have been side by side for almost a quarter century now. So positive emotional emergence prevailed! Thank you for giving me all humanly possible idiosyncrasy credit!

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