

How Humble Leaders Foster Employee Creativity: A Cross-Level Path Model

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Abstract

Drawing on social information-processing theory and the status-and-engagement perspective, a field study investigated the pathways through which team leader humility leads to employee creativity. Using a sample of 347 high-tech workers nested in 95 teams and their supervisors, this research theorized a multilevel model with data from multiple waves and sources. The results indicated that, at the individual level, leader humility perceived by individual employees boosted the employees' self-perceived status, which then promoted employee creativity. At the team level, leader humility created a team voice safety climate, which then had a positive cross-level impact on team members' creativity. This bridges the creativity and the leader humility literature by extending the social information-processing perspective of leader humility to integrate this perspective with research on individuals' desire to develop and maintain a status and positive identity. Theoretical implications of these results and practical implications for management practices were discussed.

Keywords: Leader humility, employee creativity, voice safety

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authorship.

Since humility was identified as a core virtue that is fundamental to the healthy functioning of organizations (e.g., Cameron, Dutton, & Quinn, 2003), there has been an increasing interest in understanding the effects of leader humility expressed by supervisors on their employees (Bharanitharan, Chen, Bahmannia, & Lowe, 2019; Chiu, Owens, & Tesluk, 2016; Mao, Chiu, Owens, Brown, & Liao, 2019; Owens, Johnson, & Mitchell, 2013; Rego et al., 2019; Wang, Owens, Li, & Shi, 2018). Leader humility refers to an interpersonal characteristic expressed by a leader that shows the leader's willingness to accurately view him- or herself, the leader's appreciation of others' strengths and contributions, and his or her teachability (Owens et al., 2013). It is intuitively appealing to believe that humility, as comprised of these characteristics, is a virtue for individuals; thus it is imperative to know whether and how being humble allows a front-line supervisor to be an effective leader in terms of eliciting outcomes that are valuable to their organizations (Ellinger, Ellinger, & Keller, 2003). Research is beginning to focus on the effects of leader humility on employee workplace outcomes and provides initial evidence that leader humility has a positive impact on individual employees, boosting their job satisfaction and reducing turnover (Owens et al., 2013), which are traditionally desired by organizations (Staw, 1984).

Little is known about whether and how leader humility can promote employee creativity. In this era of increased competition, creativity, an outcome that was not traditionally expected from rank-and-file employees (Staw, 1984), is now an essential asset that enables organizations to adapt to a dynamic environment (Anderson, Potocnik, & Zhou, 2014; Gong, Zhou, & Chang, 2013; Miron-Spektor, Gino, & Argote, 2011; Oldham & Baer, 2012). Defined as the generation of novel and useful ideas by employees (Amabile, 1996; Oldham & Cummings, 1996), creativity exhibited by employees who work in a wide variety of functional areas increases the likelihood that the organization can differentiate itself from the competition and create value for customers in

an effective and efficient fashion. When employees exhibit creativity, their novel and useful ideas may help the organization to discover new technologies, invent new products, and design new services or to cut costs and improve the efficiency of work processes and operations. Indeed, previous research has demonstrated that, to the extent that an organization devotes attention to harvesting the benefits of employees' creative ideas, employee creativity makes a positive contribution to firm innovation in terms of introducing new products to the market (Liu, Gong, Zhou, & Huang, 2017) and achieving better overall and competitive firm performance (Gong et al., 2013). Thus, to gain competitive advantage, organizations need to foster employee creativity.

The creativity literature suggests that employees' immediate supervisors play a key role in fostering creativity in their employees. Because the process of coming up with truly new and useful ideas is often ambiguous and uncertain, to make sense of and navigate the process, employees often need to pick up on cues from their immediate context (Drazin, Glynn, & Kazanjian, 1999). Notably, the supervisors constitute the most important aspect of the context in which the employees work (Anderson et al., 2014; Shalley, Zhou, & Oldham, 2004). Given the call for greater leader humility in contemporary organizations (Owens et al., 2013; Weick, 2001) and the important role that supervisors play in leading and fostering employee creativity, it is imperative to know whether and how leader humility can bring about creativity in their employees. To address this concern, we conducted a field study at a high-tech firm, using a sample of research and development (R&D) employees and their supervisors.

This research aimed to make three contributions to the literature. First, it study contributes to the creativity literature by providing an investigation of whether and how leader humility fosters employee creativity. Although humility is considered a fundamental virtue (Cameron et al., 2003), little research has been devoted to understanding whether and how leader humility

is beneficial to employee creativity. By investigating this relationship, this research also adds to the rapidly growing body of work on the impact of leader humility on employees by expanding the type of outcomes examined in prior studies to a non-traditional one that is especially valuable for organizations today—employee creativity.

Second, only a few studies have revealed the mechanisms through which leader humility exerts its effects on employee outcomes. The present study thus makes another contribution to the literature through its use of a path analysis to reveal the psychological mechanisms through which leader humility affects individual employees' creativity. Our adoption of the multilevel path analysis enables the estimation of the individual-level, team-level and cross-level relationships between variables by decomposing the variance into with-group variance and between-group variance (Lüdtke, Marsh, Robitzsch, Trautwein, Asparouhov, & Muthén, 2008). Furthermore, the multilevel path analysis can examine multilevel mediation effects in an appropriate way because it can differentiate the indirect effect at different levels (Preacher, Zyphur, & Zhang, 2010). Similar to prior research into the effects of leader humility (e.g., Ou, Tsui, Kinicki, Waldman, Xiao, & Song, 2014), we use the social information-processing perspective (Salancik & Pfeffer, 1978) as the primary theoretical lens to guide the analysis of why humility expressed by leaders has an impact on their subordinates.

This research extends the social information-processing perspective of leader humility by integrating this perspective with prior work on individuals' desire to develop and maintain a positive identity (Tyler & Blader, 2002). This theoretical integration allows us to identify self-status perception as the individual-level pathway that links leader humility to employee creativity. This research theorizes that, when an individual employee observes humility from his or her leader, the employee will perceive him- or herself as having high status and that this elevated self-status perception will propel the employee to

engage in creative activities. As such, this self-status perception serves as the psychological pathway that transmits leader humility to employee creativity at the individual level of analysis. This theorizing also adds to prior work on self-status perception by showing, for the first time, that leader humility is an antecedent of the employees' self-status perception.

Third, Anderson et al. (2014) pointed out that employee-team interface is a valuable and much needed direction for creativity research. Although teams have become the foundational building blocks of organizations, the cross-level effect of team climate on individual team members' creativity is still not well understood. In addressing this research need, the social information-processing perspective was again used to conduct a cross-level path analysis that links team-level leader humility to individual-level creativity. It is reasoned that team-level leader humility creates a team climate seen by team members to be safe in speaking up and expressing their ideas and voice. This team-level voice safety climate is at the center of the cross-level pathway that transmits team-level leader humility to the individual-level creativity exhibited by team members.

The following section presents more detailed theoretical analysis and hypothesis development.

Leader Humility and Employee Creativity: Individual- and Cross-level Pathways

Leader humility is expressed by the focal leader during interactions with employees and, hence, is observable by employees (Owens et al., 2013; Vera & Rodriguez-Lopez, 2004). With regard to the three characteristics of leader humility, the willingness to accurately view oneself is manifested by behaviors such as seeking feedback and admitting when one does not know how to do something (Nielsen, Marrone, & Slay,

2010). The appreciation of others' strengths and contributions is manifested by behaviors such as complimenting others and expressing appreciation of others' contributions (Tangney, 2002). Teachability is manifested by behaviors such as being open to ideas and the advice of others and showing a willingness to learn from others (Templeton, 1997). In addition to its conceptual definition, the discriminant validity of the leader humility construct has been established empirically (e.g., Owens et al., 2013).

These characteristics of leader humility suggest that, in the workplace, humble leaders are not afraid of admitting what they do not know, are open-minded about learning new ways of doing things, show willingness to learn from their employees, are receptive to their employees' voice and suggestions, encourage their employees to fully use their strengths at work, and value their employees' new ideas and novel contributions. These attributes of humble leaders should facilitate their employees' engagement in creative activities because, as we will explain in the next section, they boost the employees' self-perceived status.

Individual-level Pathway between Leader Humility and Creativity: Self-perceived Status

In any meaningful context or social group, individuals are interested in appraising their status in the context, as status indicates the prominence and respect that they garner, and status perception is at the core of individuals' self-concept and identity (Ridgeway & Berger, 1986; Tyler & Blader, 2002; van Dijke, De Cremer, Mayer, & Van Quaquebeke, 2012). Researchers have defined individuals' perceptions of the extent to which they have high status in a specific social group or context as autonomous respect (Tyler & Blader, 2002; Zhang, Huai, & Xie, 2015). Because autonomous respect represents individuals'

status in the eyes of others, following the logic of social information-processing theory (Salancik & Pfeffer, 1978), individuals develop the perception of their status from the cues generated by important others in their immediate context so as to reduce ambiguity and achieve accurate perception (Tyler & Blader, 2001). In their drive to appraise their status accurately, employees often draw information from people who are important to them in the specific context and use the information to form their perception of their status. To the extent that many organizations, including high-tech firms, use teams as the foundational organizing unit (Katzenbach & Smith, 1993), team leaders are important for employees because, as the direct supervisors of the employees, team leaders play an essential role in shaping how employees function in their teams and in coordinating the relationship between the employees and the organization (McGrath, 1962; Morgeson, DeRue, & Karam, 2010). Thus, individual employees often use information drawn from the leader of their work team to form their perceptions with regard to status.

The definition of leader humility indicates that, when a team leader expresses humility at work, first, the leader's willingness to accurately view him- or herself is manifested by behaviors such as seeking feedback from employees and admitting when he or she does not know how to do something (Nielsen et al., 2010). According to the social information-processing perspective (e.g., Ou et al., 2014), being at the receiving end of such humble behaviors from the team leader is likely to make the employees feel respected and that they have a prominent place in the team. Second, the leader's appreciation of his or her employees' strengths and contributions is manifested by behaviors such as complimenting the employees on their strengths and expressing appreciation for their contributions (Tangney, 2002). Processing such information from their leaders should lead the employees to feel important, valued, and respected. Finally, the humble leader also expresses teachability via his or her behaviors, such as being open to ideas

and the advice of his or her employees and showing a willingness to learn from the employees (Templeton, 1997). According to the social information-processing perspective, these behaviors from the humble leader are cues that the employees are likely to pick up and process, thereby making them feel that they have respect and high status on the team as they make important contributions by helping the team leader to learn new ideas and perspectives.

Taken together, this research has integrated the social information-processing perspective of leader humility and the status-and-engagement perspective to reason that leader humility cues employees that they are important and respected. Processing such information from their leaders is likely to result in the employees' perceiving themselves as having high status in the team. Thus, we predict:

Hypothesis 1: Leader humility is positively related to employee self-perceived status.

The status-and-engagement perspective posits that individuals seek to develop, maintain, and enhance a positive self-perception of status in a given context because it is at the core of their self-concept and the sense of self-worth (Tyler & Blader, 2002). Once they perceive that they have high status—that they are being respected and valued at work—they are motivated to maintain and enhance the high status that they desire. The drive to maintain and enhance their high status often leads employees to be deeply engaged in the context in which they enjoy high status, proactively making unique and valuable contributions that demonstrate their distinctive strengths and value, such as generating new and useful ideas (Janssen & Gao, 2015; Tyler & Blader, 2002; Zhang et al., 2015). The generation of new and useful ideas concerning products, services, and processes is commonly defined as employee creativity (e.g., Amabile, 1996; Oldham & Cummings, 1996; Shalley et al., 2004). In other words, there is a positive relationship between self-perceived status and employee creativity such that the self-perception of being respected and holding

prominent status in a context will drive employees to engage in generating creative ideas for the workplace. Thus,

Hypothesis 2: Employee self-perceived status is positively related to employee creativity.

Thus far, the argument here has relied on the social information-processing perspective in regard to the impact of leader humility on employees (e.g., Ou et al., 2014) to suggest that greater humility expressed by leaders will lead employees to perceive that they enjoy high status at work. This perspective allowed us to identify leader humility as a key antecedent to employees' perceptions of their status at work. The status-and-engagement perspective (Tyler & Blader, 2002) is also used to argue that the self-perception of high status or autonomous respect will lead employees to proactively engage in the workplace and demonstrate creativity. Insights from this perspective have led us to identify creativity as an important consequence of self-perceived status. Integrating these two theoretical perspectives enables us to extend both perspectives and to develop a fuller understanding of how leader humility is linked to employee creativity.

More specifically, self-perceived status can serve as the individual-level pathway that links leader humility and employee creativity. When team leaders exhibit humility, the individual team members will experience high levels of self-perceived status because the expressed leader humility makes them feel valued and respected at work and that they enjoy high status. This elevated self-perception of status will propel employees to be deeply engaged at work so as to make distinctive contributions by using the unique strengths and qualities for which their leaders have shown appreciation (e.g., Janssen & Gao, 2015; Tyler & Blader, 2002). To the extent that organizations need new and useful ideas from their employees to produce new products and services and to make the work process more efficient and cost effective, employees' developing creative ideas concerning products, services, and processes makes a valuable contribution.

Thus, this research theorizes self-perceived status as the individual-level pathway that links leader humility to employee creativity. Here is the hypothesis:

Hypothesis 3: Employee self-perceived status mediates the relation between leader humility and employee creativity.

Cross-level Pathways that Link Team-level Leader Humility to Employee Creativity: Team Voice Safety Climate

Work teams have become the building blocks of contemporary organizations (Kozlowski & Ilgen, 2006). While at work, team leaders influence team members not only by having dyadic interactions with them but also through shaping the overall climate of the team (Ehrhart, 2004; Liao & Chuang, 2007). Prior theoretical and empirical work on leader humility suggests that it can function as a team-level construct, defining team-level leader humility as team members' consensus perception of how their leader demonstrates humility (Chiu et al., 2016). Recent research also demonstrated that leader humility could enhance team processes through the lens of social information processing theory (Wang, Li, & Yin, 2020). It implies that team-level leader humility is potentially suitable for creating a voice safety climate, defined as team members' shared belief about the extent to which it is safe to speak up in their teams (Morrison, Wheeler-Smith, & Kamdar, 2011). When the leader of a team expresses humility, he or she seeks feedback from the employees, admits when he or she does not know something, compliments the employees on their strengths, expresses appreciation of their contributions, is open to ideas and advice from employees, and shows a willingness to learn from the employees (Nielsen et al., 2010; Owens et al., 2013; Tangney, 2002; Templeton, 1997), all of which

contribute to a voice safety environment. All of these behaviors, which manifest humility, are likely to serve as cues that make employees feel that it is safe for them to speak up, identifying problems when problems occur, proposing solutions to fix the problems, and making suggestions about how to do things better. The expressed leader humility implies that the team leader is open to ideas and suggestions and that the leader wants employees to fully utilize their strengths to help the leader to learn what he or she does not know and to help the team to succeed by expressing their ideas and voice. Processing the information and cues conveyed by leader humility should facilitate the employees on a team to develop a shared belief that it is safe to speak up. Thus, we predict:

Hypothesis 4: Team-level leader humility is positively related to a team voice safety climate.

The climate of the work teams to which individual employees belong is important to employees. This is because each employee is embedded in the team day in and day out and needs to interact constantly with other members and because his or her success or failure at work is often influenced by the climate within the team and, as such, is tied closely to the team (Baer & Frese, 2003). Thus, the voice safety climate transmits what is valued in the team and provides social cues for team members. In a team that has the shared belief that it is safe for the team members to speak up in regard to problems that need to be fixed or new ways of doing things, individual team members are likely to feel that they are respected and their contributions are valuable. As such, they are likely to feel that they enjoy high status. Hence, we posit:

Hypothesis 5: Team voice safety climate is positively related to employee self-perceived status.

By building on the social information-processing perspective of leader humility, the preceding theoretical analysis demonstrates that team-level leader humility leads to a team's voice safety climate, which then boosts individual team members'

perceptions of their status (Tyler & Blader, 2002). This line of reasoning suggests that a team voice safety climate mediates the cross-level relationship between team-level leader humility and individual employees' self-perceived status. This cross-level mediation is formally stated in the following hypothesis:

Hypothesis 6: Team voice safety climate mediates the cross-level relation between team-level leader humility and employee self-perceived status.

When individual team members work in a team that has a climate in which it is safe to speak up, team members feel that their ideas, concerns, and perspectives are valuable and important for the team's success (Morrison et al., 2011; Zhou & Pan, 2015). Encouraged and supported by such a safe climate, the team members are likely to immerse themselves in their work and be on the lookout for opportunities of continuous improvement. Those team members will not just do what they are told but, rather, to use their skills or strengths to identify existing problems and propose new and useful ways of solving these problems. Immersion in the work and an orientation toward continuous improvement and newer and better ways of doing things often result in employee creativity—the generation of new and useful ideas for helping their organization to improve and prosper (Hirst, Van Knippenberg, & Zhou, 2009; Zhou & George, 2001). Thus, having previously argued that team-level leader humility is associated with a voice safety climate, this climate serves as the cross-level pathway between team-level leader humility and individual creativity. Thus,

Hypothesis 7: Team voice safety climate mediates the cross-level relation between team-level leader humility and employee creativity.

Figure 1 shows the cross-level path model that this research has developed. We now turn to reporting a field study in which we tested the model.

Objectives and Relevance of the Study

There is a very limited number of studies exploring the psychological factors of the film production environment in Poland (e.g. Mroz, 2008; 2015; 2017). The presented literature review has also demonstrated that many of the studies exploring the psychological factors in a film setting investigated them predominantly from the perspective of an individual filmmaker or a dyadic perspective. However, as film projects are based on a collaboration between numerous individuals who are each affected by the group dynamics (e.g. team cohesion, emotional contagion), the present study aimed to explore the factors which contribute to effective teamwork within groups of filmmakers, and which ultimately allow filmmakers to thrive and showcase their eminence, genius, and talent in creating high quality films. Moreover, to the authors' best knowledge, there are no studies that have looked into the social processes and complexities that characterize film production crew from the perspective of performance psychology. As suggested by Ayoagi et al. (2012), and Hamilton and Robson (2006), performance psychologists should aim to understand the specific performance domain prior to commencing a collaboration with performers.

At the outset of the present project, the researchers conducted several informal conversations with people engaged in film production and with the deans as well as students of three major film academies in Poland. The filmmakers were requested to partake in informal conversations during various film festivals. The first group consisted mainly of established actors and directors. The deans of the Acting, Production, and Directing departments of the most prestigious Polish film academies participated in these talks as well. Finally, students representing numerous departments (e.g. Acting, Directing, Animation, Operating, Editing) and who were at various stages of their education, also contributed to these informal conversations. As immersion into the participants' environment allows

the researcher to better understand the processes and factors involved, those initial meetings constituted a chance to learn about the specifics. What more, those conversations allowed them to understand the variety of roles and responsibilities involved in a film production crew (e.g. the responsibilities of directors versus producers) and the stages of the film production process. Moreover, these activities supported the formation of the subsequent research ideas. Every participant of informal conversations expressed their desire for greater understanding of the psychological demands that affect them.

Given the above, the need to better understand the film environment voiced by some filmmakers, and a lack of coherent guidance to provide psychological support to filmmakers in Poland, a qualitative approach was chosen - specifically, a grounded theory approach. The researchers aimed to explore the social processes and complexities specific to the process of film production in a single country, considering the limitations and possibilities created by the governing bodies in that country.

Materials & Methods

Methodological Overview

Grounded theory constitutes an insightful approach to explore phenomena which have not been extensively studied and satisfactorily explored (Strauss & Corbin, 1998). According to Holt and Tamminen (2010) and Weed (2017), when considering using a grounded theory methodology, the researchers should examine their philosophical orientation and choose a variant of the grounded theory accordingly. Thus, in the present study Corbin and Strauss' (1998, 2008) variant of grounded theory was used as it allows "insight, enhance understanding, and provide a meaningful guide to action" (Strauss & Corbin, 1998, p.12). The techniques and procedures were employed in accordance with the post-positivist beliefs (cf. Weed, 2009).

Participants and Sampling

Initially, participants were recruited through purposive sampling, in which the researchers focused on the more experienced and knowledgeable members of a film production crew, specifically the directors and producers, as well as actors. The directors and producers tend to have the broadest perception of the collaboration between members of a film crew, as it is their responsibility to select with whom they want to create a film (Zablocki, 2013). Actors are usually the group, whom, among the filmmakers, are the most open to seek psychological support. Most of the participants were award-winning filmmakers in Poland and abroad. Among them there are award-winning filmmakers who have been recognised by various prestigious institutions and at major film festivals, including: Academy Awards (Oscars), American Association of Cinematographers Venice Film Festival (Lions, Gold Osella), Berlinale (Bears), International Film Festival in Locarno (Leopards), Polish Film Festival (Eagles), Karlovy Vary International Film Festival („East of West” Award), Los Angeles Film Awards, Brasilia International Film Festival, Montreal World Film Festival Award, International Short and Animation Film Festival, Worldwide Short Film Festival, Canadian Film Centre's Worldwide Short Film Festival, Manlleu Short Film Festival, Norwich Film Festival (Amanda), Kosmorama Trondheim International Film Festival, and European Independent Film Awards (Grand OFF). The interviews and observations were employed with the aim to understand the specificity of filmmakers' functioning and to gain insight into the complexities affecting a film production crew.

The data analysis from initial interviews and observations conducted on the films sets informed subsequent interviews, causing the process of data collection and analysis to intertwine (Corbin & Strauss, 2008). In the following stages, the selection of participants was directed by emerging concepts; thus, the participants were selected using theoretical sampling (Corbin & Strauss, 2008). This process

commenced by sampling filmmakers serving other roles in the film production process (e.g. camera operators and film editors) and by conducting interviews with them. As the theory was taking shape, additional interviews with experienced filmmakers were scheduled, and more on-site, filmset observations were conducted. The final sample of participants consisted of: 20 actors, 16 directors, 12 producers, 6 cameramen, 5 sound technicians, 3 costume designers, 3 make-up artists, 3 film editors, 2 screenwriters, and

2 stage designers. All of the participants who took part in the study can be considered as elite in the Polish film setting; those filmmakers have won a number of awards both: nationally and internationally, and are regarded as experts in their specific departments. Moreover, the vast majority of them are the role models in the industry. Table 1 presents the demographic data of the participants.

Table 1

Demographic data of all the participants

Department	Age	Years of Experience	Gender	
Actors	M = 44.8; SD = 13.9	M = 21.2; SD = 14.0	M = 12	F = 8
Directors	M = 46.9; SD = 12.2	M = 20.8; SD = 11.9	M = 14	F = 2
Producers	M = 50.3; SD = 14.9	M = 17.0; SD = 15.7	M = 8	F = 5
Cameramen	M = 54.8; SD = 20.7	M = 26.5; SD = 19.2	M = 6	F = 0
Sound technicians	M = 47.8; SD = 8.7	M = 20.0; SD = 7.8	M = 4	F = 1
Costume designers	M = 67.0; SD = N/A	M = 28.0; SD = 14.0	M = 0	F = 3
Make-up artists	M = 58.0; SD = N/A	M = 21.3; SD = 4.5	M = 1	F = 2
Editors	M = 55.0; SD = 4.2	M = 26.7; SD = 5.1	M = 2	F = 1
Screenwriters	M = 41.5; SD = 17.7	M = 16.0; SD = 9.9	M = 2	F = 0
Stage directors	M = 58.5; SD = 7.8	M = 29.0; SD = 8.5	M = 1	F = 1

Data Collection and Analysis

The participants were contacted by email and by phone calls. During the initial contact, they were notified of the purpose of the study and what it entailed, and they were invited to participate in an interview; in addition, the researchers inquired about the possibility to visit various film sets and conduct observations. The participants who agreed to take part in the study were emailed to arrange a mutually convenient time and location. Informed consent was obtained before the data collection began. The data were collected in various settings, including film academies, film sets, and during film festivals.

Grounded theory involves “an iterative process based on the interaction of data collection and analysis, facilitated via theoretical sampling” (Holt & Tamminen, 2010, p. 410). In the present study, the data were collected during a period of three years using a variety of methods: semi-structured interviews (ranging in duration between 60 and 120 minutes), participant observations, informal conversation, and field notes. Various coding processes were employed; starting with the open coding during which the concepts were identified, compared and contrasted for similarities and differences, and their properties were described. Then, during axial coding, categories and subcategories were linked, which helped to refine and conceptualize the phenomena being studied (Strauss & Corbin, 1998; Corbin & Strauss, 2008). As the filmmakers revealed their stories and perceptions, the anecdotes and incidents were compared across the interviews of participants in the same roles (e.g. director A vs. director B), and across various roles (e.g. directors discussed their expectations of the actors, and actors’ perceptions of the directors’ expectations were compared). The continuous comparison enabled the researchers to refine and develop the concepts, which is in congruence with one of the core elements of grounded theory; the constant comparative method (Holt & Tamminen, 2010; Weed, 2017). During the data collection and analysis, memos were written to record the main researcher’s thoughts

and interpretations and guide the final stage of data analysis, selective coding, during which the theory was integrated and refined. The data collection and analysis ended when the data saturation was reached, and any new insights stopped emerging (Strauss & Corbin, 1998).

Results

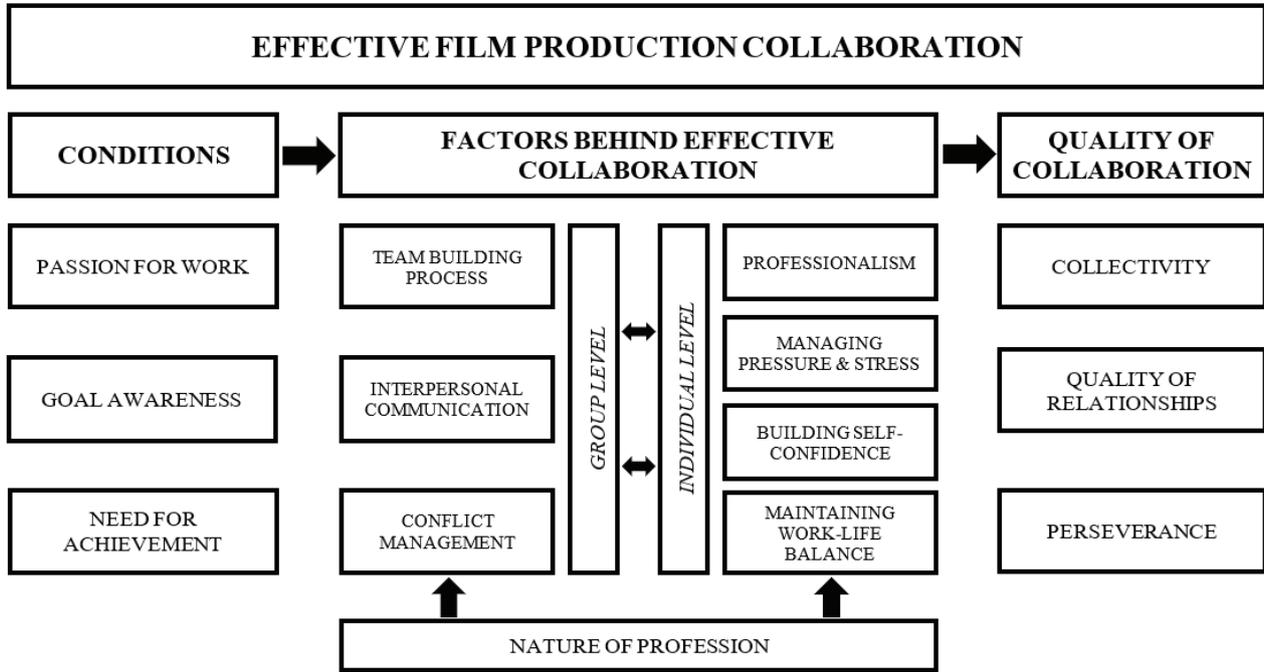
The analysis of the data led to the development of a grounded theory of effective collaboration between professional Polish filmmakers. In this section, the three main factors are presented and supported by participants’ quotes: 1) conditions (that form the structure of collaboration from the beginning of the creative process), 2) factors behind effective collaboration, and 3) quality of collaboration (including categories and subcategories that determine the level of effective collaboration and manifest themselves as a result of the impact of the factors described earlier, as a whole, these factors may contribute to high performance levels). In the presented grounded theory, the effective film production collaboration is an overarching concept which encompasses essential conditions, which may be understood as a mindset, through individual- and group-level factors, which contribute to reaching a certain level of cohesiveness of activity, and also direct indicators that the collaboration in the filmmaking process is effective. Figure 1 shows a schematic representation of the categories and factors to illustrate their connections.

Category: Conditions

The category Conditions represents elements which are important even before the film production starts. Those elements shape the attitude towards filmmaking and they provide certain mindset for all the filmmakers. This category includes three themes and it is assumed that without passion for filmmaking, goal awareness and need for achievement present at the beginning of a filmmaking process, it

Figure 1.

Grounded theory of effective film production collaboration in Poland.



is arduous to persevere and achieve anything in this profession. Therefore, those three conditions not only allow effective film production collaboration, but they also support the filmmakers in their careers. Passion for work (a); according to filmmakers, passion makes it possible to initiate the filmmaking process and persevere throughout this process, especially in the face of obstacles as one of the participants explained:

“... love for what you’re doing. Without it, there will be a moment when you’re too tired to survive it all. This feeling [love] will protect us in every situation, or almost every situation. It will remove the obstacle. It will support from within. It will help standing up and will give you joy” (Costume Designer 3).

Goal awareness (b), sets the course of action for all people engaged in the filmmaking process and supports effective and consistent collaboration of a film production crew. Even though individual goals should be valued and respected, it is of outmost

importance for the filmmakers to be aware what the main goal is, to prioritize the actions that would bring the film crew closer to achieving that main group goal. When discussing various goals, many of the filmmakers admitted that they know they should be striving to support one another in achieving the main goal, that very often it is an implied expectation; one of the participants portrayed it this way:

“... formal regulations are not enough. A sense of collective responsibility is necessary; additionally, it is important for everyone to be striving to achieve the best possible outcome. I believe that your aim is to work for the final result of the project, not your own outcome” (Film Editor 2).

Finally, (c) need for achievement, challenges filmmakers to engage in continuous growth and fuels their actions and sacrifice. The need for achievement is connected with the openness to new experiences, looking for unconventional solutions, and the attitude

towards self-development. It also supports and drives the filmmakers in the lengthy process of creating a film where feedback and often gratification are delayed, and where creators have to wait months or sometimes years to see the final effects of their work. Need for achievement allows them to focus their actions and be productive, even without seeing the immediate effects of their work.

Category: Factors Behind Effective Collaboration

The second category is divided into two levels (a) group level and (b) individual level. The group level represents factors used to interact with others in order to work effectively. Creating and making a film requires involvement of many people; therefore, it is important to account for the factors which affect the interactions among the filmmakers. Individual level encapsulates individual's attempts to optimize their functioning, which in effect contributes to an increase in the level of effectiveness of the whole group's performance. The factors from both group and individual levels affect each other and in addition are shaped by the nature of the profession of a given filmmaker.

Group level factors include: (a) *team building process*; it refers to choosing the right people to work with to create a film, with the selection resulting from the producer's or the director's knowledge regarding necessary competencies¹, the tasks to be carried out, and the workstyles of particular filmmakers. The team building process is greatly affected by the crew members' awareness of the functions performed by each of them individually and together in the group, of their mutual expectations and of their faith

in the project from the start to the end. One of the participants said:

"I'm for 100% clarity. Every person from my department knows what they are supposed to do. I define my responsibilities and the character of my work very clearly. I am convinced that if you don't clearly and honestly say who is responsible for what, chaos and frustration will appear" (Producer 11).

Interpersonal communication (b) is viewed by the filmmakers as readiness to search for a common ground for agreement, i.e. an "access key" to particular crew members at different stages of the filmmaking process. Filmmakers stress that an element of effective film production collaboration is creative dialogue (based on partnerships), which involves direct communication, active listening and feedback, or being open to collaborators' opinions. As one of the sound technicians (Sound Technician 3) suggested:

"Communication is the foundation [base?], the ability to listen to the director and being able to do what is expected of us. It is important to remember that we're making his [director's] film. We always try to use our means to achieve what he [director] wants; there can't be a situation that by using different means we will try to achieve something different and try to convince the director that this is really better."

Moreover, an inseparable part of a film production crew's work is an assertive attitude to collaborators, understood as the ability to react appropriately to different situations, taking the context into account while remaining aware of one's and others' rights and acting according to one's own principles. Finally, *conflict management* (c) is a crucial factor allowing a film crew to successfully negotiate conflict. Filmmakers, drawing from their own experience, know that a conflict may spark an element of creativity and may result in reinforcement of collaboration of

¹ Depending on whether the project is a director's cinema project or a producer's cinema project, the director's and the producer's impact on the personal composition of the crew will vary.

the whole team if treated as a difference of opinion, not as a personal attack. A quote provided by one of the participants illustrates such productive approach:

“It is important for the filmmakers to not treat the pursuit for a high quality [of a film] as a fight, but instead, as a dialogue. I think it is important to talk, not to take offence. I believe that a conflict should not be treated personally but as a step which, if taken correctly, allows to forward progress” (Film Editor 1).

Individual level factors include: (a) *professionalism*, (b) managing pressure and stress, (c) building self-confidence, and (d) maintaining a work-life balance. Professionalism (a) refers to preparation (e.g. becoming familiar with the script), diligent work ethic, and commitment to the duties assigned. Furthermore, positive attitude, workflow and time organization, and focus on the tasks at hand all benefit effective collaboration. In order for a film production crew to be able to work effectively, it is necessary to define the meaning of professionalism in the context of a particular group; it can be understood differently at the individual level, though. Managing pressure and stress (b) includes the ability to handle the opinions of collaborators, media, or society. A filmmaker’s career is dynamic and changeable, it involves both success and failure, which both may have similar effects on the mental state of a given creator. That’s why it is so important for filmmakers to be able to deal with various stressors because their profession involves a sense of a constant uncertainty. The following quote highlights the psychological demands which the filmmaking process inflicts on the filmmakers:

“Stress occurs in every stage of the filmmaking process: doubts if the project will even commence; new situations at the beginning of the production; communication with new collaborators; stress whether the intellectual, health and artistic resources are enough to make the project successful; and finally, stress connected with film editing and then with

detaching yourself from the film when you await viewers’ reactions” (Director 4).

Building self-confidence (c) understood as an active approach to building one’s sense of confidence, entails acting within one’s limits and according to one’s principles, analyzing one’s own performance, and engaging in self-reflection. It also means an ability to draw conclusions and learn from mistakes, as well as an awareness of one’s strengths and weaknesses as one of the participants disclosed:

“Failures do happen and then you have to replay your journey and consider what went wrong. If a person believes that what they’re working towards will happen, then this process is easier because we have more strength (Costume Designer 3).

A filmmaker who is sure of their competencies and of the role they play in a film production crew improves their ability to make decisions and to accept the potential risks such decisions involve.

Maintaining a work-life balance (d) refers to the ability to control energy resources, e.g. taking care of one’s physical and mental balance. It involves the need to release the tension after the production is complete (e.g. when it’s time to face the reality after a project ends, searching for balance) and taking care of one’s relationships with friends and family, which also can constitute a great source of support; one of the participants reflected that:

“Acting gives you an opportunity to have a parallel life. Your family is your real life, and in my case, my family gives me perspective and distance [from work]. My second life is the one I live on a film set, in my little film community” (Actress 1).

This is especially important in the context of the specificity of the profession of filmmaker, where high-

intensity periods alternate with phases of dormancy (understood as e.g. non-participation in a project).

Filmmakers are aware of the difficulties inherent in their profession. Both the group-level and individual-level factors referred to above are shaped in response to the nature of their profession. In their everyday practice, they face many situations that are standard elements of their work, e.g. fear of idleness (e.g. not making it through a casting and thus not getting hired for a film), the unpredictability of their profession (e.g. a co-producer withdraws from the project), living in two parallel worlds (i.e. personal and professional), the need to be flexible (e.g. seven days a week, irregular working hours), subjective assessment of their performance (e.g. reviews or audience rating), or time and financial pressures. Being aware of the factors that derive from the nature of filmmakers' professions allows them to be better equipped and prepared to face the everyday challenges of the production phase.

Quality of Collaboration

The final category includes (a) *collectivity*, understood as a situation when film production crew's working standards are imposed by the director, and the job of particular crew members is to understand and follow clearly defined directions within the collaboration. The quality of collaboration also much depends on the crew's awareness regarding the goal to be pursued, and on the sense of individual responsibility for the final outcome of the pursuit (e.g. particular crew members being responsible for the decisions taken and facing the consequences of these decisions). In order to optimize the workflow and proceed according to the production strip board², it is important that all crew members be familiar with the tasks that need to be carried out by each of them, stick to their qualifications, be able to distance themselves (e.g.

from their ideas, including the ability to withdraw from them if they appear to be of no good to the film), and be able to tackle difficulties and look for solutions together. Of immense importance is the role of a director, who is in a privileged position to influence the sense of collectivity as this quote illustrates:

“The filmmakers are more likely to collaborate effectively if they like the project. I have always believed that a director must inspire the collaborators, he [a director] has to care to ‘infect’ others. It’s a bit like being a commander, a leader. If a leader doesn’t believe in a victory, then the followers will not believe they can succeed. It would affect their morale without a doubt” (Director 16).

Another element is *the quality of relationships* (b); filmmakers stressed that a partnership approach, readiness to show support, and the ability to accept mistakes made in the course of the filmmaking process favour collaboration and creative success. Moreover, an authentic and empathetic attitude, trust, openness to collaboration, and respecting collaborators and their work all contribute to building relationships between individual filmmakers, as one of the participants said:

“... in the meantime, little gestures cost only three minutes, but they so positively influence our work and collaboration (Make-up Artist 1).

Also, appreciating the contribution of particular crew members by providing positive reinforcement translates into their engagement and perseverance in pursuing a given goal.

The last element involves *perseverance* (c), meaning: determination, persistence, consistent behavior, patience, and readiness to engage in hard physical and mental work in the face of challenges filmmakers encounter in their everyday practice. The following quotes from two leading directors illustrate the significance of perseverance:

² The schedule of film production works, broken down into all days of the shooting period (production stage).

“Apart from successes, there is the everydayness – regular training which entails setting aims and goals for yourself without the support of fans, without the applause - as if you were in solitude. That’s the reality of working on a script, and before that, searching for a topic. That’s also the reality when you apply for funding and when you try to convince various institutions to finance your project” (Director 3) and

“I think that a so-called talent is only worth fifteen percent in my profession, the rest is stubbornness, persevering, and having the constitution of a horse. I believe that without perseverance it won’t be possible to achieve what you have planned. If I decide to do a certain film, then I will push until the end and not allow myself to be discouraged by, for example, lack of money” (Director 15).

Discussion

To the authors’ knowledge, the present study constitutes a first attempt to explore the functioning of various roles engaged in the film production process. The perceptions of the psycho-social processes and complexities which contribute to effective collaboration among various film departments (e.g. directors, cameramen, or costume designers) were investigated in the present study. The study was conducted from the perspective of performance psychology (e.g. Hays & Brown, 2004) and was focused on the positive and supportive factors which contribute to people’s growth and high level of functioning. Furthermore, the study was conducted within a single nation and therefore, the results are also grounded in the specificity of that country’s film environment (e.g. regulations, budgeting, actors’ education).

One of the participants, a film editor, said that: “A collaboration [during film production] starts where there is an awareness that I’m dependent on others, and others are dependent on me. It is due to the fact

that the responsibilities of various roles interlock and overlap” (Film Editor 1). The collaboration between the filmmakers during the process of creating a film can be considered as more than the sum of all the efforts various members contribute to the process; the individuals coordinate their beliefs, thoughts, and actions to achieve a higher-order system which may lead to the final success. Every filmmaker brings their own dynamic (e.g. power, commitment, self-reflection) and engage with various mechanisms of mutual influence (Nowak & Vallacher, 1998; Zienowicz & Serwotka, 2017), in order to meet the demands and expectations of the project. As the participants noted, the factors which affect the interactions between the members of a film production crew are dynamic and time-sensitive (dependent on the stage of film production), dominant on an individual or group levels, and they are influenced by the characteristics of the industry (i.e. lack of full-time employment; being exposed to public criticism; or the need to both: immerse in the character and be able leave it when in personal setting).

Within the main system, some members create smaller sub-systems to increase the effectiveness of the project; for example, producers and directors work closely to be able to convey the vision of the film within the bounds of the accumulated budget. The EFPC grounded theory does not indicate which departments are more important than others. Rather, it highlights the importance of all the departments, and accentuates the importance of building and cultivating effective interpersonal relationships. Kogan (2002) stated that performing artists usually constitute members of a team and in order to achieve a desirable performance, they need to trust and depend on one another. The film production process can be viewed as a “team sport” (i.e. based on the collaboration between various departments), and even though some of the departments are often underestimated, the filmmakers claim to be aware that film’s success is based on the synergy created between all the roles. However, in practice this synergy is often missing, and the lack of care about the relationships

between various members can influence the whole film production process.

Crucial to this process are the leadership roles of both directors and producers. The directors' role is to create a film according to their artistic vision; they provide guidance and leadership to the other members of the film crew in order to achieve the highest standard. Producers, on the other hand, are the main financial investors who are responsible for employing all the other members, providing financial support (e.g. buying costumes, equipment, rights to film in a specific location), and they also may have influence on the artistic vision conveyed by a director (KIPA, 2016). Even though directors and producers are both in the positions of power, they are responsible for different aspects when managing the film crews. However, for both roles it is of fundamental importance, similarly to leaders in business and sport, to be able to manage conflicts (e.g. Zhang, Cao, & Tjosvold, 2011), promote commitment (e.g. Kent & Challadurai, 2001), and build positive relationships with all the members of their team – a film crew (e.g. Din, Paskevich, Gabriele, & Werthner, 2015).

Moreover, it is important to also understand that “success” is not always implied in terms of money, box office records and career (Galazka, 2012). In sport, success may be perceived as winning (achieving the best score), defeating an opponent, or prime performance (understood as showing excellent level of performance in the most demanding conditions; Taylor, 2001). However, as pointed out by Hamilton and Robson (2006), performing arts differ from sport in terms of the way success is perceived, as there is no “perfect score” measured; in film, achieving artistic excellence perceived subjectively by the individuals creating a film can be viewed as an indicator of success. Usually, the final outcome (i.e. film) would be assessed based on the subjective reactions and perceptions of the audience, film critics, and peers. The same film may appeal differently to various individuals, which is why the film performance forecasts are sometimes fallible (Swami, 2006). Even though the filmmakers

strive for awards in film competitions (e.g. Berlin International Film Festival; Cannes Film Festival), and the number of awards correlates positively with the consequent movie guide ratings (Simonton, 2004), those awards are also subject to a number of factors (e.g. opportunities to promote a film, which is connected with film's budget; cultural factors; how popular a specific topic is in a given year; originality). As Hamilton and Robson (2006, p. 255) suggested: “Although commercial success in the arts is often similar to playing the lottery, focusing on peak performance can help talented artists come closer to achieving this goal by mastering the aesthetic and technical requirements”. For those reasons, filmmakers could find it beneficial to learn how to embrace task orientation (Nicholls, 1984a; Nicholls, 1984b) and focus on the psychological techniques which may help them in dealing with varying amounts of success.

Even among professionals and the eminent, success is not guaranteed and may depend on a number of factors such as intrinsic motivation and strategies used to cope with performance stressors (Poczwadowski & Conroy, 2002) or resilience (Fletcher & Sarkar, 2012). Intrinsic motivation is an especially important factor and it has been found to be associated with positive performance and positive emotional outcomes in a group of performing artists (Lacaille, Koestner, & Gaudreau, 2007), and intrinsic motives (participating in theatre was exciting and stimulating and could lead to the accomplishment of personal goals) have been found to be more important than external motives to a group of theatre actors (Martin & Cutler, 2010). Intrinsic motivation has also been indicated as one of the necessary components of creativity (Amabile, 1996), which has been shown to be differently exhibited between eminent (e.g. Olympic level athletes) and less-skilled athletes (Gute, Gute, & Csikszentmihalyi, 2016). The future research should explore how the social environment (i.e. relationships between various filmmakers) affects intrinsic motivation, and by that, enables creativity and supports the development of one's talent and eminence.

The filmmakers expressed their awareness regarding the importance of mental skills and how they affect their functioning; however, they tend to not engage in mental skills training. Similar results have been found in sport environment, where the researchers have found that even though athletes admit that the developmental of mental skills is important, they are reluctant to engage in training (e.g. Green, Morgan, & Manley, 2012). Some of the reasons put forward are: being judged by coaches and teammates (Green et al., 2012); (lack of) confidence in sport psychology consulting (Martin, Kellmann, Lavallee, & Page, 2002); and personality factors (neuroticism, conscientiousness, and openness; Ong & Harwood, 2017). In the present study, the filmmakers also stated that lack of information and understanding regarding how mental skills can be improved was a major reason preventing them from engaging in such development. Moreover, they were not convinced that psychological skills training is crucial for them; however, the more experienced and older participants disclosed that they had experience collaborating with psychotherapists when they found they were unable to deal with stress, anxieties, and substance abuse on their own, and when those disorders affected their ability to work. It is therefore important to collaborate with, for example, film schools to educate filmmakers about the benefits of mental skills development, and to provide mental skills training in the early stages of filmmakers' development. Skills and techniques such as arousal management, goal setting, imagery, or relaxation can prove essential to sustain healthy wellbeing, optimize the experience of flow (Csikszentmihályi, 1990), effectively face the demands placed on the filmmakers by the film production process and cope with critics' reviews (Hamilton & Robson, 2006).

Limitations & Future research Directions

Even though the majority of the departments included in a film production were represented in

the data collection process, some were more included than others. For example, 20 actors took part in the interviews, in comparison to only five sound technicians and four costume designers. In the future, the under-represented groups should be investigated further, especially taking into account their concerns about not being fully understood. Coffey (2014) in "An Open Letter from your Sound Department" pointed out a number of obstacles that the sound technicians face when recording audio in hope of educating directors and producers. His request: "We are not asking for any special powers on set, just equal respect for our craft" resonates with the generated grounded theory, as it portrays the film making process as a collaboration between all the members who should be treated with respect and appreciation.

Furthermore, in the present study the focus was on a film production crew as a group/team; however, there is still a need to explore the individual characteristics and factors which drive various members of the film production. In the literature regarding the psychology of performing artists in the film domain, the focus is predominantly on the actors (e.g. Hamilton & Robson, 2006; Wilson, 1994); however, as the presented grounded theory has shown, other filmmakers make it possible for a film to be created and to achieve success. Therefore, future studies and practice of performance psychologists should not be exclusively available to actors and actresses, but to all members of a film production.

The present study constituted only a first step in the exploration of the dynamics which affect and govern a film production process. Future research should investigate more closely the relationships between specific conditions, factors, and the indicators of the quality of collaboration. For example, it could prove useful to learn how the communication style of directors affect the sense of togetherness. In sport, the inspirational communication style used by coaches has been shown to affect feeling of pride and unity (e.g. Smith, Figgins, Jewiss, & Kearney, 2018),

and the emotional messages embedded into a coach speech may affect participants' sense of team efficacy (Vargas & Bartholomew, 2006). It could be posited that a director who conveys an exciting vision for the film in an inspirational way, could also help his fellow filmmakers achieve a sense of cohesion, as well as understand the sacrifices to be made in order to achieve that goal (e.g. severe weight loss/gain by an actor for a specific role).

Conclusions

The EFPC grounded theory does not constitute a template which would guarantee a successful film production process; it suggests that the dynamics which govern a film production process are complex, yet the included factors are malleable and can be developed through a systematic training and reflective approach. Moreover, any psychologist who wishes to begin a collaboration with filmmakers should first attempt to understand this performance environment and tailor their intervention to the individual needs of the performer (Hamilton & Robson, 2006).

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