Received: 9 June 2020 | Accepted: 22 June 2022

DOI: 10.1111/poms.13798

POMS

ORIGINAL ARTICLE

Aid worker adaptability in humanitarian operations: Interplay of prosocial motivation and authoritarian leadership

Mojtaba Salem[1] | **Niels Van Quaquebeke**[2] | **Maria Besiou**[2]

[1]Chair of Research and Science Management, Technical University of Munich, München, Germany

[2]Department of Leadership & Management, Department of Operations & Technology, Kühne Logistics University (KLU), Hamburg, Germany

Correspondence
Maria Besiou, Kühne Logistics University, Grosser Grasbrook 17, 20457 Hamburg, Germany.
Email: maria.besiou@the-klu.org

Handling Editor: Sushil Gupta

Abstract

Many field office leaders contend that authoritarian leadership improves the performance of humanitarian operations. The common narrative is that authoritarian leadership helps aid workers more quickly adapt to changes and thus deliver better job performance (e.g., by improving operations in their field office). However, given that field reports often highlight extant leadership as the source of serious operational failures, could leaders with an authoritarian style be part of the problem? We draw on psychological theorizing on the nature of human motivation to address this question. Specifically, we note that many aid workers primarily join humanitarian operations with the prosocial motive to help beneficiaries. While proactive adaptability is inherent to prosocial motivation, we hypothesize that authoritarian leadership may curtail the relationship by impeding aid workers' autonomy. We find support for our theorizing in a sample of 299 humanitarian aid workers from the field. Additionally, we conducted 31 expert interviews to contextualize and validate our empirical findings. The paper concludes by discussing the findings' theoretical and managerial implications for humanitarian operations.

KEYWORDS
adaptability, authoritarian leadership, humanitarian operations, prosocial motivation

1 | INTRODUCTION

Recent decades have seen humanitarian organizations (HOs) having to save more lives and reduce more human suffering under increasing funding constraints (United Nations OCHA, 2022). Hence, HOs find themselves under pressure to better leverage the knowledge, skills, and abilities (KSAs) of field-level personnel into their humanitarian operations (Rajakaruna et al., 2017). They do so by, for example, adopting the Core Humanitarian Competency Framework, which outlines how aid workers are to be empowered to accomplish performance objectives against the backdrop of rapid changes in beneficiaries' needs (Kovács & Spens, 2007; Larson & Foropon, 2018; Obrecht, 2019b). This aligns with the scientific literature, which has also recognized that improving humanitarian operations depends on the ability of aid workers to adaptively perform their assigned tasks in the face of challenges that may not be well defined and arise unexpectedly (Gottwald, 2010; Meduri, 2020; Swords, 2007).

Indeed, field offices' most critical challenges often involve dynamic changes in beneficiaries' demands and locations (Obrecht & Bourne, 2018). Corresponding insights from the field suggest that aid workers' capacity to be personally adaptable to changes is closely linked with performance in fulfilling more of beneficiaries' needs (Allana & Sparkman, 2014; Mercy Corps & IRC, 2016). Here, adaptability refers to the capacity to adjust behaviors and practices in response to an emerging situation (Griffin et al., 2007). However, after-action reviews of humanitarian operations indicate that aid workers often struggle in practice to adapt appropriately to the dynamics of crises (Obrecht & Bourne, 2018). Against this background, we focus on two factors that are inherent to humanitarian operations and argue that their interplay is a determinant of aid workers' adaptability.

Accepted by Sushil Gupta, after three revisions.

First, HOs expect their field office leadership to facilitate the adaptability of aid workers vis-à-vis situational changes (Trainor & Velotti, 2013; Wheeler et al., 2013). Humanitarian leadership toolkits emphasize that field leaders should act decisively when setting goals and make all important decisions with authority and discipline (Canton, 2013; Clarke, 2014; Wheeler et al., 2013). For example, a study on the Italian Red Cross found that field leaders adopt an authoritarian style to quickly instruct people to carry out assigned tasks during emergencies (Wheeler et al., 2013). Largely rooted in military thinking (Hyllengren, 2017; Tomasini & Van Wassenhove, 2009), the authoritarian leadership style provides unambiguous instructions on what and how decisions are to be made in fast-changing situations (H. Wang & Guan, 2018). The rationale for using an authoritarian leadership style in humanitarian operations is to relieve people from operational pressures, thus offering them time and psychological resources for adapting to rapid situational changes while also facilitating a speedy implementation (Hermann & Pagé, 2016).

Second, HOs attract and recruit highly motivated people. Based on survey findings, aid workers show high personal dedication to serve the people affected (Skeoch et al., 2017). While mixed or self-interested motives may exist, most aid workers perceive their job as a calling and express strong prosocial motives (Tassell & Flett, 2011). Theoretically, prosocial motivation (defined as the personal desire to improve the situation of other people) invokes a sense of self-initiation and autonomy (Grant & Berg, 2011). When people such as aid workers have strong prosocial motives, their effort at work focuses more on personally confronting challenges and creating positive outcomes (Grant, 2007; Grant & Ashford, 2008; Grant & Berg, 2011). Case in point: Firefighters with stronger prosocial motives show greater persistence and performance on rescue missions (Bolino & Grant, 2016).

In sum, whereas HOs' guidelines and manuals commonly highlight the relevance of the authoritarian leadership style for adaptive responses (Wheeler et al., 2013), organizational behavior (OB) theorizing relates improved adaptability to the strength of individuals' prosocial motives (Grant & Berg, 2011). Both matter in the context of the present study, which is why we seek to jointly study both factors, but more importantly, to also consider the interaction of authoritarian leadership (H. Wang & Guan, 2018) and aid workers' prosocial motivation (Grant & Berg, 2011) to explain variance in aid worker adaptability, which is the core competence for fulfilling beneficiaries' needs (Hockaday, 2014; McKay & MacLachlan, 2000). Specifically, we hypothesize that although authoritarian leadership is perceived as improving adaptability by creating clear structures for aid workers to follow, it actually curbs their sense of self-initiation and autonomy, which highly motivated people need to stay proactively engaged with the context (Weinstein & Ryan, 2010). Thus, while it may work on those who have a weaker prosocial motive, authoritarian leadership is likely to elicit frustrating reactions, such as actively withdrawing efforts and dedication, in many aid workers by reducing their autonomy, ownership, and control over their work (Grant, 2008). This theorizing encompasses the observations and anecdotes that question the widely held belief that adaptability is always improved when leaders authoritatively command and control their personnel (Hockaday, 2014; Humphries, 2013).

Our research extends, differs from, and builds on previous literature on humanitarian operations in the following key ways. First, our data show that while the authoritarian leadership style is often regarded as useful for emergency environments (Boin et al., 2013; Hannah et al., 2009), the practice of authoritarian leadership is actually ill-suited for improving adaptability in humanitarian operations due to aid workers' clearly prosocial motivations (Tassell & Flett, 2011). Aid workers' prosocial motivations are thus at odds with the often-lauded military logic of authoritarian leadership, with its heavy emphasis on command and control (Tomasini & Van Wassenhove, 2009).

Second, a large body of studies have investigated the impact of adaptability on performance from a response-level perspective (Obrecht, 2019b; Tomasini & Van Wassenhove, 2009); however, research has scarcely explored how adaptability is enacted at the level of individual aid workers. However, the humanitarian sector has increasingly called for enhancing individuals' adaptability, as they are the ones most closely facing the dynamic changes in beneficiaries' needs, movements, and contexts (Clarke, 2018; Obrecht & Bourne, 2018; Stoddard et al., 2015). Therefore, the individual level of our analysis directly addresses the newest Core Humanitarian Competency Framework/Standards (Obrecht, 2019a). Relatedly, while a substantial body of studies link the individual performance of field personnel with improvements in HOs' overall operational performance (De Leeuw, 2010; Jusoh et al., 2021), research has yet to fully explore the factors that positively influence aid workers' job performance in humanitarian operations (Rajakaruna et al., 2017). Thus, our study fills this gap by considering the impact of individual adaptability, as a key behavioral competency, on workers' ability to complete necessary tasks and objectives (Haavisto, 2014).

Third, while field observations regularly express concerns over ineffective leadership (Clarke, 2014; Round Table on Humanitarian Leadership, 2019), research in operations management (OM) has only just begun to cover that territory (e.g., Salem et al., 2019). This is partly due to the difficulty of obtaining primary data from humanitarian operations (Starr & Van Wassenhove, 2014) but also because behavioral dynamics are not central to the dominant methods and mindsets in OM, despite their undoubted relevance for operations (Gunasekaran et al., 2018). In response to calls for interdisciplinary research with primary data (Prakash et al., 2020; Villa, 2019), our study integrates two disciplines that have largely been isolated. In doing so, our study underscores OB theorizing as a key direction for complementing OM's scope, which is to speak meaningfully to human-centric operations (Loch & Wu, 2007; Villa, 2019). Ultimately, our study constitutes a significant contribution to the nascent stream of data-driven research on leadership in humanitarian operations (Salem et al., 2019), thanks to its relatively large size and diverse breadth of hard-to-reach survey participants

(cf. Clarke, 2014), as well as rich qualitative insights from subsequent expert interviewees.

Our paper has the following structure: Section 2 conceptualizes our research model by integrating humanitarian field reports with the operations management, prosocial motivation, and leadership literature. Section 3 discusses our methodology. Section 4 provides the findings of our data analysis. Section 5 introduces the qualitative findings from the expert interviews. In Section 6, we discuss the implications of the overall findings for both theory and managerial practice. In Section 7, we discuss the limitations of the study and opportunities for future research.

2 | Literature Review

2.1 | Job performance of aid workers

Improving humanitarian operations largely depends on the performance of individual aid workers (De Leeuw, 2010; Jusoh et al., 2021). Due to rising expectations from donors, HOs rely on aid workers to complete key operational objectives with limited resources (Rajakaruna et al., 2017; Swords, 2007). While HOs have developed different internal methods for measuring the performance of their aid workers, all of them seek to evaluate aid workers' ability to achieve predefined operational performance goals (Beamon & Balcik, 2008; Pulakos et al., 2000). While such goals can vary widely, emphasis usually falls on efficiency and effectiveness referring, respectively, to the best use of scarce resources in work-related processes and the timeliness in accomplishing activities like aid delivery (Santarelli et al., 2013). Likewise, team productivity (i.e., the overall number of beneficiaries supported given the resources) and the quality of creative solutions are also considered crucial in humanitarian operations (de Leeuw, 2010; Lu et al., 2016). Taken together, aid workers' ability to achieve such interdependent performance goals comprises their overall operational job performance.

2.2 | Individual adaptability relates to the job performance of aid workers

Rapid situational changes in humanitarian operations are commonplace. HOs must respond to the problems (e.g., beneficiaries' needs) that impinge on their operations in unpredictable ways (Obrecht, 2019a). Such problems often overwhelm HOs' operational capacity and constrain aid workers' performance (Cahill, 2003). Therefore, the field personnel themselves are called upon to be prepared to adapt their behaviors and actions to retain the ability to perform their job requirements. For example, to minimize infant death, the United Nations Children's Fund (UNICEF) provided Haitian mothers with infant feeding products after the 2010 earthquake, without initially realizing that most mothers did not know how to use this nutritional aid properly (e.g., they often gave it to their noninfants as a regular food; Ayoya et al., 2013). In response, some aid workers realized that they needed to shift their task focus from delivery to education, as they had to quickly teach mothers how to use infant formula (Ayoya et al., 2013). Generally, aid workers must quickly learn how to take on unexpected responsibilities (e.g., search and rescue missions for finding Chilean miners; Useem e al., 2011), integrate new team members from different cultures, or adapt to changes in operating procedures (e.g., nongovernmental organization [NGO]–military collaborations in Metcalfe et al., 2012). As these examples illustrate, aid workers must quickly grasp unfamiliar work processes and, when necessary, learn new ways of performing tasks (Obrecht & Bourne, 2018), all of which require adaptability competency (Pulakos et al., 2000). Accordingly, adaptability is recognized in the Core Humanitarian Competency Framework/Standards as the most important competency in humanitarian performance management (Hockaday, 2014). Fittingly, a survey of 100 aid workers recognized adaptability as the most valued skill for performing well in humanitarian operations (Kovács & Spens, 2007; McKay & MacLachlan, 2000).

In short, aid workers are expected to accomplish designated performance objectives against the backdrop of rapid changes in beneficiaries' needs, which requires a high degree of adaptability (Larson & Foropon, 2018; Obrecht, 2019b). This relationship is echoed in OB research, which finds that employees' performance requires personal responsiveness and agility in volatile situations (Cullen et al., 2014; Ployhart & Bliese, 2006). However, as sensible as this hypothesis sounds, scholars have yet to uncover empirical evidence for the relationship between aid worker adaptability and job performance. This is because the focus has largely been on the institutional level of humanitarian responses (e.g., Baharmand et al., 2019; Obrecht, 2019b). To close this gap, we seek to test the following hypothesis:

Hypothesis 1. *Aid workers' individual adaptability is positively related to their job performance during humanitarian operations.*

2.3 | Interplay of prosocial motivation and authoritarian leadership influences aid workers' adaptability

HOs expect their field office leadership to foster the adaptability of aid workers (e.g., UNICEF, 2015). Traditionally, leaders strive to do so by using command-and-control behaviors that facilitate swift decisions (Campbell & Clarke, 2018; Collinson & Schenkenberg, 2019). Also known as authoritarian leadership, this leadership style entails proactively making all decisions regarding operating procedures, schedules, roles, and responsibilities (Gottwald, 2010). The logic is that leaders should provide their personnel with the stability needed to stay focused on their tasks during rapid changes (Cahill, 2003). People who work in fast-changing situations (like humanitarian operations) can be overwhelmed by a feeling of inefficacy (Pfeifer, 2013). Hence, leaders in these situations view their role as one that helps their personnel stay focused by giving concrete guidelines and preventing

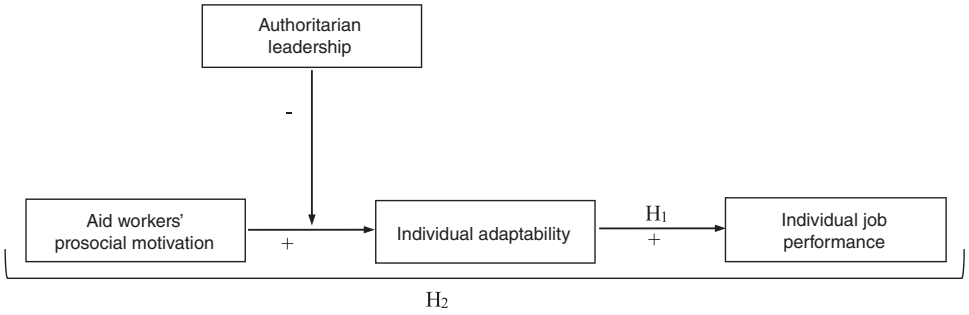

FIGURE 1 Hypothesized moderated mediation model

possible deviations during implementation (Canton, 2013). The common narrative is that aid workers can better adapt to changes in their task requirements when their leaders resort to authoritarian leadership, that is, when the leader tells aid workers how and when they should perform their tasks (Hannah et al., 2009) and manage crises (Demiroz & Kapucu, 2012; Trainor & Velotti, 2013).

Another salient characteristic of humanitarian operations is their ability to attract highly motivated people who are willing to risk their lives for needy beneficiaries (Skeoch et al., 2017; Tassell & Flett, 2011). Indeed, field study findings (Uny, 2008) suggest that the primary reason that people sign up as aid workers is their intrinsic desire to help and improve the lives of other people (Grant & Berry, 2011). Often, aid workers describe their motivation in prosocial phrases like "helping those in need" and "uplifting people in vulnerable positions" (Ashcroft, 2015; Polak, 2018). Theoretically, strongly motivated people with a prosocial cause are inclined to take ownership of their actions—a testament to their natural inclination for personal autonomy, which is a key characteristic of any intrinsically driven motivation (Van den Broeck et al., 2016). According to Grant (2008), people with prosocial motives may feel a "magnetic pull" toward their work when they are allowed to autonomously perform tasks that ultimately benefit others. This description squarely applies to most aid workers, who typically set themselves up for challenging goals and continuously look for ways to help beneficiaries (Bjerneld et al., 2006; Skeoch et al., 2017). As such, personal autonomy allows aid workers' prosocial motive to flourish (Cahill, 2003). As field aid workers say, "When people feel good about themselves, they work better" (Cahill, 2003, p. 99). Indeed, people with a stronger prosocial motive dedicate more time and energy to their work (Cai et al., 2019; Grant, 2008).

Interestingly, these two aspects—prosocial motivation and authoritarian leadership—have never been jointly considered in theorizing, even though merging these perspectives may help explain how field office leadership can fail. Given that most aid workers have a strong, intrinsic desire toward prosocial motives (e.g., rescuing and helping beneficiaries), they are inherently inclined to practice autonomy and self-initiation. However, working under authoritarian leadership tends to undermine the autonomy and self-initiation that are central to prosocial motives (Van den Broeck et al., 2016). Naturally, aid workers who rely on prosocial motives will perceive authoritarian leadership as a violation of their self-determination and thus react by, for example, disengaging with multiple tasks, failing to embrace emerging tasks when required to do so, and trying to get even with the leader. Therefore, while authoritarian leadership may appear necessary in contexts where individuals lack a strong prosocial motive to take on challenging tasks (e.g., military contexts, Hyllengren, 2017; Pfeifer, 2013), it is theoretically counterproductive for improving aid worker adaptability in humanitarian operations. Hence, with the second hypothesis, our aim is to test the interaction effect of aid workers' prosocial motivation and their leaders' authoritarian style on subsequent dynamics, as spelled out in Hypothesis 1:

Hypothesis 2. *The less that authoritarian leadership is practiced in the field office team during humanitarian operations, the stronger the positive impact of aid workers' prosocial motivation on their individual adaptability, which ultimately relates positively to their job performance*.

Figure 1 depicts the full moderated mediation model as reflected in Hypothesis 2.

3 | Research Method

3.1 | Sample and data collection

We collected a sample of 299 aid workers via a voluntary and anonymous online survey. We requested participation among field-level aid workers because their observations of the operations can reduce possible perception biases in the data (Podsakoff et al., 2012). Please see the Online Appendix for more comprehensive information about our data collection and survey operationalization.

3.2 | Respondent characteristics

The survey respondents worked across 101 different HOs, including United Nations agencies (e.g., UNICEF),

international NGOs (e.g., Save the Children), and many local agencies. Those respondents who were categorized as members of the same HOs (e.g., International Committee of the Red Cross, ICRC) were members of separate field offices in different countries (e.g., ICRC members who operated in Afghanistan, Nigeria, and South Sudan). The Online Appendix contains more comprehensive information about the respondents' demographic backgrounds.

3.3 | Measurement scales

We operationalized our theoretical constructs through validated and established measurement scales that have been previously used in humanitarian operations, motivation, and leadership research. Prior to conducting the survey, we asked six aid workers with field experience to evaluate the measurement scales in terms of clarity, accuracy, and relevance to the humanitarian setting. Expert review is an effective strategy for reducing nonresponse bias because it can uncover vague questions that may lower data quality (Olson, 2010). Table 1 depicts the list of items for measurement scales along with their associated factor loadings, which are the standardized regression coefficients showing the correlation between the latent theoretical construct and each item in the measurement scale (Salkind, 2012). Regarding the measure of our dependent variable, many HOs (55%) do not monitor specific performance measures, and only a few (25%) report on basic performance metrics (Blecken, 2010). Of those that measure performance, their measurement is based on different context-specific metrics (Haavisto & Goentzel, 2015). For this reason, obtaining comparable data on the objective measures of performance across several HOs is rather infeasible. Instead, similar to Moshtari (2016) and Salem et al. (2019), we obtained aid workers' perception of their job performance, which allowed us to meaningfully analyze the data across different HOs. Such self-evaluation in the performance appraisal process is a common practice in HOs (Swords, 2007) and has been frequently used in research on commercial organizations (Singh et al., 2016). We obtained ratings on eight key operational performance goals based on Kearney et al.'s (2009) measure.

3.3.1 | Control variables

We controlled for individual (i.e., tenure, gender, leader gender, education, and local vs. international status) as well as contextual (i.e., relief vs. development setting) factors that are likely to affect prosocial motivation and authoritarian leadership and can thus be deemed relevant control variables (Bernerth & Aguinis, 2016). We chose tenure because aid workers with higher tenure generally have more experience in adapting to changes (which may happen irrespective of leadership intervention), as well as a stronger inclination to internalize norms like authoritarian leadership. We selected gender because the research suggests that women tend to be more prosocially motivated than men (Diekman & Clark, 2015) and may thus react differently toward an authoritarian leader. Prior research also suggests that people hold different perceptions about authoritarian behaviors when the leader is male or female (A.-C. Wang et al., 2013). Additionally, we controlled for aid workers' level of education since research shows that a better education level is related to increased self-esteem and autonomy, as well as more negative perceptions of authoritarian leadership (Mingjian & Shuisheng, 2011). Similarly, we controlled for the operational context (i.e., a relief vs. development program): In the former scenario, aid workers face greater pressure in terms of time, uncertainty and scale and may hence perceive authoritarian treatment as natural and less threatening to their activities.

We used aid workers' status (as locals or expatriates) as a proxy measure to control for cultural differences in the perception of authoritarian leadership between Global Northern and Southern nations (cf. Jackson, 2016). Global North and South, respectively, represent developed and more democratic vs. developing and less democratic countries across any continent (Shome, 2019). The locals comprised 68% of respondents and most of them came from Global South nations (i.e., 49% Africa, 40% in developing nations of Asia, 7.5% Europe, and 2% South and North America). On the other hand, 32% were expatriates who mainly belonged to Global North countries (i.e., 65% Europe, 10% North America, 3% Australia, and the remaining 22% belonged to Asia and Africa). By controlling for these variables, we delineated potentially spurious effects that may explain variability while minimizing possible endogeneity bias that may happen due to omitting theoretically relevant variables (Ketokivi & McIntosh, 2017).

4 | Analysis and Results

Based on the recommendations of Aiken and West (1991) and Dawson (2014), we began by subtracting the mean of each variable from its original value and then dividing the result by the standard deviation to z-standardize the independent variable and moderator. As likewise recommended, we did not z-standardize the mediator and dependent variables so that their regression coefficients would indicate their actual variability. Moreover, considering that the same survey respondents provided ratings for all measurement scales, we used Harman's single-factor test to check if common method variance (CMV) bias presents a systematic problem. Harman's single-factor test loads all variables on one factor in a confirmatory factor analysis (CFA) to determine if any potential errors in the measurement (and not the theoretical model) account for more than 50% of variance (Tehseen et al., 2017). In our case, the first factor in CFA accounts for only 27% of the variance, which indicates that CMV bias is unlikely to confound interpretations of our results.

TABLE 1 List of measurement scales and factor loadings

Item	Measurement scale items	*Factor
	Aid workers' prosocial motivation (adopted from Grant (2008))	
	Likert rating scale: strongly disagree (1) to strongly agree (7)	
	What is your reason for working in your organization?	
1	I want to have positive impact on others	0.79
2	I want to help others through my work	0.89
3	It is important to me to do good for others through my work	0.90
4	I care about benefiting others through my work	0.80
	Authoritarian leadership (adopted from Huang's et al. (2015))	
	Likert rating scale: strongly disagree (1) to strongly agree (7)	
	**Please indicate how much you agree with the following statements	
1	My manager emphasizes that our team must have the best performance of all the teams in the organization	0.48
2	I feel pressured when working with my manager	0.69
3	My manager criticizes us when we cannot accomplish our tasks	0.68
4	My manager makes all decisions in team whether they are important or not	0.66
5	My manager exercises strict discipline over subordinates	0.66
6	We have to follow my manager's rules to get things done. If not, he or she punishes us severely	0.76
7	My manager asked me to obey his/her instructions completely	0.77
8	My manager always has the last say in the meeting	0.68
9	My manager always behaves in a commanding fashion in front of employees	0.74
	Individual adaptability (adopted from Griffin's et al. (2007))	
	Likert rating scale: almost never (1) to very often (7)	
	**Please rate how often you perform following behaviors in your team.	
1	Adapting well to changes in core tasks	0.84
2	Learning new skills to help me adapt to changes in my core tasks	0.79
3	Coping with changes to the way I have to do my core tasks	0.87
	Individual job performance (adopted from Kearney's et al. (2009))	
	Likert rating scale: far below average (−3) to far above average (+3)	
	In comparison to other individuals who perform similar tasks in your team, how do you evaluate your performance in terms of the following criteria?	
1	Accomplishing objectives	0.87
2	Problem-solving initiatives	0.80
3	Efficiency in all work-related processes	0.85
4	Efficiency in achieving goals	0.88
5	Overall output	0.89
6	Quality of creative ideas	0.82
7	Team productivity	0.83
8	Overall achievement	0.89

*Factor loading shows the correlation between a scale item and the latent construct that the item measures (see Section 3.3).

4.1 | Measurement model reliability and validity

We also examined the degree to which our operationalization of the study variables accurately reflects the theoretical constructs. First, we checked the convergent validity of the measurement scales—that is, the extent to which the scales can accurately measure the theoretical constructs. We thus calculated Cronbach's alpha (CA) and composite reliability (CR). The CA and CR are both estimates of internal consistency, such that a scale is a reliable measurement when CA and CR values are 0.7 and above (Peterson & Kim, 2013). Although these tests demonstrate sufficient convergent validity, we also calculated the average variance extracted (AVE) to measure the amount of variance captured by a construct versus the amount due to measurement error. AVE values at or above.50 are acceptable, although an AVE slightly below .50 can still indicate acceptable convergent validity in field

TABLE 2 Measurement properties of constructs

	Average varaiance extracted (AVE)	Composite reliability (CR)	Cronbach's alpha	Range of factor loading
Cutoff values	>0.50	>0.80	>0.70	>0.40
Aid workers' prosocial motivation	0.72	0.91	0.87	0.79–0.90
Authoritarian leadership	0.47*	0.89	0.86	0.48–0.77
Individual adaptability	0.70	0.87	0.78	0.79–0.87
Individual job performance	0.74	0.96	0.95	0.80–0.89

*Generally, AVE values of 0.50 and above are acceptable. However, AVE slightly below 0.50 can still indicate acceptable convergent validity if the associated CR value is higher than 0.60, which is the case here (Henseler et al., 2015).

studies, given that their CR values are higher than 0.60 (Henseler et al., 2015). Additionally, we presented the factor loadings to show the correlation of the latent theoretical construct and each item in a measurement scale. Convergent validity exists when factor loadings have a value of .40 and above (Salkind, 2012). Table 2 shows that the CA, CR, AVE, and factor loading values for all our measurement scales are sufficiently high and satisfy the necessary cutoff values.

Then, we checked discriminant validity (the degree to which measurement scales are empirically independent and unrelated), which requires that the correlations among pairs of constructs be smaller than the square root of AVE for each construct (Shiu et al., 2011). Recently, scholars have also suggested using the heterotrait–monotrait ratio of the correlations (HTMT) to assess discriminant validity. HTMT indicates whether the correlations of items within the same scale are stronger than correlations of the items across different scales; discriminant validity exists when the HTMT value is below 0.85 (Henseler et al., 2015). Table 3 reports the square roots of AVE and HTMT values, showing that our measurement scales have strong discriminant validity. We also conducted a CFA to measure how well our hypothesized relations fit the sample data in comparison to no model (Jackson et al., 2009). The common goodness-of-fit measures (root mean square error of approximation [RMSEA] = 0.05, standardized root mean square residual [SRMR] = 0.06, comparative fit index [CFI] = 0.94) suggest that the overall model fit (with all relevant factors) is sufficiently high (Hooper et al., 2008). For example, the values of RMSEA and SRMR should be less than 0.07 and 0.08, respectively, to indicate a well-fitted model; our case met these thresholds. Likewise, the CFI values being greater than 0.90 add further confidence that our hypothesized model is well-fitted.

4.2 | Moderated mediation analysis

After investigating the psychometric properties of the measurement scales, we calculated the estimates for the structural model. First, we looked at the intercorrelations among the constructs to detect the direction and strength of the linear relationship between variables (see Table 3). Prosocial motivation showed a statistically significant correlation with individual adaptability ($r = 0.29$, $p < 0.001$) and job performance ($r = 0.15$, $p < 0.01$). Similarly, individual adaptability showed a statistically significant correlation with job performance ($r = 0.38$, $p < 0.001$). These correlations are consistent with the theoretical expectation that prosocially motivated aid workers are likely to be better at adapting to changes, which is positively associated with improved job performance.

We proceeded to estimate the interaction relationship in the model by using a covariance-based structural equation modeling approach, which tests the extent to which the empirical data fit our hypothesized theoretical relations (Edwards, 2011). This approach is based on the moderated mediation model (also known as the conditional indirect effects model), which uses an ordinary least squares regression-based path analytic framework to test the proposed hypotheses (Hayes, 2018; Preacher et al., 2007). We first tested how authoritarian leadership interacts with prosocial motivation to affect aid workers' adaptability. Statistically, we regressed adaptability on prosocial motivation, authoritarian leadership style, and the interaction of prosocial motivation and authoritarian leadership style. The interaction effect needs to be statistically significant to infer that the association between prosocial motivation and individual adaptability depends on the level of authoritarian leadership style. Given that this inference was accurate, we then calculated how the interaction effect on adaptability is indirectly associated with aid workers' job performance. Thus, we regressed job performance on adaptability, prosocial motivation, authoritarian leadership, and the interaction term. We also used the robust estimator of variance to ensure that the regression results are robust against the possible impact of heteroskedasticity—a situation in which some observations (e.g., extremely high mean values in prosocial motivation) contain larger disturbance variance. Such a disturbance variance could produce greater variability in the outcome (Yang & Yuan, 2016).

Table 4 provides the coefficients and *p*-values of the model. First, consistent with field reports (e.g., Obrecht & Bourne, 2018), we found confirmation for Hypothesis 1: namely, that the association between aid workers' adaptability and job performance is positive and statistically significant (*coeff* = 0.37,

TABLE 3 Means (*M*), standard deviations (*SD*), intercorrelations, Fornell–Larcker, and heterotrait-monotrait (HTMT) values

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11
1 Aid workers' prosocial motivation	6.39	1.03	(0.85)	(0.04)†	(0.34)†	(0.16)†							
2 Authoritarian leadership	3.20	1.31	0.03	(0.69)	(0.06)†	(−0.03)†							
3 Individual adaptability	6.03	0.87	0.29***	0.05	(0.84)	(0.44)†							
4 Individual job performance	5.70	0.95	0.15**	−0.03	0.38***	(0.86)							
Control variables													
5 Gender	1.24	0.43	0.03	−0.10	−0.09	−0.15**	(−)						
6 Leader gender	1.21	0.40	0.09	−0.06	−0.03	−0.10	0.08	(−)					
7 Status (local vs. expatriate)	1.32	0.47	−0.09	−0.19***	−0.25***	−0.16**	0.17**	−0.02	(−)				
8 Education	4.69	0.68	−0.08	−0.02	−0.04	−0.00	0.03	−0.02	0.15**	(−)			
9 Tenure with the team	26.7	32.7	−0.04	0.00	−0.03	0.07	−0.14*	0.08	−0.13*	0.15*	(−)		
10 Relief operations	0.52	0.50	−0.03	−0.07	−0.19***	−0.14*	−0.06	0.07	0.13*	0.01	−0.16**	(−)	
11 Development operations	0.26	0.44	0.05	0.04	0.15**	0.12*	0.11	−0.06	−0.06	0.01	−0.01	−0.62***	(−)

Notes: $N = 299$. Nondiagonal values are the correlations among constructs. Diagonal values in parentheses are the square roots of the variance shared between the constructs and their measurement scales (i.e., Fornell–Larcker's square roots of AVEs) and should be larger than correlations to indicate discriminant validity. Heterotrait–monotrait values are also provided in parentheses with † sign and should be lower than 0.80 to indicate strong discriminant validity between two constructs. Gender and leader gender were coded 1 = male and 2 = female. Status was coded 1 = local and 2 = expatriate. Tenure with team was measured in number of months. Relief and development operations were each coded 0 = no and 1 = yes.
*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

TABLE 4 Coefficients of moderated mediation model with control variables

	Individual adaptability (Mediator)				Individual job performance			
	Coeff	*SE*	*p*	[95% CI]	*Coeff*	*SE*	*p*	[95% CI]
Gender	−0.20	0.11	0.08	−0.42, 0.03	−0.24	0.13	0.06	−0.50, 0.01
Leader gender	0.08	0.12	0.50	−0.14, 0.31	−0.28	0.14	0.05*	−0.56, −0.00
Status (local vs. expatriate)	−0.35	0.11	0.00***	−0.57, −0.14	−0.10	0.11	0.37	−0.32, 0.12
Tenure with the team	−0.00	0.00	0.13	−0.00, 0.00	0.00	0.00	0.14	−0.00, 0.00
Education	0.03	0.08	0.72	−0.13, 0.19	0.01	0.07	0.88	−0.14, 0.16
Relief operations	−0.26	0.10	0.02*	−0.47, −0.04	−0.06	0.13	0.65	−0.31, 0.20
Development operations	0.08	0.120	.52	−0.16, 0.32	0.12	0.15	0.40	−0.16, 0.41
Aid workers' prosocial motivation (*PM*)	0.26	0.07	0.00***	0.11, 0.40	0.08	0.06	0.20	−0.04, 0.19
Authoritarian leadership (*AL*)	0.01	0.07	0.84	−0.13, 0.16	–	–	–	–
Interaction effect (*PM* × *AL*)	−0.29	0.13	0.03*	−0.54, −0.03	–	–	–	–
Individual adaptability	–	–	–	–	0.37	0.06	0.00***	0.24, 0.49
		Adjusted $R^2 = 0.19$				*Adjusted* $R^2 = 0.19$		
		$F = 5.09$, $p = 0.00$***				$F = 9.10$, $p = 0.00$***		

Notes: $N = 295$. CI, confidence intervals.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

SE = 0.06, $p = 0.000$, 95% CI[0.24, 0.49]). Most importantly, we found support for Hypothesis 2, that is, the interaction hypothesis (*coeff* =−0.29, *SE* = 0.13, $p = 0.030$, 95% CI[−0.54, −0.03]). The interaction means that prosocial motivation is positively associated with improvements in aid workers' individual adaptability when the level of practiced authoritarian leadership is low. This interaction explained 19% of the variance (*R*-squared = 0.19, $F = 5.09$, $p = 0.000$). As we expected, status (local vs. expatriate) and relief operations emerged as statistically significant control variables, while the development program did not. This means, if not controlled for, those variables could influence the relations in the model independently of the hypothesized interaction between leadership style and prosocial motivation. That said, Hypothesis 2 also received empirical support without including any control variables (Table 5 presents the results with no control variables). Figure 2 graphically demonstrates the interaction effect via the simple slopes at −1 and +1 standard deviations of authoritarian leadership's mean, that is, the effect of aid workers' prosocial motivation on their

TABLE 5 Coefficients of moderated mediation model without control variables

	Individual adaptability (Mediator)				Individual job performance			
	Coeff	*SE*	*p*	[95% CI]	*Coeff*	*SE*	*p*	[95% CI]
Aid workers' prosocial motivation (PM)	0.28	0.08	0.00***	0.12, 0.44	0.05	0.06	0.40	−0.07, 0.17
Authoritarian leadership (AL)	0.09	0.08	0.22	−0.06, 0.24	–	–	. —	–
Interaction effect (PM × AL)	−0.33	0.15	0.03*	−0.62, −0.03	–	–	–	–
Individual adaptability	–	–	–	–	0.40	0.06	0.00***	0.28, 0.52
		Adjusted $R^2 = 0.11$				*Adjusted* $R^2 = 0.15$		
		$F = 4.67$, $p = 0.00$***				$F = 16.01$, $p = 0.00$***		

Notes: $N = 299$. CI, confidence intervals.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

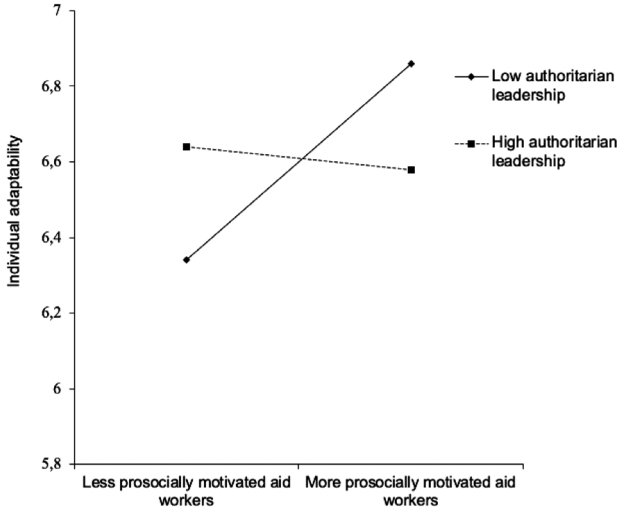

FIGURE 2 Simple slopes at −/+1 SD of authoritarian Leadership's mean: Aid workers' higher prosocial motivation is significantly associated with their increased individual adaptability when the leader is less authoritarian (*coeff* = 0.44, *SE* = 0.14, $p = 0.000$, 95% confidence interval [0.16, 0.80])

adaptability at lower (*coeff* = 0.44, *SE* = 0.14, $p = 0.000$, 95% CI[0.16, 0.80]) and higher (*coeff* = 0.06, *SE* = 0.12, $p = 0.601$, 95% CI[−0.16, 0.29]) levels of authoritarian leadership.

As expected, the direct effect of prosocial motivation on job performance was positive but not statistically significant (*coeff* = 0.08, *SE* = 0.06, $p = 0.200$, 95% CI[−0.04, 0.19]). To further probe the relationship, we estimated the indirect effect of aid workers' prosocial motivation on job performance via their level of adaptability based on the results in Table 4. This estimate shows that individual adaptability mediated the association between prosocial motivation and job performance (*coeff* = 0.10, *SE* = 0.03, 95% CI[0.05, 0.17]). Moving forward, we calculated bias-corrected confidence intervals (CIs) via a bootstrapping method (Hayes, 2018) to test the second part of Hypothesis 2, that is, whether the confirmed interaction effect of authoritarian leadership and prosocial motivation on individual adaptability was also positively associated with job performance. The lack of zero in the bias-corrected CIs (Preacher et al., 2007) signals that the indirect effect of prosocial motivation on job performance meaningfully differs from zero at varying levels of authoritarian leadership. The top section of Table 6 provides the coefficients for the conditional indirect effects based on 10,000 bootstrapped samples for low (mean −1 *SD*) and high (mean +1 *SD*) levels of authoritarian leadership, as well as the difference between low and high authoritarian leadership. We confirmed the second part of Hypothesis 2: When working with less authoritarian leaders, aid workers with high prosocial motivation had better individual adaptability, which then enhanced their job performance. The same pattern of results emerged when all control variables were excluded (see the lower section of Table 6). Consistent with general practice (e.g., Emergency Preparedness & Support Team, 2019), we also found that aid workers who were less prosocially motivated showed decreased adaptability when leaders were not authoritarian.

As an additional check, we also reported the index of moderated mediation, which is the slope of the regression line that quantifies how the association between prosocial motivation and job performance changes as the leader adopts a less versus. more authoritarian style (Hayes, 2018). The index is statistically significant at the 95% CI when the control variables are included (*coeff* = −0.10, *SE* = 0.06, *CI*[−0.23, −0.00]) or excluded (*coeff* = −0.13, *SE* = 0.07, CI[−0.28, −0.01]), which further bolsters our confidence in the results.

5 | Additional exploratory interviews on leadership in humanitarian operations

We complemented our empirical findings with semistructured exploratory interviews. We managed to conduct 31 expert interviews over 7 months, which captured aid workers' personal experiences with leadership behaviors in humanitarian operations. Following the grounded-theory approaches (Glaser & Strauss, 1967), the lead author contacted field office leaders and supply chain executives from various HOs to collect a relatively large sample of interviewees (see Table 7). Subsequently, two raters (including the lead author) read all the interviews and independently sorted terms or phrases used by the interviewees into an emergent set of categories using an open-coding of the interview transcripts. In

TABLE 6 Indirect effect of the interaction between aid workers' prosocial motivation and authoritarian leadership on individual job performance

		Individual job performance (as outcome variable)		
	Moderator authoritarian leadership	***Coeff***	**Bootstrap std. error**	**[95% CI]**
With control variables	Low, −1 standard deviation	0.17	0.06	0.08, 0.31
	High, +1 standard deviation	0.02	0.04	−0.05, 0.11
	Difference between low and high	−0.14	0.08	−0.31, −0.01
	Index of moderated mediation	−0.10	0.06	−0.23, −0.00
Without control variables	Low, −1 standard deviation	0.20	0.07	0.10, 0.36
	High, +1 standard deviation	0.02	0.05	−0.08, 0.11
	Difference between low and high	−0.18	0.09	−0.38, −0.02
	Index of moderated mediation	−0.13	0.07	−0.28, −0.01

Note: $N = 295$ with control and $N = 299$ without control variables. *Coeff* is significant when confidence interval (CI) does not have zero. The top section of the table presents bias-corrected moderated mediation coefficients with gender, leader gender, status (local vs. expatriate), tenure with the team, education, and relief/development operations as control variables, while the lower section provides the coefficients without considering the control variable. The index of moderated mediation indicates how much the indirect effect of aid workers' prosocial motivation on individual job performance through adaptability changes as authoritarian leadership changes by one unit (Hayes, 2018).

the first analysis phase, the raters jointly checked their codes (produced from several iterations), reflected on differences, and discussed their interpretations of codes until they could agree on commonly identified categories (Corbin & Strauss, 2014). In the second phase, the lead author prepared a coding scheme that both raters used independently to code all interviews and subsequently to compute interrater agreement. Please visit the Online Appendix for all details about the reflective analysis process and intercoder reliability measure.

5.1 | Findings

5.2 | Authoritarian leadership

While we deliberately avoided asking direct questions about authoritarian leadership, the interviews nevertheless highlighted that the command-and-control approach is a common practice. Sample comments include: "I can only tell from my own experience that I face authoritarian leadership too (Participant 15)", "It actually is very common. Because you [as a leader] are dealing with people who are dependent on the resources that are in your hands" (Participant 20), and "Still in our circles, there is a lot the authoritarian leadership, but it is not very successful. It is there, but it is getting better definitely over the years" (Participant 26). The interviews made it clear that aid workers had, over the course of their careers, developed negative opinions about the efficacy of authoritarian leadership; they largely considered it an old-school approach that is ill-suited for humanitarian operations. The following excerpts describe the challenges of authoritarian leadership:

> When you are working in an emergency, you need a collaborative environment. So, I mean I have medical people, logistics people, [and] admin people working for me. I also have large national staff, international staff, and you need to get that team functioning well together—and you do not need an authoritarian leader. (Participant 9)

> After getting clear directions, there is the job that needs to be done. The question is how? What is my space of responsibility? You [as a leader] can make this space of responsibility smaller and smaller and smaller, and finally, you have just a soldier that executes a plan. That does not help in crisis … and is rather a low value for the operations. (Participant 15)

The interviews also indicated that authoritarian leadership is detrimental for the people who joined the sector with a strong motivation to help and deliver aid, thereby underscoring the importance of aid worker motivation:

> [There are] lots of risks with authoritarian approaches, and more likely the risk of clash and a breakdown in rapport with those people who got lots of energy and who need more nurturing and shaping and involving than being told where to go. (Participant 2)

> The first thing that happens to a person is that they could get demotivated. They could become afraid of making mistakes, and that is not good if you want to progress in your work. Because once you get afraid of making mistakes, you will not be able to make your own decisions. So, I think that is a downside of authoritarian leadership because it does not allow you to have your own choice and have your own way. (Participant 22)

Interestingly, the interviews refuted the widely held belief that unpredictable and rapidly evolving conditions require

TABLE 7 Sample for expert interviews

Participant	Field missions	Nationality	Gender	Tenure (years)	Position
1	International	Japanese	Male	+30	Country director
2	International	British	Male	20	Operations manager
3	Local	Jordanian	Female	5	Field office manager
4	International	French	Male	11	Operations manager
5	Local	Afghan	Female	4	Operations officer
6	International	Dutch	Male	15	Deputy coordinator
7	International	Italian	Female	7	Deputy coordinator
8	International	Slovenian	Female	20	Country director
9	International	British	Male	10	Operations manager
10	International	Romanian	Female	12	Field office manager
11	International	German	Male	5	Operations officer
12	International	French	Female	21	Country director
13	International	French	Male	7	Operations specialist
14	International	German	Male	12	Project manager
15	International	German	Male	15	Field office manager
16	International	Portuguese	Male	27	Field office manager
17	International	German	Male	12	Operations specialist
18	International	Norwegian	Female	21	Country director
19	International	Swedish	Male	9	Country director
20	Local	South African	Female	+30	Country director
21	International	Norwegian	Female	18	Country director
22	Local	Afghan	Female	6	Operations officer
23	Local	Afghan	Female	4	Operations officer
24	Local	Afghan	Female	5	Operations officer
25	International	Japanese	Female	3	Operations officer
26	International	Finnish	Female	+30	Deputy director
27	International	Swedish	Female	22	Deputy coordinator
28	International	Indian	Female	3	Operations officer
29	International	Bulgarian	Female	+30	Head of operations
30	International	Japanese	Female	7	Operations officer
31	Local	Afghan	Male	5	Program coordinator

authoritarian leaders who can reinforce discipline and obedience in emergencies (e.g., Huang et al., 2015). Instead, interviewees suggested that situational contexts (e.g., chaos, etc.) are usually an excuse to cover up personal insecurities or enforce a particular type of culture:

> I think anyone that is using an emergency [for authoritarian leadership] is making an excuse, I have seen emergency being used as an excuse for a lot of bad behaviors and a lot of bad practices, and I was trying to figure out whether that is a personality thing. But emergency is not an excuse to be a bad guy. (Participant 9)

> You have a lot of inexperienced people who are young but are brought into responsible positions, which they would never have at home. But now just because of what they are doing in this context, [they are] on a very high level of responsibility and power over other people. Sometimes people tend to use that power and cover their own insecurities just by giving orders, instead of thinking about what would be relevant for this situation and how should react. (Participant 15)

> I do not really believe that it is so much the situation that needs authoritarian leaders. I think it is the cultural context. Because I think somebody who has more of empowering attitude, they will use those values and ideas even if they are in a pressure situation. (Participant 21)

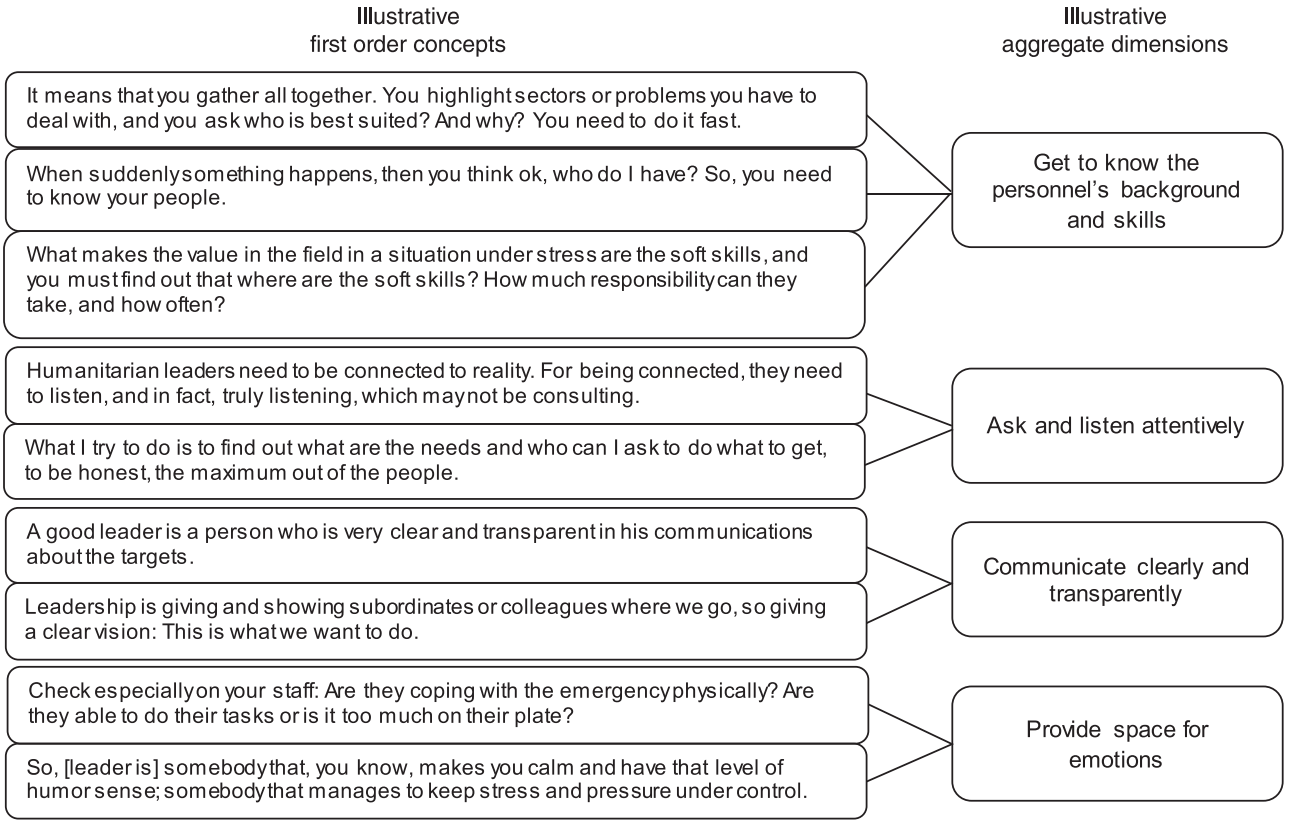

FIGURE 3 Summary of interview findings on effective leadership in humanitarian operations

> I notice that expats coming in there and sometimes feel this type of [authoritarian] leadership is necessary with certain people because that it caters to the expectations of sometimes of the teams that we have. Sometimes in sub-Saharan Africa, I have the feeling that the leadership is from international staff or national staff is a bit more top-down … I'm the boss, I'm the King and that is also partly expected. (Participant 14)

5.3 | Additional insights into (more effective) leadership in humanitarian operations

The dominant themes from the interviews corroborated our core empirical findings, namely, that highly motivated aid workers operate better without the interventions of authoritarian leaders. In fact, the interviewees suggested that successful field leaders avoid asserting strict authority over aid workers and instead adopt a style that embraces volatility and change. Sample comments on this point include the following: "Change is also the norm. This demands that leaders respond differently to that environment, to the way they handle their teams, to the way they plan and design, conceptualize their programs and report on them" (Participant 2); "You have to have several hats on as a leader" (Participant 18); and "There are [successful] leaders who adapt management styles to whoever is in team" (Participant 6). Therefore, as we reasoned, authoritarian behaviors are not an effective leadership approach for creating stability amid chaos. Instead, adaptive behaviors position leaders to leverage aid workers' motivation and nurture their energy, which will then improve their sense of ownership and initiative for performing their work. The following excerpts describe some components of effective leadership in humanitarian operations. Figure 3 also provides the summary of interview findings.

5.3.1 | Get to know the personnel's background and skills

The interviews emphasized that authoritarian leadership fails to facilitate teamwork in humanitarian operations. Instead, leaders should have frank and continuous interactions with all their personnel to fully understand their technical and soft knowledge, skills, and abilities (KSAs).

> Expectation from the leadership is that with the team, the analysis is quickly done. So very quickly, we must see in this kind of situation what are strengths within the team; what more is needed; and, whether we have enough expertise or we should bring in more [expertise]. (Participant 26)

> If you know the capacities you have available within the team, then you can do tasks fast. If you do not have that, then you have to quickly explore what [capacities] you have, which match your goals. That means that you gather all [staff] together. You highlight sectors or the problems you have to deal with, and you ask who is best suited? And why? You need to do it fast. (Participant 8)

Knowing their personnel well enables leaders to address any situational needs that arise in humanitarian operations with the resources and capacities that are available in the team.

> What makes the value in the field in a situation under stress are the soft skills, and you have to find out that where are the soft skills? How do people react under pressure? How much responsibility can they take, and how often? (Participant 15)

> I have seen the same in Congo, for instance, when we went into some of these camps that were not organized camps at the beginning. When suddenly something happens, then you think ok, who do I have? So, you need to know your people. Who do I have, who can do this, who can do that? And then you need to distribute the resources you have as best as you can. (Participant 18)

5.3.2 | Ask and listen attentively

The interviews also indicated the role of leadership in asking questions and listening attentively to the personnel instead of demanding that any operational decisions be made in line with the given directions. It is crucial that leaders avoid reinventing the wheel in time-pressed situations and instead consider how aid workers' prior skills and experiences can be applied to the ongoing operation.

> [For a leader] it is important to be a good listener to rely on others' support because in a complicated operation or environments of conflict or a disaster situation, you need to rely on the team members and you need to ask them for their opinions. (Participant 29)

> Humanitarian leaders need to be connected to reality. For being connected, they need to listen, and in fact, truly listening, which may not be consulting. I have worked a lot on this mechanism. Sometimes, we say we consult people, but in fact we have already decided what we want. We just consult to get sure to do that. But if the consultation is really to bring people together to put the issue on the table, to let people bring their views, and to select what is the best— not necessarily your views [as a leader]— then it makes a difference. (Participant 12)

> What I try to do is to find out what are the needs and who can I ask to do what to get, to be honest, the maximum out of the people. I am not there to be nice to people. This is not my aim. I aim to achieve things, but the best way to do that is to be nice to people. (Participant 15)

5.3.3 | Communicate clearly and transparently

Likewise, interviews highlighted the role of leadership in clearly communicating responsibilities and priorities to personnel because they constantly face ambiguities in humanitarian operations.

> A good leader is a person who is very clear and transparent in his communications about the targets: Who is available, who is engaged in supporting the team, and who is building good relationships with partners and other stakeholders. And, this was definitely not the case with my latest boss and also other bosses I had. (Participant 19)

> Leadership is giving and showing subordinates or colleagues where we go, so giving a clear vision: This is what we want to do. This type of giving a clear vision is one of the leadership rules. I think it is required in every chaotic situation. (Participant 30)

5.3.4 | Provide space for emotions

Ultimately, interviews underscored the role of leadership in providing emotional support to ensure that the personnel are well enough to adapt to chaotic and stressful situations and thus perform their tasks effectively. Sitting down and talking with the aid worker (as opposed to pushing to get things done fast) gives them the necessary space to keep calm and carry on.

> Check especially on your staff: Are they feeling? Are they coping with the emergency physically? Are they able to do their tasks or is it too much on their plate? Do we need additional people? Is it possible or not? Not always possible though. (Participant 13)

> In my Yemen experience, I managed to stay there for so long is that I had a great relationship

> with my supervisor. So, [he is] somebody that you know makes you calm and have that level of humor sense; somebody that manages to keep stress and pressure under control. (Participant 7)

6 | Research Contributions

6.1 | Theoretical implications

With the present study, we integrated theorizing on motivation and leadership to better understand how aid workers' adaptability impacts their operational job performance. In doing so, the study contributes to a nascent behavioral stream of research in humanitarian operations: one that acknowledges the centrality of people in operational effectiveness (Gunasekaran et al., 2018; Prakash et al., 2020; Salem et al., 2019). Our study makes three specific contributions to this particular stream of research in humanitarian operations.

First, aid workers usually face task requirements that demand adaptability to rapidly changing operating environments (Obrecht, 2019a). Whereas existing directives imply that authoritarian leadership is effective (Emergency Preparedness & Support Team, 2019), we found that its absence improves adaptability for prosocially minded individuals. This is especially noteworthy when considering that prosocial motivation is often the main reason why aid workers join HOs (Tassell & Flett, 2011). We reasoned that authoritarian leadership should be understood as a double-edged sword, as it clashes with the fundamental modus operandi of aid workers (i.e., people who are autonomously following their motivation). Considering how common the command-and-control approach is among leaders in humanitarian operations, our finding offers new theoretical insights into the efficacy of the military rationale in this specific sector.

Moreover, our exploratory approach provides in-depth descriptions that complement our novel empirical evidence. While the humanitarian sector traditionally views authoritarian leadership as a preferred style (Campbell & Clarke, 2018; Tomasini & Van Wassenhove, 2009), the interviews clearly indicated that asserting authority and control is operationally counterproductive; instead, effective leaders should engage in behaviors that leverage aid workers' motivation. Our findings highlight several behaviors that are more effective than the often-lauded command-and-control behaviors, namely, personally knowing aid workers, doing regular emotional check-ins, engaging in active listening, and having transparent communications. The interviews align with our results on this point: By deferring to aid workers' high motivations, effective leaders facilitate their personnel's desire to take ownership of their tasks in humanitarian operations. Notably, our findings add empirical weight to practitioner reports and discussions about the constraints imposed by authoritarian leadership on the success of humanitarian operations (Buchanan-Smith & Scriven, 2011; Clarke, 2014; Round Table on Humanitarian Leadership, 2019). Moreover, our exploratory approach echoes recent evidence that maintaining leadership influence is not about asserting strong authority and control over personnel (Kearney et al., 2019; Waldman & Bowen, 2016) but rather about creating rapport with motivated people who will proactively adapt so long as their autonomy is respected (Judge et al., 2004; Van Quaquebeke & Felps, 2018).

Second, although most of the research on adaptability in humanitarian operations has addressed the response level of analysis (Dubey & Gunasekaran, 2016), HOs' operational performance increasingly hinges on the higher adaptability of their personnel (Allana & Sparkman, 2014; Clarke, 2018; Mercy Corps & IRC, 2016; Stoddard et al., 2015). Our findings corroborate not only the Core Humanitarian Competency Framework but also field observations (Chandler, 2001; Swords, 2007), where improvements in individual-level adaptability positively affected operational performance.

Third, our study adds to extant research that has only just begun to substantiate practitioners' concerns with field-level, empirical data (e.g., Salem et al., 2019). While scholars have extensively benefited from using mathematical optimization modeling (Gunasekaran et al., 2018), empirical methods are still less common in this domain because of feasibility/design issues and the hard-to-reach nature of field-level data (Starr & Van Wassenhove, 2014). According to Besiou and Van Wassenhove (2015), this constitutes a serious gap because mathematical optimization modeling may not adequately represent the actual situations in which aid workers operate. To more fully unpack what is happening in the field, we provided both empirical data and qualitative interviews. Together, the findings add meaningful, evidence-based context to anecdotes about how authoritarian leadership practices often negatively impact performance in humanitarian operations (Clarke, 2014; Round Table on Humanitarian Leadership, 2019).

Beyond humanitarian operations research, our study also has implications for research on leadership in extreme contexts, which generally sees the leader's role as asserting authority and control in order to effectively rally followers toward objectives (Hannah et al., 2009; Waldman & Bowen, 2016). Our findings challenge the functional utility of authoritarian leadership in extreme contexts: We provide empirical evidence that adopting less authoritarian behaviors can produce better outcomes (even in the extreme context of humanitarian operations), so long as we consider the role of prosocial motivation as an important contextual variable. Contrary to mainstream opinion, which proposes that authoritarian leadership is effective in stressful, extreme situations that demand rapid mobilization, greater efficiency, and quick coordination (Huang et al., 2015; H. Wang & Guan, 2018), our humanitarian aid practitioners expressed more appreciation for leadership behaviors that embraced a loss of control in exchange for greater collaboration. Interestingly, these findings reflect the lessons learned from actual crises, such as the rescue operations of the Chilean miners (Useem et al., 2011). They are also corroborated by the strategic crisis management literature, which has similarly identified command-and-control organizational structures as ineffective

for crisis response (Pfeifer, 2013). In this way, we open a new avenue for studying leadership in similarly extreme operational settings (firefighting, surgical teams) where members are likely to have a strong prosocial motivation or sense of calling for their tasks (Cai et al., 2019).

6.2 | Managerial implications for humanitarian field offices

Our findings have implications for the evidence-based design of aid workers' leadership trainings. Generally, field office leaders need to be taught that the common practice of command-and-control should not be the default way of leading. The relatively high mean score of prosocial motivation in our sample indicates that leaders who carelessly adopt an authoritarian style may risk impeding the intrinsic motivations—and, by extension, adaptability—of aid workers. Alternatively, humanitarian leadership trainings should enhance leaders' capacity to better understand and communicate with their team in crisis situations. First, field office leaders should learn that understanding their staff's professional qualities is critical for the success of humanitarian operations. Thus, field office leaders need to not only work on forging personal relations and continuous interactions but might also want to have emotional check-ins that give aid workers the space to adapt to chaotic and overwhelming situations. This understanding can enable leaders to quickly identify and leverage their staff's competencies amidst urgent operational problems. Second, field office leaders should learn to maintain a two-way conversation with their staff in crises—that is, communicating objectives with clarity and listening attentively to aid workers on how they could best achieve those objectives throughout the field mission. Of course, it will take time to fully integrate these leadership skills into professional trainings; in the interim, leadership toolkits and manuals (e.g., leadership guides like Blackstock, 2016; Emergency Preparedness & Support Team, 2019) should be redesigned in order to nudge field office leaders to be more mindful of the leadership styles they adopt.

7 | Concluding discussion, limitations, and future directions

Our study's results provide several interesting directions for future studies. First, while our findings illuminate some drawbacks of authoritarian leadership for prosocial aid workers, they also reveal the style's benefit for those who are not prosocially motivated. Those individuals have a weaker personal initiative to invest their time and energy in challenging tasks that require adaptability. With this knowledge, future research may take the next step of identifying optimal leadership behaviors for aid workers without prosocial motivation. For example, some expatriates may have joined the sector as a way to escape normal life and experience adventure, while some locals may have become aid workers due to scarce employment opportunities. In either case, workers may not have the inner desire to engage in and adapt to depleting tasks on their own beyond the minimum requirements. Less prosocially motivated aid workers would likely demand initiating structure (i.e., the degree to which a leader is task-focused and provides direction to shape work roles; Dansereau et al., 2013). Thus, amid the importance of creating rapport with aid workers, leaders would also need to instill a sense of direction in less-motivated personnel.

As such, our findings draw attention to the contradictory demands that are inherent in humanitarian operations. Indeed, leaders would need to juggle displays of empowering (e.g., deferring to aid worker autonomy) and authoritarian (e.g., asserting control) behaviors in their field office interactions with motivated and unmotivated aid workers (Waldman & Bowen, 2016). While these different leadership behaviors are usually studied separately (Kearney et al., 2019), future studies may investigate the combined interactive effects of empowering and authoritarian behaviors, which would paint a more holistic view of leadership's impact on aid workers' adaptability and performance. Relatedly, scholars may explore whether and how such "code switching" can be cultivated in leaders.

Second, the common perception suggests that the authoritarian leadership style is prevalent because individuals with military backgrounds often occupy managerial roles in field offices (Buchanan-Smith & Scriven, 2011; Chandler, 2001; Emergency Preparedness & Support Team, 2019; Hermann & Pagé, 2016). While this perception derives largely from anecdotal observations, it may also be possible that there are more prosocially motivated ex-military people than are normally accounted for (e.g., ex-military personnel who join humanitarian operations out of their prosocial motives and dislike the command-and-control approach). Thus, future studies need to empirically investigate whether a military background is indeed associated with the prevalence of authoritarian behavior in humanitarian aid field offices.

Interestingly, our interview responses also hinted at the role of leaders' personal insecurities. Echoing these sentiments, research has found that personality traits explain some of the variance in the emergence of leadership styles (Ensari et al., 2011). For example, authoritarian political leaders have lower scores on emotional stability—defined as the capability to remain stable and balanced (Nai & Toros, 2020). Thus, future studies may strive to clarify the degree to which field office leaders' personality traits can explain variability in the practice of authoritarian leadership in humanitarian operations. Likewise, followers with specific personality traits (e.g., high cognitive rigidity, low emotional stability) can tolerate and even instigate authoritarian behaviors in their leaders (Thoroughgood et al., 2012). Therefore, future studies should build on theorizing about personality traits (McAdams & Pals, 2006) and follower compliance (Barbuto, 2000) in order to examine whether certain follower personalities fare better with, and even invoke, authoritarian leadership.

The interviewees similarly emphasized the importance of how leaders perceive national cultural contexts. Here,

national culture refers to "the collective programming of the mind which distinguishes the members of one human group from another" (Hofstede, 1980, p. 25). Of course, humanitarian operations require leaders to operate in diverse cultural contexts (Rodon et al., 2012). Cultural research (Gupta & Gupta, 2019; Hofstede, 1980) suggests that people's reactions to leadership depend on culture-specific values, which can differ in terms of dimensions such as power distance (i.e., the extent to which cultural norms accept and expect that authority is unequally distributed). According to this theorizing, a national cultural context characterized by low power distance interprets leader authoritarian behaviors as counterproductive, whereas high power distance contexts may perceive authoritarian leadership as a sign of paternalistic consideration and support (Hofstede, 1980; H. Wang & Guan, 2018). Building on these insights, future studies could explore whether a higher propensity for authoritarian behavior arises from the cultural context. To address such questions, scholars may need to seek out larger samples of aid workers that reflect multiple cultural dimensions.

Relatedly, the humanitarian sector consists of a large pool of stakeholders, from large international NGOs and United Nations (UN) agencies to national societies of the International Red Cross and Red Crescent Movement to small local HOs. Each of these stakeholders has a unique organizational culture (Clarke & Ramalingam, 2008), which is often strictly hierarchical and rigid in crisis settings but may be entrepreneurial and empowering in a few cases (Bowers et al., 2017). From this perspective, organizational culture is increasingly seen as a critical factor in how aid workers perceive and interpret leadership behavior at work (e.g., see Hilhorst & Schmiemann, 2002, for a review of organizational culture in Doctors without Borders–Holland). Theoretically, if aid workers find their leader's authoritarian behaviors to be consistent with the hierarchical norms of their organizational culture, they may psychologically adjust according to cultural attractiveness theory (Li et al., 2017). In this scenario, they may still retain the effect of their prosocial motivation and avoid performance loss. Alternatively, it may be that adherence to humanitarian principles imbues the culture of HOs with benevolence and morality (Mohamed & Ofteringer, 2015). When such cultural standards are practiced alongside command-and-control leadership, leaders' authoritarian behaviors are likely to be perceived as more paternalistic (Gu et al., 2020). In this sense, aid workers may attribute positive meanings to their leader's authoritarian behaviors and remain motivated for their cause. Future studies could empirically examine these theoretical propositions in more complex interactive models and, in doing so, contribute to a better understanding of organizational culture and its impact on humanitarian leadership, which is currently limited in the literature on humanitarian operations and OM (Marshall et al., 2016).

Third, given the need to increase the relevance of humanitarian operations research (Gunasekaran et al., 2018), future studies should further contextualize our findings. For example, because field office leaders are usually assigned from abroad to manage a diverse team of locals and expatriates (Shevchenko & Fox, 2008), their level of group prototypicality (i.e., how representative the leader is) within their team is likely to vary. Theoretically, leaders with a higher level of prototypicality may get away from practicing authoritarian behaviors regardless of followers' prosocial motivation (for a discussion of prototypicality in humanitarian aid, see Salem et al., 2018). This allowance is sometimes called a "Teflon effect" (Giessner & van Knippenberg, 2008; Matuson, 2017). Therefore, this theoretical argument suggests a three-way interaction between prosocial motivation, authoritarian leadership style, and leaders' group prototypicality.

Future studies should also address a number of limitations in our study. While our research model detected statistically significant associations, our survey design does not allow us to make causal arguments. That said, our theoretical framework does suggest a specific cause-and-effect relationship based on an extensive review of the literature and practitioner reports; moreover, we validated our theoretical framework with rich qualitative insights from expert interviews. Further, our finding of a statistically significant moderation effect reduces the likelihood of reverse causality. Yet, we cannot unequivocally rule out the presence of reverse causality and endogeneity bias by design. Similarly, most survey research cannot rule out the possibility of nonresponse bias. If future survey studies can identify and contact individuals who did not respond or dropped out of the survey, researchers might be able to ask them to complete an additional demographic survey. In this way, they could compare whether their characteristics systematically differ from that of the actual survey respondents, thus estimating whether nonresponse bias is a major issue. Otherwise, the optimal study design to rule out reverse causality, endogeneity, and nonresponse is a field experiment, which is rare in humanitarian operations research because of feasibility issues (e.g., lack of access to field offices).

Relatedly, the cross-sectional nature of our survey data may raise concerns about common method variance (CMV) bias: a situation where respondents can be consistently biased in negative or positive directions about their perceptions of the team leader and job performance. However, according to Podsakoff et al. (2012), "if a study is designed to test hypotheses about quadratic or interaction effects, rather than main effects, then method bias would not be able to account for any statistically significant effects observed" (p. 565). Indeed, statistically, CMV bias reduces the possibility of finding a robust and significant interaction effect, which is also generally less detectable in field studies (McClelland & Judd, 1993). Therefore, the empirical support for our theorized moderator effect should be interpreted as strong evidence that CMV did not systematically affect our findings (Siemsen et al., 2010). Likewise, Harman's single-factor test did not detect a serious and systematic CMV bias in our data. Ultimately, to minimize this concern, we also followed Podsakoff et al.'s (2012) recommendations to separate study variables when designing the survey and filter out inattentive

respondents. Nevertheless, we encourage future studies to replicate and extend our findings, preferably by recruiting a larger sample size. Not only would this facilitate stronger statistical power, but it would also allow researchers to obtain better representation of non-English-speaking field offices, as well as potentially pursue a multisource or longitudinal data structure. Granted, we acknowledge the difficulty of accessing and collecting such primary data from field-level aid workers (Starr & Van Wassenhove, 2014). We hope that as aid workers notice our study's findings, they may become more open to granting access to their offices.

Last, we used a subjective, rather than objective, measurement scale for aid workers' job performance. Prior methodological research (Bommer et al., 1995; Singh et al., 2016; Wall et al., 2004) provides strong evidence that self-report measures of performance have reliable and comparable convergent, discriminant, and construct validity relative to objective appraisals of job performance. Practically speaking, it is difficult to find a common objective performance measure that is applicable for all aid workers in a sample. Even many HOs rely on self-report evaluations of their personnel, simply due to a lack of clearly defined objective metrics or performance management systems (e.g., Rajakaruna et al., 2017). Therefore, given the acceptable quality of experts' self-report ratings (Podsakoff et al., 2012), we assumed that field-level aid workers would have sufficient subject matter expertise due to their direct involvement in humanitarian operations. However, future studies should triangulate performance appraisal measurements with data on objective metrics such as lead-time and cost-recovery charges when they have survey access or a partnership with large HOs. By capturing variability in lead-time and cost-recovery charges, both of which are crucial for decision-making in humanitarian operations, future research could further enhance the practical relevance of our findings.

In conclusion, HOs may perceive authoritarian leadership as a necessary condition for improving aid workers' adaptability—and by extension, their job performance in humanitarian operations. However, we advanced another theoretical possibility and provided empirical support for it: Aid workers' strong prosocial motivation is at odds with authoritarian leadership. Indeed, our survey and interviews both suggest that humanitarian operations are better served by leaders who instead try to forge personal connections with aid workers, regularly perform emotional check-ins, engage in active listening, and have transparent communications. In this way, our findings are among the first to underscore the value of considering interdependent relationships between contextual issues like aid worker motivation and leadership style, as well as their consequences for humanitarian operations.

ACKNOWLEDGMENTS

The authors thank Sushil Gupta, the senior editor, and the three reviewers for their insightful suggestions and comments that significantly improved the study.

ORCID

Maria Besiou https://orcid.org/0000-0002-7941-6564

REFERENCES

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications, Inc.

Allana, A., & Sparkman, T. (2014). Navigating complexity: Adaptive management and organizational learning in a development project in Northern Uganda. *Knowledge Management for Development Journal*, *10*(3), 101–112.

Ashcroft, H. (2015, August 19). A job well done is the best possible humanitarian motivation. *ALNAP Blog*. https://www.alnap.org/blogs/a-job-well-done-is-the-best-possible-humanitarian-motivation

Ayoya, M. A., Kate, N., Ismael, M., Marjolein, D. M., Aissa, K., Leslie, B., Erin, B., Jean, M. L., Celine, M., & Joseline, P. (2013). Protecting and improving breastfeeding practices during a major emergency: Lessons learnt from the baby tents in Haiti. *Bulletin of the World Health Organization*, *91*(8), 612–617.

Baharmand, H., Comes, T., & Lauras, M. (2019). Defining and measuring the network flexibility of humanitarian supply chains: Insights from the 2015 Nepal earthquake. *Annals of Operations Research*, *283*(1-2), 961–1000.

Barbuto, J. E. Jr. (2000). Influence triggers: A framework for understanding follower compliance. *The Leadership Quarterly*, *11*(3), 365–387.

Beamon, B. M., & Balcik, B. (2008). Performance measurement in humanitarian relief chains. *International Journal of Public Sector Management*, *21*(1), 4–25.

Bernerth, J. B., & Aguinis, H. (2016). A critical review and best-practice recommendations for control variable usage. *Personnel Psychology*, *69*(1), 229–283.

Besiou, M., & Van Wassenhove, L. N. (2015). Addressing the challenge of modeling for decision-making in socially responsible operations. *Production and Operations Management*, *24*(9), 1390–1401.

Bjerneld, M., Lindmark, G., McSpadden, L. A., & Garrett, M. J. (2006). Motivations, concerns, and expectations of Scandinavian health professionals volunteering for humanitarian assignments. *Disaster Management & Response*, *4*(2), 49–58.

Blackstock, J. (2016). *Performance management toolkit for immunization supply chain managers*. Report, UNICEF, Geneva, Switzerland. https://isc.technet-21.org/media/attachments/2017/02/07/performance_management_toolkit_final_14_july_2016.pdf

Blecken, A. (2010). *Humanitarian logistics: Modelling supply chain processes of humanitarian organisationss*. Haupt Verlag.

Boin, A., Kuipers, S., & Overdijk, W. (2013). Leadership in times of crisis: A framework for assessment. *International Review of Public Administration*, *18*(1), 79–91.

Bolino, M. C., & Grant, A. M. (2016). The bright side of being prosocial at work, and the dark side, too: A review and agenda for research on other-oriented motives, behavior, and impact in organizations. *Academy of Management Annals*, *10*(1), 599–670.

Bommer, W. H., Johnson, J. L., Rich, G. A., Podsakoff, P. M., & MacKenzie, S. B. (1995). On the interchangeability of objective and subjective measures of employee performance: A meta-analysis. *Personnel Psychology*, *48*(3), 587–605.

Bowers, M. R., Hall, J. R., & Srinivasan, M. M. (2017). Organizational culture and leadership style: The missing combination for selecting the right leader for effective crisis management. *Business Horizons*, *60*(4), 551–563.

Buchanan-Smith, M., & Scriven, K. (2011). *Leadership in action: Leading effectively in humanitarian operations*. ALNAP Field Study, London.

Cahill, K. M. (Ed.). (2003). *Basics of international humanitarian missions*. Fordham University Press.

Cai, Z., Huo, Y., Lan, J., Chen, Z., & Lam, W. (2019). When do frontline hospitality employees take charge? Prosocial motivation, taking charge, and job performance: The moderating role of job autonomy. *Cornell Hospitality Quarterly*, *60*(3), 237–248.

Campbell, L., & Clarke, P. K. (2018). *Making operational decisions in humanitarian response: A literature review*. ALNAP Field Study.

Canton, L. G. (2013). Disaster planning and management: Does one leadership style work for both? *Journal of Leadership Studies*, *7*(3), 47–50.

Chandler, R. C. (2001). The marks of a leader. *Contingency Planning and Management Magazine*, *6*(5), 20–22.

Clarke, P., & Ramalingam, B. (2008). *Organizational change in the humanitarian sector*. ALNAP/Overseas Development Institute.

Clarke, P. K. (2014). *Between chaos and control: Rethinking operational leadership*. ALNAP Field Study.

Clarke, P. K. (2018). *The state of the humanitarian system*. ALNAP Field Study.

Collinson, S., & Schenkenberg, E. (2019). UNHCR's leadership and coordination role in refugee response settings, Desk Review, Switzerland. https://www.unhcr.org/5e3da94e4.pdf

Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications.

Cullen, K. L., Edwards, B. D., Casper, W. C., & Gue, K. R. (2014). Employees' adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. *Journal of Business and Psychology*, *29*(2), 269–280.

Dansereau, F., Seitz, S. R., Chiu, C. Y., Shaughnessy, B., & Yammarino, F. J. (2013). What makes leadership, leadership? Using self-expansion theory to integrate traditional and contemporary approaches. *The Leadership Quarterly*, *24*(6), 798–821.

Dawson, J. F. (2014). Moderation inmanagement research: What, why, when, and how. *Journal of Business and Psychology*, *29*(1), 1–19.

de Leeuw, S. (2010). Towards a reference mission map for performance measurement in humanitarian supply chains. In L. M. Camarinha-Matos, X. Boucher, & H. Afsarmanesh (Eds.), *11th IFIP WG 5.5 Working Conference on Virtual Enterprises* (pp. 181–188). Springer.

Demiroz, F., & Kapucu, N. (2012). The role of leadership in managing emergencies and disasters. *European Journal of Economic and Political Studies*, *5*(1), 91–101.

Diekman, A. B., & Clark, E. K. (2015). Beyond the damsel in distress: Gender differences and similarities in enacting prosocial behavior. In D. A. Schroeder & W. G. Graziano (Eds.), *The Oxford handbook of prosocial behavior*. Oxford University Press.

Dubey, R., & Gunasekaran, A. (2016). The sustainable humanitarian supply chain design: Agility, adaptability and alignment. *International Journal of Logistics Research and Applications*, *19*(1), 62–82.

Edwards, J. R. (2011). The fallacy of formative measurement. *Organizational Research Methods*, *14*(2), 370–388.

Emergency Preparedness and Support Team. (2019). *Leadership in emergencies toolkit*. https://hr.un.org/sites/hr.un.org/files/Leadership_in_Emergencies_Toolkit.pdf

Ensari, N., Riggio, R. E., Christian, J., & Carslaw, G. (2011). Who emerges as a leader? Meta-analyses of individual differences as predictors of leadership emergence. *Personality and Individual Differences*, *51*(4), 532–536.

Giessner, S. R., & van Knippenberg, D. (2008). License to fail": Goal definition, leader group prototypicality, and perceptions of leadership effectiveness after leader failure. *Organizational behavior and human decision processes*, *105*(1), 14–35.

Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.

Gottwald, M. (2010). *Competing in the humanitarian marketplace: UNHCR's organizational culture and decision-making processes*. Report, Research Paper No. 190, UNHCR, Switzerland.

Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, *93*(1), 48–58.

Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, *32*(2), 393–417.

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, *28*, 3–34.

Grant, A. M., & Berg, J. M. (2011). Prosocial motivation at work: When, why, and how making a difference makes a difference. In G. M. Spreitzer & K. S. Cameron (Eds.), *The Oxford handbook of positive organizational scholarship*. Oxford University Press.

Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Academy of Management Journal*, *54*(1), 73–96.

Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, *50*(2), 327–347.

Gu, Q., Hempel, P. S., & Yu, M. (2020). Tough love and creativity: How authoritarian leadership tempered by benevolence or morality influences employee creativity. *British Journal of Management*, *31*(2), 305–324.

Gunasekaran, A., Dubey, R., Fosso, W. S., Papadopoulos, T., Hazen, B. T., & Ngai, E. W. T. (2018). Bridging humanitarian operations management and organisational theory. *International Journal of Production Research*, *56*(21), 6735–6740.

Gupta, M., & Gupta, S. (2019). Influence of national cultures on operations management and supply chain management practices—A research agenda. *Production and Operations Management*, *28*(11), 2681–2698.

Haavisto, I. (2014). *Performance in humanitarian supply chains*. [Doctoral dissertation. Hanken School of Economics].

Haavisto, I., & Goentzel, J. (2015). Measuring humanitarian supply chain performance in a multi-goal context. *Journal of Humanitarian Logistics and Supply Chain Management*, *5*(3), 300–324.

Hannah, S. T., Uhl-Bien, M., Avolio, B. J., & Cavarretta, F. L. (2009). A framework for examining leadership in extreme contexts. *The Leadership Quarterly*, *20*(6), 897–919.

Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, *85*(1), 4–40.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135.

Hermann, M. G., & Pagé, C. (2016). Leadership and behavior in humanitarian and development transnational non-governmental organizations. *Politics and Governance*, *4*(2), 127–137.

Hilhorst, D., & Schmiemann, N. (2002). Humanitarian principles and organisational culture: Everyday practice in Meédecins Sans Frontié res-Holland. *Development in Practice*, *12*(3-4), 490–500.

Hockaday, D. (2014). The servant leadership approach and humanitarian collaboration. *Journal of Partnership Brokering*, (4), https://partnershipbrokers.org/w/journal/the-servant-leadership-approach-and-humanitarian-collaboration/

Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization*, *10*(4), 15–41.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, *6*(1), 53–60.

Huang, X., Xu, E., Chiu, W., Lam, C., & Farh, J. L. (2015). When authoritarian leaders outperform transformational leaders: Firm performance in a harsh economic environment. *Academy of Management Discoveries*, *1*(2), 180–200.

Humphries, V. (2013). Improving humanitarian coordination: Common challenges and lessons learned from the cluster approach. *Journal of Humanitarian Assistance*, http://sites.tufts.edu/jha/archives/1976

Hyllengren, P. (2017). Military leaders' adaptability in unexpected situations. *Military Psychology*, *29*(4), 245–259.

Jackson, D. L., Gillaspy, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, *14*(1), 6–23.

Jackson, T. (2016). Paternalistic leadership. *International Journal of Cross Cultural Management*, *16*(1), 3–7.

Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, *89*(1), 36–51.

Jusoh, Z. S. M., Hassan, M., Abdullah, A. R., Hashim, H., & Irfan, M. (2021). Effects of individual performance on humanitarian operations performance in humanitarian organisations in Malaysia. *International Journal of Business and Economy*, *3*(2), 64–76.

Kearney, E., Gebert, D., & Voelpel, S. C. (2009). When and how diversity benefits teams: The importance of team members' need for cognition. *Academy of Management Journal*, *52*(3), 581–598.

Kearney, E., Shemla, M., van Knippenberg, D., & Scholz, F. A. (2019). A paradox perspective on the interactive effects of visionary and empowering leadership. *Organizational Behavior and Human Decision Processes*, *155*(11), 20–30.

Ketokivi, M., & McIntosh, C. N. (2017). Addressing the endogeneity dilemma in operations management research: Theoretical, empirical, and pragmatic considerations. *Journal of Operations Management*, *52*(5), 1–14.

Kovács, G., & Spens, K. M. (2007). Humanitarian logistics in disaster relief operations. *International Journal of Physical Distribution & Logistics Management*, *37*(2), 99–114.

Larson, P. D., & Foropon, C. (2018). Process improvement in humanitarian operations: An organisational theory perspective. *International Journal of Production Research*, *56*(21), 6828–6841.

Li, C., Brodbeck, F. C., Shenkar, O., Ponzi, L. J., & Fisch, J. H. (2017). Embracing the foreign: Cultural attractiveness and international strategy. *Strategic Management Journal*, *38*(4), 950–971.

Loch, C. H., & Wu, Y. (2007). Behavioral operations management. *Foundations and Trends® in Technology*. *Information and Operations Management*, *1*(3), 121–232.

Lu, Q., Goh, M., & De Souza, R. (2016). An SCOR framework to measure logistics performance of humanitarian organizations. *Journal of Humanitarian Logistics and Supply Chain Management*, *6*(2), 222–239.

Marshall, D., Metters, R., & Pagell, M. (2016). Changing a leopard's spots: A new research direction for organizational culture in the operations management field. *Production and Operations Management*, *25*(9), 1506–1512.

Matuson, R. C. (2017). The teflon effect: Nonstick leadership. In *The magnetic leader: How irresistible leaders attract employees, customers, and profits* (pp. 32–44). Routledge.

McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, *61*(3), 204.

Meduri, Y. (2020). Humanitarian efficiency and role of relief workers: Testing a competency-based approach. *International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)*, *11*(4), 72–86.

Mercy Corps and IRC. (2016). *Adapting aid: Lessons from six case studies*. Mercy Corps.

McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, *114*(2), 376–390.

McKay, M., & MacLachlan, M. (2000). Emergency relief workers: What skills do you need to be effective? *Development in Practice*, *10*(5), 1.

Metcalfe, V., Haysom, S., & Gordon, S. (2012). *Trends and challenges in humanitarian civil–military coordination: A review of the literature*. (Working Paper), Humanitarian Policy Group, London.

Mingjian, Z., & Shuisheng, S. (2011). Linking power distance orientation and education level to authoritarianl eadership. In *2011 International Conference on Information Management, Innovation Management and Industrial Engineering*, Shenzhen, China (pp. 238–241).

Mohamed, A. S., & Ofteringer, R. (2015). Rahmatan lil-'alamin"(A mercy to all creation): Islamic voices in the debate on humanitarian principles. *International Review of the Red Cross*, *97*(897-898), 371–394.

Moshtari, M. (2016). Inter-organizational fit, relationship management capability, and collaborative performance within a humanitarian setting. *Production and Operations Management*, *25*(9), 1542–1557.

Nai, A., & Toros, E. (2020). The peculiar personality of strongmen: Comparing the Big Five and Dark Triad traits of autocrats and non-autocrats. *Political Research Exchange*, *2*(1), 1707697.

Obrecht, A. (2019a). Proactive and reactive strategies for knowing when to adapt. *Southasiadisasters.net*, *181*(Special Issue), 4–5.

Obrecht, A. (2019b). Supporting adaptive approaches to DRR and humanitarian action. *Southasiadisasters.net*, *181*(Special Issue), 2–3.

Obrecht, A., & Bourne, S. (2018). *Making humanitarian response more flexible*. ALNAP Background Report.

Olson, K. (2010). An examination of questionnaire evaluation by expert reviewers. *Field Methods*, *22*(4), 295–318.

Peterson, R. A., & Kim, Y. (2013). On the relationship between coefficient alpha and composite reliability. *Journal of Applied Psychology*, *98*(1), 194–198.

Pfeifer, J. W. (2013). *Crisis leadership: The art of adapting to extreme events*. Discussion Paper, Massachusetts, United States, Harvard Kennedy School.

Ployhart, R., & Bliese, P. (2006). Individual adaptability (I-ADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability. In C. Burke, L. Pierce, & E. Salas (Eds.), *Understanding adaptability: A prerequisite for effective performance within complex environments* (pp. 3–39). Emerald Publishing.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*(1), 539–569.

Polak, S. (2018). *Why we do this: The psychology of humanitarian work*. Philanthropy Connections Foundation. https://philanthropyconnections.org/research/psychology-humanitarian-work/

Prakash, C., Besiou, M., Charan, P., & Gupta, S. (2020). Organization theory in humanitarian operations: A review and suggested research agenda. *Journal of Humanitarian Logistics and Supply Chain Management*, *10*(2), 261–284.

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*(1), 185–227.

Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, *85*(4), 612–624.

Rajakaruna, S., Wijeratne, A., Mann, T., & Yan, C. (2017). Effect of individual skills and performance on humanitarian organisations: A structural equation model. *Logistics*, *1*(1), 7.

Rodon, J., Maria Serrano, J. F., & Giménez, C. (2012). Managing cultural conflicts for effective humanitarian aid. *International Journal of Production Economics*, *139*(2), 366–376.

Round Table on Humanitarian Leadership. (2019). *Buddha, Hercules, and others in humanitarian leadership, Geneva, Switzerland*. https://here-geneva.org/wp-content/uploads/2021/01/HERELeadershipEvent_25-Oct-2019-website.pdf

Salem, M., Van Quaquebeke, N., & Besiou, M., & Meyer, L. (2019). Intergroup leadership: How leaders can enhance performance of humanitarian operations. *Production and Operations Management*, *28*(11), 2877–2897.

Salem, M., Van Quaquebeke, N., & Besiou, M. (2018). How field office leaders drive learning and creativity in humanitarian aid: Exploring the role of boundary-spanning leadership for expatriate and local aid worker collaboration. *Journal of Organizational Behavior*, *39*(5), 594–611.

Salkind, N. J. (Ed.) (2012). Factor loadings. In *Encyclopedia of research design*. SAGE Publications, Inc.

Santarelli, G., Abidi, H., Regattieri, A., & Klumpp, M. (2013). *A performance measurement system for the evaluation of humanitarian supply chains*. Working Paper, University of Padua, Italy.

Shevchenko, O., & Fox, R. C. (2008). Nationals" and "expatriates": Challenges of fulfilling "sans frontières" ("without borders") ideals in international humanitarian action. *Health and Human Rights*, *10*(1), 109–122.

Shiu, E., Pervan, S. J., Bove, L. L., & Beatty, S. E. (2011). Reflections on discriminant validity: Reexamining the Bove et al. (2009) findings. *Journal of Business Research*, *64*(5), 497–500.

Shome, R. (2019). Thinking culture and cultural studies—from/of the global south. *Communication and Critical/Cultural Studies*, *16*(3), 196–218.

Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, *13*(3), 456–476.

Singh, S., Darwish, T. K., & Potočnik, K. (2016). Measuring organizational performance: A case for subjective measures. *British Journal of Management*, *27*(1), 214–224.

Skeoch, K., Stevens, G. J., & Taylor, M. (2017). Future role aspirations, achievement motivations and perceptions of personal help-seeking among humanitarian aid trainees. *Journal of International Humanitarian Action*, *2*(1), 12.

Starr, M. K., & Van Wassenhove, L. N. (2014). Introduction to the special issue on humanitarian operations and crisis management. *Production and Operations Management*, *23*(6), 925–937.

Stoddard, A., Harmer, A., Haver, K., Taylor, G., & Harvey, P. (2015). *The state of the humanitarian system*. ALNAP Field Study.

Swords, S. (2007). *Behaviours which lead to effective performance in humanitarian response.*People in Aid.

Tassell, N., & Flett, R. (2011). Motivation in humanitarian health workers: A self-determination theory perspective. *Development in Practice*, *21*(7), 959–973.

Tehseen, S., Ramayah, T., & Sajilan, S. (2017). Testing and controlling for common method variance: A review of available methods. *Journal of Management Sciences*, *4*(2), 142–168.

Thoroughgood, C. N., Padilla, A., Hunter, S. T., & Tate, B. W. (2012). The susceptible circle: A taxonomy of followers associated with destructive leadership. *The Leadership Quarterly*, *23*(5), 897–917.

Tomasini, R., & Van Wassenhove, L. N. (2009). *Humanitarian logistics.* INSEAD Business Press.

Trainor, J. E., & Velotti, L. (2013). Leadership in crises, disasters, and catastrophes. *Journal of Leadership Studies*, *7*(3), 38–40.

UNICEF. (2015). *Evaluation of UNICEF's humanitarian response to the Syria crisis*. https://www.alnap.org/system/files/content/resource/files/annex/2168-unicef-syria-appendices-final_0.pdf

United Nations OCHA. (2022). *The global humanitarian overview*, Report. Geneva, Switzerland.

Uny, I. W. (2008). Factors and motivations contributing to community volunteers' participation in a nursery feeding project in Malawi. *Development in Practice*, *18*(3), 437–445.

Useem, M., Jordan, R., & Koljatic, M. (2011). How to lead during a crisis: Lessons from the rescue of the Chilean miners. *MIT Sloan Management Review*, *53*(1), 49–55.

Van den Broeck, A., Anja, F. D. L. C., Chu-Hsiang, R., & Christopher, C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, *42*(5), 1195–1229.

Van Quaquebeke, N., & Felps, W. (2018). Respectful inquiry: A motivational account of leading through asking questions and listening. *Academy of Management Review*, *43*(1), 5–27.

Villa, S. (2019). Behavioral operations in multi-agent settings and humanitarian operations. In S., Villa, G. Urrea, J. Castañeda, & Larsen, E. (Eds.), *Decision-making in humanitarian operations* (pp. 147–167). Palgrave Macmillan.

Waldman, D. A., & Bowen, D. E. (2016). Learning to be a paradox-savvy leader. *Academy of Management Perspectives*, *30*(3), 316–327.

Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, *57*(1), 95–118.

Wang, A.-C., Chiang, J. T.-J., Tsai, C.-Y., Lin, T.-T., & Cheng, B.-S. (2013). Gender makes the difference: The moderating role of leader gender on the relationship between leadership styles and subordinate performance. *Organizational Behavior and Human Decision Processes*, *122*(2), 101–113.

Wang, H., & Guan, B. (2018). The positive effect of authoritarian leadership on employee performance: The moderating role of power distance. *Frontiers in Psychology*, *23*(9), 357.

Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology*, *98*(2), 222–244.

Wheeler, C. M., Weeks, P. P., & Montgomery, D. (2013). Disaster response leadership: Perceptions of American Red Cross workers. *International Journal of Leadership Studies*, *8*(1), 79–100.

Yang, M., & Yuan, K.-H. (2016). Robust methods for moderation analysis with a two-level regression model. *Multivariate Behavioral Research*, *51*(6), 757–771.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Salem, M., Van Quaquebeke, N., & Besiou, M. (2022). Aid worker adaptability in humanitarian operations: Interplay of prosocial motivation and authoritarian leadership. *Production and Operations Management*, *31,* 3982–4001. https://doi.org/10.1111/poms.13798