Research Article

Instrumentality and/or Identity? Explanation of Participation in Collective Action in the Gabonese Repressive Context Based on the Dual-Pathway Model of Social Movement Participation

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Abstract: The dual-pathway model of social movement participation posits that engagement in social movements is done through an instrumental pathway (by evaluating the costs and benefits of participation) or an identification pathway (by becoming aware of the similarity and destiny shared with members of the same social category as oneself); these pathways are mutually exclusive. In the present research, this postulate, formalized and tested until now exclusively in a democratic context, is tested in a repressive context, which differs from the democratic context due to the quasi-systematic recourse of the institutional authorities to coercive tactics to prevent the expression of dissident discourse and conduct. The data were collected during a student social movement from 389 Gabonese students (232 men and 152 women), aged between 16 and 33 (M = 23.9, SD = 3.20). They were administered self-reported measures, focusing on instrumentality, identity, and intention to participate in protest action. The results report that the instrumental and identification pathways simultaneously predict the intention to participate in protest action. They are therefore not mutually exclusive, as the model suggests.

Keywords: dual-pathway model of social movement participation, instrumentality, identification, collective action, repressive context

1. Introduction

Until recently, the literature on participation in collective action was constituted by work carried out in a democratic context, excluding authoritarian contexts (Ayanian & Tausch, 2016; Ayanian et al., 2021). However, even if democratic contexts are not devoid of interest, the fact remains that protest actions are considered legitimate political behaviors challenging the governing system (Uluğ et al., 2022). Consequently, the risks that protesters face there are lower than those faced by individuals who adopt the same behaviors in an authoritarian context (Adra et al., 2020; Ayanian & Tausch, 2016). Theoretically, the consequence of this observation is that the cross-contextual validity of explanatory models of collective action designed and tested only in democratic contexts is questionable since activism is a mechanism of social change sensitive to the context (Odağ et al., 2023). It materializes one of the major methodological weaknesses of the psychological sciences: an over-sampling of western, educated, industrialized, rich, and democratic populations in general (WEIRD; Henrich et al., 2010) and American populations in particular (Kahalon et al., 2022). To
remedy this, it seems necessary to carry out empirical tests of these models outside the sociopolitical contexts in which they were designed in order to test their trans-contextual validity (van Zomeren, 2019), in particular because cultural contexts are important elements of collective action analysis and vary from one country to another (van Zomeren & Louis, 2017). Indeed, although protests in an authoritarian context are part of the international protest movement, it is necessary to integrate them into the sociopolitical trajectories that are at their origin (Polet, 2023). In support of this approach, the application of this procedure to theoretical models of collective action (the Social Identity Model of Collective Action, SIMCA, for instance; van Zomeren et al., 2008) reports their explanatory limits outside WEIRD societies (Adra et al., 2020; Ayanian et al., 2021) and, in turn, reveals the need to continue research in this direction. The present study, which focuses on the explanation of participation in protest action by the dual-pathway model of social movement participation (Simon et al., 1998), is situated in this perspective.

The dual-pathway model of social movement participation distinguishes between an instrumental pathway, underpinned by calculated reasoning focused on the costs and benefits of participation, and an identity pathway, guided by identification processes (van Stekelenburg & Klandermans, 2013). It predicts that the instrumental cost-benefit motivations (including efficacy) and identity (politicized) operate relatively independently of each other. This means that they contribute uniquely to the prediction of collective action. However, this unique contribution, which is questioned in the present research, has the disadvantage of having been observed only in the contexts of liberal democracy (Simon & Klandermans, 2001; Simon et al., 1998), to the exclusion of repressive contexts, which have systemic characteristics that are out of phase with those of democratic contexts. Repressive contexts are of specific interest for testing this model, in particular, because the costs of engagement in collective action, in which it is interested in its instrumental way, are much higher there for protesters than in democratic contexts (Adra et al., 2020; Ayanian et al., 2021). In this vein, the present research evaluates the explanation of collective action by the dual-pathway model of social movement participation in a repressive context, which is both little explored until now and different from the democratic context because of the tendency of the institutional authorities to resort almost systematically to repressive tactics to counter dissident movements and ideas (Messanga et al., 2020); hence the specificities of the motivational dynamics underlying collective action there (Solak et al., 2022). It tests the hypothesis of the exclusivity of instrumental and identification pathways in the explanation of collective action theorized by this model in the Gabonese context, which, despite being listed as authoritarian (Economist Intelligence, 2022), paradoxically records a significant number of student protest actions (Mintsa M’Obiang, 2014), which reveals that the repression to which the institutional authorities of this country resort (Muru, 2016) to combat these actions does not deter the actors but, on the contrary, exacerbates the virulence of the movements (Mounguenguï, 1995). In this vein, this study aims to understand the driving forces behind this paradox by focusing on the motivations of the actors in collective action as theorized by Simon et al. (1998).

1.1 The explanation of collective action by the dual-pathway model of social movement participation

The literature on protest behavior emphasizes that discontent alone is not enough to provoke it (Mathieu, 2004; Olson, 1978). This means that other factors must be taken into account to explain why individuals are inclined to participate in collective action, despite its potential physical, psychological, or social costs and the risks associated with it (arrests, fines, molestations, injuries, or even death). In this vein, Simon et al. (1998) proposed a dual-pathway model of participation in collective action in which they distinguish an instrumental pathway and an identification pathway (Simon et al., 1998; van Stekelenburg & Klandermans, 2009, 2013).

The first basic postulate of Simon et al.’s (1998) model stipulates that individuals who plan to participate in collective action assess its costs and benefits. This calculated reasoning corresponds to the economic reading of human conduct made by Olson (1978), a researcher who positioned his work on collective action within the framework of rational choice theory. This suggests that social actors seek, at all times, to reduce the costs and increase the profits of their actions (Mathieu, 2004; Olson, 1978). In this logic, the fact that the members of a group know that they will be able to achieve a common benefit by joining their efforts in a collective action will not be enough to arouse their engagement. The reason for this is that the type of good targeted being collective, that is to say that it benefits the whole of the group, cannot be refused to any of its members, whether or not they have taken part in the movement (Mathieu, 2004; Olson, 1978; Simon et al., 1998). Under these conditions, people who assess the costs and benefits of their
participation will be tempted by the “free rider” strategy (Mathieu, 2004; Olson, 1978), an obstacle to engagement and therefore to the emergence of certain movements. However, despite this obstacle, social movements still appear (Mathieu, 2004). They are underpinned by three motives: collective, social, and reward (Klandermans, 1984). Each of the three stems from the objectives of the movement and emanates from a different type of expected cost and benefit (Simon et al., 1998). Collective motive is conceptualized as the multiplicative function of the subjective value of social movement goals and the subjective expectation that these goals will be achieved. The social motive stems from the importance of the expected reactions of others (ridiculousness or admiration from friends or family) to one’s own participation in the collective action. The reward motive, on the other hand, is conceptualized as a multiplicative function of the components of value and expectation (Simon et al., 1998). The collective and reward motives together determine the attitude towards participation in collective action, while the social motive corresponds to the subjective norm component (Fishbein & Ajzen, 1975). In this logic, the attitude and the subjective norm co-determine the intention to protest (Simon et al., 1998). Among these components, expectancy is particularly important because it represents the subjective expectation of individuals and groups to know whether collective action will be effective in achieving its objectives (Klandermans, 1984). This orientation thus makes efficacy one of the main instrumental explanations of collective action, the idea being that people engage collectively if they believe it will achieve relevant goals (van Zomeren et al., 2008). Several studies show, in fact, that feelings of efficacy are strongly correlated with participation in protest (Cohen-Chen et al., 2014; Mummedey et al., 1999; van Stekelenburg & Klandermans, 2009; van Zomeren et al., 2008). This relationship is such that participation in collective action depends on belief in its efficacy (van Stekelenburg & Klandermans, 2013).

The second postulate of Simon et al.’s (1998) model states that participation in collective action is guided by identification processes. In this model, rather than replacing instrumentality as the explanatory paradigm, identification was added to explanation as a second pathway (van Stekelenburg & Klandermans, 2013; van Stekelenburg et al., 2013). Taking into account the most recent conceptualizations of identification, van Zomeren et al. (2008) highlight two components: cognitive centrality, i.e., group membership (Turner, 1985; Turner et al., 1987); and affective ties, relating to the feeling of psychological attachment, commitment, or connection to the group (Ellemers et al., 1999). In many measures of group identification, these two facets are combined (Cameron, 2004). Identification with others is accompanied by an awareness of similarity and shared destiny with those who belong to the same social category (van Stekelenburg & Klandermans, 2013). Moreover, it generates an obligation to behave as a “good” member of the group (Stürmer et al., 2003). This identification must be politicized to become the engine of collective action (van Stekelenburg & Klandermans, 2009); politicization is the process by which the relationship between the group and its environment undergoes transformations and/or tactical choices are shaped by identity (Polletta, 2009). It starts with becoming aware of common grievances (van Stekelenburg & Klandermans, 2013). Then an outside enemy is blamed for the group’s predicament. Finally, compensation claims are directed toward this enemy. The most politicized members of the group are the most likely to participate in collective action directed against the government or the general public (van Zomeren et al., 2008).

Studies that tested the dual-pathway model of Simon et al. (1998) conclude that instrumentalization and identification make unique contributions to predicting engagement in collective action (Simon, 2004; Simon et al., 1998; Simon et al., 2008; Stürmer & Simon, 2004a, 2009). In other words, identification and instrumental cost-benefit motivations (including efficacy) operate relatively independently of each other (van Zomeren et al., 2008). Thus, Simon et al. (1998) suggest that the explanations for participation in collective action are linked either to the evaluation of costs and benefits by individuals (instrumental way) or to their identification with a social collective (identification way), but not both simultaneously. The question is, what is the value of this position in a repressive context where the costs of collective action are much higher than in democratic contexts where these results have been obtained?

1.2 The current research: Instrumentality and/or identification? The explanation of collective action in the Gabonese repressive context by the dual-pathway model of social movement participation

Collective action cannot be understood without analyzing the political conditions in which individuals evolve (Tilly, 2008). In this vein, it is not only a question of taking into account the immediate political context. It is also necessary to look, from a historical perspective, at the interactions between authorities and individuals over time. The
political opportunity approach follows this logic. Political opportunities are defined as the dimensions of the political environment that are likely to encourage or discourage the participation of individuals in collective action (Tarrow, 1989). Political openness is one of their dimensions. It refers to the degree to which political institutions allow the manifestation of collective action in time and space. It implies that people can express their concerns and criticisms freely in the streets without fear of repression or persecution (Saavedra & Drury, 2019). It follows that protest actions are more likely to occur within a tolerant political environment (Tarrow, 1989). Indeed, repression considered the cost of collective action for individuals (Tilly, 1978), is one of the important aspects of the evaluation of political opportunities (Davenport & Armstrong, 2004). This can be considered a barometer of political opportunities through its direct and visible impact on individuals’ participation in collective action (Della Porta & Diani, 2012). In a repressive context, these opportunities appear to be restricted.

The literature on the explanatory factors of collective action in repressive or high-risk contexts is specifically interested in how repressive or high-risk environments modulate the predictors of collective action (Adra et al., 2020; Li et al., 2023). Repression refers to the set of physical, psychological, and social tactics (Earl, 2011) that the state or system actors use to shape and defend the power and resources of their allies against the pressures of other elites and the popular masses, in particular by preventing, among other things, the expression of protest behavior among citizens and participation in public demonstrations (DiPietro, 2016). It is therefore an element of the repertoire of sociopolitical control strategies of a government, particularly in authoritarian states, which consider that demonstrations or anti-system movements are unacceptable (Tilly, 2008); hence: the ban on political parties from organizing meetings and demonstrations; the use of informers and provoking agents; newspaper censorship; torture, kidnappings, and massacres; prohibition of the activities of political actors; limitation of citizens’ demands and expectations of the governing system; and the intimidation by police, security forces, and vigilantes (Booth & Richard, 2000) that can be observed in these countries. In its various forms, repression is a sharp and brutal political instrument that can cause harm or eliminate specifically selected people (Lemonde, 2010). It also has consequences for the values, beliefs, and behaviors of people who witness it (Messanga et al., 2020). Thus, in repressive societies, the lives of individuals involve high degrees of obedience and conformity (Moghaddam, 2016); hence, engaging in collective action for social change requires disobedience that can be met with backlash from authorities (Stapnes et al., 2022). Its costs are therefore particularly high. This is why the motivational dynamics of collective action in repressive contexts are different from those in democratic contexts (Uluğ et al., 2022), hence the need to question the validity of the explanatory hypotheses of the determinants of collective action outside the contexts in which they were initially formulated and tested. This is the task that this research tackles by answering the following question: In the explanation of the motives for participation in collective action in a repressive context, are the instrumental and identification pathways mutually exclusive, as suggested by the dual-pathway model of social movement participation by Simon et al. (1998), or do they interact? This theoretical question is addressed within the empirical framework of student protest in the Gabonese context.

Gabon is in the 118th position in the ranking of democracies (Economist Intelligence, 2022). With an overall score of 3.40, this country falls into the category of authoritarian regimes due to the functioning of its political system. Indeed, its stability is, to some extent, the result of a political strategy based in part on the repression of citizens in general and students in particular. According to Augé (2015), ordinary acts of repression by the armed forces against students follow two logics. The first is institutional. It refers to the double deficit of socio-political legitimacy of the regime in place, which makes the army a force for internal political use, whose action aims to perpetuate a hegemonic power anchored in the postcolonial state. Thus, in this country, the role of the army is less to accomplish missions of national defense and international engagement outside the territory than to participate in the perpetuation of a postcolonial model of popular supervision, which did not disappear with the return of democracy in the 1990s. In this logic, the establishment of practices of ordinary repression against civilians in general and students in particular (Info241, 2014; Mintsa M’Obiang, 2014) is the manifestation of the inability of the army to deconstruct an authoritarian ethos, culturally rooted in the colonial period. The second stems from an organizational dynamic within the army dominated by a preference for repressive and coercive activities against students. This military control of the population dates from Omar Bongo’s authoritarian regime. Under his reign, the Gabonese army went from serving the colonial order to serving the presidential figure and his oligarchic power. This transformation of law had only a cosmetic impact on the form of the military organization without modifying its substance, which perpetuates an authoritarian and repressive military culture towards dissent (Augé, 2015).
Higher education in Gabon is experiencing many structural problems, including the lack of perspective and stagnation of careers; hypertrophied theoretical teaching; a very insufficient practical education; a significant gap between the programs provided by the models and the teaching actually carried out; obsolete available documentation; the weak capacity of the Ministry of Higher Education to promote a real higher education and research policy; the question of the autonomy and governance of universities; the contestation of certain political decisions; the failures in the regulation of formal decision-making bodies; and clientelist pedagogical practices (Moussavou, 2022). For example, at Omar Bongo University, the country’s first university, the buildings designed in 1970 to accommodate 8,000 students remain, for the most part, unchanged and unable to accommodate the current students’ number, which is around 30,000. The halls of residence have been closed for more than a decade, with no plans to reopen. Sports and leisure facilities are almost non-existent. Teachers and researchers do not have an individual workspace (Makaya, 2021). The consequence is that the Gabonese university has operated, since its creation, to the rhythm of unprecedented crises, including repeated student strikes (Mintsa M’Obiang, 2014). Thus, for a little over forty years, the scenario has been the same in the Gabonese education sector. Each year is punctuated by numerous and interminable strikes (Muru, 2016). To deal with it, the institutional authorities, since the 1990s, have resorted to increasingly severe repression, which exacerbates the virulence of the movements (Mounguengui, 1995); hence the heavy tolls, ranging from injuries to arrests. This raises the interest in taking into account the social and political context in which the actors of student collective action in Gabon evolve to test the main hypothesis of the dual-pathway model of social movement participation (Simon et al., 1998) in order to fully understand the logics of the actors of collective action in an environment that is certainly repressive but where collective action is regularly seen in universities, which suggests the idea that repression does not really manage to deter protest action and that the motivations of the people involved deserve to be studied with more attention.

2. Method
2.1 Participants

The sample for this research is composed of 389 students from three Gabonese state universities, including 232 men and 152 women. Their age varies between 16 and 33 years \( M = 23.9, \ SD = 3.20 \).

2.2 Instruments

Data for this study were collected using a questionnaire containing three instruments developed and/or adapted for research purposes, among demographic questions.

2.2.1 Four-factor scale measuring instrumentality

The measure of instrumentality was constructed for the purposes of this study, as there was no measurement scale for this construct in the literature. Construction operations are based on Churchill’s (1979) paradigm. It has made it possible to understand that instrumentality is a way that underlies participation in protest (Simon et al., 1998; Stürmer & Simon, 2009). Thus, instrumentality is calculated reasoning focused on the costs and risks (e.g., arrests, fines, molestations, injuries, or even death) or the benefits and motivations of participation in protest action (Adra et al., 2020; Ayanian et al., 2021). Collective, social, and reward motives, as well as group efficacy, are dimensions of the assessed instrumental pathway. The items developed are strongly inspired by the literature relating to the decision to participate in a protest action (Simon et al., 1998; Stürmer & Simon, 2009). This measure consists of 16 items rated on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). They measure collective motive \( \alpha = .75; \) e.g., “I think that as many students as possible will participate in the movement”), social motive \( \alpha = .60; \) (example of a reverse item: “I am not participating in the movement because of the reaction that my friends will have if they learn that I’m part of the movement”), reward motive \( \alpha = .61; \) (example of a reverse item: “I think that taking part in the movement can harm my future professional career”), and group efficacy \( \alpha = .83; \) (e.g., “I think that if we get together, we can do so that our right to health is respected”). The four-factor model presents a good reliability index \( \alpha = .709 \). Confirmatory factorial analysis performed under JASP.0.17.1.0 reveals a good fit of the data \( \chi^2 = 15658.44, df = 98; p < .001; \) CFI = .98, TLI = .97, RMSEA = .08, SRMR = .08).
2.2.2 Three-factor scale measuring social identity

The three-factor model measuring identification pathway is an adaptation of Cameron’s (2004) social identity scale. The adaptation operations consisted of translating the items from English to French using the “back translation” method. The researchers ensured that the content of the French version of this measure was the same as that of the English version. The reliability of the three-factor model and that of the different dimensions are estimated for this version. This measure comprises 12 items to which participants respond on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). These items are divided into three dimensions of four items each. The first measures cognitive centrality ($\alpha = .602$; e.g., “Being a member of the student community is an important part of my image”), the second assesses ingroup affects ($\alpha = .690$; e.g., “In general, I feel good when I think I am a member of the student community”), and the third is interested in politicized identity ($\alpha = .610$; e.g., “I think it is time for the state to improve students’ living conditions”). The overall identification pathway measurement scale is reliable ($\alpha = .709$) and the three-factor model fits the data well ($\chi^2 = 118.61; df = 51, p < .001, CFI = .98, TLI = .97, RMSEA = .06, SRMR = .07$).

2.2.3 Two-factor scale measuring intention to participate in collective action

The social protest scale has 10 items and is designed to measure individuals’ intention to participate in collective action on a two-factor model: normative and non-normative. The first factor assesses collective actions in violation of established social rules with six factorial loads ($\alpha = .784$; e.g., “Throwing paint bombs at buildings” and “Setting buildings on fire”). The second factor measures collective actions in line with existing social norms, with four factorial loads ($\alpha = .884$; e.g., “Writing leaflets and creating signs.”; “Signing petitions or complaints containing demands addressed to politicians.”). Participants respond on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The instrument's two-factor model is reliable ($\alpha = .706$) and exhibits a two-factorial structure that fits the data well ($\chi^2 = 11563.78, df = 45, p < .001, CFI = .99, TLI = .99, RMSEA = .08, SRMR = .08$).

This instrument assesses a two-factor model of social protest participation, adapted from Tausch et al. (2011). The initial adapted scale consisted of 16 items evaluating the three-factor structure of collective action, namely: normative collective action (participate in discussion meetings, participate in plenary meetings, write flyers, sign complaints against the unconstitutionality of tuition fees, street theater, demonstrations), non-violent non-normative collective action (throw stones or bottles, arson attacks on university buildings, arson attacks on private property of responsible persons, attacks on police, attacks on responsible persons), and collective action non-normative violence (disturb events where advocates of tuition fees appear, block university buildings, block the highway). Adapting this measure to the Gabonese context consisted of translating the items from English to French (the “back translation” method was used, and it was ensured that the items in the French version complied with the items from the initial English version). But the factor analysis made it possible to verify whether the structure of the new version was in fact consistent with the structure of the initial English version. For this, they revealed a two-factorial structure (based on initial eigenvalues greater than 1 and the varimax orthogonal rotation method) and not a three-dimensional structure. The factorial weight of less than .40 led to the removal of six factorial loads from the list (“street theater; demonstrations; attacks on responsible persons; disturb events where advocates of tuition fees appear”). For the first factor (eigenvalues = 3.70; factorial weight varying from .72 to .81), which we have simply called “non-normative social movement participation,” the factorial loads retained are the following: “Attack the police; throw paint bombs at buildings; burn down buildings; block the streets; block public buildings (the town hall, for example); and throw stones or bottles.” Although this factor combines the last two dimensions of the initial scale, it assesses non-normative protest. The factorial load of the second factor (“normative social movement participation,” eigenvalues = 1.78; factorial weight varying from .58 to .76) and which are retained are the following: “Taking part in demonstrations; participating in information sessions; writing leaflets and creating signs; and signing petitions or complaints containing demands addressed to politicians.” An introductory sentence for the items was formulated as follows: “To improve the situation of Gabonese students, I am ready to...”
2.3 Procedures

The potential participants were 500. They were solicited on the campuses of three Gabonese state universities (Omar Bongo, Health Sciences, and Sciences and Techniques of Masuku) during a student’s effective participation in social protest. But not all of them responded favorably to our request. Among the students contacted, 73 (i.e., 14.60%; rate of refusal to participate in the survey) did not agree to answer the questionnaire. On the other hand, 427 (i.e., 85.40%; participation rate in the survey) agreed to participate voluntarily in the survey. However, among the 427 questionnaires administered, 38 (i.e., 8.90%) were excluded due to the fact that they presented missing data (with a high non-response rate), while 389 (i.e., 91.10%) were completely filled. This sample was selected on the basis of the simple random sampling method, which can use a list or a device to limit or present the individuals in the study population. Since the participants were students from state universities, sampling was not done using the student enrollment list as the basis. Every student who belonged to one of these three striking universities had the chance to participate in the study. The survey was carried out by directly administering the questionnaire to the participants in person. After completing the questionnaire, the participant returned it directly to the researcher. From the point of view of research ethics, guarantees were given to them as to the use that would be made of the information they would provide in the context of the study.

3. Results

This study verifies whether the instrumental and identification pathways are mutually exclusive or if they interact in explaining Gabonese students’ intention to participate in collective action. The preliminary analyses, in particular the means and standard deviations of the scores obtained on these variables, as well as the correlation indices between each pathway and the propensity to participate in collective action, are estimated using the JASP.17.1.0 data analysis tool. The normality of the residuals relative to the data distribution is analyzed by applying the Shapiro-Wilk normality test under JASP.17.1.0 (Table 1). To explain the effect of the interaction relationship between the instrumental and identification ways on the intention to participate in collective action, a linear regression analysis is carried out using the JASP.17.1.0 software (Table 2). The coefficients of determination ($R^2$), unstandardized and standardized regression, and the Variance Inflation Factor (VIF, measure of the strength of the correlation between independent variables – Instrumental and Identification ways) are estimated. The parameter estimates or coefficients of the models and the adjustment measures of the variables to the empirical data are analyzed under JASP.17.1.0 and SPSS-AMOS.23. They make it possible to estimate the degree to which instrumentality and identification pathways can explain effective participation in collective action in a repressive context in order to conclude whether these pathways are independent (exclusive) or complementary (Figures 1 and 2). The evaluation of the adjustment of the models to the data is made from indices such as the $\chi^2$, the value of the comparative adjustment index (CFI and TLI ≥ .80), and the standard root mean residual (SRMR; Garofalo et al., 2021; Sellbom & Tellegen, 2019). The pathways must be simultaneously, positively, and significantly related to participation in collective action, and the interaction or combinatorial effect of instrumental and identity pathways (given by linear regression indices: $R^2$ change and p-value $F$ change, $B$, $\beta(t)$ and p-value) must be significantly positive, so that we conclude that they are not mutually exclusive.
### 3.1 Preliminary descriptive and correlational results

Table 1. Descriptive statistics, test of normality, and correlations between variables

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<td>3. Social motive</td>
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<td>7. Feeling of attachment</td>
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<td>8. Politicized identity</td>
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<td>9. Cognitive centrality</td>
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<td>10. Social movement participation</td>
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<td>11. Normative social movement participation</td>
<td>.48**</td>
<td>.44**</td>
<td>.13*</td>
<td>.04</td>
<td>.44**</td>
<td>.20**</td>
<td>.22**</td>
<td>.50**</td>
<td>.11*</td>
<td>.40**</td>
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<td>12. Non-normative social movement participation</td>
<td>-.00</td>
<td>-.06</td>
<td>.09</td>
<td>.16**</td>
<td>-.10*</td>
<td>.09</td>
<td>.05</td>
<td>.35**</td>
<td>.12*</td>
<td>.82**</td>
<td>-.18**</td>
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<td>14</td>
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<tr>
<td>Mean</td>
<td>72.43</td>
<td>20.20</td>
<td>14.31</td>
<td>14.44</td>
<td>21.50</td>
<td>35.16</td>
<td>18.22</td>
<td>8.50</td>
<td>16.94</td>
<td>35.26</td>
<td>22.92</td>
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<td>Standard deviation</td>
<td>12.61</td>
<td>6.26</td>
<td>4.14</td>
<td>3.46</td>
<td>5.84</td>
<td>9.35</td>
<td>5.36</td>
<td>4.84</td>
<td>5.19</td>
<td>9.81</td>
<td>5.63</td>
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<td>Shapiro-Wilk test of residual normality</td>
<td>.98</td>
<td>.93</td>
<td>.97</td>
<td>.93</td>
<td>.90</td>
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<td>.84</td>
<td>.92</td>
<td>.84</td>
<td>.72</td>
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<td>p-value of Shapiro-Wilk</td>
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<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
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Note: **p < .01; *p < .05; ***p < .001 significant test (Shapiro-Wilk with N = 389).

### 3.2 Results of the analysis of the interaction between instrumentality and identity and their effects on participation in collective action in a repressive context

Table 2. Interaction/combinatory effect of instrumental and identification pathways in regression model analysis with social movement participation as a criterion

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard error of the estimate</th>
<th>R² change</th>
<th>F change</th>
<th>df1</th>
<th>df2</th>
<th>p F change</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>95.0% confidence interval for B</th>
<th>Collinearity statistics</th>
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<tr>
<td>1</td>
<td>.31</td>
<td>.10***</td>
<td>.09***</td>
<td>9.35</td>
<td>.10***</td>
<td>20.54</td>
<td>2</td>
<td>386</td>
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<td>2</td>
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<td>.10*</td>
<td>.10*</td>
<td>9.39</td>
<td>.01*</td>
<td>4.73</td>
<td>1</td>
<td>385</td>
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<tr>
<td>Model</td>
<td>B</td>
<td>Standard error</td>
<td>β</td>
<td>t</td>
<td>p</td>
<td>Lower bound</td>
<td>Upper bound</td>
<td>Tolerance</td>
<td>VIF</td>
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<tr>
<td>1 (Constant)</td>
<td>16.10</td>
<td>3.03</td>
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<td>10.14</td>
<td>22.06</td>
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<tr>
<td>Instrumental way</td>
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<td>.03</td>
<td>.24***</td>
<td>4.89</td>
<td>&lt;.001</td>
<td>.11</td>
<td>.26</td>
<td>.96</td>
<td>1.04</td>
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<tr>
<td>Identification way</td>
<td>.15**</td>
<td>.05</td>
<td>.15**</td>
<td>3.03</td>
<td>&lt;.01</td>
<td>.05</td>
<td>.26</td>
<td>.96</td>
<td>1.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>36</td>
<td>9.63</td>
<td>3.73</td>
<td>&lt;.001</td>
<td>17.05</td>
<td>54.92</td>
<td></td>
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<td></td>
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<tr>
<td>Identification way*instrumental way</td>
<td>.09*</td>
<td>.00</td>
<td>.74*</td>
<td>2.17</td>
<td>&lt;.05</td>
<td>.00</td>
<td>.01</td>
<td>.02</td>
<td>50.70</td>
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Note: Dependent variable: Social movement participation; Identification way*instrumental way = combinatory effect or effect of interaction; VIF values > 4 or 5 is moderate to high and > 10 is very high.
By examining the statistical significance of the coefficient of the interaction term (p < .05) and the variation of the $R^2$ ($R^2 = .01*$; p < .05), this gives a first indication of the existence of an interaction effect between instrumental and identification pathways on the explanation of participation in collective action. Introducing the interaction term to the equation and treating the effects of instrumental and identification pathways as dependent on each other helps to explain participation in collective action. Moreover, the positive sign of the coefficient of the interaction term ($B = .008*$; $\beta = .74*$; t (389) = 2.17; p < .05; 95% CI [.00, .01]) indicates that the effect of the instrumental way on participation in collective action increases at the same time as the effect of the identification way increases (and vice versa). We can conclude that these two pathways evolve in the same direction when it comes to explaining participation in collective action. They can therefore explain, at the same time or simultaneously, the participation in the collective action at 74%. However, it is unclear whether they opt for normative or non-normative social movement participation, hence the need to analyze the linear relationships between these dimensions of social movement participation and the instrumental and identification pathways.

The analysis of the relationships between the components of the instrumental and identification pathways reveals that all of their internal elements are positively associated with social movement participation (see Figure 1). Indeed, in an instrumental way, the social motive and the reward motive are significantly associated with the tendency to collective action, while collective motive and group efficacy are positively and insignificantly related to the collective action tendency. From these significant relationships, it can be said that social and reward motives are more predictive of social movement participation. As for the elements internal to the identification pathway, the results show that politicized identity and cognitive centrality are positively and significantly associated with participation in collective action. Only the feeling of attachment is positively related in a non-significant way to participation in collective action (see Figure 1). Based on these significant relationships, it can be said that politicized identity and cognitive centrality better predict participation in collective action. In summary, the positive and significant relationships of the components of the instrumental and identification pathways with collective action show that these components are the most relevant to take into account in the analysis of motivations to participate in protest movements among Gabonese students. However, it is important to know what forms of protest these factors internal to the instrumental and identification pathways can predict.

Note: SOM = Social movement participation; the indices that are on the arrows of the diagram represent the factorial weights of the path relations between the variables. The indices that are in parentheses are the standard errors. **p < .01; *p < .05; $\chi^2 = 50.80; df = 8; p = .000; CFI = .906; TLI = .90; RMSEA = .07; SRMR = .06.

Figure 1. Path analysis tests the relationships between the internal components of the instrumental and identification pathways and participation in collective action.
The level of fit of the model’s built-in variables to the data is acceptable. The results in Figure 2 reveal, with regard to the indices (or factorial weights), that normative and non-normative social movement participation are linked to the components of the instrumental and identification pathways. Indeed, social, reward, and collective motives, the feeling of group efficacy, and the feeling of attachment to the group are simultaneously and positively associated with participation in normative social movements. Social and reward motives, feelings of group efficacy, feelings of group attachment, politicized identity, and cognitive centrality are positively associated with the tendency to participate in non-normative collective action. However, collective and social motives and feelings of group efficacy are related to normative social movement participation, while reward motives, politicized identity, and cognitive centrality follow more of the same directions with purposeful intention than non-normative social movement participation. These results show that the drivers of social movements included in the instrumental and identification pathways jointly participate in explaining participation in normative and non-normative collective action, as summarized in Figure 3.

Note: NSO = Normative social movement participation; NNS = Non-normative social movement participation. The indices, which are on the arrows of the diagram, represent the factorial weights of the path relations between the variables. Indices in parentheses are standard errors. ***, *p < .001; **, *p < .01; *, p < .05; χ² = 52.0; df = 10; p < .001; CFI = .93; TLI = .92; RMSEA = .06; SRMR = .05.

Figure 2. Interactions between forms of collective action (normative and non-normative) and instrumental and identification pathways

Figure 3. Summary of the dual pathway model predicting participation in collective action in a repressive context
Figure 3 summarizes the interactive relationships between the instrumental and identification pathways in the simultaneous explanation of motivations to participate in collective action (normative and non-normative social movement participation). The two pathways interact positively and significantly. The paths that connect each of these pathways to the main collective action are positive and significant (+). The positive interaction between the pathways and the positive paths linking these pathways to collective action excludes or rejects the hypothesis of the exclusivity of these pathways in the explanation of collective action. These results support the hypothesis of a positive and significant interaction between instrumental and identification pathways in the motivation to participate in protest movements in a repressive context.

4. Discussion

This study empirically tested the dual-pathway model of social movement participation (Simon et al., 1998) in a repressive context, focusing on the idea defended by this model that the instrumental and identification pathways contribute in a unique way to predicting individuals’ participation in collective action. The data collected does not point in this direction. They reveal, on the contrary, that the two pathways interact positively and significantly to explain the inclination to protest. Regarding the forms of social movement participation, the observations made report that instrumentality and identity explain participation in normative social movement participation more than in non-normative social movement participation. In the facts, they reveal that social and reward motives (internal factors to instrumentality pathway), politicized identity, and cognitive centrality (internal factors to identity pathway) better explain participation in social movement when they are put together. In addition, the results of the study report that the collective and social motives and the feeling of group efficacy jointly and significantly explain participation in normative collective action, while the reward motive, politicized identity, and cognitive centrality together significantly explain participation in non-normative social movement participation. The intention of Gabonese students to take part in social protest is explained both by the internal factors of identity and instrumental pathways. They lead to the conclusion that in a repressive context, identity and instrumentality, including efficacy, must be taken into account jointly in explaining the inclination to participate in collective action in its normative and non-normative forms.

Firstly, the results of this study confirm the fact that to participate in a social movement, the individual evaluates the costs and benefits. As a reminder, these stem from three motives (collective, social, and reward) for participating in social movements (Klandermans, 1984, 1997b; Klandermans & Oegema, 1987; Simon et al., 1998). In addition to this assessment, the individual must have the belief that collective problems can be solved through collective efforts (Cohen-Chen et al., 2014; Mummendey et al., 1999; van Stekelenburg & Klandermans, 2009; van Zomeren et al., 2008). Thus, in addition to will or intention, the three motives (including efficacy) underlie the intention to participate in collective action in a repressive context. In this context, the heavy police violence during the manifestation (collective action) underlies the motivation for non-normative collective action. Thus, in addition to the four factors of the instrumental pathway, the experience of direct or indirect violence observed in a repressive context during social protest reinforces the stronger intention of non-normative civil collective action (Li et al., 2023). According to these authors, this reinforcement of non-normative collective action is done through three psychological factors, in particular the increased moralization of non-normative (even violent) tactics of collective action (the perceived moral uprightness of these strategies and the demonization of the means of repression force), the increased state of mind of nothing to lose (a perceived low effectiveness of normative strategies), and the perceived high effectiveness of non-normative strategies (Li et al., 2023). Therefore, they are not only socio-psychological determinants of the intention to participate in collective action. Instrumentality, therefore, may constitute an explanatory path for the intention to participate in social movements.

Secondly, research on social movements (De Weerd & Klandermans, 1999; Friedman & McAdam, 1992; Kelly, 1993; Kelly & Breinlinger, 1995; Kelly & Kelly, 1994; Klandermans et al., 2004; Simon, 2004; Simon et al., 1998; Stürmer & Simon, 2004a; Stürmer et al., 2003; Wright, 2003) defines collective identification as a psychological process that determines the will or the intention to participate in collective action. The contribution of identity to research on social movements has been addressed in this study within the specific framework of immediate intention to participate in social protest, since the data was collected from activists during a student protest movement. They report that group
identification effectively explains the immediate intention to participate in collective action, especially when it turns into politicized identity (Klandermans, 1997a; Melucci, 1996; Simon & Klandermans, 2001; Taylor & Whittier, 1992, 1996), thus going in the same direction as previous studies (De Weerd & Klandermans, 1999; Friedman & McAdam, 1992; Kelly, 1993; Kelly & Breinlinger, 1995; Kelly & Kelly, 1994; Klandermans et al., 2004; Simon et al., 1998; Stürmer & Simon, 2004b; Stürmer et al., 2003; Wright, 2003). They therefore provide support for the idea that social identity (Tajfel & Turner, 1986; Turner et al., 1987) constitutes a way in the explanation of intention to participate in social movements, in addition to cost-benefit calculations.

According to the political opportunity structures approach, the opportunities created by political regimes determine the choice of strategies and means of protest, i.e., the actors’ collective action repertoire. This is how a democratic political regime favors repertoires that conform to existing institutions, such as (authorized) demonstrations or the signing of petitions, while a closed political regime (like that of Gabon, for example) would favor repertoires that are not institutionalized and more confrontational (Engels, 2018), such as civic disobedience (attacking the police or burning down buildings). Simon et al. (1998) indicate that the collective and reward motives contribute uniquely to the prediction of the willingness to participate in collective action, even when the three motives and two measures of collective identification are taken into account simultaneously; the contribution of the social motive is only marginal in this analysis. Moreover, identification is a uniquely significant predictor of the inclination to participate in collective action, even when collective, social, and reward motives are taken into account (Simon et al., 2018; Stürmer & Simon, 2004a). The results of the present research do not go in this direction, since they reveal that the two paths interact positively and significantly to explain the intention of collective action. Thus, we can suggest that in the decision-making process of participation in collective action aimed at social change in a repressive context, individuals are not motivated either by their politicized social identity or by the evaluation of the costs and benefits, as postulated by the dual pathway model of social movement participation (Simon et al., 1998). They are motivated by both paths simultaneously.

4.1 Limitations and future research

This research has certain limitations. First, the data was collected from self-reported questionnaires, which may raise concerns about common variance between responses (Degand et al., 2021) and induce desirability biases. Future research could therefore integrate qualitative methodology in addition to quantitative methodology in order to better understand the phenomenon under study. Second, the current research was conducted in one country, Gabon. It would be interesting to replicate it in several other countries with an authoritarian and repressive political context.

4.2 Implications

Given the role of instrumentality and group identification in explaining individuals’ participation in collective action for social change, this research has some implications. First, the dual-pathway model of Simon et al. (1998), which is tested in this study, predicts that instrumental motivations and identification are two distinct explanatory paradigms in participation in collective action — a thesis that is not supported by the results of the present study, which rather point in the direction of a simultaneous contribution of the two pathways. This research, therefore, opens up a new theoretical perspective. Similarly, Simon et al.’s (1998) model and earlier studies (De Weerd & Klandermans, 1999; Friedman & McAdam, 1992; Kelly, 1993; Kelly & Breinlinger, 1995; Kelly & Kelly, 1994; Klandermans et al., 2004; Simon, 2004; Simon et al., 1998; Stürmer & Simon, 2004a; Stürmer et al., 2003; Wright, 2003) have very often focused on the intention to participate in collective action and not on actual participation. However, the data for this study was collected during a student demonstration, thus reporting differences between results obtained in a real situation and in an experimental situation. From this perspective, if potential participation in a social movement is a function either of the expected costs and benefits of participation (Klandermans, 1984, 1997a; Simon et al., 1998) or of the level of collective identification (Breinlinger & Kelly, 1996; Kawakami & Dion, 1993, 1995; Kelly, 1993; Kelly & Breinlinger, 1995; Simon et al., 1998), effective participation is, for its part, a function of both taking into account the costs and benefits of participation and collective identification.

Second, Simon et al.’s (1998) model was validated by two democratically recognized movements (the Graue Panther in Germany and the Gay Movement in the United States), while the results of this research were obtained in
an authoritarian and repressive context. Thus, the divergence of results underlines the relevance of the antecedents of a movement. Indeed, social movements are rooted in socio-structural, political, and organizational contexts (McAdam et al., 1996), and the political context is particularly salient because of its capacity to encourage, or on the contrary, dissuade, individuals’ participation. The divergence of results confirms the need to carry out investigations in specific political contexts (Ayanian et al., 2021). It follows that research in the social psychology of protest would benefit from validating the explanatory models of participation in social movements in different contexts (e.g., democratic vs. authoritarian regime) in order to ensure a more relevant generalization of the results.

5. Conclusion

This study addresses an important gap in the literature by validating a theoretical model of protest, the dual pathway model of social movement participation, in an authoritarian context. First, it reports that the instrumental and identification pathways simultaneously underlie participation in collective action in authoritarian and repressive contexts, contrary to the results obtained in democratic contexts, which argue that the intention to participate in collective action is motivated either by attitudes and the subjective norm or by social identity. The results of the present study also suggest that the sub-dimensions of the instrumental and identification pathways jointly participate in the explanation of participation in normative and non-normative collective action in authoritarian and repressive contexts. These results have implications and are part of concerns about issues of intention, effective participation in collective action, and the socio-political contexts in which these collective actions arise. Ultimately, this study hopes that more studies validating the dual pathway model of social movement participation will be conducted in authoritarian contexts other than Gabon to verify whether the results are similar.

Conflict of interest

The authors declare no conflict of interest in this study.

References


