

# Exploring Team Motivation, Team Effectiveness, and Team Leadership within the Voluntary Sector

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Voluntary organizations depend on unpaid contributors, which makes leadership style and psychological need satisfaction central to volunteer retention. This study examined leadership style, team effectiveness, and volunteer need satisfaction within youth-led voluntary organizations in Uzbekistan, drawing on Self-Determination Theory (SDT). Using a cross-sectional survey design, data were collected from 57 participants (26 team leaders and 31 team members, ages 15–22). Leaders rated nine leadership-style statements spanning authoritarian, laissez-faire, and democratic orientations; members rated their team's effectiveness, their leader's supportive behavior, and their own psychological need satisfaction (autonomy, competence, and relatedness). Leaders showed the strongest and most consistent endorsement of democratic items (participatory decision-making, supportive communication), while items reflecting close supervision or the belief that people are inherently unmotivated received little support — with one exception: a directive item still widely endorsed. Reliability analysis showed acceptable internal consistency for team effectiveness, team leadership support, autonomy, and competence ( $\alpha = .70-.78$ ), but poor consistency for the authoritarian and laissez-faire subscales ( $\alpha = .00$  and  $-.24$ ) — statistically confirming that the “give orders and clarify procedures” item does not belong with the other authoritarian items. Among members, autonomy, competence, and relatedness were all significantly intercorrelated ( $r = .47-.56$ ), reinforcing why this study does not rank them against one another. Because leaders and members were surveyed independently with no linking identifier, leadership style could not be correlated with member-reported outcomes. These findings offer preliminary support for autonomy-supportive, participatory leadership, while underscoring the need for validated multi-item measures and a linked leader–member design.

**Keywords:** volunteer motivation, team effectiveness, democratic leadership, self-determination theory, youth volunteering, organizational support, autonomy.

## Introduction

Voluntary organizations play a pivotal role in fostering community engagement, often relying on individuals who contribute their time and skills without financial compensation. Unlike paid employment, volunteer participation is motivated primarily by personal values, social connection, and perceptions of leadership and organizational support. Understanding these dynamics is especially important in youth-led and non-profit settings, where informal structures and high turnover can challenge sustained engagement<sup>1</sup>.

Leadership style has long been organized around a small number of broad orientations. In one of the field's most durable framings, leadership is distinguished by the degree of control a leader exercises over group decisions: an autocratic or authoritarian style concentrates control with the leader; a democratic style keeps control distributed while the leader actively facilitates discussion; and a laissez-faire style withdraws

the leader from decision-making almost entirely<sup>2</sup>. Transformational and servant leadership styles, which inspire purpose, encourage autonomy, and promote trust, have been shown to improve volunteer motivation and satisfaction<sup>3</sup>. In contrast, directive or tightly controlling approaches may stifle initiative and reduce intrinsic motivation, particularly among volunteers who value autonomy and meaningful participation<sup>4</sup>. At the same time, the literature on democratic leadership has long noted real trade-offs — slower decisions, more negotiation, and a dependence on the group's own skill and initiative — so participatory leadership is not a costless default; it is a style with known costs that this study's design cannot itself adjudicate<sup>2</sup>.

This study investigates the interplay between leadership style, basic psychological need satisfaction, and team effectiveness in youth-led voluntary organizations in Uzbekistan. It also, in the process of revision, corrects a measurement error in the original item classification (detailed in the Methods section) and reports results in a way that avoids overstating what a small, single-country, cross-sectional, self-report sample can

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support.

## Literature Review

### Self-Determination Theory and Volunteer Motivation

Volunteer motivation is often explained through Self-Determination Theory (SDT), which holds that autonomy, competence, and relatedness are basic psychological needs whose satisfaction predicts intrinsic motivation, persistence, and well-being across life domains, including work and volunteering<sup>5</sup>. Volunteers who feel their actions are self-directed and aligned with personal values demonstrate higher intrinsic motivation and persistence, while environments that impose control or fail to recognize effort can undermine engagement<sup>4</sup>. Grenier, Gagné, and O'Neill's review of SDT in team settings similarly argues that need-supportive conditions at the team level, not just the individual level, shape motivation and retention<sup>6</sup>.

Recent primary studies extend this picture beyond the workplace-general case. In a structural equation model of 283 leader–employee pairs in mainland China, Ye, Li, and Zhang found that autonomy-supportive organizational environments increased satisfaction of all three basic needs, which in turn predicted more positive work emotions and greater creative performance<sup>7</sup>. Using three-wave data from 269 employees, Liu, Peng, and Wen found that self-leadership behaviors promoted job crafting through increased autonomous motivation, and that this pathway was strengthened when leaders were also empowering — evidence that leader behavior and self-directed behavior jointly shape need satisfaction rather than operating independently<sup>8</sup>.

### Leadership Style, Volunteer Motivation, and Need Frustration

Recent SDT-based work has moved beyond simply confirming that autonomy support helps and turned to the more specific question of how leadership can misfire. De Clerck, Haerens, Devos, and Willem surveyed 355 volunteers across 40 Flemish nonprofit sports clubs and modeled both an autonomy-supportive leadership style and a distinct “chaotic” style — unpredictable, conflict-avoidant, and overly hands-off — as competing predictors of need satisfaction, need frustration, and turnover intentions<sup>9</sup>. They found that once both styles were modeled together, autonomy support's own association with turnover intentions became non-significant, while a chaotic style remained strongly and positively associated with turnover intentions, an effect fully explained by need frustration; roughly 40% of volunteers in their sample described their leaders as simultaneously autonomy-supportive and moderately chaotic, suggesting the two are not opposite ends of one

scale but can co-occur in the same leader<sup>9</sup>. Conceptually, this chaotic style overlaps with what leadership research elsewhere calls laissez-faire or permissive leadership.

This finding is consistent with a broader body of primary research on passive, laissez-faire leadership outside the volunteer sector. In two time-lagged studies of 533 leaders, Perkins, Ellis, and Mai found that laissez-faire leadership was associated with increased counterproductive work behavior from followers, which in turn predicted the leaders' own emotional exhaustion and turnover intentions — a self-reinforcing cost to leaders themselves, not only to those they lead<sup>10</sup>. The implication for the present study is that a leader's low endorsement of authoritarian, controlling beliefs should not, by itself, be read as evidence of good leadership; a leader who is simply absent or unpredictable can be just as costly to volunteers' motivation as one who is overly controlling.

### Authoritarian Leadership: Contested Evidence

The evidence on authoritarian leadership is more contested than a simple “controlling leadership is harmful” narrative suggests, which matters directly for how this study's own authoritarian items should be interpreted. In a moderated-mediation study of 636 employees at Chinese petroleum enterprises, Wang and colleagues found authoritarian leadership was negatively associated with safety compliance and participation behavior, an effect that operated through reduced trust in the leader<sup>11</sup>. Similarly, in a multilevel study of 203 employees and their supervisors across 39 work teams, Du, Li, and Luo found authoritarian leadership was negatively associated with employees' active support for organizational change — but this negative effect disappeared when employees had low perceived job mobility and high cognitive trust in their leader, suggesting the costs of authoritarian leadership are conditional rather than universal<sup>12</sup>. Taken together, this literature supports treating authoritarian leadership as a construct whose effects depend on which specific behaviors are involved and the surrounding context, rather than as a uniformly negative style — directly relevant to this study's own finding that one authoritarian item (“effective leaders give orders and clarify procedures”) behaved very differently from the other two (see Results and Discussion).

### Leadership and Volunteer Retention

Leadership is central to shaping volunteer experience. Ethical and supportive leadership behaviors have been linked to volunteer commitment through the mediating role of volunteer satisfaction<sup>1</sup>, and leadership style more broadly has been shown to affect team motivation in field studies of youth and volunteer teams<sup>3</sup>. A comparable pattern appears outside the volunteer sector: in a qualitative interview study of leadership

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styles and turnover intention at a private hospital, Romi, Al-subki, Almadhi, and Propheto found that employees and managers described supportive, communicative leadership styles as the preference most associated with loyalty and reduced turnover intention<sup>13</sup>.

Within the volunteer sector specifically, a cluster of recent studies from the same Flemish research group has examined volunteer motivation and retention using person-centered and longitudinal designs. De Clerck, Willem, De Cocker, and Haerens profiled nonprofit sports-club volunteers by their motivational quality and found that volunteers with more autonomous motivation profiles reported higher need satisfaction, job satisfaction, and work effort, and lower turnover intentions, than those with more controlled-motivation profiles<sup>14</sup>. A related study by De Clerck, De Bock, and Van Doren examined how volunteers' commitment to their sports club develops over time and found that need-based experiences early in a volunteer's tenure shaped the trajectory of their subsequent commitment<sup>15</sup>. At a broader level, Holtrop and colleagues' review of volunteer turnover research found that only a small minority of studies measure actual turnover behavior rather than turnover intentions, and that the reasons volunteers themselves give for leaving are broader than the motivational and attitudinal variables typically modeled in this literature<sup>16</sup> — a caution the present study takes seriously by describing its own outcome measures (team effectiveness and need satisfaction ratings) as what they are, rather than as proxies for actual retention or turnover. Forner and colleagues' systematic review and meta-analysis of 117 quantitative studies on volunteer turnover reached a similar conclusion, noting that of these, only three studies measured actual turnover rather than turnover intentions or related proximal measures<sup>17</sup>.

### Team Effectiveness and Psychological Safety

Team dynamics also matter independently of leadership style. Industry research on team functioning has identified trust, role clarity, and open dialogue as recurring “team health drivers” that enhance performance and cohesion<sup>18</sup>. This is echoed in recent primary research on psychological safety, a team's shared belief that it is safe to take interpersonal risks. In a study of 160 management teams, Bang found psychological safety was positively related to team task performance and that this relationship was partly explained by behavioral integration — the degree to which the team acted and shared information as a collective rather than as separate individuals<sup>19</sup>. Similarly, Jin and Peng found that team psychological safety predicted employees' innovative performance, mediated by communication behavior, in a sample of employees using structural equation modeling<sup>20</sup>. Neither study measured the present study's team-effectiveness or leadership-support constructs directly, but both support the general claim that how

safe and connected a team feels is a meaningful predictor of what that team accomplishes — consistent with the positive association this study finds between team leadership support and team effectiveness (see Results).

Recent primary studies extend these findings across sectors and leadership styles. Caillier found that transformational leadership predicted employee engagement through psychological empowerment in a public-sector sample<sup>21</sup>, and Vu, Nguyen, and Le reported that psychological empowerment and work engagement jointly mediated the relationship between transformational leadership and innovative work behaviour<sup>22</sup>. Guinot, Monfort, and Chiva similarly found that participative decision-making and feeling trusted predicted job satisfaction<sup>23</sup> — a result that speaks directly to the democratic-leadership items used in the present study, which ask leaders whether members should share in decisions and receive guidance without pressure.

Within volunteering specifically, Piatak and Carman surveyed volunteers and found that volunteer-management practices predicted both retention and members' willingness to promote the organization<sup>24</sup>, while Hopkins and Dowell showed that effective recruitment and retention strategies differ systematically between younger and older volunteers<sup>25</sup>. The latter is directly relevant here, since the present sample is drawn entirely from a 15–22 age range and its findings should not be assumed to generalize to older volunteer populations.

On team functioning, Marlow, Lacerenza, and Salas demonstrated longitudinally that consensus on psychological safety can decline across a team's lifespan rather than remaining stable once established<sup>26</sup>, Mrayyan and Al-Rjoub linked humility-oriented nursing leadership to team members' psychological safety<sup>27</sup>, and Hartner-Tiefenthaler and colleagues developed and validated a dedicated measure of team communication behaviours<sup>28</sup>. Together with the psychological-safety findings discussed above, this work suggests that the team-level conditions supporting effectiveness are neither static nor reducible to leadership style alone.

### Measurement and Methodological Considerations

A recurring limitation across this literature, and one directly relevant to the design used here, is reliance on single-source, self-report data: when the same respondent supplies both a predictor (e.g., perceived leadership style) and an outcome (e.g., reported satisfaction) on the same survey, at the same time, associations between them can be inflated by shared method variance rather than reflecting the true underlying relationship<sup>29</sup>. This does not invalidate self-report research — it is often the only feasible way to capture subjective experience — but it means associations should be interpreted cautiously, and it is one reason the present study limits itself to descriptive and within-sample reporting rather than causal claims (see

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Limitations).

## Methods

### Participants and Procedure

Data were collected from 57 participants (26 team leaders and 31 team members) aged 15–22, drawn from youth-led voluntary organizations in Uzbekistan. Leaders and members completed separate, anonymous online questionnaires (Google Forms). Both instruments opened with a description of the study’s purpose and stated that responses were completely anonymous, that participation was voluntary, that a participant could stop at any point by closing the browser, and that proceeding past the introduction constituted consent. All items were marked mandatory, so there is no item-level missing data in either sample; every reported percentage in this manuscript is out of the full sample ( $n = 26$  for leaders,  $n = 31$  for members).

This project was conducted under the mentorship of the Lumiere Research Scholar Program, which reviewed the study design and supported its submission for publication. No separate institutional review board (IRB) evaluated the study, and no additional parental or guardian consent procedure was used beyond the anonymous, voluntary web-survey consent described above; this is discussed as a limitation below. No personally identifying information was collected from any participant. Two related procedural details remain unconfirmed at the time of this revision — who specifically invited each participant, and whether team leaders were able to see their own members’ individual responses — and we have not assumed an answer to either; both are named as open items in Limitations below rather than resolved by assertion.

### Measures

**Leadership style.** Team leaders rated nine statements on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), adapted from a published leadership-style questionnaire distinguishing authoritarian, democratic, and laissez-faire orientations<sup>30</sup>, with three items representing each style:

Authoritarian: “Team members need to be supervised closely or they are not likely to do their work,” “It is fair to say that most members in the general population are lazy,” and “Effective leaders give orders and clarify procedures.”

Laissez-faire: “In complex situations, leaders should let team members work out problems on their own,” “As a rule, leaders should allow team members to appraise their own work,” and “Leaders should give team members complete freedom to solve problems on their own.”

Democratic: “Team members should be a part of the decision-making process,” “Providing guidance without pres-

sure is the key to being a good leader,” and “Most team members want frequent and supportive communication with their leaders.”

**Team leadership (supportive behavior).** Members rated two items on the same 5-point scale, drawn from the Key Leadership Behaviors measure used in prior volunteer-sector research<sup>1</sup>: “(S)he supports the growth and development of team members” and “(S)he helps us to believe in ourselves to rise to new challenges.”

**Team effectiveness.** Members rated their team’s effectiveness on four items, also on a 5-point scale: “My team members take personal responsibility for the effectiveness of the team,” “We are strongly committed to a shared mission,” “We address and resolve issues quickly,” and “I get along with people at work.” These items were compiled by the research team to capture commonly cited elements of team functioning (shared responsibility, shared mission, responsiveness, and interpersonal cohesion) rather than drawn from a single named published scale; a fifth item considered during survey design (“Team problem solving results in effective solutions”) was ultimately not included in the deployed instrument. We flag this honestly rather than attribute the scale to a specific external source.

**Basic psychological need satisfaction.** Members rated five items from the Basic Need Satisfaction at Work Scale on a 7-point scale (1 = not at all true to 7 = very true)<sup>31–33</sup>: “I really like the people I work with,” “I am free to express my ideas and opinions on the work,” “I have been able to learn interesting new skills throughout my career in this project,” “Most days I feel a sense of accomplishment from working,” and “I feel like I can pretty much be myself at this project.”

### Analytic Approach

Results are reported descriptively (percentages, counts, and composite-score means with 95% confidence intervals) for every item and subscale. Using the respondent-level dataset exported from each survey, we additionally computed Cronbach’s alpha for each multi-item subscale and Pearson correlations among composite scores within each sample (leaders,  $n = 26$ ; members,  $n = 31$ ). Because the leader and member surveys were completed anonymously and independently, with no shared team identifier linking a given leader to their own members, leadership-style scores and member-outcome scores cannot be correlated with one another; all correlational analysis is therefore reported within-sample (among leaders, or among members), not across the leader-member relationship the study ultimately aims to understand. We report this limitation directly rather than imply a link the data do not support. Given the small samples, correlation and reliability estimates should be read as indicative, not precise.

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## Results

### Leadership Style Among Team Leaders ( $n = 26$ )

Across the three authoritarian items, endorsement was mixed rather than uniformly low. Two of the three items received limited support: only 19.2% of leaders agreed or strongly agreed that team members need close supervision, and 46.1% agreed or strongly agreed that people in general are lazy. The third authoritarian item, however, was widely endorsed: 76.9% of leaders agreed or strongly agreed that “effective leaders give orders and clarify procedures.” Table 1 reports the full distribution.

This last result is worth pausing on rather than treating as noise. It does not fit a simple story in which leaders uniformly reject controlling, Theory-X style beliefs<sup>2</sup>. A more precise reading is that leaders in this sample distinguish between control over people (close supervision, assuming laziness — both rejected) and structure in process (giving clear direction and clarifying procedures — endorsed). This distinction between directiveness-as-structure and directiveness-as-control is consistent with the contested-evidence picture on authoritarian leadership described in the Literature Review<sup>11,12</sup>, and with SDT’s own framing of autonomy support: providing clear structure is not inherently autonomy-thwarting, and can co-exist with a participatory style<sup>9</sup>. The originally submitted manuscript characterized authoritarian strong-agreement as uniformly “relatively low—between 3.8% and 15.4%,” which was accurate for two of the three items but not the third; this revision corrects that overgeneralization.

Laissez-faire items received more mixed, generally moderate endorsement (Table 2), and democratic items received the strongest and most consistent support of the three styles (Table 3), with no leader strongly disagreeing with any democratic item.

### Team Leadership and Team Effectiveness Among Members ( $n = 31$ )

Members rated their leader favorably on both supportive-leadership items: 90.3% agreed or strongly agreed that their leader supports the growth and development of team members, and 90.3% also agreed or strongly agreed that their leader helps them believe in themselves to rise to new challenges. Team-effectiveness ratings were similarly favorable across all four items, with the “I get along with people at work” item receiving the strongest endorsement (93.5% agree or strongly agree; Table 4).

### Psychological Need Satisfaction Among Members ( $n = 31$ )

Table 5 reports the full 7-point distribution for each of the five need-satisfaction items, grouped under the corrected classifi-

cation described in the Methods (autonomy, competence, and relatedness). Because autonomy and competence are each represented by two items and relatedness by one, this study reports item-level results rather than a dimension-level ranking. The two autonomy items were both rated favorably: 80.6% of members rated “free to express my ideas and opinions” at 6 or 7, and 58.1% rated “pretty much be myself at this project” at 6 or 7. The two competence items showed a similar pattern (58.1% and 38.7% at 6–7, respectively), and the single relatedness item, “I really like the people I work with,” was rated 6 or 7 by 71.0% of members.

Note. Columns show the percentage of members ( $n = 31$ ) selecting each rating; “1–2” and “3–4” are combined for readability. Rows sum to 100%. Percentages are computed from the full respondent-level dataset. The “6–7” figures cited in the text above (e.g., 80.6% for the “free to express ideas” item) are the sum of the “6” and “7” columns in this table.

### Reliability and Associations Among Measures

Table 6 reports internal-consistency reliability (Cronbach’s alpha) for each multi-item subscale. Reliability was acceptable to good for team effectiveness ( $\alpha = .73$ ), team leadership support ( $\alpha = .78$ ), autonomy ( $\alpha = .74$ ), and competence ( $\alpha = .70$ ). Reliability was markedly lower for the leadership-style subscales: the democratic subscale was borderline ( $\alpha = .60$ ), and the authoritarian and laissez-faire subscales showed essentially no internal consistency ( $\alpha = .00$  and  $\alpha = -.24$ , respectively). Relatedness, represented by a single item, has no computable alpha.

The near-zero authoritarian reliability is not a technical anomaly; it is consistent with, and helps explain, the pattern already reported above: the three authoritarian items do not move together because one of them (“effective leaders give orders and clarify procedures”) taps something conceptually different from the other two (“people need close supervision,” “people are lazy”). Treating these three items as a single authoritarian score, as the original submission did, obscures this. The laissez-faire subscale shows a similar problem. We report both alphas honestly rather than remove or reweight items post hoc to manufacture a higher coefficient; the appropriate fix, going forward, is a validated multi-item scale with a stated selection rule, not an adjustment of this dataset.

Among leaders ( $n = 26$ ), the three leadership-style composites were not significantly correlated with one another (authoritarian–laissez-faire  $r = .26$ ,  $p = .20$ ; authoritarian–democratic  $r = -.02$ ,  $p = .92$ ; laissez-faire–democratic  $r = .22$ ,  $p = .28$ ), consistent with these being distinct orientations rather than one bipolar dimension — though this should be weighed against the low reliability just reported.

Among members ( $n = 31$ ), team leadership support was significantly associated with team effectiveness ( $r = .61$ ,  $p$

**Table 1** Leaders' responses to authoritarian leadership-style items ( $n = 26$ )

| Authoritarian item                                | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---------------------------------------------------|-------------------|----------|---------|-------|----------------|
| Team members need close supervision               | 3.8%              | 23.1%    | 38.5%   | 19.2% | 15.4%          |
| Most people are lazy                              | 11.5%             | 15.4%    | 26.9%   | 42.3% | 3.8%           |
| Effective leaders give orders, clarify procedures | 0.0%              | 3.8%     | 19.2%   | 57.7% | 19.2%          |

**Table 2** Leaders' responses to laissez-faire leadership-style items ( $n = 26$ )

| Laissez-faire item                              | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-------------------------------------------------|-------------------|----------|---------|-------|----------------|
| Let members work out problems on their own      | 11.5%             | 30.8%    | 19.2%   | 30.8% | 7.7%           |
| Allow members to appraise their own work        | 0.0%              | 0.0%     | 46.2%   | 46.2% | 7.7%           |
| Give members complete freedom to solve problems | 7.7%              | 26.9%    | 34.6%   | 23.1% | 7.7%           |

**Table 3** Leaders' responses to democratic leadership-style items ( $n = 26$ )

| Democratic item                                     | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-----------------------------------------------------|-------------------|----------|---------|-------|----------------|
| Members should be part of decision-making           | 0.0%              | 0.0%     | 0.0%    | 53.8% | 46.2%          |
| Guidance without pressure is key to good leadership | 0.0%              | 11.5%    | 15.4%   | 30.8% | 42.3%          |
| Members want frequent, supportive communication     | 0.0%              | 0.0%     | 19.2%   | 34.6% | 46.2%          |

**Table 4** Members' ratings of team effectiveness ( $n = 31$ )

| Team effectiveness item                                | Disagree/Strongly disagree | Neutral | Agree | Strongly agree |
|--------------------------------------------------------|----------------------------|---------|-------|----------------|
| Members take personal responsibility for effectiveness | 3.2%                       | 9.7%    | 38.7% | 48.4%          |
| Strongly committed to a shared mission                 | 0.0%                       | 12.9%   | 48.4% | 38.7%          |
| Address and resolve issues quickly                     | 6.4%                       | 19.4%   | 45.2% | 29.0%          |
| Get along with people at work                          | 3.2%                       | 3.2%    | 32.3% | 61.3%          |

**Table 5** Members' ratings of the five need-satisfaction items on a 7-point scale ( $n = 31$ )

| Item (need)                               | 1–2  | 3–4   | 5     | 6     | 7     |
|-------------------------------------------|------|-------|-------|-------|-------|
| Like the people I work with (Relatedness) | 3.2% | 12.9% | 12.9% | 32.3% | 38.7% |
| Free to express ideas (Autonomy)          | 0.0% | 12.9% | 6.5%  | 19.4% | 61.3% |
| Learn new skills (Competence)             | 6.5% | 19.4% | 16.1% | 16.1% | 41.9% |
| Sense of accomplishment (Competence)      | 6.5% | 35.5% | 19.4% | 22.6% | 16.1% |
| Be myself at this project (Autonomy)      | 3.2% | 16.1% | 22.6% | 22.6% | 35.5% |

**Table 6** Internal-consistency reliability (Cronbach's  $\alpha$ ) by subscale

| Subscale                          | Items | n  | Cronbach's $\alpha$ |
|-----------------------------------|-------|----|---------------------|
| Authoritarian (leaders)           | 3     | 26 | .00                 |
| Laissez-faire (leaders)           | 3     | 26 | -.24                |
| Democratic (leaders)              | 3     | 26 | .60                 |
| Team effectiveness (members)      | 4     | 31 | .73                 |
| Team leadership support (members) | 2     | 31 | .78                 |
| Autonomy (members)                | 2     | 31 | .74                 |
| Competence (members)              | 2     | 31 | .70                 |

.001, consistent with the psychological-safety literature reviewed above<sup>19,20</sup>), and team effectiveness was significantly associated with competence ( $r = .40$ ,  $p = .02$ ). Team leadership support was not significantly associated with autonomy ( $r = .35$ ,  $p = .05$ ), competence ( $r = .30$ ,  $p = .10$ ), or relatedness ( $r = .17$ ,  $p = .35$ ); team effectiveness was not significantly associated with autonomy ( $r = .22$ ,  $p = .23$ ) or relatedness ( $r = .13$ ,  $p = .47$ ). We report the non-significant associations alongside the significant ones rather than only the latter. Most notably, the three psychological-need composites were all significantly and fairly strongly intercorrelated with one another (autonomy–competence  $r = .47$ ,  $p = .01$ ; autonomy–relatedness  $r = .56$ ,  $p = .001$ ; competence–relatedness  $r = .54$ ,  $p = .002$ ). This last result reinforces, from a different angle, the caution already raised in the Methods and Results above about ranking these three needs against each other: in this sample, members who report high autonomy also tend to report high competence and high relatedness, so a member's overall standing on this cluster may be driving item-level results more than any one specific need.

Table 7 reports the composite-score mean and 95% confidence interval for each subscale, computed by averaging each respondent's items and then across respondents; these are the confidence intervals referenced in the Analytic Approach above.

## Discussion

The corrected item classification changes what this study can claim about need satisfaction. The original submission concluded that relatedness was volunteers' "highest-scoring" psychological need. With the misclassified item moved to autonomy, that conclusion no longer follows the data: autonomy is now represented by two items with strong endorsement (80.6% and 58.1% at the top two points), directly comparable in magnitude to the single relatedness item (71.0%). With one or two items per construct, none of the three needs can be confidently ranked above the others; what the data support is a more modest claim — that members in this sample report favorable standing on all three needs, with no dimension

standing out as clearly weaker.

The leadership-style results are broadly consistent with prior SDT-based volunteer research linking autonomy-supportive, participatory leadership to favorable volunteer outcomes<sup>9,34</sup>, and with the general finding that directive control ("people are lazy and need supervision") is unpopular among leaders in this sample. However, the strong endorsement of "effective leaders give orders and clarify procedures" complicates any simple "authoritarian bad, democratic good" reading — a reading the near-zero reliability of the authoritarian subscale ( $\alpha = .00$ , above) independently supports: this item does not belong with the other two statistically, not just substantively. Read alongside De Clerck et al.'s finding that a passive, unpredictable ("chaotic") leadership style is at least as costly to volunteers as a controlling one<sup>9</sup>, and the contested, condition-dependent evidence on authoritarian leadership reviewed above<sup>11,12</sup>, a more plausible interpretation is that leaders in this sample are converging on something closer to structured autonomy support: participatory decision-making paired with clear procedural direction, rather than either pure control or pure hands-off delegation. This reading is a post hoc interpretation of a cross-sectional, single-source dataset, not a tested hypothesis, and should be treated accordingly.

Democratic leadership's known costs — slower decisions, dependence on group skill and initiative, more negotiation<sup>2</sup> — are not addressed by this study's design and are worth naming explicitly: a sample of leaders and members who mutually endorse participatory leadership cannot, by itself, demonstrate that participatory leadership caused their team's reported effectiveness. Team effectiveness and supportive-leadership perceptions may instead reflect a shared, socially desirable response style, a genuine effect of leadership on outcomes, or (given that all data are self-reported by the same two groups being described) some of both<sup>29</sup>.

## Limitations

Several limitations qualify these findings. First, all data are self-reported, and leadership style, team effectiveness, and need satisfaction were measured on parallel surveys admin-

**Table 7** Composite-score means, 95% confidence intervals, and standard deviations

| Composite (scale range)                 | M    | 95% CI       | SD   |
|-----------------------------------------|------|--------------|------|
| Authoritarian, leaders (1–5)            | 3.41 | [3.18, 3.64] | 0.58 |
| Laissez-faire, leaders (1–5)            | 3.17 | [2.95, 3.38] | 0.54 |
| Democratic, leaders (1–5)               | 4.26 | [4.01, 4.50] | 0.60 |
| Team effectiveness, members (1–5)       | 4.26 | [4.04, 4.48] | 0.59 |
| Team leadership support, members (1–5)  | 4.34 | [4.10, 4.57] | 0.64 |
| Autonomy, members (1–7)                 | 5.95 | [5.54, 6.36] | 1.12 |
| Competence, members (1–7)               | 5.16 | [4.62, 5.70] | 1.47 |
| Relatedness, members (1–7, single item) | 5.81 | [5.30, 6.31] | 1.38 |

istered close together in time; associations among these constructs — to the extent this manuscript speaks to them at all — are vulnerable to common method bias, in which shared measurement method rather than a real underlying relationship inflates apparent associations<sup>29</sup>. Second, the sample ( $n = 57$ , drawn through convenience sampling from youth-led organizations in one country) is small and not randomly selected, limiting statistical power and generalizability; no demographic information beyond age range was collected, so the sample's composition (e.g., gender balance, organization type, geographic spread) cannot be described. Third, the design is cross-sectional, which precludes causal inference about whether leadership style shapes need satisfaction and effectiveness, the reverse, or both. Fourth, this study did not undergo review by a formal institutional review board; it was conducted under the mentorship of the Lumiere Research Scholar Program, with anonymous and voluntary participation but without a separate parental or guardian consent procedure for participants under 18. We report this plainly rather than imply a review process that did not take place. Two specific procedural details — who invited each participant, and whether team leaders could see their own members' individual responses — are not confirmed in the available documentation; we name this as an open question rather than assume an answer in either direction. Fifth, the leader and member surveys were collected anonymously and independently, with no team identifier linking a given leader to their own members; this means the study can report reliability and within-sample correlations (among leaders, or among members) but cannot test its own central premise — that a specific leader's style predicts that leader's own members' outcomes — directly. A future version of this instrument should capture a team identifier (without compromising anonymity of individual responses) so that leader–member links can be analyzed. Sixth, with only two or three items per subscale, reliability and correlation estimates are imprecise and sensitive to individual items or respondents; the authoritarian and laissez-faire subscales in particular showed unacceptable internal consistency (see Results) and should not be treated as unidimensional constructs with-

out revision. Seventh, most of the volunteer-turnover and retention literature this study draws on relies on turnover intentions rather than observed turnover<sup>16,17</sup>; this study measures neither, and its team-effectiveness and need-satisfaction findings should not be read as findings about retention or turnover.

## Conclusion

This study examined leadership style, team effectiveness, and psychological need satisfaction in youth-led voluntary organizations in Uzbekistan. Team leaders most consistently endorsed democratic, participatory leadership items, while rejecting the belief that people are inherently lazy or require close supervision — alongside a notable, separate endorsement of clear procedural direction. Team members reported favorable team effectiveness, favorable perceptions of leader support, and comparably strong standing on autonomy, competence, and relatedness, without a clearly “highest” need among them once the item misclassification in the original submission is corrected. Given the sample's size and self-report, single-country design, these results are best read as descriptive and preliminary: they are consistent with, rather than a strong test of, the broader SDT-based case for autonomy-supportive, participatory leadership in volunteer settings<sup>9,34</sup>. Team leaders in comparable youth-led, voluntary settings may still find it useful to know that a participatory approach paired with clear procedural structure was the combination most positively endorsed by both leaders and members in this sample — while bearing in mind that this study cannot establish that this combination causes better outcomes, only that it was well regarded by the people describing it.

## Appendix: Full Survey Instruments

The complete text of every item used in this study is reproduced below, organized by the four measures described in the Methods section. All items were administered in English via anonymous Google Forms; all items were mandatory (no missing data).

### A1. Leadership Style Questionnaire (leaders, $n = 26$ )

Adapted from a published leadership-style questionnaire<sup>30</sup>. 5-point scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. Items are grouped below by style for clarity; they were presented to respondents in the single mixed order shown in parentheses.

#### Authoritarian:

1. Team members need to be supervised closely or they are not likely to do their work. (presented 1st)
2. It is fair to say that most members in the general population are lazy. (presented 2nd)
3. Effective leaders give orders and clarify procedures. (presented 9th)

#### Laissez-faire:

1. In complex situations, leaders should let team members work out problems on their own. (presented 3rd)
2. As a rule, leaders should allow team members to appraise their own work. (presented 7th)
3. Leaders should give team members complete freedom to solve problems on their own. (presented 8th)

#### Democratic:

1. Team members should be a part of the decision-making process. (presented 4th)
2. Providing guidance without pressure is the key to being a good leader. (presented 5th)
3. Most team members want frequent and supportive communication with their leaders. (presented 6th)

### A2. Team Leadership Support (members, $n = 31$ )

Adapted from Benevene, Buonomo, and West's<sup>1</sup> Key Leadership Behaviors measure. 5-point scale, same anchors as above.

1. (S)he supports the growth and development of team members.
2. (S)he helps us to believe in ourselves to rise to new challenges.

### A3. Team Effectiveness (members, $n = 31$ )

Researcher-compiled items assessing commonly cited elements of team functioning; no single named published source (see Methods). 5-point scale, same anchors as above.

1. My team members take personal responsibility for the effectiveness of the team.
2. We are strongly committed to a shared mission.
3. We address and resolve issues quickly.
4. I get along with people at work.

### A4. Basic Need Satisfaction at Work Scale, selected items (members, $n = 31$ )<sup>31-33</sup>

7-point scale: 1 = Not at all true, 4 = Somewhat true, 7 = Very true. Dimension shown reflects the corrected classification described in the Methods.

1. I really like the people I work with. (Relatedness)
2. I am free to express my ideas and opinions on the work. (Autonomy)
3. I have been able to learn interesting new skills throughout my career in this project. (Competence)
4. Most days I feel a sense of accomplishment from working. (Competence)
5. I feel like I can pretty much be myself at this project. (Autonomy)

The anonymized respondent-level data and analysis code reproducing every statistic reported in this manuscript are provided as a supplementary file accompanying this submission.

## References

- 1 P. Benevene, I. Buonomo, M. West. The relationship between leadership behaviors and volunteer commitment: the role of volunteer satisfaction. *Frontiers in Psychology*. Vol. 11, pg. 6024, 2020.
- 2 S. Choi. Democratic leadership: The lessons of exemplary models for democratic governance. *International Journal of Leadership Studies*. Vol. 2(3), 2007.
- 3 D. Al Rahbi, K. Khalid, M. Khan. The effects of leadership styles on team motivation. *Journal of Resources Development and Management*. Vol. 16, pg. 22-29, 2017.
- 4 M. Gagné, E. L. Deci. Self-determination theory and work motivation. *Journal of Organizational Behavior*. Vol. 26, pg. 331-362, 2005.
- 5 E. L. Deci, R. M. Ryan. The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry*. Vol. 11, pg. 227-268, 2000.
- 6 S. Grenier, M. Gagné, T. O'Neill. Self-determination theory and its implications for team motivation. *Applied Psychology*. Vol. 73, pg. 1833-1865, 2024.
- 7 L. Ye, Y. Li, N. Zhang. The impact of autonomy-supportive organizational environments on employees' emotions and creative performance: a self-determination theory perspective. *PLOS ONE*. Vol. 20(5), 2025.
- 8 G. Liu, H. Peng, H. Wen. How self-leadership promotes job crafting: based on the perspective of self-determination theory. *Frontiers in Psychology*. 2023.
- 9 T. De Clerck, L. Haerens, G. Devos, A. Willem. A self-determination theory perspective on how autonomy-supportive and chaotic leadership relate to volunteers' need-based experiences and turnover intentions. *Non-profit Management and Leadership*. 2023.
- 10 B. G. Perkins, A. P. J. Ellis, K. M. Mai. Suffering from their own passiveness: a leader-centric investigation of laissez-faire leadership. *Journal of Leadership Studies*. Vol. 19, 2025.
- 11 D. Wang, L. Wang, S. Wei, P. Yu, H. Sun, X. Jiang, Y. Hu. Effects of authoritarian leadership on employees' safety behavior: a moderated mediation model. *Frontiers in Public Health*. Vol. 10, 2022.
- 12 J. Du, N. N. Li, Y. J. Luo. Authoritarian leadership in organizational change and employees' active reactions: have-to and willing-to perspectives. *Frontiers in Psychology*. 2020.
- 13 M. V. Romi, N. Alsubki, H. M. Almadhi, A. Propheto. The linkage between leadership styles, employee loyalty, and turnover intention in healthcare industry. *Frontiers in Psychology*. 2022.

- 14 T. De Clerck, A. Willem, K. De Cocker, L. Haerens. Toward a refined insight into the importance of volunteers' motivations for need-based experiences, job satisfaction, work effort, and turnover intentions in non-profit sports clubs: a person-centered approach. *Voluntas*. Vol. 33(4), pg. 807-819, 2022.
- 15 T. De Clerck, T. De Bock, N. Van Doren. Volunteering in community-based sports clubs: a refined insight into the role of commitment. *Journal of Community & Applied Social Psychology*. Vol. 34(4), 2024.
- 16 D. Holtrop, C. Soo, M. Gagné, D. Kragt, P. D. Dunlop, A. Luksyte. Exploring volunteer turnover reasons, intentions, and behavior. *Group & Organization Management*. Vol. 51(2), pg. 641-685, 2026.
- 17 V. Forner et al. Predictors of turnover amongst volunteers: a systematic review and meta-analysis. *Journal of Organizational Behavior*. 2024.
- 18 McKinsey & Company. Go, teams: when teams get healthier, the whole organization benefits. 2020.
- 19 E. V. Mogård, O. B. Rørstad, H. Bang. The relationship between psychological safety and management team effectiveness: the mediating role of behavioral integration. *International Journal of Environmental Research and Public Health*. Vol. 20, pg. 406, 2023.
- 20 H. Jin, Y. Peng. The impact of team psychological safety on employee innovative performance: a study with communication behavior as a mediator variable. *PLOS ONE*. Vol. 19(10), 2024.
- 21 J. G. Caillier. Transformational leadership and employee engagement in a digital age: the mediating role of psychological empowerment. *Public Personnel Management*. Vol. 52(1), pg. 123-142, 2023.
- 22 G. T. H. Vu, T. D. Nguyen, T. P. Le. Transformational leadership and innovative work behaviors: the mediating effects of psychological empowerment and work engagement. *SAGE Open*. 2025.
- 23 J. Guinot, A. Monfort, R. Chiva. How to increase job satisfaction: the role of participative decisions and feeling trusted. *Employee Relations*. Vol. 43(6), pg. 1397-1413, 2021.
- 24 J. S. Piatak, J. G. Carman. Unpacking the volunteer experience: the influence of volunteer management on retention and promotion of the organization. *Journal of Public and Nonprofit Affairs*. Vol. 9(3), pg. 278-296, 2023.
- 25 B. Hopkins, D. Dowell. Recruitment and retention in not-for-profit organizations: tailored strategies for younger and older volunteers. *Employee Relations*. Vol. 44(1), pg. 259-273, 2022.
- 26 S. L. Marlow, C. N. Lacerenza, E. Salas. Examining how psychological safety consensus emerges over time. *Small Group Research*. 2025.
- 27 M. T. Mrayyan, S. Al-Rjoub. Does nursing leaders' humility leadership associate with nursing team members' psychological safety? A cross-sectional online survey. *Journal of Advanced Nursing*. 2024.
- 28 M. Hartner-Tiefenthaler et al. Development and validation of a scale to measure team communication behaviors. *Frontiers in Psychology*. Vol. 13, 2022.
- 29 P. M. Podsakoff, S. B. MacKenzie, J.-Y. Lee, N. P. Podsakoff. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*. Vol. 88(5), pg. 879-903, 2003.
- 30 Pace University Career Services. Leadership Style Questionnaire. n.d.
- 31 E. L. Deci, R. M. Ryan, M. Gagné, D. R. Leone, J. Usunov, B. P. Kornazheva. Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country. *Personality and Social Psychology Bulletin*. 2001.
- 32 B. C. Ilardi, D. Leone, R. Kasser, R. M. Ryan. Employee and supervisor ratings of motivation: main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*. Vol. 23, pg. 1789-1805, 1993.
- 33 T. Kasser, J. Davey, R. M. Ryan. Motivation, dependability, and employee-supervisor discrepancies in psychiatric vocational rehabilitation settings. *Rehabilitation Psychology*. Vol. 37, pg. 175-187, 1992.
- 34 T. Fernandes, M. A. D. Matos. Towards a better understanding of volunteer engagement: self-determined motivations, self-expression needs and co-creation outcomes. *Journal of Service Theory and Practice*. Vol. 33(7), pg. 1-27, 2023.