# The Psychological Impact of Leadership Styles on Employee Well-being and Productivity: A Self-Determination Theory Perspective

Ameer Rasool Batcha F[1], Dr. Shivam Bhartiya[2]
[1]*Master of Science in Psychology (Open and Distance Learning), Semester IV, JAIN (Deemed-to-be University)*
[2]*Guide, JAIN (Deemed-to-be University)*

***Abstract*—This study examined how employees' perception of their manager's autonomy support relates to their well-being and productivity, and whether the satisfaction of basic psychological needs explains these links, from the perspective of Self-Determination Theory. A cross-sectional online survey was completed by 9 eligible employees and former employees who had worked under a direct manager for at least six months. Adapted brief measures were used: the Work Climate Questionnaire (autonomy support, 2 items), the Work-related Basic Need Satisfaction scale (3 items), the WHO-5 Well-Being Index (2 items) and the Individual Work Performance Questionnaire, task performance (2 items), together with a single question on the manager's predominant leadership style. Data were analyzed with correlations, regression and bootstrapped mediation. Need satisfaction was strongly related to well-being (r = .82) and productivity (r = .74), and manager autonomy support was strongly related to need satisfaction (r = .75). Autonomy support was positively but not significantly related to well-being (r = .62, p = .076) and productivity (r = .49, p = .180). The indirect effect of autonomy support through need satisfaction was supported for productivity (95% CI [0.10, 2.83]) but not for well-being (95% CI [-0.20, 2.89]). Leadership styles could not be compared statistically because of small groups. The findings are provisional because the sample is very small, and the design is cross-sectional and based on self-report. They are consistent with the view that managers who support autonomy help employees feel connected, competent and free, which goes with better well-being and productivity.***

***Index Terms*—leadership, autonomy support, self-determination theory, well-being, productivity**

## I. INTRODUCTION

### 1.1 Background and Context of the Study

In today's dynamic and competitive organizational landscape, effective leadership has emerged as a crucial determinant of both employee experience and overall business performance. The interplay between leadership style, employee psychological well-being, and productivity is a subject of growing academic and professional interest. As organizations strive to enhance performance, innovation, and retention, increasing emphasis is being placed on cultivating work environments that support not only output, but also the intrinsic motivation and mental health of the workforce.

Leadership style refers to the behaviors, methods, and approaches a leader employ to guide, influence, and interact with employees. These styles, from transformational and democratic to authoritarian and laissez-faire, significantly impact how employees perceive their roles, engage with their work, and ultimately perform. Effective leaders can inspire commitment, foster trust, and promote well-being, while ineffective leadership can lead to stress, burnout, disengagement, and high turnover.

Five styles are commonly discussed, and all five appear in this study. Authoritarian leaders make decisions alone, give strict instructions and expect obedience. Democratic leaders ask for the team's input and decide together with the team. Laissez-faire leaders leave people to work on their own, with little guidance or involvement. Transformational leaders share an inspiring vision and motivate people to grow. Supportive or servant leaders put the needs of the team first and show care, empathy and support. In practice, managers rarely fit one category perfectly, and employees may experience the same manager differently. For this reason, the study asks each participant to choose the description that fits best, and

treats the result as a descriptive comparison and not as a precise measurement of the manager.

One prominent theoretical lens through which these relationships can be explored is Self-Determination Theory (SDT). Developed by Deci and Ryan (1985), SDT posits that individuals function optimally in environments that satisfy three fundamental psychological needs: autonomy, competence, and relatedness. In workplace settings, when leadership styles nurture these needs, employees tend to feel more motivated, psychologically fulfilled, and productive. Conversely, leadership that constrains, controls, or ignores these needs often results in dissatisfaction, stress, and reduced efficacy.

Well-being and productivity are the two outcomes that organizations care about most, and they are often treated as competing goals. Well-being refers here to how employees feel in their working life, including positive mood, energy and calm, while productivity refers to how well employees carry out the tasks that make up their job. A long tradition of research suggests that the two are linked rather than opposed: employees who feel well tend to give more attention and energy to their work, and employees who are able to do their work effectively tend to feel more competent and satisfied. Leadership sits at the point where these two outcomes meet, because managers decide how work is assigned, how decisions are made, and how much room employees have to act on their own judgment.

### 1.2 Statement of the Research Problem

Despite growing awareness about the importance of mental health in the workplace, many leadership practices remain grounded in models that neglect human psychological needs. As a result, employees may meet performance targets while experiencing disengagement, emotional fatigue, or burnout. While numerous studies have explored individual leadership styles or aspects of employee well-being, fewer studies examine, within a single model, how perceived leadership and manager autonomy support relate to the satisfaction of basic psychological needs and, through them, to both well-being and productivity. There is a need to evaluate leadership not only by what it achieves, but also by how it affects those who contribute to its outcomes.

The problem has a practical side and a research side. In practice, organizations invest in leadership development and well-being programs, but these efforts are often planned separately, and it is not always clear which manager behaviors actually matter for employees' experience at work. If autonomy support is the behavior that links leadership to well-being and productivity, then training managers to listen, explain and show confidence in their staff would be a direct and inexpensive way to improve both outcomes. If it is not, resources may be going to the wrong place.

On the research side, most studies look at a single leadership style or a single outcome, and the process that connects them is often assumed rather than tested. The present study therefore asks a focused question: when employees describe their manager as supporting their autonomy, do they also report better well-being and productivity, and is this link accounted for by the satisfaction of their basic psychological needs?

### 1.3 Research Questions

This study seeks to answer the following questions:

1. How is employees' perception of their manager's autonomy support related to their well-being and productivity?
2. Is the satisfaction of the basic psychological needs of autonomy, competence, and relatedness related to employee well-being and productivity?
3. Does basic psychological need satisfaction explain (mediate) the relationship between perceived leadership and employee well-being and productivity?
4. Do employees who describe their manager's predominant style differently (for example democratic, authoritarian, laissez-faire, transformational or supportive) differ in well-being and productivity?

### 1.4 Key Objectives of the Study

1. To examine the relationship between perceived manager autonomy support and employee well-being and productivity.
2. To examine the relationship between basic psychological need satisfaction at work and employee well-being and productivity.
3. To test whether basic psychological need satisfaction mediates the relationship between perceived leadership and the outcomes, using the Self-Determination Theory framework.
4. To compare well-being and productivity across

employees who describe their manager's predominant style differently.
5. To draw practical implications for leadership development and organizational practice.

## II. REVIEW OF LITERATURE

### 2.1 Theoretical Background

Leadership as an organizational construct has evolved dramatically over the past century. Early approaches such as trait and behavioral theories have given way to more nuanced models that situate leadership within complex social and psychological contexts. Modern theories not only classify and describe leadership behaviors but also scrutinize their effects on employee psychology, well-being, and productivity in organizations fueled by knowledge work, diversity, and rapid change. Against this backdrop, leadership is increasingly seen as a dynamic relationship rather than a mere set of hierarchical functions.

Self-Determination Theory in the workplace. Self-Determination Theory (SDT) provides a foundational perspective for understanding how leadership impacts employee motivation, well-being, and performance. Central to SDT is the assertion that three innate psychological needs, autonomy, competence, and relatedness, must be satisfied for individuals to achieve optimal functioning and sustained motivation. Autonomy-supportive environments let employees make meaningful choices in their work. Competence relates to mastering tasks, receiving constructive feedback, and experiencing growth. Relatedness involves meaningful social connections and a sense of belonging. Leadership behaviors shape the extent to which these needs are met: transformational, democratic, and supportive styles are generally aligned with SDT, whereas authoritarian or absentee leadership tends to frustrate these needs.

### 2.2 Review of Previous Studies

The studies below were selected because they address the main variables of this dissertation: leadership styles, employee well-being, productivity or performance, and the role of basic psychological needs. They are grouped by variable.

A. Self-Determination Theory and basic psychological needs at work

1. Ryan and Deci (2000) set out Self-Determination Theory as a theory of motivation, social development, and well-being. They argued that whether people engage or stay passive depends heavily on their social context, and proposed three innate needs, competence, autonomy, and relatedness. Meeting these needs goes with better motivation and mental health, whereas frustrating them goes with declines in both. The paper also applies the theory to several domains, including work.
2. Deci et al. (2017) reviewed the state of Self-Determination Theory research in work organizations. They distinguish autonomous motivation from controlled motivation and argue that satisfying employees' needs for competence, autonomy, and relatedness supports autonomous motivation, performance, and well-being together. The review also links SDT to transformational leadership, job characteristics, justice, and pay.
3. Gagné and Deci (2005) presented SDT as a theory of work motivation. By separating extrinsic motivation into types that differ in how autonomous they are, the authors replaced a simple intrinsic versus extrinsic divide with a framework that fits organizational settings. They related SDT to other organizational behavior theories and proposed a research agenda.
4. Slemp et al. (2018) carried out a meta-analysis of leader autonomy support in the workplace, covering 72 studies (83 samples, N = 32,870). Perceived leader autonomy support was strongly related to autonomous work motivation and unrelated to controlled motivation. It was also positively related to need satisfaction, well-being, and positive work behaviors, and negatively related to distress. The effects did not differ by country, publication status, or the way autonomy support was measured.
5. Van den Broeck et al. (2016) reviewed and meta-analyzed 99 studies (119 samples) on the basic psychological needs at work. They examined whether each need uniquely predicts growth, internalization, and well-being, and meta-analyzed the antecedents and consequences of need satisfaction. They also proposed future work on need frustration, culture, and measurement.
6. Baard et al. (2004) tested need satisfaction as a basis of performance and well-being in two U.S. banking settings (a pilot of 59 employees and a main study of 528 first-line employees). Perceived manager

autonomy support and employees' autonomous causality orientation each independently predicted need satisfaction, which in turn predicted performance evaluations and psychological adjustment. A reversed model with performance driving need satisfaction fit worse.

7. Deci et al. (2001) compared employees of state-owned Bulgarian companies with employees of a privately owned U.S. corporation. They tested an autonomy-supportive work climate as a route to need satisfaction, which in turn predicted task motivation and adjustment. The model fit in both countries and the constructs were equivalent across the two cultures.

B. Leadership styles and employee well-being

8. Skogstad et al. (2007) surveyed 2,273 Norwegian employees on laissez-faire leadership. Laissez-faire leadership, usually treated as the absence of leadership, was linked to more role conflict, role ambiguity, and conflict with coworkers, and these stressors carried its effect on bullying. Its effect on psychological distress ran mostly through these stressors, so the authors classed it as a destructive leadership behavior.
9. Hildenbrand et al. (2018) studied 148 employees of a German manufacturer in a two-wave survey, two weeks apart. Employees who rated their leader as more transformational reported more thriving at work, and thriving was linked to lower burnout later on. This indirect route held only for employees high in openness to experience.
10. Montano et al. (2023) conducted a meta-analysis of 53 studies (217 effect sizes, about 93,470 participants) comparing seven leadership styles in relation to followers' mental health. Transformational and destructive leadership were the strongest predictors of overall mental health and of negative outcomes such as stress. Relationship-oriented and task-oriented leadership, with transformational leadership close behind, were the strongest predictors of positive outcomes such as well-being.
11. Jiang and Wei (2024) examined servant leadership and employees' thriving at work from a Self-Determination Theory perspective, using an experiment and a two-wave survey of 455 civil servants. Servant leadership satisfied followers' needs for autonomy, competence, and relatedness, and need satisfaction mediated its effect on thriving. The effect was stronger when followers' power distance was low.
12. Fatoki (2023) surveyed employees of small and micro enterprises and used partial least squares structural equation modelling. Participative leadership was positively related to job satisfaction, and both psychological empowerment and work engagement partly carried this effect.
13. Skogstad et al. (2014) reported two prospective, representative studies with six-month and two-year time lags on constructive, laissez-faire, and tyrannical leadership. Destructive leadership was the only significant predictor of job satisfaction in both studies: tyrannical leadership predicted a drop in satisfaction over six months, and laissez-faire leadership was the only predictor over two years.

C. Leadership styles and employee productivity

14. Wang et al. (2011) meta-analyzed 117 independent samples (113 primary studies) on transformational leadership and performance. Transformational leadership was positively related to individual, team, and organizational performance, and the link was usually stronger for contextual performance than for task performance.
15. Judge and Piccolo (2004) meta-analyzed 626 correlations from 87 sources on transformational, transactional, and laissez-faire leadership. Transformational leadership showed the highest overall relationship with outcomes (about .44), followed by contingent reward (about .39), while laissez-faire leadership was negatively related to outcomes (about -.37).
16. Nohe and Hertel (2017) used meta-analytic path models, based on correlations from published meta-analyses (761 samples, 227,419 individuals), to test why transformational leadership relates to organizational citizenship behavior. Affective commitment, job satisfaction, trust in the leader, and leader-member exchange each linked the two, and leader-member exchange was the strongest when all four were modelled together.
17. Wang et al. (2005) surveyed 162 leader-follower dyads in organizations in the People's Republic of China. Leader-member exchange fully mediated the relationship between perceived transformational leadership and followers' task performance and organizational citizenship

behavior.

18. Gastil (1994) carried out a meta-analytic review of democratic and autocratic leadership. Neither style was related to productivity overall, except when study setting and task complexity were considered, whereas democratic leadership had a moderate positive relationship with member satisfaction.

2.3 Research Gap

The studies above show that leadership relates to well-being and performance, and that Self-Determination Theory offers a plausible mechanism. Several gaps remain. First, many studies examine one leadership style at a time, often transformational leadership, and fewer compare democratic, authoritarian, and laissez-faire styles within the same sample. Second, SDT-based studies of leadership more often test autonomy support or a single outcome than both well-being and productivity in one model. Third, the studies reviewed here were conducted largely in Western or East Asian settings, and fewer were found with working adults whose experience spans India and other countries. Fourth, as noted in the literature, measurement relies heavily on self-report, which limits causal conclusions, and the rapid change in work modes (hybrid and remote) means the findings need fresh testing.

2.4 Need and Rationale of the Study

Many organizations continue to prioritize productivity without adequately considering how leadership behaviors affect the psychological foundations of sustainable performance. Particularly in the post-pandemic era, with the rise of hybrid work and increasing concern for workplace mental health, understanding how leadership relates to well-being and productivity is timely. By testing basic psychological need satisfaction as the link, the study aims to explain not only whether leadership matters but how.

The rationale rests on three considerations. The first is theoretical: Self-Determination Theory gives a specific and testable explanation of how leadership affects employees, and each part of that explanation can be examined with a short questionnaire. The second is practical: organizations need guidance on which manager behaviors to develop, and autonomy support is a behavior that can be taught and observed. The third concerns the sample: the study reaches working adults and recent employees through personal and professional networks, which may include people who have worked in different countries and so may add to a literature that has drawn mostly on Western and East Asian samples.

2.5 Significance and Scope of the Present Study

This research contributes to the academic literature and to organizational practice by offering a clearer understanding of how leadership shapes employee experiences through the lens of motivation psychology. For practitioners, the findings may inform leadership training, employee engagement initiatives, and well-being strategies. For scholars, the study offers data from working adults on a model that combines leadership, need satisfaction, well-being, and productivity. The scope is limited to adults with work experience who rate their current or most recent manager, and to the self-reported measures described in Chapter 3.

The scope is limited in the following ways. The study covers adults who have worked under a direct manager for at least six months in a current job or in a job left within the last year. It does not cover self-employed people, people with no direct manager, or people who have been out of work for longer than a year. It measures perceptions and not objective performance, and it measures them once. It does not try to identify the causes of differences between managers, and it does not evaluate any particular organization. The findings are therefore a first, provisional test of the model in a convenience sample and should not be generalized to all workers.

## III. RESEARCH METHODOLOGY

3.1 Research Topic

The topic was chosen because it sits where two questions that matter to employees meet: how they are treated by the person they report to, and how they feel and perform as a result. The title refers to leadership styles because styles are the everyday language people use to describe managers, while the analysis focuses on perceived autonomy support, the manager behavior that Self-Determination Theory identifies as most relevant to employees' motivation. The Self-Determination Theory perspective was chosen because it offers a clear mechanism, the satisfaction of basic psychological needs, that can be tested with a

short survey.
The Psychological Impact of Leadership Styles on Employee Well-being and Productivity: A Self-Determination Theory Perspective.

3.2 Aim of the Study
In more specific terms, the study aims to describe how strongly employees' perception of their manager's autonomy support is related to their well-being and productivity, to test whether the satisfaction of the needs for autonomy, competence and relatedness lies between these variables, and to describe how the outcomes differ across the leadership styles that employees choose for their manager. The study is exploratory in the sense that it uses a small convenience sample, and its main purpose is to give an initial test of the model and to prepare the way for a larger study.
To examine how employees' perceptions of their manager's leadership relate to their well-being and productivity, and whether the satisfaction of basic psychological needs explains these relationships.

3.3 Objectives of the Study
1. To examine the relationship between perceived manager autonomy support and employee well-being and productivity.
2. To examine the relationship between perceived manager autonomy support and basic psychological need satisfaction.
3. To examine the relationship between basic psychological need satisfaction and employee well-being and productivity.
4. To test whether basic psychological need satisfaction mediates the relationship between perceived manager autonomy support and the two outcomes.
5. To compare well-being and productivity across perceived predominant leadership styles.

3.4 Hypotheses
H1: Perceived manager autonomy support is positively related to employee well-being.
H2: Perceived manager autonomy support is positively related to employee productivity (task performance).
H3: Perceived manager autonomy support is positively related to basic psychological need satisfaction.
H4: Basic psychological need satisfaction is positively related to employee well-being and productivity.
H5: Basic psychological need satisfaction mediates the relationship between perceived manager autonomy support and employee well-being and productivity.
H6: Well-being and productivity differ significantly across groups of employees who describe their manager's predominant style differently.

3.5 Operational Definitions
Perceived manager autonomy support is the score on two items of the Work Climate Questionnaire (Baard et al., 2004), in which employees' rate how much their manager supports their autonomy.
Perceived predominant leadership style is the style (authoritarian, democratic, laissez-faire, transformational, or supportive/servant) that the participant selects as best describing the manager's usual way of leading, from short descriptions given in the questionnaire.
Basic psychological need satisfaction is the score on three items of the Work-related Basic Need Satisfaction scale (Van den Broeck et al., 2010), covering relatedness, competence and autonomy at work.
Well-being is the score on two items of the WHO-5 Well-Being Index (cheerful and calm), which measure positive mood over the last three months worked under the manager.
Productivity is the self-rated task performance on two items of the Individual Work Performance Questionnaire (Koopmans et al., 2014) over the last three months worked under the manager.

3.6 Variables
Independent variables: perceived manager autonomy support and perceived predominant leadership style.
Mediating variable: basic psychological need satisfaction (autonomy, competence, relatedness).
Dependent variables: employee well-being and employee productivity (task performance).
Control (demographic) variables: age, gender, and whether the participant still works under the rated manager. These are collected to describe the sample and to check whether they influence the results.

3.7 Inclusion Criteria
- Adults aged 18 years or above.
- At least six months of paid work experience with a

direct manager, in a current job or the most recent job.
- Ability to read and answer the questionnaire in English.
- Voluntary informed consent.

3.8 Exclusion Criteria
- Participants with less than six months of work experience under the rated manager.
- Self-employed participants and participants with no direct manager.
- Incomplete questionnaires.

3.9 Research Design
The study uses a quantitative, cross-sectional, correlational survey design. Participants were recruited through purposive and snowball sampling, using professional and academic networks: working professionals, and university students who have previous work experience. The planned sample size was between 50 and 100 participants, in line with the University's guideline of a sample large enough to run parametric tests. The final sample is reported in Chapter 4.
Purposive sampling was used so that every participant would meet the inclusion criteria, and snowball sampling was used so that participants could pass the link to other eligible colleagues, which is a practical way to reach working adults in a short time. Both are non-probability methods, so the sample cannot be assumed to represent all employees. The target sample of 50 to 100 participants was chosen so that correlations and regression models could be run with reasonable stability; a sample of about 85 is needed to detect a medium correlation ($r = .30$) with 80% power at the .05 level, and the final sample achieved to date, reported in Chapter 4, is far smaller than this target. The results are therefore treated as provisional until more data are collected.

3.10 Tools of Assessment
Socio-demographic details. Age, gender, and whether the participant still works under the rated manager (yes, left within the last six months, or left six months to one year ago).
Perceived predominant leadership style. One researcher-developed question with five short style descriptions (authoritarian, democratic, laissez-faire, transformational, supportive/servant). It is a single-item classification and is treated as a limitation in Chapter 4, since no standardized free scale was available for this classification.
Work Climate Questionnaire, short form (Baard et al., 2004), adapted. Two items ("My manager listens to how I would like to do things" and "My manager conveyed confidence in my ability to do well at my job") rated on a seven-point scale from not at all true (1) to very true (7). The six-item short form was reduced to two items to keep the questionnaire brief.
Work-related Basic Need Satisfaction scale (W-BNS; Van den Broeck et al., 2010), adapted. One item for each need was used: relatedness ("At work, I felt part of a group"), competence ("I felt competent at my job") and autonomy ("I felt free to do my job the way I thought it could best be done"), rated from totally disagree (1) to totally agree (5). The full scale has 18 items; the three-item version was used to keep the questionnaire short, so the three needs are not analyzed separately.

WHO-5 Well-Being Index, adapted. Two items ("cheerful and in good spirits" and "calm and relaxed") were used, scored from 0 (at no time) to 5 (all of the time). The reference period was changed from the past two weeks to the last three months worked under the manager, so that it matches the leadership experience. Higher scores mean better well-being.
Individual Work Performance Questionnaire, task performance subscale (IWPQ; Koopmans et al., 2014), adapted. Two items ("I managed my time well" and "I was able to carry out my work efficiently") about the last three months worked under the manager, rated from seldom (1) to always (5). The full subscale has five items; the short version was used to keep the questionnaire brief.

3.11 Procedure of Administration
The questionnaire was created as an online form and shared with eligible participants through personal and professional contacts. The form had five short pages and took about two minutes to complete. The first page explained the purpose of the study, stated that participation was voluntary and anonymous, and asked for consent. Participants who did not meet the inclusion criteria were directed out of the form. Responses were collected from 23 October 2026 in a spreadsheet, screened for eligibility and completeness, scored, and analyzed.

3.12 Ethical Considerations

Participation was voluntary and based on informed consent. The first page of the form stated that participation was voluntary and anonymous and that no names, email addresses or employer names were collected, and participants agreed before continuing. The data are used only for this academic dissertation. The scales were used for non-commercial academic research and are cited to their authors. No deception was used and the questions did not ask about sensitive personal details beyond the basic demographic information needed.

Several steps were taken to reduce risk to participants. The questions did not ask about health, income, religion or other sensitive personal topics. Participants were asked to think about one manager but were not asked to name the manager, the organization or the sector, so responses cannot be traced to a person. Because the topic involves opinions about a manager, anonymity matters: it allows participants to answer honestly without worrying about consequences at work. The responses are held in a password-protected account, are used only for this dissertation, and are reported in aggregate, so that no individual's answers are described.

3.13 Statistical Analysis

Scores were calculated as the mean of the items in each measure, with no reverse scoring because all items were positively worded. For the two-item measures the correlation between the items and the Spearman-Brown coefficient were reported, and for the three-item need satisfaction score Cronbach's alpha. Descriptive statistics and Shapiro-Wilk tests of normality were run. Pearson correlations tested H1 to H4, with Spearman correlations as a check because of non-normality.

Simple and multiple regression analyses tested the prediction of well-being and productivity. Mediation (H5) was tested with a bootstrapped indirect effect (5,000 resamples, percentile 95% confidence interval). The comparison of style groups (H6) was to use one-way ANOVA, or the Kruskal-Wallis test if assumptions were not met, when group sizes allowed it, and otherwise to be reported descriptively. The significance level was set at .05. Analyses were run in Python with NumPy and SciPy.

## IV. ANALYSIS, FINDINGS AND CONCLUSIONS

[Provisional draft: the results in this chapter are based on the 9 eligible responses received by 24 October 2026. They will be re-run when the final sample is complete, and every number, table and conclusion in this chapter, in Chapter 5 and in the abstract will be updated. Remove this note before submission.]

This chapter presents the analysis of the questionnaire data. The online form received 11 submissions. Two participants answered that they did not have at least six months of experience under a direct manager within the last year and were directed out of the form, so the analysis uses 9 complete, eligible responses.

Scores were calculated as the mean of the items in each measure: perceived manager autonomy support (two items, 1 to 7), basic psychological need satisfaction (three items, 1 to 5), well-being (two items, 0 to 5) and productivity (two items, 1 to 5). Higher scores mean more of the construct. With a sample this small, p values and confidence intervals are unstable, so the findings are read mainly through the size and direction of the effects.

Before the main analysis, the responses were screened. Responses where the participant did not consent or did not meet the eligibility criteria were removed, and the remaining responses were checked for missing values and out-of-range values.

No missing values were found in the eligible responses. Text answers to the mood and performance questions were converted to numbers using the scales described in Chapter 3. Scores were then calculated, and the distribution of each score was checked with the Shapiro-Wilk test.

4.1 Presentation of the Analysis of Data

Table 1 describes the sample. Participants were aged 25 to 60 years (M = 33.1, SD = 11.7), and seven of the nine were men.

Six still worked under the rated manager and three had left within the last year. Authoritarian was the most commonly chosen style (n = 4), followed by laissez-faire (n = 2), transformational (n = 2) and democratic (n = 1). No one chose supportive/servant.

Table 1. Demographic profile of the participants (N = 9)

| Characteristic | Category | n or value | % |
|---|---|---|---|
| Age (years) | M (SD) | 33.1 (11.7) | |
| Age (years) | Range | 25 to 60 | |
| Gender | Male | 7 | 77.8 |
| Gender | Female | 2 | 22.2 |
| Still working under the rated manager | Yes | 6 | 66.7 |
| Still working under the rated manager | No, left within the last 6 months | 2 | 22.2 |
| Still working under the rated manager | No, left 6 months to 1 year ago | 1 | 11.1 |
| Predominant style | Authoritarian | 4 | 44.4 |
| Predominant style | Democratic | 1 | 11.1 |
| Predominant style | Laissez-faire | 2 | 22.2 |
| Predominant style | Transformational | 2 | 22.2 |
| Predominant style | Supportive / servant | 0 | 0.0 |

Table 2 shows the reliability of the measures. The two-item measures were checked with the correlation between the two items and the Spearman-Brown coefficient, and the three-item need satisfaction score with Cronbach's alpha. All values were acceptable, but they come from nine participants and are rough estimates.

Table 2. Reliability (Cronbach's alpha) of the scales

| Measure | Items | Statistic | Value |
|---|---|---|---|
| Manager autonomy support | 2 | Inter-item r / Spearman-Brown | 0.68 / 0.81 |
| Need satisfaction | 3 | Cronbach's alpha | 0.93 |
| Well-being | 2 | Inter-item r / Spearman-Brown | 0.83 / 0.91 |
| Productivity | 2 | Inter-item r / Spearman-Brown | 0.67 / 0.80 |

Table 3 gives the descriptive statistics. Mean manager autonomy support was above the midpoint of the 1 to 7 scale (M = 5.72), and need satisfaction, well-being and productivity were above the midpoints of their scales. Shapiro-Wilk tests showed departures from normality for manager autonomy support ($p = .025$), need satisfaction ($p = .001$) and well-being ($p = .023$), so Spearman correlations were also computed. They showed the same direction for every pair, but the correlation between need satisfaction and productivity fell short of significance ($\rho = .61$, $p = .078$).

Table 3. Descriptive statistics of the study variables

| Variable | Scale range | M | SD | Min | Max |
|---|---|---|---|---|---|
| Manager autonomy support | 1 to 7 | 5.72 | 1.15 | 4.50 | 7.00 |
| Need satisfaction | 1 to 5 | 4.11 | 1.32 | 1.67 | 5.00 |
| Well-being | 0 to 5 | 3.17 | 1.44 | 0.00 | 4.50 |
| Productivity | 1 to 5 | 3.67 | 1.15 | 1.50 | 5.00 |

Table 4 shows the correlations; * means $p < .05$ and ** means $p < .01$. Manager autonomy support was strongly related to need satisfaction ($r = .75$, $p = .020$), which supports H3. Need satisfaction was strongly related to well-being ($r = .82$, $p = .006$) and productivity ($r = .74$, $p = .022$), which supports H4. Manager autonomy support was positively related to well-being ($r = .62$, $p = .076$) and productivity ($r = .49$, $p = .180$), but neither correlation was significant, so H1 and H2 were not supported at the .05 level, although the direction was as predicted. With nine participants a correlation has to exceed about .67 to be significant, so moderate effects could not be detected. Well-being and productivity were also strongly related ($r = .87$, $p = .002$). Age was not significantly related to any variable.

Table 4. Correlations among the study variables

| Variable | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1. Manager autonomy support | | | | |
| 2. Need satisfaction | .75* | | | |
| 3. Well-being | .62 | .82** | | |
| 4. Productivity | .49 | .74* | .87** | |

Table 5 shows the regression analyses. Manager autonomy support explained 56% of the variance in need satisfaction. Need satisfaction explained 68% of the variance in well-being and 55% of the variance in productivity, and manager autonomy support alone explained 38% and 24%. When both predictors were entered together, the coefficient for manager autonomy support was close to zero for well-being ($B = 0.01$, $p = .988$) and slightly negative for productivity

(B = −0.15, p = .727), while need satisfaction kept most of its coefficient (B = 0.89, p = .058 for well-being; B = 0.74, p = .082 for productivity). The two predictors are strongly correlated, so with this sample size these coefficients are imprecise.

Table 5. Regression analyses

| Outcome | Predictor | B | SE | β | t | p | $R^2$ |
|---|---|---|---|---|---|---|---|
| Need satisfaction | Manager autonomy support | 0.86 | 0.29 | .75 | 3.00 | .020 | .56 |
| Well-being | Manager autonomy support | 0.77 | 0.37 | .62 | 2.08 | .076 | .38 |
| Well-being | Need satisfaction | 0.89 | 0.23 | .82 | 3.83 | .006 | .68 |
| Productivity | Manager autonomy support | 0.49 | 0.33 | .49 | 1.49 | .180 | .24 |
| Productivity | Need satisfaction | 0.64 | 0.22 | .74 | 2.93 | .022 | .55 |

Table 6 shows the mediation analysis for H5. The indirect effect of manager autonomy support through need satisfaction was positive for well-being (0.77) and for productivity (0.64). The 95% bootstrap confidence interval excluded zero for productivity [0.10, 2.83] but not for well-being [−0.20, 2.89], so H5 was supported for productivity and not for well-being. In both models the direct effect was close to zero once need satisfaction was included, which is the pattern expected if need satisfaction carries the effect. The very small sample makes the intervals wide, and this analysis is exploratory.

Table 6. Mediation analyses

| Outcome | a path | b path | Total effect (c) | Direct effect (c') | Indirect effect (ab) | 95% bootstrap CI |
|---|---|---|---|---|---|---|
| Well-being | 0.86 | 0.89 | 0.77 | 0.01 | 0.77 | [-0.20, 2.89] |
| Productivity | 0.86 | 0.74 | 0.49 | -0.15 | 0.64 | [0.10, 2.83] |

Table 7 compares well-being and productivity across the leadership styles chosen by participants. The groups are too small for a test of H6: one participant chose democratic, none chose supportive/servant, and the largest group has four. The table is therefore descriptive. Participants who described their manager as authoritarian reported the lowest well-being (M = 2.00) and productivity (M = 2.63), and those who described the manager as transformational reported the highest productivity (M = 4.75).

Participants who still worked under the manager reported higher well-being (M = 3.67, SD = 0.61) and productivity (M = 4.08, SD = 0.92) than those who had left (well-being M = 2.17, SD = 2.25; productivity M = 2.83, SD = 1.26).

Table 7. Comparison of well-being and productivity across perceived leadership styles

| Leadership style | n | Well-being M (SD) | Productivity M (SD) |
|---|---|---|---|
| Authoritarian | 4 | 2.00 (1.47) | 2.63 (0.75) |
| Democratic | 1 | 4.50 (n/a) | 4.00 (n/a) |
| Laissez-faire | 2 | 4.00 (0.00) | 4.50 (0.71) |
| Transformational | 2 | 4.00 (0.00) | 4.75 (0.35) |
| Supportive / servant | 0 | n/a | n/a |

4.2 Discussion on the Findings

The study asked whether employees who see their manager as autonomy supportive report higher well-being and productivity, and whether the satisfaction of basic psychological needs carries this effect. The clearest finding is the link between need satisfaction and both outcomes (H4). Employees who felt part of a group, competent, and free to do their job as they saw best also reported better well-being and higher productivity. This agrees with Self-Determination Theory (Ryan & Deci, 2000; Deci et al., 2017) and with the review by Van den Broeck et al. (2016) of antecedents and consequences of need satisfaction at work. Manager autonomy support was strongly related to need satisfaction (H3). This is consistent with Baard et al. (2004) and Deci et al. (2001), who found that

perceived manager autonomy support predicted need satisfaction in work settings, and with the meta-analysis by Slemp et al. (2018). The direct links from autonomy support to well-being (H1) and productivity (H2) were positive but not significant. This is not evidence against them: correlations of .62 and .49 are medium to large effects, but with nine participants only correlations above about .67 reach significance. A larger sample is needed to decide.

The mediation results (H5) fit the Self-Determination Theory account but do not confirm it. Once need satisfaction was in the model, the direct effect of autonomy support was close to zero for both outcomes, and the indirect effect was positive. The confidence interval excluded zero for productivity only. The design cannot show the order of the variables, and Baard et al. (2004) compared a reversed model in which performance drove need satisfaction, so a causal reading is not possible here.

The comparison of leadership styles (H6) could not be tested. The higher productivity reported by participants who described their manager as transformational is in the direction reported by Judge and Piccolo (2004) and Montano et al. (2023), but groups of one to four people do not allow a conclusion. Participants who had left their manager also reported lower scores than those who still worked under their manager. This could reflect the end of a poor working relationship or the delay in recall, and it was not tested.

4.3 Conclusions Drawn Based on Findings

On the basis of the nine responses analyzed so far, the study draws the following conclusions. First, need satisfaction at work was strongly related to well-being and productivity (H4 supported). Second, perceived manager autonomy support was strongly related to need satisfaction (H3 supported). Third, the direct relationships between autonomy support and well-being (H1) and productivity (H2) were positive but not significant at the .05 level. Fourth, the indirect effect of autonomy support through need satisfaction was supported for productivity but not for well-being (H5). Fifth, the comparison across leadership styles (H6) could not be tested because of the group sizes. These conclusions are provisional and will be re-examined with the final sample.

Hypothesis by hypothesis, the position is as follows. H1, that perceived manager autonomy support is positively related to well-being, was in the predicted direction ($r = .62$) but not significant ($p = .076$). H2, that autonomy support is positively related to productivity, was also in the predicted direction ($r = .49$) but not significant ($p = .180$). H3, that autonomy support is positively related to need satisfaction, was supported ($r = .75$, $p = .020$). H4, that need satisfaction is positively related to well-being and productivity, was supported for both outcomes ($r = .82$ and $r = .74$). H5, that need satisfaction mediates the relationship between autonomy support and the outcomes, was supported for productivity, where the bootstrap interval excluded zero, but not for well-being, where it just included zero. H6 could not be tested because of the group sizes. Overall, the parts of the model that involve need satisfaction are supported, and the direct links from autonomy support to the outcomes are suggested but unconfirmed.

4.4 Limitations and Implications

The main limitation is the sample. Nine participants, recruited through personal and professional networks, is far below the planned 50 to 100 and too small for stable estimates, so the findings cannot be generalized. The design is cross-sectional and based on self-report from one source at one time, so the results show associations and not causes, and common-method bias is possible. The measures are adapted brief versions with one to three items per construct, so their reliability is limited and the scores cannot be compared with norms from the full scales. Leadership style was measured with one researcher-developed question, and the transformational leadership scale planned at the start was dropped to keep the questionnaire short. Participants who had left their manager answered from memory, and all items were worded in the same direction, so a tendency to agree with every item could not be checked. Seven of the nine participants were men. As an implication, the results are consistent with the view that managers who give choice, listen, and show confidence in employees may help them feel competent, connected and free at work, and that these feelings go with better well-being and productivity. The study gives no basis for stronger claims.

Self-report brings further risks. Participants may answer in a way that makes them look good, or may rate all aspects of their working life in a similar way because of their overall feeling about the manager, which can inflate the correlations between variables

that are measured in the same survey. Because the measures have only two or three items, a single item that is read differently by one participant has a large effect on the score. Finally, because participants who had left their manager looked back on the experience, their answers may be shaped by how the relationship ended. These issues do not make the results useless, but they are the reason that the conclusions of this dissertation are stated cautiously.

4.5 Recommendations

For organizations, the findings point to practical steps that Self-Determination Theory already supports: training managers to offer choices, to listen to how employees want to do their work, and to show confidence in them, and checking whether employees feel connected, competent and free in their roles. For research, the study should be repeated with the full scales and a larger sample before any recommendation is adopted.

## V. SUMMARY

5.1 Summary of Key Outcomes of the Study and Their Implications

The study examined how perceived manager autonomy support relates to employee well-being and productivity, and whether the satisfaction of basic psychological needs explains these links. A cross-sectional online survey produced nine eligible responses at the time of writing. Need satisfaction was strongly related to both well-being and productivity, and manager autonomy support was strongly related to need satisfaction. Autonomy support was positively but not significantly related to the two outcomes, and its indirect effect through need satisfaction was supported for productivity but not for well-being. Leadership styles could not be compared statistically because of the group sizes. The pattern fits Self-Determination Theory and suggests that managers affect their teams mainly by shaping whether employees feel connected, competent and free in their work. For practice, this supports leadership development that focuses on autonomy-supportive behavior. These findings are limited by the very small sample described in Chapter 4.

5.2 Suggestions for Future Study

Future studies should use a larger and more varied sample so that regression, mediation and style comparisons have enough power, and should use the full validated scales, including the seven-item transformational leadership scale and all items of the need satisfaction scale, so that autonomy, competence and relatedness can be analyzed separately. Longitudinal designs, or designs that combine employee reports with manager or supervisor ratings, would help to test the order of the variables and reduce common-method bias. Studies could also compare remote, hybrid and on-site work, and could test need frustration and other mediators, as suggested by Van den Broeck et al. (2016).

## REFERENCES

[1] P. P. Baard, E. L. Deci, and R. M. Ryan, “Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings,” *Journal of Applied Social Psychology*, vol. 34, no. 10, pp. 2045–2068, 2004, doi: 10.1111/j.1559-1816. 2004.tb02690. x.

[2] E. L. Deci, A. H. Olafsen, and R. M. Ryan, “Self-determination theory in work organizations: The state of a science,” Annual Review of Organizational Psychology and Organizational Behavior, vol. 4, pp. 19–43, 2017, doi: 10.1146/annurev-orgpsych-032516-113108.

[3] E. L. Deci and R. M. Ryan, Intrinsic Motivation and Self-Determination in Human Behavior. Plenum Press, 1985.

[4] E. L. Deci, R. M. Ryan, M. Gagné, D. R. Leone, J. Usunov, and B. P. Kornazheva, “Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country: A cross-cultural study of self-determination,” Personality and Social Psychology Bulletin, vol. 27, no. 8, pp. 930–942, 2001, doi: 10.1177/0146167201278002.

[5] O. Fatoki, “Participative leadership and employee job satisfaction: The mediating effects of psychological empowerment and work engagement,” Foundations of Management, vol. 15, no. 1, pp. 161–176, 2023, doi: 10.2478/fman-2023-0012.

[6] M. Gagné and E. L. Deci, “Self-determination theory and work motivation,” Journal of Organizational Behavior, vol. 26, no. 4, pp. 331–362, 2005, doi: 10.1002/job.322.

[7] J. Gastil, "A meta-analytic review of the productivity and satisfaction of democratic and autocratic leadership," Small Group Research, vol. 25, no. 3, pp. 384–410, 1994, doi: 10.1177/1046496494253003.

[8] K. Hildenbrand, C. A. Sacramento, and C. Binnewies, "Transformational leadership and burnout: The role of thriving and followers' openness to experience," Journal of Occupational Health Psychology, vol. 23, no. 1, pp. 31–43, 2018, doi: 10.1037/ocp0000051.

[9] X. Jiang and Y. Wei, "Linking servant leadership to followers' thriving at work: Self-determination theory perspective," Frontiers in Psychology, vol. 15, Art. no. 1384110, 2024, doi: 10.3389/fpsyg.2024.1384110.

[10] T. A. Judge and R. F. Piccolo, "Transformational and transactional leadership: A meta-analytic test of their relative validity," Journal of Applied Psychology, vol. 89, no. 5, pp. 755–768, 2004, doi: 10.1037/0021-9010.89.5.755.

[11] L. Koopmans, C. M. Bernaards, V. H. Hildebrandt, H. C. W. de Vet, and A. J. van der Beek, "Construct validity of the Individual Work Performance Questionnaire," Journal of Occupational and Environmental Medicine, vol. 56, no. 3, pp. 331–337, 2014, doi: 10.1097/JOM.0000000000000113.

[12] D. Montano, J. E. Schleu, and J. Hüffmeier, "A meta-analysis of the relative contribution of leadership styles to followers' mental health," Journal of Leadership & Organizational Studies, vol. 30, no. 1, pp. 90–107, 2023, doi: 10.1177/15480518221114854.

[13] C. Nohe and G. Hertel, "Transformational leadership and organizational citizenship behavior: A meta-analytic test of underlying mechanisms," Frontiers in Psychology, vol. 8, Art. no. 1364, 2017, doi: 10.3389/fpsyg.2017.01364.

[14] R. M. Ryan and E. L. Deci, "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being," American Psychologist, vol. 55, no. 1, pp. 68–78, 2000, doi: 10.1037/0003-066X.55.1.68.

[15] A. Skogstad, M. S. Aasland, M. B. Nielsen, J. Hetland, S. B. Matthiesen, and S. Einarsen, "The relative effects of constructive, laissez-faire, and tyrannical leadership on subordinate job satisfaction: Results from two prospective and representative studies," Zeitschrift für Psychologie, vol. 222, no. 4, pp. 221–232, 2014, doi: 10.1027/2151-2604/a000189.

[16] A. Skogstad, S. Einarsen, T. Torsheim, M. S. Aasland, and H. Hetland, "The destructiveness of laissez-faire leadership behavior," Journal of Occupational Health Psychology, vol. 12, no. 1, pp. 80–92, 2007, doi: 10.1037/1076-8998.12.1.80.

[17] G. R. Slemp, M. L. Kern, K. J. Patrick, and R. M. Ryan, "Leader autonomy support in the workplace: A meta-analytic review," Motivation and Emotion, vol. 42, no. 5, pp. 706–724, 2018, doi: 10.1007/s11031-018-9698-y.

[18] A. Van den Broeck, D. L. Ferris, C.-H. Chang, and C. C. Rosen, "A review of self-determination theory's basic psychological needs at work," Journal of Management, vol. 42, no. 5, pp. 1195–1229, 2016, doi: 10.1177/0149206316632058.

[19] A. Van den Broeck, M. Vansteenkiste, H. De Witte, B. Soenens, and W. Lens, "Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale," Journal of Occupational and Organizational Psychology, vol. 83, no. 4, pp. 981–1002, 2010, doi: 10.1348/096317909X481382.

[20] G. Wang, I.-S. Oh, S. H. Courtright, and A. E. Colbert, "Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research," Group & Organization Management, vol. 36, no. 2, pp. 223–270, 2011, doi: 10.1177/1059601111401017.

[21] H. Wang, K. S. Law, R. D. Hackett, D. Wang, and Z. X. Chen, "Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior," Academy of Management Journal, vol. 48, no. 3, pp. 420–432, 2005, doi: 10.5465/amj.2005.17407908.

[22] World Health Organization, Well-Being Index (WHO-5), 1998. [Online]. Citation and licensing details to be verified with the WHO or Psychiatric Research Unit before submission.