SCANDINAVIAN JOURNAL OF WORK AND ORGANIZATIONAL PSYCHOLOGY

"No Worries, there is No Error-Free Leadership!": Error Strain, Worries about Leadership, and Leadership Career Intentions among Non-Leaders

ORIGINAL ARTICLE

ELINA AUVINEN
ZEYNEP AYCAN
HEIDI TSUPARI
MARI HERTTALAMPI
TARU FELDT

**Author affiliations can be found in the back matter of this article*

STOCKHOLM UNIVERSITY PRESS

ABSTRACT

The growing body of research suggests that leadership is not among the most attractive career goals, especially for the younger work force. However, the need for leadership has not diminished. To shed light on the "problem of supply", this study addresses the question of why high-potential individuals (i.e., non-leaders) do not pursue leadership positions by focusing on worries about leadership (WAL) and error-related strain. We had two aims: (1) to identify different profiles of WAL among highly educated professionals, and (2) to explore whether their error strain and leadership career intentions differ among the identified WAL profiles. Data were gathered from 955 highly educated Finnish employees representing different sectors. WAL was measured by a three-dimensional scale consisting of worries about failure, work-life imbalance, and harming others. Based on the Latent Profile Analysis, six WAL profiles emerged: (1) *Average-WAL* (37% of respondents), (2) *Low-WAL* (34%), (3) *High-WAL* (6%), (4) *Failure-sensitive* (9%), (5) *Imbalance-sensitive* (4%) and (6) *Harm-sensitive* (11%). Professionals in the *Low-WAL* profile reported the lowest error strain, whereas employees in the profiles of *High-WAL* and *Failure-sensitive* reported the highest error strain. Employees in the *Low-WAL* profile were more willing to pursue a leadership career in an unfamiliar organization compared to employees in other profiles. In addition, employees within the *Low-WAL* profile were more willing to pursue a leadership career in an unfamiliar organization compared to their home organization. Implications of our findings and future directions are discussed.

CORRESPONDING AUTHOR:
Elina Auvinen
University of Jyväskylä, Department of Psychology, Jyväskylä, Finland
elina.m.e.auvinen@jyu.fi

KEYWORDS:
Error strain; Worries about leadership; leadership career intention

TO CITE THIS ARTICLE:
Auvinen, E., Aycan, Z., Tsupari, H., Herttalampi, M., & Feldt, T. (2022). "No Worries, there is No Error-Free Leadership!": Error Strain, Worries about Leadership, and Leadership Career Intentions among Non-Leaders. *Scandinavian Journal of Work and Organizational Psychology,* 7(1): 6, 1–19. DOI: *https://doi.org/10.16993/sjwop.166*

A growing body of literature suggests that pursuing leadership roles is no longer the primary career goal for most of the workforce (Chernyshenko et al., 2017; Chudzikowski, 2012; Crowley-Henry et al., 2019 Sutela & Lehto, 2014; Torres, 2014). Indeed, the majority of American workers reported a lack of interest in becoming a leader because they either felt satisfied with their current positions or did not want to sacrifice their work-life balance (Torres, 2014). Similar trends have been found in Singapore (Chernyshenko et al., 2017) and Finland (Sutela & Lehto, 2014). Instead of striving to become a leader, a professional career path (almost 70% in Singaporean university students) or self-development at work (48% of the representative sample of the Finnish earner population) are deemed more attractive. There are also generational differences. The younger generations were found to be more interested in lateral moves within or across organizations than vertical moves (i.e., moving up in the hierarchy) compared to the older generations (Chudzikowski, 2012). As careers have become more boundaryless (Crowley-Henry et al., 2019), employees feel the freedom to manage their career options based on their own preferences. In sum, a radical change seems to have taken place in the way people see leader roles as a desirable career option.

Despite these changes, the need for leadership in organizations has not diminished. Leadership is needed in an organization at every level and in different forms (e.g., Hodges & Howieson, 2016; Pearce et al., 2008, 2009). The leadership at the top has a significant impact on the organization's strategy formulation and performance (e.g., Hambrick & Mason, 1984; Jensen et al., 2020; Waldman et al., 2001). The role of leadership in the successful implementation of the innovation strategy has been increasingly evident in recent years (e.g., Denti & Hemlin, 2012; Hodges & Howieson, 2016; Wasserman et al., 2010). Leadership is also an emerging research theme in the *future of the work* field, which signals that leadership is crucial for future jobs involving more diverse teams than today (Santana & Cobo, 2020). Equally important is the recognition of the dark side of leadership with harmful consequences for organizations and stakeholders (e.g., Schyns & Schilling, 2013; Tepper et al., 2006). Hence, it is critical to explore who emerges as a leader, who doesn't and why not. As stated by Lanaj and Hollenbeck (2015), "in some instances, the wrong person might emerge as a leader of a group or the right person may fail to emerge as a leader" (p. 1477).

Why do people refrain from pursuing leadership? As stated by Epitropaki (2018), "talented employees – who are, by all accounts, successful individual contributors – are not willing to step up into managerial positions and claim leadership" (pp. 89)? To answer this question, this study focused on highly educated professionals and investigated how they felt about leadership by using a recently introduced construct of worries about leadership (WAL; Aycan and Shelia, 2019). WAL refers to various worries that individuals may experience while considering taking on a formal leadership role (Aycan & Shelia, 2019). It offers new insights into why some people with possibly high leadership potential would avoid leader positions. Capitalizing on the multidimensionality of the construct, we aim to discover different profiles of worries among highly educated employees who currently do not hold leadership positions. The primary motivation for this study lies in shedding light on why high-potential individuals do not strive for leadership positions. To better understand why talented individuals do not strive for leadership positions, we need to examine the potential reasons behind WAL, such as different individual characteristics that might predispose individuals to feel these worries. Here, we focused on error orientation, and especially its sub-component, error strain, as an antecedent for WAL. We assert that individuals who are less tolerant of making errors would have higher worries about the negative consequences of leadership. Therefore, they would be less likely to aspire a leadership positions in their organization.

WAL taps into the self-selection process in leader emergence (Epitropaki, 2018) and has opened a new avenue in the literature. The present study contributes to this new line of research on self-selection for leadership by investigating a correlate of WAL – namely, the error strain, which is one of the most salient dimensions of general error orientation (Frese & Keith, 2015). Error strain (i.e., fearing the occurrence of errors) is a critical individual-difference variable for developing innovative capacity in organizations (Cannon & Edmondson, 2005), as avoiding mistakes and failures in work context may hamper the innovation from blooming (Ucbasaran et al., 2013). Innovation potential is enhanced to the extent that risk-taking is encouraged and error making is tolerated, as stated by Rybowiak and colleagues (1999, p. 528), "if a company has a more positive attitude towards errors, it can be more action-oriented, innovative, and experimental." The findings of this research would shed light on who aspires for leadership positions to enhance an organization's innovative capacity. Our findings are also expected to make contributions to leadership and innovation literature. The person-centered approach adopted in this research (Howard & Hoffman, 2018) enables us to identify different WAL profiles based on their multidimensional structure and recognize which of these profiles might be associated with unfavorable attitudes towards errors. This knowledge may help organizations design intervention programs to reduce worries about leadership based on individual differences between employees regarding their worry profiles.

WORRIES ABOUT LEADERSHIP (WAL)

WAL is defined as the worries people have about the possible negative consequences of assuming a formal leadership role (Aycan & Shelia, 2019). WAL is an anticipated emotion related to whether an individual wants to strive or avoid leadership roles (Aycan & Shelia, 2019). WAL is among the first constructs to capture the agency perspective (Bandura, 1989) of becoming a leader. Previously, the role of agency has been addressed in the context of Motivation to Lead (MTL), which has focused on individual differences in wanting to assume leadership training, roles, or responsibilities and personal efforts and persistence in acting as a leader (Chan & Drasgow, 2001). Aycan and Shelia (2019) argued that it is not only the motivation but also the emotion that influences the decision when an individual considers leadership roles. The authors theoretically proposed and empirically verified that WAL is orthogonal to MTL. One can have high worries about taking on leadership responsibilities despite a high level of motivation to do so.

WAL consists of three dimensions: 1) *worries about failure* (e.g., worries about losing self-esteem or feeling embarrassment in case of a failure), 2) *worries about work-life imbalance* (e.g., worries about being unable to fulfill duties to family or having less time for self), and 3) *worries about harming others* (e.g., worries about treating others unfairly or becoming a harsh person). WAL is grounded in three theoretical perspectives. Following the idea of the Appraisal Theory of Emotions (Lazarus & Folkman, 1984; Lazarus, 1991), worries arise when an individual perceives leadership role threatening. These cognitive appraisals and associated negative emotions (worries) occur, especially when individuals feel that leadership poses a threat to fulfilling the basic human needs of competence, autonomy, and relatedness, which are the key components of flourishing Self-Determination Theory (Deci & Ryan, 1985). More specifically, possible failure in the leadership role threatens the fulfillment of the need for competence; potential loss of work-life balance threatens the fulfillment of the need for autonomy; the possibility of causing harm to others with the decisions leaders make threatens the fulfillment of the need for relatedness. Finally, in line with the Self-Handicapping Theory (Jones & Berglas, 1978), these threats to the satisfaction of basic human needs can lead to self-handicapping behavior (Elliot & Church, 2003) (i.e., avoiding leadership positions despite the individual's high potential for it).

Our study aims at contributing to the existing literature in two ways. First, we consider the dimensionality of WAL (Aycan & Shelia, 2019) for the first time and use all three dimensions to profile individual differences regarding worries about failure, work-life imbalance, and harming others. These dimensions were theoretically justified and empirically validated for various European and US employee samples (Aycan & Shelia, 2019). Using a person-centered approach (Howard & Hoffman, 2018) allows us to identify different combinations of worries (i.e., WAL profiles) from a large sample of professional employees for whom the leader positions would be a viable career option. The person-centered approach differs fundamentally from the variable-oriented approach focusing on the associations between variables among the *whole sample* under study (Howard & Hoffman, 2018). With the person-centered approach, we can discover how nuanced profiles of worries emerge in sub-samples and how the different worry combinations (i.e., profiles) are associated with error strain and leadership career intentions.

Second, in our study, we examine the ways in which WAL profiles are associated with leadership career intentions when considering leader positions in different organizational contexts. Aycan and Shelia (2019) proposed that WAL can be situation-specific, implying that a particular leadership situation may evoke higher worries than another leadership situation for the same individual. Thus far, this proposition has not been tested. Although we do not test this proposition directly in the present study, we examine how WAL levels are associated with seeking leadership positions in one's own organization versus in another, unfamiliar organization. According to the integrative leadership model of Zaccaro et al. (2018), subjective perceptions about individuals' characteristics (e.g., demographic characteristics, competencies, experience) vis-à-vis role requirements in a given situation influence the self-nomination of leadership. Their model, therefore, recognizes the possibility of situation-specific outcomes (e.g., whether an individual self-nominates, the role expectations are different, or outcomes are different for different leadership situations).

The multidimensionality of the WAL construct implies that individuals differ in the strength of their anticipated emotion, worry (e.g., Perugini & Bagozzi, 2001), or in the power of the urgency to satisfy the need for competence, autonomy, and relatedness (Deci et al., 2001). To acknowledge these differences, we propose that there are sub-groups, or worry profiles, according to the strength of each WAL dimension. The first set of profiles are expected to have similar levels of worries in all three dimensions of WAL, namely "high WAL" (high levels of worries in all dimensions), "average WAL" (average levels of worries in all dimensions), and "low WAL" (low levels of worries in all dimensions). The second set of profiles are expected to have one aspect of worry to be particularly salient and higher than others. These can be individuals with the highest level of worry about failing in the leadership role (can be named as "failure-sensitive"), harming others ("harm-sensitive"), and experiencing an

imbalance in life due to work-life conflict ("imbalance-sensitive"). Therefore, we propose that our latent profile analysis will reveal six profiles of WAL.

Hypothesis 1. Employees will be grouped under six profiles according to their scores of WAL dimensions: (1) low-WAL, (2) average-WAL, (3) high-WAL, (4) failure-sensitive, (5) harm-sensitive, and (6) imbalance-sensitive profiles.

ERROR STRAIN AS AN ANTECEDENT FOR WAL

Making an error is always an emotional event (Zhao, 2011). In the work context, work-related errors may provoke negative emotions such as shame, guilt, anger, fear of losing face, and worry (Frese & Keith, 2015; Zhao et al., 2014). Errors can even lead to psychological trauma and lower confidence of employees to succeed in the company (Välikangas et al., 2009). However, errors can never be avoided entirely (Goodman et al., 2011), especially when working in a leadership role. Errors and failures should be welcome for innovation to flourish (e.g., Ucbasaran, et al., 2013). In the present study, we focus on error strain as a marker of individuals' *error orientation* (Rybowiak et al., 1999), namely the tendency to be stressed about the errors, as a possible anteceding correlate of WAL.

We assume that those who have negative attitudes towards errors would experience more WAL and would be more likely to avoid leadership roles. Romance of leadership theory (Meindl et al., 1985) proposes a tendency to over-attribute the performance of an organization to leaders and ignore other internal and external factors (e.g., resource limitations or market conditions). This tendency is especially evident when organizations do not perform at the expected level; the leaders are often seen as the culprit (Meindl et al., 1985). It is, therefore, natural to expect that those who avoid making errors would also be more prone to avoid leadership positions.

In our study, we utilized one of the most salient dimensions of error orientation, namely, *error strain*, which is defined as "being strained by making errors and therefore fearing the occurrence of errors or reacting to errors with high emotions" (Rybowiak et al., 1999, p. 534). Rybowiak and colleagues (1999) found that among the empirically validated dimensions of the construct (i.e., error competence, learning from errors, error risk-taking, error anticipation, and covering up errors), error strain has the strongest negative correlation with employee well-being (depression and psychosomatic complains), self-esteem and self-efficacy. It is also negatively correlated with initiative taking and controlling. There are several reasons why we consider worries about failure and error strain as theoretically distinct constructs. First, worries about failure is an anticipated emotion capturing the expected level of worry one would feel when failed in the leadership role. As such, it is not the *fear of failure*, but the anticipated emotional *consequence of a failure* (e.g., losing self-esteem or feeling embarrassment). Second, error strain is an attitude towards errors in general, whereas worries about failure is domain-specific (i.e., failure in the leadership domain). Third, research suggests that error-related negativity (depicting increased sensitivity to threat-related to err) precedes emotional processes like anxiety and worry (Proudfit et al., 2013). It has also been argued that worry is an attempt to compensate for the increased sensitivity to an uncertain threat, such as making an error at work (Mennin & Fresco, 2013). Based on this evidence, we argue that error strain might be the most proximal predictor of WAL, as leadership requires a high level of self-esteem, psychological strength, and action orientation – elements that are negatively associated with error strain.

In this study, we explore the association between WAL profiles and error strain. In our first hypothesis, we proposed that there would be six profiles of WAL depending on the level of worries in each dimension of the construct. We expect that error strain is the highest in "high WAL," "failure-sensitive," and "harm-sensitive" profiles. We propose that employees who are highly stressed about making errors would experience the highest levels of WAL in general. We further presume that these individuals would experience a high amount of worries, especially about failing in the leadership role, because leaders are the key figures who are perceived as primarily accountable for organizational outcomes (Meindl et al., 1985). Individuals with high error strain are likely to assess their performance in a potential leadership role more critically, visualize unwanted scenarios and dwell on the things that can go wrong (Bandura, 1993) – for example, causing harm to others due to their authority. On the other hand, we expect error strain to be the lowest in "low WAL" and "imbalance-sensitive" profiles because individuals with these profiles do not necessarily worry about making errors at work; their worries are mainly about losing work-life balance.

Hypothesis 2. Error strain is highest in *high WAL*, *failure-sensitive,* and *harm-sensitive* profiles; lowest in *low WAL* and *imbalance-sensitive* profiles; and in the middle in *average WAL* profile of WAL.

LEADERSHIP CAREER INTENTIONS AS AN OUTCOME OF WAL

There is increasing recognition and support to the dual path of career advancement in organizations: professionals can choose to advance through the managerial/leader

path or the non-managerial professional course, ideally with similar organizational development opportunities and rewards (Weer & Greenhaus, 2015). Therefore, for highly educated professionals, leadership positions are not necessarily the main goal for career advancement if they choose to progress in the professional path. However, for most of these professionals, career advancement opportunities are possible only if vertical progress to leadership positions are pursued with responsibilities to manage individuals, teams, finances, and strategic priorities in the organization. For example, in the academic world, faculty members who initially did not choose to become leaders (e.g., Dean, Provost) must weigh whether to pursue traditional vertical career moves. As the theoretical base behind the concept of WAL suggests, worry is the fundamental emotion that may influence career-related decision making. To understand WAL's relationship with future career plans of highly educated professionals, our third aim was to investigate how leadership career intentions (measured as the perceived likelihood for seeking leadership positions) vary among WAL profiles.

Based on the theory of self-handicapping behavior (Elliot & Church, 2003), individuals with high WAL, despite their leadership potential, may shy away from self-promoting or developmental activities to prepare the conditions for their leadership role occupancy. Therefore, we expected that high levels of WAL would have a negative association with seeking leadership positions. Additionally, we assert that seeking leadership positions in one's own organization would not evoke the same level of worries as in an unfamiliar organization. We predict that leadership career intentions would be particularly sensitive to the individuals' worry about harming others. We propose that in an individual's home organization, the negative anticipation concerning the leader role and the increased responsibility and authority related to leadership tasks may pose a threat to the individual's need for relatedness. The rationale is that rising through the ranks to become a leader may threaten the sense of belonging among those who were once colleagues in the same work community. However, in an unfamiliar organization, this risk may be less apparent, as the organization and the work community are less familiar and the emotional ties are weaker, rendering the decision making easier for the leader.

Hypothesis 3a: Leadership career intentions (i.e., the probability of seeking a leadership position) in one's own and in the unfamiliar organization will be the highest for *average WAL* and *low WAL* profiles; lowest in the *high WAL*, *failure-sensitive* and *imbalance-sensitive* profiles.

Hypothesis 3b: Those in the *harm-sensitive* profile will have lower leadership career intentions (i.e., lower probability of seeking a leadership position) in their own organization than in an unfamiliar organization.

See ***Figure 1*** for the summary of Hypotheses 2 and 3.

METHODS

SAMPLE AND PROCEDURE

The present study focused on Finnish highly educated white-collar employees who were not working in leadership positions at the time of data collection. Trade unions were chosen because most employees are unionized in Finland (in 2013, the rate was 64.5%; Ahtiainen, 2015). Finnish trade unions are also organized based on profession or industry, thus providing a reliable way of gathering representative data from different occupational sectors. The study sample was drawn from the membership registers of the following unions: the Finnish Union of University Professors, the Finnish Union of University Researchers and Teachers, the Finnish Business School Graduates, and Academic Engineers and Architects in Finland. In this study, these professional groups are referred to as professors, university researchers, teachers, business school graduates, and academic engineers. In the Finnish labor market, "business school graduates" indicate individuals with a business degree. They may be employed in various sectors, and they share a common feature of having a university-level business

	High WAL profile	**Average WAL profile**	**Low WAL profile**	**Failure-sensitive profile**	**Harm-sensitive profile**	**Imbalance-sensitive profile**
Error strain	Highest (*Hypothesis 2*)	Middle (*Hypothesis 2*)	Lowest (*Hypothesis 2*)	Highest (*Hypothesis 2*)	Highest (*Hypothesis 2*)	Lowest (*Hypothesis 2*)
Leadership career intentions in employees' own organization or in an unfamiliar organization	Lowest in both "own" and "unfamiliar" organization (*Hypothesis 3a*)	Highest in both "own" and "unfamiliar" organization (*Hypothesis 3a*)	Highest in both "own" and "unfamiliar" organization (*Hypothesis 3a*)	Lowest in both "own" and "unfamiliar" organization (*Hypothesis 3a*)	Lower in "own" than in "unfamiliar" organization (*Hypothesis 3b*)	Lowest in both "own" and "unfamiliar" organization (*Hypothesis 3a*)

Figure 1 An overview of the study hypotheses about the relationships of six WAL profiles with error strain and leadership career intentions.

school degree. "Academic engineers" are engineers with an academic degree but not necessarily working in academia. Instead, they work within other technical fields. The name "academic" contrasts them from other engineers who have a lower level of education, such as the polytechnic (university of applied sciences) degree. The research project (of which this study is a part of) has undergone the ethical assessment and passed the risk analysis successfully.

In spring 2017, a link to an electronic survey was sent to 1272 members of Finnish Union of University Professors, 3009 members of The Finnish Union of University Researchers and Teachers, 2820 from The Finnish Business School Graduates and 2897 members of Academic Engineers and Architects in Finland TEK. Altogether 1151 participants responded to an electronic survey. Of them, 955 had completed the key scales to be analyzed in this study and therefore formed the final sample, yielding a response rate of 25%. From 955 participants, 8% were university professors (n = 75), 51% university researchers and teachers (n = 492), 20% business school graduates (n = 188) and 21% academic engineers (n = 200). The participants' age was 45.4 years on average (range = 25–69; SD = 10.7) and 56% of the participants were women, 76% had a partner, and 34% had underage children. Most of the participants (71%) had a fixed contract of employment. The average weekly working hours was 41.3 hours (SD = 7.5).

MEASURES

Worries about leadership were measured with nine items from the original 16-item WAL scale developed by Aycan and Shelia (2019). The instruction of the scale was as follows: "Suppose that you are offered a leadership position in your organization. To what extent does the possibility of each of the following worry you while considering this offer?" The response scale for the items ranged from 1 (to a very little extent) to 5 (to a very large extent). Nine items were chosen for the present study based on the series of the confirmatory factor analyses (CFAs) which supported the three-factor solution with nine items (χ^2 = 92.41, df = 24, p < 0.001; RMSEA = 0.06; CFI = 0.98; TLI = 0.96; SRMR = 0.04) compared to the 16-item three-factor solution (χ^2 = 1143.39, df = 101, p < 0.001; RMSEA = 0.104; CFI = 0.83; TLI = 0.80; SRMR = 0.10). The chosen nine items represented three core dimensions of WAL: 1) *worries about failure* (3 items, e.g., "Always having to prove my competence to others"), 2) *worries about work-life imbalance* (3 items; e.g., "Being unable to balance work and family"), and 3) *worries about harm* (3 items, e.g., "Treating employees unfairly"). Cronbach's alphas were 0.85, 0.81, and 0.68, respectively.

Error strain was measured with three items from the Error Orientation Questionnaire (Rybowiak et al., 1999). A sample item is "I find it stressful when I err". The response scale ranged from 1 (not at all) to 5 (totally). Cronbach's alpha for this measure was 0.86. Higher scores indicated higher strain.

Leadership career intentions were measured by two statements formulated for this study to capture the different contexts for pursuing leader roles: 1) "I will seek a leadership position in my current organization" and 2) "I will seek leadership positions in another organization". Brief instruction ("Please assess your career plans for the coming five years") was presented preceding the statements. The response scale ranged from 1 (very unlikely) to 5 (very likely). Leadership career intentions were both used as single scores in the subsequent analyses.

Demographic factors. In the analyses, we controlled for several demographic factors: gender (1 = female, 2 = male), age (in years), relationship status (1 = living with a partner, 2 = living alone), children under 18 years old (1 = yes, 2 = no), professional group (1 = professors, 2 = university researchers, and teachers, 3 = business school graduates, 4 = academic engineers), employment contract (1 = fixed, 2 = temporary) and working hours per week (in hours). These were chosen as control variables based on their associations with the outcome variable (WAL). There is evidence that gender differences in leadership still exist (Kossek et al., 2017). Family situations, especially relationship status and dependent children at the household may affect worries concerning work-life imbalance (Korabik, 2015). For this same reason, the weekly working hours were controlled for. For the work-context factors, we controlled for occupational group and employment type, because it is assumed that different occupational groups differ in their motivation for pursuing a career as a leader and employment-related uncertainty may be related to increased worries.

RESULTS

DATA ANALYSIS STRATEGY

All study hypotheses were based on the first hypothesis, which predicted that employees would be grouped under six theoretically driven profiles according to their scores of WAL dimensions. To test this hypothesis, we performed series of Latent Profile Analyses (LPAs) and investigated whether different WAL profiles can be identified based on the three worry dimensions. LPAs were estimated using the Mplus program (Version 8.0, Muthén and Muthén, 1998–2014). The model parameters were estimated using full information maximum likelihood (FIML) estimation with standard errors that are robust to non-normality (MLR estimator). The group solutions (i.e., alternative WAL profiles) were estimated from one group onwards until the fit indices no longer showed an improved fit with the data by adding groups. The fit of the alternative group solutions was evaluated

using Log Likelihood (LL), entropy, the sample-size adjusted Bayesian information criterion (aBIC), and the Lo–Mendell–Rubin adjusted likelihood ratio test (LMR) (Muthén & Muthén, 1998–2014; Nylund et al. 2007). The smaller values of the LL and aBIC indicate a better model fit for a given group solution. Entropy ranges from 0 to 1, higher entropy value indicating a better fit for a given group solution. LMR compares group solution to a *k –1* solution (where *k* is the number of groups) (Nylund et al., 2007). A significant p-value of LMR indicates improvement of the model fit compared to a group solution with *k –1* solution. Rationality and theoretical interpretability of the alternative group solutions were also emphasized when choosing the most adequate model.

After identifying the latent subgroups of WAL (i.e., WAL profiles) in Mplus, we conducted subsequent analyses in the SPSS 24 program. First, we examined differences in demographics between the WAL profiles using either cross-tabulation with Chi-square tests (gender, relationship status, underage children, occupational group, and employment status) and univariate analysis of variance (ANOVA; age and weekly working hours). Second, we investigated differences in error strain and leadership career intentions based on the WAL profile membership using ANCOVAs and controlling for the effects of demographic factors discussed earlier. Differences in leadership career intentions (own organization, unfamiliar organization) within a WAL profile were investigated by using paired samples t-test in the SPSS 24 program. The correlation coefficients and descriptive information of studied variables are presented in ***Table 1***.

IDENTIFYING WAL PROFILES

The results of LPAs are presented in ***Table 2***. Altogether nine group solutions were estimated. All of the fit indices improved when the number of groups was increased until the five-group solution, so group solutions from one to five were rejected. When comparing six- and seven-group solutions, we rejected the seven-group solution based on its higher aBIC value. Also, a decrease in Log Likelihood and aBIC values and increase in entropy was only minor compared to the six-group solution. In addition, the seven-group solution did not offer new interpretative value about WAL profiles, because it produced two almost identical groups with a highly similar WAL profile. LMR values of the 8- and 9-group solutions were insignificant, the entropy started to decrease and aBIC increased in the 9-group solution. Thus, based on the fit indices and content interpretation of the group solutions, the six-group solution was chosen for further analyses.

	1.	2.	3.	4.	5.	M	SD	α
1. Worries about failure	1					2.26	0.88	0.85
2. Worries about work-life imbalance	.29***	1				2.83	1.08	0.81
3. Worries about harm	.59***	.29***	1			2.03	0.55	0.68
4. Error strain	.60***	.18***	.35***	1		2.68	0.92	0.86
5. Leadership career intention in own organization	–.06	–.03	.01	–.03	1	2.18	1.15	
6. Leadership career intention in unfamiliar organization	–.11***	–.08*	–.08**	–.03	.43***	2.40	1.22	

Table 1 Means, standard deviations, reliability coefficients, and Pearson intercorrelations among study variables.
Note: α = Cronbach's alpha.

NUMBER OF CLASSES	LOG L	ENTROPY	ABIC	LMR	LATENT CLASS PROPORTIONS *N* (%)
1	–3794.671	–	7611.475	–	955 (100)
2	–3557.669	0.705	7152.227	0.0000	624 (65)/334 (35)
3	–3443.154	0.723	6937.909	0.0000	410 (43)/399 (42)/146 (15)
4	–3423.796	0.720	6913.936	0.0233	404 (42)/330 (35)/145 (15)/76 (8)
5	–3390.349	0.761	6861.785	0.0002	360(38)/344 (36)/104 (11)/86 (9)/61 (6)
6	–3381.320	0.747	6858.470	0.0229	350 (37)/320 (34)/104 (11)/86 (9)/61 (6)/34 (4)
7	–3374.858	0.770	6860.288	0.0177	363 (38)/316 (33)/98 (10)/86 (9)/44 (5)/28 (3)/20 (2)
8	–3361.358	0.787	6848.032	0.5959	263 (28)/248 (25)/184(19)/88 (9)/61 (6)/48 (5)/35 (4)/28 (3)
9	–3356.009	0.735	6852.076	0.7230	291 (30)/243 (25)/ 105 (11)/96 (10)/77 (8)/76 (8)/32 (3)/22 (2)/13 (1)

Table 2 Fit indices for the Worries About Leadership (WAL) profiles based on Latent Profile Analysis.
Notes: *Log L* = Log Likelihood, *aBIC* = sample-size adjusted Bayesian information criterion, *LMR* = Lo–Mendell–Rubin test.

Six distinguishable WAL profiles fitted the data best, supporting Hypothesis 1. Three of the profiles were worry-level specific, and the rest of the three were worry-type specific. The profiles and their descriptive names are presented as z scores in ***Figure 2*** and the differences in the intensity of WAL dimensions among different profiles are reported in ***Table 3***. The profile labeled as *average-WAL* included 37% participants, being the largest profile in sample size. This profile included individuals whose scores for all WAL dimensions were close to the sample mean. The second-largest (34%) profile was labeled as *low-WAL*. This profile included employees who reported worries on every WAL dimension below the sample mean. Profile labeled as *high-WAL* was relatively small (6%), including employees whose scores were above the sample mean on all WAL dimensions. For the remaining three profiles specific to the worry type, 9% of the participants belonged to the profile labeled as *failure sensitive*. They reported worries related to failure above the sample mean compared to other worry dimensions, which they reported being on average. Profile of *imbalance sensitive* was smallest, comprised only 4% of the respondents. In this profile, the worries about work-life imbalance were high while the worries concerning failure and harm were significantly low compared to the sample mean. Lastly, there was a profile that was labeled as *harm sensitive* (11% of the respondents). In this profile, the respondents' level of all worries was above the sample mean, but unlike in the *high-WAL* profile, their scores of harm-related worries were high compared to other worry dimensions.

As a *post-hoc* analysis, we investigated whether the six WAL profiles differed on various demographic factors (age, gender, relationship status, underage children, employment status, professional group, and weekly working hours). From these variables, only weekly working hours did not differ between WAL profiles (χ^2 (5) = .746; p = .589). ANOVA with pairwise comparisons (Bonferroni) showed that in the profile of *low-WAL*, employees were older (M = 48.6, SD = 11.1) than members of the *average-WAL* (*M* = 44.2, *SD* = 10.3), *high-WAL* (*M* = 42.7, *SD* = 11.0), *failure-WAL* (*M* = 42.2, *SD* = 10.6) and *harm-WAL* profiles (*M* = 44.3, *SD* = 10.9). In addition, professors were overrepresented in the *low-WAL* profile compared to other occupational groups (see ***Table 4***). In the *average-WAL* profile, employees who had children living at home were overrepresented. The profile of high-WAL had an overrepresentation of employees who were living alone (without a spouse) and of employees who worked as university researchers or teachers. For profiles specific to different types of worry, employees who were either female or working with a temporary employment contract were overrepresented in the *failure-sensitive* group. In the *imbalance-sensitive* profile, employees living with children at home were overrepresented. Lastly, in the *harm-sensitive* profile, employees with temporary employment contracts were overrepresented. Age, gender, relationship status, underage children, employment status, and the occupational group were controlled for in the further analysis.

ERROR STRAIN IN WAL PROFILES

Hypothesis 2 stated that error strain would be highest in *high-WAL*, *failure-sensitive* and *harm-sensitive* profiles; lowest in *low-WAL* and *imbalance-sensitive* profiles; and in the middle in *average-WAL* profile. The ANCOVA results

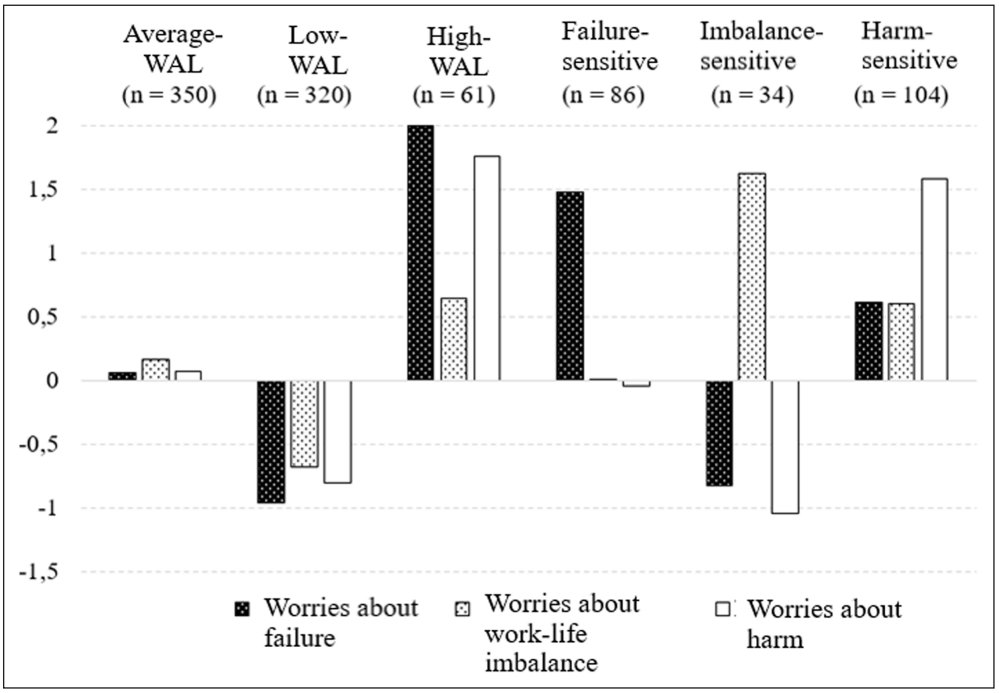

Figure 2 Worries About Leadership (WAL) profiles (presented as standardized z-scores to help interpretation).

	1.AVERAGE WAL (*N* = 350) M (SD)	2.LOW WAL (*N* = 320) M (SD)	3.HIGH WAL (*N* = 61) M (SD)	4.FAILURE-SENSITIVE (*N* = 86) M (SD)	5.IMBALANCE-SENSITIVE (*N* = 34) M (SD)	6.HARM-SENSITIVE (*N* = 104) M (SD)	*F*	PAIRWISE COMPARISONS[a]
Worries about failure	2.34 (0.40)	1.36 (0.38)	4.15 (0.45)	3.66 (0.34)	1.50 (0.44)	2.85 (0.44)	875.26***	3 > 4 > 6 > 1, 2, 5 2 > 1
Worries about work-life imbalance	3.01 (0.90)	2.13 (0.76)	3.50 (1.08)	2.85 (0.99)	4.52 (0.39)	3.46 (0.80)	91.04***	5 > 1, 2, 3, 4, 6 3, 6 > 1, 2, 4 1, 4 > 2
Worries about harm	2.08 (0.40)	1.43 (0.38)	3.33 (0.46)	2.00 (0.39)	1.25 (0.25)	3.21 (0.39)	507.70***	3, 6 > 1, 2, 4, 5 1, 4 > 2, 5

Table 3 Differences in Worries about leadership (WAL) dimensions among six profiles based on Latent Profile Analysis.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.
[a] Bonferroni comparisons.

	AVERAGE WAL (*N* = 350)	LOW WAL (*N* = 320)	HIGH WAL (*N* = 61)	FAILURE-SENSITIVE (*N* = 86)	IMBALANCE-SENSITIVE (*N* = 34)	HARM-SENSITIVE (*N* = 104)	ALL PARTICIPANTS (*N* = 955)	χ^2
	% WITHIN PATTERN (% OF TOTAL *N* = 955)							
Gender								18.65**
Female	53.1 (19.5)	50.6 AT (17.0)	63.9 (4.1)	73.3 T (6.6)	67.6 (2.4)	54.8 (6.0)	(55.5)	
Male	46.9 (17.2)	49.4 T (16.5)	36.1 (2,3)	26.7 AT (2.4)	32.4 (1.2)	45.2 (4.9)	(44.5)	
Relationship status								12.10*
Living with a spouse	78.9 (29.1)	78.0 (26.1)	62.1 AT (3.8)	72.1 (6.5)	79.4 (2.8)	83.7 (9.2)	(77.5)	
Living without spouse	21.1 (7.8)	22.0 (7.4)	37.9 T (2.3)	27.9 (2.5)	20.6 (0.7)	16.3 (1.8)	(22.5)	
Children under 18 years								23.92***
No	60.9 AT (22.4)	72.3 T (24.2)	75.9 (4.6)	65.1 (5.9)	38.2 AT (1.4)	64.4 (7.1)	(65.6)	
Yes	39.1 T (14.4)	27.7 AT (9.3)	24.1 (1.5)	34.9 (3.2)	61.8 T (2.2)	35.6 (3.9)	(34.4)	
Employment type								19.41*
Regular employment	67.1 (24.6)	69.7 (23.4)	62.3 (4.0)	53.5 AT (4.8)	73.5 (2.6)	57.7 (6.3)	(65.7)	
Temporary employment	24.9 (9.1)	23.8 (8.0)	26.2 (1.7)	39.5 T (3.6)	17.6 (0.6)	37.5 T (4.1)	(27.0)	
Self-employed	8.0 (2.9)	6.6 (2.2)	11.5 (0.7)	7.0 (0.6)	8.8 (0.3)	4.8 (0.5)	(7.3)	
Occupational background								26.01*
Professors	6.0 (2.2)	11.9 T (4.0)	3.3 (0.2)	4.7 (0.4)	8.8 (0.3)	6.7 (0.7)	(7.9)	
Researchers and teachers	49.4 (18.1)	49.1 (16.4)	63.9 T (4.1)	58.1 (5.2)	35.3 (1.3)	58.7 (6.4)	(51.5)	
Business school graduates	22 (8.1)	20.6 (6.9)	14.8 (0.9)	17.4 (1.6)	23.5 (0.8)	12.5 AT (1.4)	(19.7)	
Academic engineers	22.6 (8.3)	18.4 (6.2)	18.0 (1.2)	19.8 (1.8)	32.4 (1.2)	22.1 (2.4)	(20,9)	

Table 4 Differences in gender, family-related factors, employment type and professional group (%) between the WAL profiles.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.
T = typical (adjusted residual > 1.96), AT = atypical (adjusted residual < 1.96).

for the differences in error strain among WAL profiles and the pairwise comparisons are shown in ***Table 5***. Results showed that, as expected, error strain levels were (1) the highest in *high-WAL* (M = 3.56, SD = 0.10) and *failure-sensitive* profiles (M = 3.58, SD = 0.08), and (2) the lowest in the *low-WAL* profile (M = 2.16, SD = 0.04). *Harm-sensitive* (M = 2.98, SD = 0.08), *average-WAL* (M = 2.68, SD = 0.04) and *imbalance-sensitive* (M = 2.32, SD = 0.13) profiles were in the middle. Although the ranking of the profiles concerning mean values on error strain was in the expected direction, some of the differences were not statistically significant. Hence, we conclude that the data partially supported our second hypothesis.

LEADERSHIP CAREER INTENTIONS IN WAL PROFILES

First, we studied the leadership career intentions (i.e., likelihood of seeking a leadership position) *between* the different WAL profiles and hypothesized that these intentions would be the highest in the *average-WAL* and *low-WAL* profiles and lowest in the *high-WAL, failure-sensitive* and *imbalance-sensitive* profiles (H3a). As shown in ***Table 5***, the highest likelihood of seeking leadership positions in one's home organization was reported by employees in the *average-WAL* profile compared to the other profiles, supporting H3a. Employees in the *low-WAL* profile reported the second highest likelihood, but pairwise comparisons revealed that the difference was not statistically significant from the likelihood reported by employees in *high-WAL* and *failure-sensitive* profiles, thus only partially confirming our hypothesis. For seeking leadership positions in an unfamiliar organization, hypothesis H3a was fully supported (see ***Table 5***): Employees in the *average-WAL* and *low-WAL* profiles reported a higher likelihood of seeking leadership positions in an unfamiliar organization compared to employees in *high-WAL, failure-sensitive* and *imbalance-sensitive* profiles.

Finally, H3b investigated the differences in leadership career intentions *within* each WAL profile. Here, we compared the probability of seeking leadership positions in one's home organization and in an unfamiliar organization in each profile. These results are shown in ***Table 6***. We found that employees in the *harm-sensitive* profile preferred pursuing leadership positions in an unfamiliar organization compared to their home organization, which supported H3b. A similar result was found for the employees in the *low-WAL* profile.

DISCUSSION

This study contributes to the pioneering line of research on WAL by applying a person-centered methodology to capture the multidimensionality of the construct (i.e., WAL profiles) among highly educated employees. Theoretically, we proposed error strain as an antecedent for worries about leading, whereas leadership career intentions were treated as an outcome resulting from such worries. The primary aim of the study was to group a large sample of professionals into WAL profiles according to their experiences on three dimensions of WAL. In line with our first hypothesis, altogether six WAL profiles were identified. Three of these profiles were depicted by the fluctuations in the levels of all three dimensions of WAL and were labeled as *average WAL, low WAL,* and *high WAL*. The remaining three profiles showed worry type-specific differences and were named as *failure-sensitive, imbalance-sensitive*, and *harm-sensitive* profiles. It is worth noting that two-thirds of the professional sample in Finland were grouped under low and medium worry profiles, whereas only 6.38% were under the high worry profile. Among the worry type-specific groups, the highest number of cases were in the harm-sensitive group, followed by failure-sensitive and imbalance-sensitive groups.

Employees in the *failure-sensitive* profile were mainly worried about failing in the leadership role, should they accept it. For this profile, other dimensions were lower on average than the mid-point, which was 3 on the response scale (indicating a medium level of worry). Employees in the *imbalance-sensitive* profile rather strongly worried that their work-life balance would be destroyed if they were to be appointed as a leader. Other types of worries for this group were very low. The *harm-sensitive* profile was worried about causing harm to others in the leadership role (e.g., having to fire someone) or experiencing personal harm (e.g., experiencing health-related problems due to stress). This group also reported worrying about work-life imbalance, which might have been perceived as harming others (i.e., family, friends) as well as oneself.

We investigated the demographic characteristics of employees within each profile, and found that women were overrepresented in the *failure-sensitive* profile, which is in line with the literature on women's fear of failure (e.g., Correll, 2004; Kossek et al., 2017). This also may imply that women still feel they have to do more to survive in a male dominant field of leadership (Kossek et al., 2017). The gender gap in representation (i.e., number of cases) was also high in the *imbalance-sensitive* profile: those who were worried about losing work-life balance were more likely to be women than men. More women than men were worried about having insufficient opportunities to attend to the needs of not only their families but also their friends and self-care needs. This finding may be due to a higher level of perfectionism in all areas of life attributed to women than men (Mitchelson, 2009). In addition, according to a recent report, women in Finland still do more

	1.AVERAGE WAL	2.LOW WAL	3.HIGH WAL	4.FAILURE-SENSITIVE	5.IMBALANCE-SENSITIVE	6.HARM-SENSITIVE	*F*	PAIRWISE COMPARISONS[a]	PARTIAL η^2
	(*N* = 350) M (SE)	(*N* = 320) M (SE)	(*N* = 61) M (SE)	(*N* = 86) M (SE)	(*N* = 34) M (SE)	(*N* = 104) M (SE)			
Error strain	2.68 (0.04)	2.16 (0.04)	3.56 (0.10)	3.58 (0.08)	2.32 (0.13)	2.98 (0.08)	67.83***	3, 4 > 1, 2, 5, 6 6 > 1, 2, 5 1 > 2	0.29
Leadership career intention									
Own organization	2.33 (0.06)	2.24 (0.06)	1.86 (0.15)	1.84 (0.12)	2.04 (0.19)	2.17 (0.11)	3.96***	1 > 4	0.02
Unfamiliar organization	2.37 (0.06)	2.68 (0.06)	1.85 (0.14)	1.93 (0.12)	2.00 (0.19)	2.37 (0.11)	11.12***	2 > 1 > 3, 4 2 > 5	0.06

Table 5 Mean differences in error strain and leadership career intentions between the WAL profiles (ANCOVA).
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.
[a] Bonferroni comparisons.

	OWN ORGANIZATION *M (SD)*	UNFAMILIAR ORGANIZATION *M (SD)*	*T*	*DF*
Average WAL	2.35 (1.17)	2.45 (1.16)	-1.48 *ns*	349
Low WAL	2.12 (1.16)	2.54 (1.29)	-5.52***	319
High WAL	1.90 (1.16)	1.90 (1.14)	.00 *ns*	60
Failure-sensitive	1.93 (1.00)	2.10 (1.14)	-1.52 *ns*	85
Imbalance-sensitive	2.09 (1.06)	2.06 (0.95)	.177 *ns*	33
Harm-sensitive	2.17 (1.12)	2.42 (1.20)	-2.09*	103

Table 6 Differences in leadership career intentions in current versus unfamiliar organization within each WAL profile (paired sample t-test).
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$, *ns* non-significant.

housework compared to men (Kurronen, 2020). Thus, this inequality may contribute to fact that women are more worried about time management and losing the balance between important life domains as a result of a leadership role in an organization. Our findings also revealed that age was inversely associated with WAL: we found that older employees experienced less WAL than younger employees did. This may reflect the advantages of accumulated experiences over the years that enable individuals to cope with failures and various types of stress in life (e.g., Smith, 2003). An interesting finding was that among those experiencing high WAL were the ones living without a spouse. Individuals may anticipate having more negative consequences of leadership if they had no spouse or partner to receive emotional and instrumental support from (King et al., 1995).

ERROR STRAIN AS A PRECURSOR OF WORRIES ABOUT LEADERSHIP

In this research, we proposed that individual attitudes towards errors at work, namely error strain, would act as an antecedent for leadership-related worries. We theorized that if an individual is prone to be strained and stressed by the chance of errors at work, they would be more worried about the possible negative consequences of leadership. In line with our Hypothesis 2, employees in the *high-WAL* and *failure-sensitive* profiles represented the least tolerant group in their error strain (i.e., they reported being most strained by errors compared to other profiles). Thus, our findings confirmed this part of the hypothesis. It seemed that the stress of making errors associated with a high level of WAL and especially the worries about failure in the leadership role.

We also suggested that the highest level of error strain would be reported by employees in the *harm-sensitive* profile. However, the findings revealed that individuals in the *harm-sensitive* profile reported only an average level of error strain (not the highest error strain, as we hypothesized) together with those in the average-WAL profile. It is possible that *harm-sensitive* professionals tolerate making errors to some extend and welcome the opportunity to help others with the actions they take. Finally, as predicted by the hypothesis, the lowest error strain was reported by professionals who experienced the lowest level of all WAL dimensions (i.e., *low-WAL* profile). Also, as expected, employees in the *imbalance-sensitive* profile were not particularly strained by errors. For this group, worries about work-life imbalance were not perceived to be specifically related to the work context itself or to the "costs of leadership" (i.e., increased responsibilities and having to use authority over others while making the decisions).

Investigating error strain as a theoretical antecedent for WAL shed light on why some individuals would avoid leadership positions more than others. Employees in the *failure-sensitive* profile felt generally anxious about committing errors; they reported the highest level of error strain. They also worried about always having to prove themselves and losing face or self-esteem in a possible leadership role. For this group, the relationship between error strain and failure worries was most pronounced. On the other hand, worries that were specifically related to work-life imbalance as a consequence of leadership did not seem to be related to error strain. These worries may reflect the individual's higher appreciation for the non-work domain, such as family and rewarding leisure.

WORRIES ABOUT LEADERSHIP ASSOCIATED WITH LEADERSHIP CAREER INTENTIONS

In our third hypothesis, we asserted that high WAL would be associated with low intention to pursue a leadership role in the future in one's own organization and an unfamiliar organization. We expected this relationship in all WAL profiles, except for the *harm-sensitive* profile. Professionals in this group were expected to report lower leadership career intentions in their own organization, compared to an unfamiliar organization.

As predicted in our hypothesis H3a, professionals in the *average-WAL* profile reported the greatest intention to become a leader in the future. Those in the *low-WAL* profile also had a higher intention, as suggested by our hypothesis, but the difference from other profiles

was significant only when considering an unfamiliar organization. When considering their own organization, professionals in the *low-WAL* profile had a similar and medium level of leadership-related career intention as other profiles, except for *failure-sensitive*. This may suggest that employees in the *average-WAL* profile had the most balanced and realistic expectations of leadership roles, especially in the familiar context (i.e., in the home organization). In line with our expectation, in both types of organizations, *failure-sensitive*, and *high-WAL* professionals had the lowest level of leadership career intentions. Employees in the *high-WAL* profile were neither interested in seeking leadership positions in their home organization nor in the unfamiliar organization. Also, employees in the *failure-sensitive* profile reported the same tendency of shying away from leadership positions in both organizational contexts. Possible failure as a leader poses a threat to the fulfillment of the need for competence (Aycan & Shelia, 2019), which is appraised as negatively in both organizational contexts.

Finally, hypothesis H3b suggested that the *harm-sensitive* profile would have lower leadership career intentions when considering own organization compared to an unfamiliar organization. It should be mentioned that for both organizational types, *harm-sensitives* were in between the professionals who dismiss the possibility of accepting leadership and those who would consider it in the future. As expected, professionals who are sensitive to giving harm to others or getting harmed by the stress of the role expressed less willingness to become a leader in their own organization than in an unfamiliar organization. The possibility of causing harm to others (e.g., with the decisions that the leader has to make and having authority over people) may threaten the fulfillment of the need for relatedness. This can be especially true in a context where those experiencing the caused harm are one's colleagues or friends, such as in one's current organization (Aycan & Shelia, 2019). In a context that is less familiar, this threat may be less pronounced, which can increase the likelihood of accepting a leadership role in an unfamiliar organization.

As an interesting observation, it should be mentioned that low-WAL profile also had higher intention to lead in an unfamiliar organization than in the current one. Although there was no hypothesis pertaining to the low-WAL profile, the finding of difference between the current and unfamiliar organizations was striking and even larger than the (hypothesized) difference found for the harm-sensitive profile. Professionals in the low-WAL profile may be interested in rapid vertical career progression. They may prefer to exercise leadership in any organization so long as they receive an offer, and they get paid well. It is possible that professionals in this profile considers vertical career advancement more likely and speedier if they change organizations (i.e., get transferred by a competitive organization), rather than stay in their own. These speculations should be tested in future studies.

In general, we observed that leadership career intentions were relatively low in our sample (i.e., on average residing below the mid-point). This finding provides further evidence to the declining appeal of leadership as a career goal (Chudzikowski, 2012) and a growing interest in pursuing a professional/technical career path or boundaryless careers without the burden of responsibilities that come with leadership (cf. Crowley-Henry et al., 2019). Our findings based on a highly professional sample support the trend found among the Finnish earner population (Sutela & Lehto, 2014).

Low leadership career intentions can also be an artefact of our methodology (i.e., related to the sample and measurement qualities). The average age of our sample was slightly over 45 years. On average, we had mid-career participants who were not managers or leaders. It is possible that this group has not been interested in managerial or leadership positions or they have not been promoted to such positions. In either case, the low leadership career intentions may be attributed to the age or career stage of our sample. Our findings can also be explained by the measurement of leadership career intentions. The items in this measure asked respondents' likelihood of seeking a leadership position in their current organization or in an unfamiliar organization. It is possible that respondents scored low on this measure because of the wording of the question, which might have suggested an active seeking of such positions. Our findings might have been different, if the question asked about the likelihood of accepting a position when it is offered, rather than actively seeking a position.

CONTRIBUTIONS AND LIMITATIONS

This research is aligned with the growing literature suggesting that leadership may not be a desirable career option for all professionals (Chernyshenko et al., 2017; Chudzikowski, 2012; Crowley-Henry et al., 2019; Sutela & Lehto, 2014; Torres, 2014). There may be both individual and organizational factors to account for the decline in the interest in leadership. We limited our attention to only one individual-level factor in our study (i.e., error strain), but we recognize the importance of organizational and structural contexts assessed by professionals while they consider pursuing leadership roles. In an increasingly ambiguous and interconnected world, the key roles of managers and leaders (e.g., interpersonal, informational, and decisional; Mintzberg, 1994) are becoming extremely complex. The control and accountability in complex management contexts is likely to increase the worries about leading. The role of *interaction* between individual- and organizational-level predictors of such worries is the next important research agenda for scholars.

The key contributions of the study are as follows. First, this study is part of a new line of research investigating the role of emotions (i.e., worries) in the decision to pursue leadership roles in the course of one's career. Our findings suggest that error strain can be a significant barrier to building an innovative capacity in organizations. Individuals with a high level of error strain experience leadership-related worries and report less interest in pursuing leader careers in the future. This may be an important insight for the literature on leadership and innovation. Second, leveraging the dimensionality of the WAL construct, this research utilized a person-centered approach and grouped employees into different profiles of WAL. This nuanced understanding of the predominant worries that individuals might have when approaching a leadership position can help organizations design intervention programs to reduce worries or increase coping strategies specific to different profiles. Finally, although previous studies showed that career patterns to become a leader are context-dependent (Davoine & Ravasi, 2013), this research showed for the first time that the decision to become a leader may also be context-dependent. More specifically, our findings suggest that different emotions may be at play while considering a leadership position in one's own organization versus in an unfamiliar organization.

There are four main limitations in the study. First, the cross-sectional design does not allow for causal inferences and empirical verification of the theoretical rationale behind our predictions concerning the relationships among error strain, WAL, and leadership career intentions. Although the research suggests that error-related negativity precedes emotional processes such as worry (Proudfit et al., 2013), a longitudinal design would be needed to verify the temporal causation suggested by our theoretical model. Second, the sample of this study were highly educated employees in professional jobs, which makes the generalizability of our finding to other employee and occupational groups debatable. Third, one of the participation requirements was being a non-leader or non-manager at the time of data collection. This sampling criterion might have biased the conclusions of our study (i.e., the leadership career intention is low), given the average age of our participants (M = 45.4 years; SD = 10.7). Employees who are interested in a leadership career might have already secured a leadership position at that age. Age was controlled for in our analyses, but future research may consider sampling from both managers and non-managers from different career stages. Finally, each WAL profile was not equal regarding their size, which may limit the reliability and utility of comparison among them.

Future research should investigate the causal links between other aspects of error orientation, leadership-related worries, and leadership career intentions by using longitudinal designs. The role of other potential contextual factors, such as the structure of the organization (e.g., hierarchical vs. agile structure), sector, and size that might affect leader emergence should also be investigated. Future research should also consider different individual-level (e.g., regulatory focus) and organizational-level (e.g., organizational climate or managerial support) factors as potential moderators between the constructs studied in the current research. For example, regulatory focus (i.e., prevention vs. promotion focus; Higgins, 1997) might moderate the relationship between error strain and WAL, in such a way that error strain is associated with higher WAL levels for those with prevention, rather than promotion focus (see also Haver et al., 2021). Managerial support and learning climate could moderate the relationship between WAL and leadership career intentions in such a way that those experiencing higher levels of WAL would be more likely to show leadership career intentions in supportive (e.g., learning climate and managerial support) than in non-supportive organizational context (e.g., Berson et al., 2013).

The present research offers some important insights for practice. In the context of identifying and developing leadership potential, as Aycan and Shelia (2019) have stressed, considering the agentic role of an individual is essential. No matter how much other members of an organization consider a person to have leadership potential and want to promote him or her to a leadership role, nothing is likely to happen unless the person in question decides to do so. The findings of our research showed that error strain can be an important self-set barrier for professionals *en route* to leadership. Thus, regardless of the employment sector, in every organization employees' orientation towards errors and the organization's learning climate should be cultivated in a way that errors are treated as a potential source for learning and development (Hetzner et al., 2011). Organizations should foster psychologically safe learning climates, where employees feel safe to make mistakes, learn from mistakes, and share these experiences with others in the organization (Edmondson, 1999). Leadership should be seen as an opportunity to learn from mistakes and prevent future ones from happening, rather than expecting leaders to avoid making any errors in the first place (see also van Dyck et al., 2005). Shared leadership (Carson et al., 2007) and corporate governance structures (Jennings, 2009) should also be fostered to promote checks and balances in the organization to minimize the cost of significant errors made by leaders. Indeed, as per the title of our paper, organizational culture and HRM practices should implicitly and explicitly spread the message "No worries! There is no error-free leadership" to motivate professionals to take on leadership roles.

ACKNOWLEDGEMENTS

We would like to express our gratification for Joona Muotka (Department of Psychology, University of Jyväskylä, Finland) in assisting with the statistical analyses.

FUNDING INFORMATION

This study was supported by the Finnish Environment Fund (Grant No. 116163).

COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR AFFILIATIONS

Elina Auvinen *orcid.org/0000-0002-0518-4852*
University of Jyväskylä, Department of Psychology, Jyväskylä, Finland

Zeynep Aycan *orcid.org/0000-0003-4784-334X*
Koç University, Department of Psychology, Istanbul, Turkey

Heidi Tsupari
University of Jyväskylä, Department of Psychology, Jyväskylä, Finland

Mari Herttalampi *orcid.org/0000-0001-9117-0395*
University of Jyväskylä, Department of Psychology, Jyväskylä, Finland

Taru Feldt *orcid.org/0000-0001-7354-0487*
University of Jyväskylä, Department of Psychology, Jyväskylä, Finland

REFERENCES

Ahtiainen, L. (2015). *Employee unionization in Finland in 2013*. Ministry of Employment and the Economy publications. *http://urn.fi/URN:ISBN:978-952-327-027-5*

Aycan, Z., & **Shelia, S.** (2019). "Leadership? No, thanks!" A new construct: Worries about leadership. *European Management Review*, *16*(1), 21–35. DOI: *https://doi.org/10.1111/emre.12322*

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*(9), 1175–1184. DOI: *https://doi.org/10.1037/0003-066X.44.9.1175*

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, *28*(2), 117–148. DOI: *https://doi.org/10.1207/s15326985ep2802_3*

Berson, Y., Da'as, R., & **Waldman, D.** (2013). How do leaders and their teams bring about organizational learning and outcomes? *Personnel Psychology*, *68*(1), 79–108. DOI: *https://doi.org/10.1111/peps.12071*

Cannon, M. D., & **Edmondson, A. C.** (2005). Failing to learn and learning to fail (intelligently): How great organizations put failure to work to innovate and improve. *Long Range Planning*, *38*(3), 299–319. DOI: *https://doi.org/10.1016/j.lrp.2005.04.005*

Carson, J. B., Tesluk, P. E., & **Marrone, J. A.** (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *The Academy of Management Journal*, *50*(5), 1217–1234. DOI: *https://doi.org/10.5465/amj.2007.20159921*

Chan, K. Y., & **Drasgow, F.** (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. *Journal of Applied Psychology*, *86*(3), 481–498. DOI: *https://doi.org/10.1037/0021-9010.86.3.481*

Chernyshenko, O. S., Chan, K. Y., Ho, M. H. R., Uy, M., & **Sam, Y. L.** (2017). Entrepreneurial Professional and Leadership Career ASpiration Survey. In J. Burrus, K. Mattern, B. Naemi, & R. Roberts (Eds.), *Building Better Students: Preparation for the Workforce* (pp. 149–176). Oxfrod University Press. DOI: *https://doi.org/10.1093/acprof:oso/9780199373222.003.0007*

Chudzikowski, K. (2012). Career transitions and career success in the 'new' career era. *Journal of Vocational Behavior*, *81*(2), 298–306. DOI: *https://doi.org/10.1016/j.jvb.2011.10.005*

Correll, S. J. (2004). Constraints into preferences: Gender, status, and emerging career aspirations. *American Sociological Review*, *69*(1), 93–113. DOI: *https://doi.org/10.1177/000312240406900106*

Crowley-Henry, M., Benson, E. T., & **Al Ariss, A.** (2019). Linking talent management to traditional and boundaryless career orientations: Research propositions and future directions. *European Management Review*, *16*(1), 5–19. DOI: *https://doi.org/10.1111/emre.12304*

Davoine, E., & **Ravasi, C.** (2013). The relative stability of national career patterns in European top management careers in the age of globalization: A comparative study in France/Germany/Great Britain and Switzerland. *European Management Journal*, *31*(2), 152–163. DOI: *https://doi.org/10.1016/j.emj.2012.06.001*

Deci, E. L., & **Ryan, R. M.** (1985). Conceptualizations of intrinsic motivation and self- determination. In *Intrinsic motivation and self-determination in human behavior* (pp. 11–40). Springer, Boston. DOI: *https://doi.org/10.1007/978-1-4899-2271-7_2*

Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & **Kornazheva, B. P.** (2001). 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*, *27*(8), 930–942. DOI: *https://doi.org/10.1177/0146167201278002*

Denti, L., & **Hemlin, S.** (2012). Leadership and innovation in organizations: A systematic review of factors that mediate or moderate the relationship. *International Journal of Innovation Management*, *16*(03), 1240007. DOI: *https://doi.org/10.1142/S1363919612400075*

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. DOI: *https://doi.org/10.2307/2666999*

Elliot, A. J., & **Church, M. A.** (2003). A motivational analysis of defensive pessimism and self-handicapping. *Journal of Personality*, *71*(3), 369–396. DOI: *https://doi.org/10.1111/1467-6494.7103005*

Epitropaki, O. (2018). Self-selection bias in leadership. Understanding reluctant leaders. In R. E. Riggio (Ed.). *What's wrong with leadership? Improving leadership research and practice* (pp. 89–104). Routledge. DOI: *https://doi.org/10.4324/9781315163604-5*

Frese, M., & **Keith, N.** (2015). Action errors, error management, and learning in organizations. *Annual Review of Psychology*, *66*, 661–687. DOI: *https://doi.org/10.1146/annurev-psych-010814-015205*

Goodman, P. S., Ramanujam, R., Carroll, J. S., Edmondson, A. C., Hofmann, D. A., & **Sutcliffe, K. M.** (2011). Organizational errors: Directions for future research. *Research in Organizational Behavior*, *31*, 151–176. DOI: *https://doi.org/10.1016/j.riob.2011.09.003*

Hambrick, D. C., & **Mason, P. A.** (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, *9*(2), 193–206. DOI: *https://doi.org/10.5465/amr.1984.4277628*

Haver, A., Akerjordet, K., Robinson, L., & **Caputi, P.** (2021). Investigating emotion regulation strategies to facilitate the well-being of managers. *Scandinavian Journal of Work and Organizational Psychology*, *6*(1), 10. DOI: *https://doi.org/10.16993/sjwop.147*

Hetzner, S., Gartmeier, M., Heid, H., & **Gruber, H.** (2011). Error orientation and reflection at work. *Vocations and Learning*, 4(1), 25–39. DOI: *https://doi.org/10.1007/s12186-010-9047-0*

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, *52*, 1280–1300. DOI: *https://doi.org/10.1037/0003-066X.52.12.1280*

Hodges, J., & **Howieson, B.** (2016). The challenges of leadership in the third sector. *European Management Journal*, *35*(1), 1–9. DOI: *https://doi.org/10.1016/j.emj.2016.12.006*

Howard, M. C., & **Hoffman, M. E.** (2018). Variable-centered, person-centered, and person-specific approaches: Where theory meets the method. *Organizational Research Methods*, *21*(4), 846–876. DOI: *https://doi.org/10.1177/1094428117744021*

Jensen, M., Potočnik, K., & **Chaudhry, S.** (2020). A mixed-methods study of CEO transformational leadership and firm performance. *European Management Journal, 38*(6), 836–845. DOI: *https://doi.org/10.1016/j.emj.2020.05.004*

Jones, E., & **Berglas, S.** (1978). Control of attributions about the self through self-handicapping strategies: The appeal of alcohol and the role of underachievement. *Personality and Social Psychology Bulletin*, 4(2), 200206. DOI: *https://doi.org/10.1177/014616727800400205*

King, L. A., Mattimore, L. K., King, D. W., & **Adams, G. A.** (1995). Family support inventory for workers: A new measure of perceived social support from family members. *Journal of Organizational Behavior, 16*(3), 235–258. DOI: *https://doi.org/10.1002/job.4030160306*

Korabik, K. (2015). The intersection of gender and work–family guilt. In: M. Mills (Ed.) *Gender and the work-family experience*. Cham: Springer. DOI: *https://doi.org/10.1007/978-3-319-08891-4_8*

Kossek, E. E., Su, R., & **Wu, L.** (2017). "Opting out" or "pushed out"? Integrating perspectives on women's career equality for gender inclusion and interventions. *Journal of Management*, *43*(1), 228–254. DOI: *https://doi.org/10.1177/0149206316671582*

Kurronen, S. (2020). Kotityön kahleet [The chains of household work]. Business life think tank EVA. Available at *https://www.eva.fi/wp-content/uploads/2020/08/eva-arvio-024.pdf* (Accessed 21 November 2020).

Lanaj, K., & **Hollenbeck, J. R.** (2015). Leadership over-emergence in self-managing teams. The role of gender and countervailing biases. *Academy of Management Journal*, *58*(5), 1476–1494. DOI: *https://doi.org/10.5465/amj.2013.0303*

Lazarus, R. S., & **Folkman, S.** (1984). Coping and adaptation. In W. D. Gentry (Ed.) *The Handbook of Behavioral Medicine* (pp. 282–325). New York: Guilford Press.

Lazarus, R. S. (1991). Cognition and motivation in emotion. *American Psychologist*, *46*(4), 352–367. DOI: *https://doi.org/10.1037/0003-066X.46.4.352*

Meindl, J. R., Ehrlich, S. B., & **Dukerich, J. M.** (1985). The romance of leadership. *Administrative Science Quarterly*, 78–102. DOI: *https://doi.org/10.2307/2392813*

Mennin, D. S., & **Fresco, D. M.** (2013). What, me worry and ruminate about DSM5 and RDoC? The importance of targeting negative self-referential processing. *Clinical Psychology: Science and practice*, *20*(3), 258–267. DOI: *https://doi.org/10.1111/cpsp.12038*

Mintzberg, H. (1994). *Rise and fall of strategic planning*. London: Prentice Hall.

Mitchelson, J. K. (2009). Seeking the perfect balance: Perfectionism and work–family conflict. *Journal of Occupational and Organizational Psychology*, *82*(2), 349–367. DOI: *https://doi.org/10.1348/096317908X314874*

Muthén, L. K., & **Muthén, B. O.** (1998–2017). *Statistical analysis with latent variables. User's guide* (Eighth ed.). Muthén & Muthén.

Nylund, K. L., Asparouhov, T., & **Muthén, B. O.** (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal, 14*(4), 535–569. DOI: *https://doi.org/10.1080/10705510701575396*

Pearce, C. L., Manz, C. C., & **Sims, H. P., Jr.** (2008). The roles of vertical and shared leadership in the enactment of executive corruption: Implications for research and practice. *The Leadership Quarterly*, *19*(3), 353–359. DOI: *https://doi.org/10.1016/j.leaqua.2008.03.007*

Pearce, C. L., Manz, C. C., & **Sims, H. P., Jr.** (2009). Where do we go from here? Is shared leadership the key to team success? *Organizational Dynamics*, *38*(3), 234–238. DOI: *https://doi.org/10.1016/j.orgdyn.2009.04.008*

Perugini, M., & **Bagozzi, R. P.** (2001). The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. *British Journal of Social Psychology*, *40*(1), 79–98. DOI: *https://doi.org/10.1348/014466601164704*

Proudfit, G. H., Inzlicht, M., & **Mennin, D.** (2013). Anxiety and error monitoring: The importance of motivation and emotion. *Frontiers in Human Neuroscience*, *7*(636), 1–4. DOI: *https://doi.org/10.3389/fnhum.2013.00636*

Rybowiak, V., Garst, H., Frese, M., & **Batinic, B.** (1999). Error orientation questionnaire (EOQ): Reliability, validity, and different language equivalence. *Journal of Organizational Behavior*, *20*(4), 527–547. DOI: *https://doi.org/10.1002/(SICI)1099-1379(199907)20:4<527::AID-JOB886>3.0.CO;2-G*

Santana, M., & **Cobo, M. J.** (2020). What is the future of work? A science mapping analysis. *European Management Journal*, *38*(6), 846–862. DOI: *https://doi.org/10.1016/j.emj.2020.04.010*

Schyns, B., & **Schilling, J.** (2013). How bad are the effects of bad leaders? A meta-analysis of destructive leadership and its outcomes. *The Leadership Quarterly*, *24*(1), 138–158. DOI: *https://doi.org/10.1016/j.leaqua.2012.09.001*

Smith, J. (2003). Stress and aging: Theoretical and empirical challenges for interdisciplinary research. *Neurobiology of Aging*, *24*, 77–80. DOI: *https://doi.org/10.1016/S0197-4580(03)00049-6*

Sutela, H., & **Lehto, A. M.** (2014). Työolojen muutokset 1977–2013. [Changes in work during years 1977 to 2013.] *Helsinki: Tilastokeskus*. Available at: *http://stat.fi/ajk/julkistamiskalenteri/kuvailusivu_fi.html?ID=12309*. (Accessed 21 November 2020).

Tepper, B. J., Duffy, M. K., Henle, C. A., & **Lambert, L. S.** (2006). Procedural injustice, victim precipitation, and abusive supervision. *Personnel Psychology*, *59*(1), 101–123. DOI: *https://doi.org/10.1111/j.1744-6570.2006.00725.x*

Torres, N. (2014). Most people don't want to be managers. *Harvard Business Review*. Available at: *https://hbr.org/2014/09/most-people-dont-want-to-be-managers* (Accessed 21 November 2020).

Ucbasaran, D., Shepherd, D. A., Lockett, A., & **Lyon, S. J.** (2013). Life after business failure: The process and consequences of business failure for entrepreneurs. *Journal of Management*, *39*(1), 163–202. DOI: *https://doi.org/10.1177/0149206312457823*

Välikangas, L., Hoegl, M., & **Gibbert, M.** (2009). Why learning from failure isn't easy (and what to do about it): Innovation trauma at Sun Microsystems. *European Management Journal*, *27*(4), 225–233. DOI: *https://doi.org/10.1016/j.emj.2008.12.001*

Van Dyck, C., Frese, M., Baer, M., & **Sonnentag, S.** (2005). Organizational error management culture and its impact on performance: A two-study replication. *Journal of Applied Psychology*, *90*(6), 1228–1240. DOI: *https://doi.org/10.1037/0021-9010.90.6.1228*

Waldman, D. A., Ramirez, G. G., House, R. J., & **Puranam, P.** (2001). Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44(1), 134–143. DOI: *https://doi.org/10.5465/3069341*

Wasserman, N., Nohria, N., & **Anand, B.** (2010). When does leadership matter? A contingent opportunities view of CEO leadership. In N. Nohria & R. Khurana (Eds.) *Handbook of Leadership Theory and Practice* (pp. 27–63). Harvard Business Press.

Weer, C. H., & **Greenhaus, J. H.** (2015). Dual career ladders in organizations. *Wiley Encyclopedia of Management*, 1–2. DOI: *https://doi.org/10.1002/9781118785317.weom130022*

Zaccaro, S. J., Green, J. P., Dubrow, S., & **Kolze, M.** (2018). Leader individual differences, situational parameters, and leadership outcomes: A comprehensive review and integration. *The Leadership Quarterly*, *29*(1), 2–43. DOI: *https://doi.org/10.1016/j.leaqua.2017.10.003*

Zhao, B. (2011). Learning from errors: The role of context, emotion, and personality. *Journal of Organizational Behavior*, *32*(3), 435–463. DOI: *https://doi.org/10.1002/job.696*

Zhao, B., Olivera, F., & **Edmondson, A.** (2014). Learning from errors in organizations: The effects of negative emotions on motivation and cognition. In Miles, J. A. (ed.) *New Directions in Management and Organization Theory* (pp. 23-61). Newcastle upon Tyne: Cambridge Scholars Publishing.

TO CITE THIS ARTICLE:
Auvinen, E., Aycan, Z., Tsupari, H., Herttalampi, M., & Feldt, T. (2022). "No Worries, there is No Error-Free Leadership!": Error Strain, Worries about Leadership, and Leadership Career Intentions among Non-Leaders. *Scandinavian Journal of Work and Organizational Psychology*, 7(1): 6, 1–19. DOI: *https://doi.org/10.16993/sjwop.166*

Submitted: 09 August 2021 Accepted: 15 February 2022 Published: 29 March 2022