

RESEARCH ARTICLE

Empirically examining the moderating role of Goal orientation dispositions through Russen and Dawson's inclusivity framework when integrating Self-determination and Thriving at work

Asha Sara Mammen¹ ☐ and Neetha Mary Avanesh²

¹Research Associate, Faculty of Management Studies, JAIN (Deemed-to-be University), Bangalore, India ²Associate Professor, School of Business and Management, CHRIST (Deemed to be University), Bangalore, India **Corresponding Author**: Asha Sara Mammen, **E-mail**: ashalaiju17@gmail.com

ABSTRACT

The objective of this study was to examine the moderating role of goal orientation dispositions, analyzed through the DEI framework of Russen and Dawson's perspective on inclusivity, in the relationship between self-determination and thriving at work. Using PLS-SEM, data collected from 396 private university faculty members were analyzed. The results revealed a significant direct effect of self-determination on thriving at work; however, goal orientation disposition did not moderate this relationship. The findings offer important insights into how behavioral factors influence academic professionals in job crafting, policy development, and leadership strategies. Specifically, the study emphasizes the importance of creating an inclusive workplace that promotes fairness, equitable work distribution, and trust in employees' diverse skills. By connecting inclusivity with goal orientation dispositions through the 2X2 framework of achievement goal theory, this research provides new perspectives on humanistic workplace inclusiveness in academia, contributing to more effective strategies for enhancing both individual and team performance.

KEYWORDS

Psychology, Employee empowerment, Competence, Heed behavior, Goal orientation, Self-determination theory, Thriving at work.

ARTICLE INFORMATION

ACCEPTED: 01 March 2025

PUBLISHED: 12 April 2025

DOI: 10.32996/jpbs.2025.5.1.4

1. Introduction

This empirical study draws inspiration from Russen and Dawson's (2023) critical review work, proposing the factor of inclusion as the starting point of the diversity, equity, and inclusion (DEI) framework - a determinant of success in creating a diverse workforce. Russen & Dawson (2023) suggest that greater diversity naturally follows if inclusion is prioritized first, followed by equity as the next step. The current study examines this perspective of inclusion by focusing on goal orientation, which discusses variations in ability and competence observed in individuals while functioning to achieve task completion. This DEI proposition has been applied to the educational sector considering the contemporary and diversified roles of educators balancing and achieving individual role responsibilities with group role responsibilities simultaneously.

Despite the widespread adoption of the DEI framework in organizations, a gap exists in understanding the specific mechanisms through which inclusion influences performance and success, especially when it comes to individual goal orientations. While the DEI framework underscores inclusion, and although goal orientation dispositions, which include mastery and performance goals, are known to affect individual performances, group behavior, and functioning, how these dispositions interact with DEI initiatives, especially within educational settings, remains underexplored. The lack of clarity regarding the role of goal orientations in the context of self-determined motivation in achieving success in diverse environments has led to the following research question: How do goal orientation dispositions moderate the relationship between self-determined individuals and their ability to thrive in environments shaped by DEI frameworks?

Copyright: © 2025 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

The various forms of goal orientation define why and how people try and aim to achieve various objectives (Anderman & Maehr, 1994). The link between "inclusion" and "goal orientation" is taken from the operational definition of DEI. DEI is described as a set of closely linked values held by many organizations that work to be supportive of different groups of individuals, not only of different races, ethnicities, religions, genders, and sexual orientations but also of different abilities and competencies (McKinsey & Company, 2022). Elliot & McGregor's (2001) rationale for the linking pin between competence to goal orientation, stating it to be the central core of the construct of goal orientation dispositions. This DEI proposition, with its foundation on competence and goal orientation dispositions, has been applied to the educational sector because of the sector's changing landscape, intellectual applications, integrating cutting-edge research, and interpersonal team functioning requirements. Competence is a set of demonstrable observable characteristics and skills that enable and improve the efficiency, efficacy, or performance of a task. It goes beyond possessing knowledge or skills alone. Competence is a combination of knowledge, abilities, skills, experiences, and behaviors that enables individuals or organizations to meet the required standards and achieve their goals, leading to effective performance. It reflects how knowledge and skills are practically applied to accomplish specific tasks.

The two dimensions of competence that warrant DEI's inclusivity through goal orientation are taken from an advanced study conducted by Elliot and McGregor on the four-classification approach merging competence with goal orientation. The first dimension is on how competence is defined as a "referent" or standard for performance evaluation, classified into three standards, namely: absolute, interpersonal, and normative. According to Elliot & McGregor (2001), competence is defined according to whether one has acquired understanding or mastered a task (an absolute standard), improved one's performance, or fully developed one's knowledge or skills, in comparison to one earlier state (an intrapersonal standard), or performed better than others (a normative standard). The second dimension is based on how competence is "valanced", which refers to the emotional affect (intrinsic appeal or repulsion) when initiating a task, evoking either an approach (desirable stimulus) predisposition or avoidance (undesirable stimulus) predisposition. Furthermore, Elliot & McGregor (2001) attribute that "competence is valanced in that it is either construed in terms of a positive, desirable possibility (i.e., success) or a negative, undesirable possibility (i.e., failure)". Bargh (1997) claims that individuals process most, if not all, encountered stimuli in terms of valence and do so immediately and without intention or awareness. This evokes either an approach or avoidance behavioral predispositions. Hence, competence is exercised in different ways when responding to external social contexts.

The operational definition of inclusion, according to McKinsey & Company (2022), describes it as how the workforce experiences the workplace irrespective of their traits and characteristics. It also involves the degree to which organizations embrace all employees and enable them to make meaningful contributions. The types of goal orientation (mastery approach/avoidance and performance approach/avoidance) whether considered as a trait, state, or even a characteristic (Payne et al., 2007) adopted across tasks are associated with different emotional experiences (Ames 1992a; Dweck & Leggett, 1988). They are exhibited as either adaptive or maladaptive patterns of engagement and have different dispositional orientations (Kaplan & Maehr, 2007).

Established scientific motivational theories posit that individuals are organismic beings with an innate tendency to master and thrive within the social context of engagement. By being self-determined and autonomously motivated through fulfilling the basic psychological needs of autonomy, competence, and relatedness, the state of forward momentum and thriving are achieved (Deci & Ryan, 1985, Mammen & Avanesh, 2024). However, elements in a social context can sustain or thwart forward progression and psychological growth (Deci & Ryan, 2000). Achievement goal theorists hold the viewpoint that the choice of goal orientation disposition can be influenced by social context factors (Hsieh et al., 2007). The objective of this study is to examine the role of goal orientation dispositions as moderators in the relationship between self-determined individuals and their ability to thrive in the workplace within the context of diversity, equity, and inclusion (DEI) frameworks.

2. Review of Literature

Goal orientation refers to an individual's disposition towards developing or validating their ability in an achievement setting (VandeWalle, 1997). Dweck and Leggett (1988) pointed out that underlying the psychology of goal orientation are the different motives, beliefs, and values of how one employs one's competencies or abilities when engaging in a task or activity. Seminal works by Dweck and Leggett (1988) and Elliot and Dweck (1988) broadly mention two different goal orientations (learning goal orientation and performance goal orientation) that individuals have that are stable when demonstrating their abilities. With advancements in the goal orientation literature, the types of goal orientation approaches have been further classified. Elliot and McGregor (2001), through their 2X2 achievement goal theory framework, classified goal orientation into mastery approach goal orientation, mastery avoidance goal orientation, performance approach goal orientation, and performance avoidance goal orientation.

A mastery approach goal orientation implies a focus on the improvement of one's competence and mastery over the task (Poortvliet, 2016). Mastery avoidance goal orientation focuses on avoiding incompetency and preventing loss of mastery over a task (Madjar et al., 2019). A performance approach goal orientation focuses on showing competence and gaining positive judgments from others (Anand, 2018). Performance avoidance goal orientation focuses on avoiding incompetence and preventing unfavorable judgment from others (Zhang, 2008). The literature further reveals that there is a preference for certain variants of goal orientation over others, such as mastery oriented goal orientation over performance oriented goal orientation; and approach orientation over avoidance orientation (Dweck & Leggett, 1988; VandeWalle, 1997; Button et al., 1996; Payne et al., 2007).

Empirically examining the moderating role of Goal orientation dispositions through Russen and Dawson's inclusivity framework when integrating Self-determination and Thriving at work

Elliot and Church (1997) identified that individuals with a high avoidance orientation often experience higher levels of stress and lower levels of intrinsic motivation. VandeWalle (1997) found that performance approach orientation is associated with competitive behavior and a desire to outperform others, while performance avoidance orientation is linked to anxiety and fear of failure when functioning to display one's competence. Dweck (1986) has highlighted that mastery-oriented individuals tend to embrace challenges, persist in the face of setbacks, and view effort as a path to improvement. Performance avoidance goal orientation is generally detrimental, associated with lower job satisfaction, increased stress, and higher turnover rates (VandeWalle et al., 1999). Vandewalle et al. (2000) found a positive relationship between a learning goal orientation with feedback-seeking behavior. Dahling and Ruppel (2016) suggest that a learning goal orientation may also provide a protective buffer against negative feedback from reporting authorities. In line with the theme of attitude towards feedback, He et al. (2016) found that goal orientation plays a role in optimizing failure feedback effects on creative outcomes among research and development employees.

Khatoom et al. (2024) found that learning goal orientation has a moderating role in the association between psychological empowerment and knowledge-sharing behavior among employees working in manufacturing and service organizations. The study utilized structural equational modelling for testing the conceptual model. This finding suggests that individuals eager to enhance their work-related competencies create a knowledge-sharing environment. A suggestion of creating a healthy work environment allows employees to feel valued by their organization by which they not only feel psychologically empowered but also reciprocate through the sharing of knowledge. Zhang et al. (2023) explored the impact of subordinates' goal orientation dispositions within the context of laissez-faire leadership using the framework of achievement goal theory. Their research used sample supervisor-subordinate dyads as participants. The findings revealed that subordinates with a strong learning goal orientation experienced negative effects from laissez-faire leadership, resulting in decreased performance due to perceiving the situation as a hindrance or through hindrance appraisal. On the contrary, Zhang et al. (2023) further mention that subordinates with a high-performance goal orientation showed improved performance under laissez-faire leadership, as they viewed the situation as a challenge or through challenge appraisal.

With respect to leadership, seeking feedback and learning goal orientation disposition, it is found in the literature that learning goal orientation is a desire to enhance one's ability, improve competence, and experience mastery in achievement situations (VandeWalle, 1997). Individuals with higher learning goal orientation focus on demonstrating incremental self-improvement (Gong et al., 2017). To achieve a learning goal, subordinates proactively seek feedback and information from others, because they believe feedback, especially negative or critical ones, help locate their disadvantages and teach them how to improve their performance and behavior (Vandewalle & Cummings, 1997; VandeWalle et al., 2000; Alexander & van Knippenberg, 2014; Miron-Spektor et al., 2022). Learning goal also motivates subordinates to focus on developing new skills, attempting to understand their tasks, and successfully achieving self-referenced standards for mastery (Vandewalle & Cummings, 1997; Ford et al., 1998). The above literature review points out that different goal orientations show different mannerisms, attitudes, and perceptions that influence how one initiates one's tasks, relationships, and engagements.

An educator's workplace is a landscape that can be persuasive, demanding, or restrictive; hence, what surrounds the educator, what others expect from them, and what they allow to impact them greatly affect their motivation and functioning (Marsi, 2018; Reynolds, 1996; Cojocnean, 2013). In the contemporary higher education sector, intellectual achievement is predominant, especially among university professionals (Klein et al., 2006). The term intellectual achievement refers to an experience when what is known in intellectual work is taken, and from it, something new is produced. The application of intellectual achievement is found across variations of task profiles that exist for a professional in the academe, from leadership, counselling, administration, documentation, and knowledge dissemination. However, the method or nature of goal orientation, either mastery-oriented or learning-oriented, adopted to carry out multi-faceted job roles influences behavior. In the event of challenges, responses can be either maladaptive, with feelings of helplessness (Payne et al., 2007), or adaptive, with evidence of a state of thriving (Hsieh et al., 2007). The research question investigated is as follows: "Does the motive or orientational disposition behind taking on and carrying out tasks affect the functioning and responses of the individuals as the task progresses to higher levels of collaborating and delegating?"

2.1 Theoretical Underpinnings

The study utilized the theoretical and philosophical underpinnings of the organismic valuing process growth theory (Rogers, 1961, 1964) which focuses on human behavior and motivation. This perspective suggests that individuals are inherently proactive and naturally motivated to engage with their surrounding context. They seek to gain mastery by fulfilling the requirements of their social environment, which in turn fosters their further development. In a work milieu, situations are seen where challenges in the form of maladaptive and ineffective functioning arise when individuals must balance their individual work goals alongside their group work goals and responsibilities. To address this issue, researchers draw upon specific theories such as self-determination theory (Deci & Ryan, 1985) and achievement goal theory (Elliot & McGregor, 2001), which offer insights into this aspect of human functioning. Additionally, the socially embedded model of thriving at work (Spreitzer et al., 2005) represents a desirable state of being that fosters positive outcomes for both individuals and groups (see Figure 1).

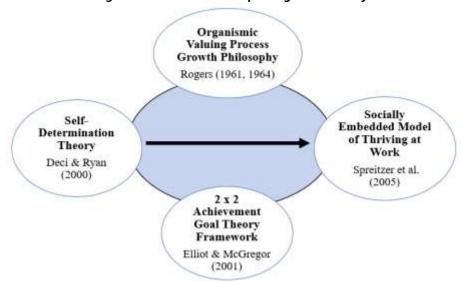


Figure 1. Theoretical underpinnings of the study

Source: Self-compilation by author

2.1.1 Self-determination Theory and Socially Embedded Model of Thriving at Work

Human beings are characterized by the organismic growth philosophy, which assumes that they possess an inherent drive to integrate themselves with the social context and proactively master their environment, promoting self-adaptation and self-development (Deci & Ryan, 2014). A prominent macro theory based on the organismic growth philosophy is the self-determination theory (SDT; Deci & Ryan, 1985) which posits that individuals are autonomously motivated (self-determined) based on the extent of satisfaction of the three basic psychological needs of autonomy, competence and relatedness when functioning in a social context. Deci and Ryan (1990) defined the need for autonomy as an individual's effort to determine their choice of behavior, while the need for competence reflects their striving to experience effectance, and the need for relatedness involves their attempts to have satisfying and coherent involvement with others. When autonomously motivated or self-determined, they are more engaged in their work and display better adjustment and well-being (Mammen & Avanesh, in press). Hence, Spreitzer and Porath (2014) argued and articulated that self-determination is a nutriment of thriving. This direct linkage forms the foundation of the current study integrating self-determination theory with the socially embedded model of thriving at work (Spreitzer et al., 2005).

2.1.2 Goal Achievement Theory and Socially Embedded Model of Thriving at Work

The human mind is a repository that exhibits itself to the external environment through the words and deeds of individuals. Dweck and Leggett (1988) argued that individual differences in beliefs and values, which are matters of the mind constitute implicit theories or mindsets, leading to different concerns and orientations. This results in different ways of behaving in achievement settings. Individuals pursue any task or activity either with a mindset to learn or compete, which creates a framework within which they interpret and react to events (VandeWalle et al., 2001). Duda (2001) confirms that the different ways of cognitively processing how to engage in an activity are referred to as goal-orientation dispositions, which are broadly differentiated into two forms: learning and performance. Learning goal orientation aims to develop competence and, hence, is linked to the act of learning. Performance goal orientation is other-referent, aimed at doing better than others, and comes across as a form of competent energy or vitality. Both learning and vitality exist within the concept of goal-orientation (Vandewalle et al., 2019). This enables linking goal achievement theory (Elliot & McGregor, 2001) with the socially embedded model of thriving at work (Spreitzer et al., 2005).

2.1.3 Self-determination Theory and Goal Achievement Theory

Self-determination theory and 2X2 achievement goal theory (Elliot & McGregor, 2001) share the characteristics of theories that explain human behaviors while engaging and hustling in a social setting. A review of the literature shows that studies have combined self-determination theory with achievement goal theory (Ntoumanis, 2001; Whitmore & Borrie, 2005; Vansteenkiste et al., 2008; Murcia et al., 2010; Chin et al., 2012) to analyze outcomes such as depositional flow and learning. The two social cognitive theories of motivation emphasize that the quality with which individuals engage in an activity depends on how they construe the meaning associated with the activity (Ntoumanis, 2001). Although the core element within the self-determination theory is autonomy, and the core element within the achievement goal theory is competence. The link between the two theories comes through the relatedness dimension embedded in both, which has implications for interpersonal exchanges.

Elliot and McGregor (2001) used the term "referent", while Martela and Riekki (2018) referred to it as "belongingness". This viewpoint is used to integrate self-determination theory with goal orientation theory.

2.2 Hypotheses Development

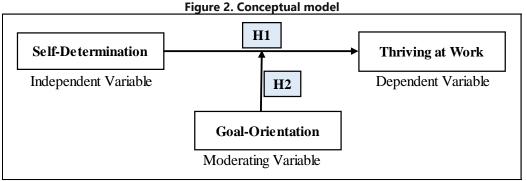
The extant literature describes an individual's goal orientation as a trait-like dispositional characteristic by which individuals seek the fulfillment of their goals and achieve tasks by utilizing their ability, competence, and extent of relatedness with others (Rodd, 2013). It is the subsequent performance and conduct on a task that determines one's goal orientation (Seijts et al., 2004). Dweck and Leggett (1988) stated that when individuals feel confident about their ability and competence, irrespective of learning goal orientation or performance goal orientation, they exhibit an adaptive response pattern when working on a task. This is in line with the psychological organismic growth process underlying self-determination theory, which states that all individuals have an inbuilt ability to hustle, with the social context playing a prominent role in it. This further suggests that individuals functioning in a social context such as a workplace show a tendency to merge with the requirements of the workplace. As explained in self-determination theory, the extent of autonomous motivation through the satisfaction of the needs for competence, autonomy, and relatedness through the process of internalization leads to a sense of vitality and a learning attitude to explore the unknown and be part of it (Deci & Ryan, 2014). This leads to the first hypothesis (H1) that self-determination positively influences thriving at work.

H1: There is significant influence of self-determination on thriving at work.

When individuals adopt their own approaches to achieve task completion, four different behaviors or underlying motives are seen, as explained by the different variations in goal orientations (Elliot et al., 2011). Elliot & Murayama (2008) and Rodd (2013) reported a comparative picture stating that mastery oriented goals, where learners seek to become competent for intrinsic reasons, were found to be positively related to persistence and ongoing participation. This is related to the characteristics of thriving showing learning and vitality. Performance oriented goals, where learners seek to demonstrate competence relative to others, are not always negatively correlated with achievement but could show characteristics of learning and vitality, though not long-term. Across the literature variations in performance, conduct, and well-being are recorded with respect to different goal orientations (Elliot et al., 1997; Dykman, 1998; Kaplan & Maehr, 1999; Tuominen-Soini et al., 2008; Vandewalle et al., 2019), irrespective of the theme in self-determination theory. This difference in mannerisms and outcomes during task accomplishment led to the second hypothesis (H2).

H2: Goal orientation significantly moderates the relationship between self-determination and thriving at work.

Based on the theoretical frameworks and literature review, a conceptual model was developed (see Figure 2).



Source: Self-compilation by author

3. Method

This study adopted an explanatory research design and employed a quantitative methodology of research inquiry. This method was selected as it was suitable for evaluating the causal relationships between the study variables of self-determination, goal orientation and thriving at work. It aligns with the objective of identifying the moderating role on the direct effect relationship. Both descriptive (percentage analysis) and inferential (PLS-SEM) statistical analyses were conducted on the dataset. Quantitative methods were chosen because the study aims to quantify and empirically test the causal relationship between the study variables. The use of PLS-SEM was considered appropriate because it can test complex relationships as seen in the conceptual model.

The study sample included educational professionals (Assistant Professors, Associate Professors, and Professors) working at private universities in India. Table 1 shows the stratified sampling procedure employed to collect the data and the related statistics. Using information from the zonal maps of India for 2022, the states of India were classified into six different

geographical zones, each representing a group of states. The sampling frame for the list of private universities for each state was derived from the University Grants Commission (UGC) State-wise list of private universities as of 04-03-2022. Kerala and Goa are two states without private universities as per the sampling frame.

S/N	Zonal Classification of Indian States	Total no. of states in each zone	Total Number of private universities in each zone	Proportionate Population size of faculty in each zone	Population	Percentage Proportionate Sample of faculty in each zone
1	North Zone	6	163	44298	40.45	155
2	South Zone	4	35	9512	8.68	34
3	East Zone	4	42	11414	10.42	40
4	West Zone	2	71	19296	17.62	68
5	Central Zone	2	55	14947	13.65	52
6	North East Zone	8	37	10056	9.18	35
	Total	26	403	109523	100	384

Source: Zonal Maps of India, UGC 2022 (https://www.ugc.gov.in), AISHE (https://aishe.gov.in), UGC State-wise list of private universities as on 04-03-2022 Krejcie & Morgan (1970), Aithal & Kumar (2016)

Category			Sub Categ	ory			Total
1. Gender	Male	Female	Third Gender				
Count	61	335	-				396
Percentage (%)	15.40	84.60	-				100
2. Age (Years)	<25	26-30	31-40	41-50	>51		
Count	6	52	234	90	14		396
Percentage (%)	1.52	13.13	59.09	22.73	3.54		100
3. Marital Status	Single	Married	Others				
Count	102	294	-				396
Percentage (%)	25.76	74.24	-				100
4. Educational Level	UG	PG	PhD	Post Doc			
Count	-	102	262	32			396
Percentage (%)	-	25.76	66.16	8.08			100
5. Designation	Asst. Prof.	Asso. Prof.	Prof.				
Count	318	59	19				396
Percentage (%)	80.30	14.90	4.80				100
6. Place of work (Zone)	North	South	East	West	Central	North East	
Count	138	39	50	73	53	43	396
Percentage (%)	34.85	9.85	12.63	18.43	13.38	10.86	100
7. Work experience (Years)	0-5	>5-10	>10-15	>15-20	>20		
Count	111	113	80	65	27		396
Percentage (%)	28.03	28.54	20.20	16.41	6.82		100
8. Current org. (Years)	0-5	>5-10	>10-15	>15-20	>20		
Count	263	84	31	18	-		396
Percentage (%)	66.41	21.21	7.83	4.55	-		100

Table 2. Demographic Profile of Sample Respondents
--

Source: Survey Statistics

The number of educational professionals employed by India's private universities was estimated based on the studentteacher ratio. The consolidated student-teacher ratio for universities, colleges, and freestanding institutions stands at 28:1 for regular mode, according to the All-India Survey of Higher Education (AISHE) website of the Department of Higher Education, Ministry of Education, Government of India. Aithal and Kumar (2016) have published a research article that highlighted the autonomy by which private universities can enhance the faculty-to-student ratio up to an ideal level of 1:10.

Empirically examining the moderating role of Goal orientation dispositions through Russen and Dawson's inclusivity framework when integrating Self-determination and Thriving at work

Statistics obtained from AISHE for the year 2022 for student enrolment in undergraduate, postgraduate, MPhil, and PhD courses were approximately 10, 95,232. Using the 1:10 ratio, the strength of faculty members across India was calculated to be 1, 09,523. The Krejcie and Morgan (1970) table was used to determine the sample size from the study population, which stands at 384. The percentage proportionate calculation method was used to distribute the sample size across different zones (see Table 1).

Online survey using Google form questionnaire was used to collect data from respondents. Ethical procedures were followed during the conduct of the survey. This study obtained ethical approval from the research advisory committee of CHRIST (Deemed to be University), India. Contact information available on the website of the universities were used to send Google forms to the sample of educational professionals. The respondents were informed about all aspects related to the research study, including the measurement scales, and were assured of confidentiality regarding their name and organization. Further, the respondents were given the opportunity to voluntarily and willingly choose to participate, and their decision was communicated to the researchers through written consent via filling the Google form.

Reliable and validated scales of measurement were used to gather sample data. The independent variable of selfdetermination was measured using the 23-item, Work-related basic needs satisfaction scale (W-BNS), Vanden Broeck et al. (2010). Goal orientation was measured using the 16-item, 2x2 Framework of achievement goals for the work domain, Baranik et al. (2007). The dependent variable was measured using the 10-item, Thriving at Work scale, Porath et al. (2012). All items were measured on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Two sets of sample data were generated from the questionnaire: demographic data (nonmetric data) and scale data (metric data). The demographic data reflect the characteristics of the study respondents. Scale data were generated from the Likert-scale items within the measurement scales for the latent variables. To better present the context of the study and the respondents' profiles, the demographic data were summarized in tabular form. The details of the demographic distribution across the sample size of 396 educational professionals are shown in Table 2. The response rate for the online survey conducted from September 2022 to November 2022 was 22.65%.

4. Results

The current study employed a partial least squares path modeling method also known as the PLS-SEM algorithm, to evaluate the proposed conceptual model and test the hypotheses (H1 and H2). The authors opted for PLS-SEM because of its robustness, less restrictive distributional assumptions, and for PLS-SEM being defined as having a method of its own, with uniquely specified advantages (Hair et al., 2019).

The latent variables in the conceptual model were studied as reflective-reflective higher-order constructs. PLS-SEM analysis was conducted only further to the dataset's compliance with the ordinary least squares regression assumptions of random sampling of observations, linearity in parameters, with constant error variance (all VIF values lie above the cut-off value of 0.1), multicollinearity, autocorrelation, endogeneity not being found and common method bias from the adopted research design to be nil (all VIF values lie below the said value of 3.3).

Within the PLS-SEM 3 application software, the proposed moderating conceptual model was evaluated by presenting the conceptual model as a combination of two models: the outer measurement model and inner structural model (Figure 3). The estimation method followed ordinary least squares regression.

4.1 Measurement Model Assessment

The measurement model assessment checks the reliability and validity of the construct measures and, therefore, provides support for the suitability of their inclusion in the path model. The assessment was performed using the following metrics: outer factor loadings, internal consistency reliability (Cronbach's alpha, composite reliability rho_C, reliability coefficient rho_A), convergent validity (average variance extracted), and discriminant validity (Fornell Larcker criterion, Heterotrait-monotrait ratio of correlations).

Referring to Figure 3, the factor loadings of all the items for the latent variables were above 0.6, and hence, retained for further analysis. Factor loadings above 0.5 indicate the extent to which the latent variables explain the indicator's variance, which is a pointer toward item reliability (Hair et al., 2019). For social sciences studies using newly developed scales, the indicator reliability/factor loading range indicating an indicator's commonality/connection strength frequently falls between 0.40 and 0.708 and is retained and recommended, subject to it causing any change in the average variants extracted (AVE) value and the composite reliability rho_C (Hair et al., 2021). Items with factor loadings less than 0.50 (Hair et al., 2012) were deleted.

In PLS-SEM, the three measures applied to measure internal consistency reliability with the same threshold value are Cronbach's alpha, reliability coefficient rho_A and composite reliability rho_C. Referring to Table 3, most values for internal consistency reliability exceed the recommended value of 0.70 (Hair et al., 2021). All values for average variance extracted (AVE) exceeded the recommended value of 0.5, showing that the construct explains more than 50% of the variance of its items (Hair et al., 2019) which establishes convergent validity.

Referring to Table 4, the Heterotrait Monotrait ratio of correlation (HTMT) for discriminant validity showed that all values were less than 0.90 confirming that the constructs are conceptually distinct (Hair et al., 2019; Henseler et al., 2015). Referring to

Table 5, the discriminant validity using the Fornell-Larcker criterion met the condition in which the square root of each construct's AVE in the diagonal matrix is greater than the intercorrelation of values between the construct in their corresponding row and column. The Heterotrait Monotrait ratio of correlation (HTMT) for discriminant validity showed that all values were less than 0.90 confirming that the constructs are conceptually distinct (Hair et al., 2019; Henseler et al., 2015). The above findings of the measurement model assessment showed that reliability and validity exist for the construct measures; hence, a structural path modeling assessment is performed.

Type of variable	Latent variable	Dimensions	Cronbach's alpha	Reliability coefficient (rho _A)	-	AVE
Independent	Self-	Autonomy	0.791	0.794	0.864	0.615
-	determination	Competence	0.717	0.744	0.823	0.542
variable		Relatedness	0.885	0.886	0.916	0.684
		Mastery approach	0.856	0.858	0.903	0.699
Moderating	Goal orientation	Mastery avoidance	0.572	0.58	0.778	0.54
variable		Performance approach	0.772	0.783	0.854	0.594
		Performance avoidance	0.822	0.842	0.882	0.652
Dependent	Thriving at	Vitality	0.875	0.877	0.914	0.728
variable	Work	Learning	0.886	0.89	0.922	0.747

Source: PLS-SEM measurement model assessment output

Table 4. Discriminant validity (HTMT Values)

	Autonomy	Competence	Relatedness	Mastery approach	Mastery avoidance	Performance approach	Performance avoidance	Vitality	Learning
Autonomy		-	-	-	-	-	-	-	-
Competence	0.472		-	-	-	-	-	-	-
Relatedness	0.267	0.106		-	-	-	-	-	-
Mastery approach	0.429	0.541	0.143		-	-	-	-	-
Mastery avoidance	0.373	0.419	0.208	0.502		-	-	-	-
Performance approach	0.172	0.290	0.201	0.269	0.432		-	-	-
Performance avoidance	0.097	0.135	0.514	0.116	0.275	0.437		-	-
Vitality	0.783	0.499	0.330	0.460	0.583	0.195	0.343		-
Learning	0.652	0.467	0.275	0.393	0.463	0.173	0.535	0.844	

Source: PLS-SEM measurement model assessment output

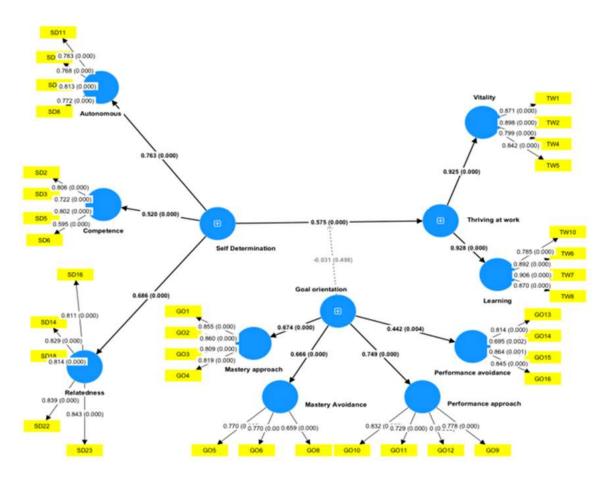
Table 5. Discriminant validity (Fornell Larcker Values)

	Autonomy	Competence	Relatedness	Mastery approach	Mastery avoidance	Performance approach	Performance avoidance	Vitality	Learning
Autonomy	0.784	-	-	-	-	-	-	-	-
Competence	0.360	0.736	-	-	-	-	-	-	-
Relatedness	0.228	0.068	0.827	-	-	-	-	-	-
Mastery approach	0.352	0.416	0.124	0.836	-	-	-	-	-
Mastery avoidance	0.261	0.279	-0.076	0.363	0.735	-	-	-	-
Performance approach	0.125	0.231	-0.126	0.223	0.293	0.771	-	-	-
Performance avoidance	-0.046	-0.058	-0.432	-0.093	0.154	0.358	0.807	-	-
Vitality	0.652	0.405	0.294	0.347	0.259	0.293	0.861	0.850	-
Learning	0.546	0.373	0.445	0.299	0.263	0.391	0.397	0.742	0.865

Source: PLS-SEM measurement model assessment output

4.2 Structural Model Evaluation and Testing of Hypotheses

Figure 3 shows the inner structural path model representing the relationship (direct effect and moderating role) between the study constructs of self-determination, goal orientation, and thriving at work. Table 6 shows the results of the two hypotheses (H1 and H2) that were set to test the significance of the relationships concerning the sample data.





Source: PLS-SEM Output

The magnitude of the path coefficient (β) indicates the strength of the connection between the latent variables and carries meaning only if the path coefficient is statistically significant. A bootstrapping procedure with 5000 resampling with replacement was conducted to generate bootstrapping estimates (t-statistics, p-value), which enabled testing for the significance of the hypothesized relationships and path coefficient. The direct effect (H1) was significant, and the moderating role (H2) was not significant.

Hypotheses	Path relationships	β	t-value	p-value	Result of hypotheses testing
H1 There is significant influence of self determination on thriving at work	SD→TAW	0.575**	13.435	0.00	Significant effect
Goal orientation significantly moderates the H2 relationship between self determination and thriving at work.	GO x SD→TAW	-0.031	0.678	0.498	Not significant moderation effect

Note: N=396 ** for significance at p < 0.05 level

Source: PLS-SEM Bootstrapping output

5. Discussion

Statistical findings significantly supported the first hypothesis (H1), stating that self-determination influenced thriving at work. This finding justifies the principle of self-determination in a sample of university professionals. The sample of educational professionals would have experienced a higher sense of autonomy, competence, and relatedness in their workplaces, work tasks, and relationships. Spreitzer and Porath (2014) stated that satisfaction of the basic psychological needs of autonomy, competence, and relatedness allows forward momentum when engaging in a social context through the process of autonomous motivation, validating the positive direct effect of self-determination on thriving at work. It also validates the organismic growth philosophy that people are innately proactive and have the inherent traits of hustling and gaining mastery in their engaging environment. This finding implies that the benefits of being autonomously motivated in the workplace can be gauged to attain further learning, performance, and functioning. The principle of internalization within the concept of autonomous motivation enables taking in the values of positive conduct and duty to reorient oneself, leading to the theme and state of thriving at work. This direct effect is an empirically proven relationship built on established theories based on human behavior and motivation when functioning in a social setting. A similar empirical finding was seen in the seminal work by Porath et al. (2000), which validated that each of the three dimensions of self-determination (autonomy, competence, and relatedness) predicted thriving at work across a sample of six organizations.

Hence, researchers have proposed the principles of inclusivity considering the universal nature of the basic psychological needs of autonomy, competence, and relatedness contributing to autonomous motivation (Deci & Ryan, 2014). Autonomous motivation is a better form of motivation that combines intrinsic motivation and the internalization of extrinsic motivation (Mouratidis, 2021). Since it includes behaviors that are endorsed out of one's own will, the role of one's disposition when functioning in a social context, specifically in an achievement setting, is considered when studying the inclusivity of the DIE trio. Variations in dispositions captured through the concept of goal orientation show differences in functioning and relatedness (Vandewalle et al., 2019).

The statistical findings showed no significant moderating role in the second hypothesis (H2). Variations in goal orientation dispositions had no statistically significant moderating role in strengthening or weakening the established positive relationship between self-determination and thriving at work. Irrespective of the manner in which an employee orients their dispositions to achieve work goals, this does not interfere with their drive to accomplish work goals. Contemporary educational professionals function in a new world of work with tasks of varying natures and profiles. Button et al. (1996) stated that individuals can simultaneously adopt both learning goal orientations and performance goals orientations when functioning on various work tasks at a time. A combination of mastery and performance goals may be ideal for learning and achievement (Button et al., 1996; Cellar et al., 2011).

It can be interpreted for the study sample that variations in both learning goal orientation and performance goal orientation would have been adopted in the required proportion in line with the different characteristics of work tasks, allowing the affects associated with each of the variants of goal orientation to balance out. The researcher rationalizes the descriptive statistics for the three dimensions of autonomy, competence, and relatedness on how an individual uses their resources, skills and personality to function optimally in a group and teamwork task. The higher value of the mean and standard deviation for autonomy (3.6, 0.48) of a self-determined mindset would have allowed for different goal orientation dispositions with which to undertake tasks. Furthermore, through the descriptive statistics for the relatedness (3.18, 0.41) dimension, one would have the disposition to share know-how. Through competence (3.51, 0.42) values, one would have been able to overcome roadblocks in intellectual achievement and interpersonal tasks, allowing for a state of thriving (3.25, 0.67).

This finding also suggests that, despite differences in individual personality attributes and work-related skills, professionals aim to show intentions to exercise proactivity or mastery-oriented patterns of response in their work tasks, roles, and profiles by virtue of their acquired educational and academic training, job training, work and non-work experiences, advice from mentors, professional contacts, family upbringing, values, talent, passion, and skills. This validates Hofer and Busch's (2011) statement that these factors function as within force towards forward movement.

However, in the long run, it is acknowledged that the negative affect, emotions, and behaviors associated with performance goal orientation and avoidance-oriented dispositions can impact one's functioning and responses. The research article addressed the issue of maladaptive functioning and languishing among academicians suggesting that it is autonomous motivation (the construct of self-determination) rather than individual goal orientation dispositions that function as a solution to achieve thriving at work. The operational definition of the dimensions of self-determination - autonomy, relatedness and even competence points towards the exercise of human values, character strengths and virtues making self-determined-based autonomous motivation a form of sustained motivation (Mammen & Avanesh, 2024b). In such situations of the long-term impact of performance goal orientation and maladaptive functioning, the researcher proposes adoption of the perspectives of the behavior of heed as a mindset which focuses on the five core human values of being discreet, being diligent, having discernment, having prudence and having perseverance to balance the negative affects, behaviors, and emotions. These five core human values are suggested as a self-help and self-empowering measure that resonates with the enactment of heedful behavior (Mammen & Avanesh, 2024, 2024a). This is suggested to behavioral strategists and counsellors to develop heed-based intervention activities to progress from an aggrieved state of being to a thriving state of being in the academe workplace. Though the concepts of goal

orientation and self-determination are universal and pervasive across human beings, the generalizability of the findings is limited to the educational professionals working in the academic sector in India. This calls for further research on different samples from other sectors or populations to validate practically the outcomes and suggestions of the study.

6. Conclusion

This valuable statistical finding gives impetus to the diversity, equity, and inclusion framework through the insight that all dispositions based on goal orientation are acceptable. Underlying beliefs and characteristics of the mind on how one aims to utilize and demonstrate one's competence in achieving goals function are only means to achieve ends. This study answers the research question and empirically supports Russen and Dawson's theoretical viewpoint that diversity naturally follows when inclusion comes first and is followed by equitable treatment. The findings support inclusivity when self-determined autonomous motivation can lead to a state of thriving at work, irrespective of the nature of goal orientation disposition adopted in task engagements. Furthermore, the practice of equity in allocating tasks and belief in employees, albeit variations in goal orientation, allows for achieving a form of diversity with humanism.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations or those of the publisher, editors, and reviewers.

References

- Aithal, P.S. and Kumar, P.M. (2016), "Opportunities and challenges for private universities in India", International Journal of Management, IT and Engineering, Vol. 6 No. 1, pp. 88-113.
- Ames, C. (1992a), "Classrooms: Goals, structures, and student motivation", Journal of Educational Psychology, 84, pp. 261–271. doi: 10.1037/0022-0663.84.3.261.
- Anderman, E.M. and Maehr, M.L. (1994), "Motivation and schooling in the middle grades", Review of Educational Research, Vol. 64 No. 2, pp. 287-309. doi: <u>10.2307/1170696</u>.
- Baranik, L.E., Barron, K.E. and Finney, S.J.(2007), "Measuring goal orientation in a work domain: Construct validity evidence for the 2×2 framework", Educational and Psychological Measurement, Vol. 67 No. 4, pp. 697-718. doi: <u>10.1177/0013164406292090</u>.
- Bargh, J.A. (2014), The automaticity of everyday life. In The automaticity of everyday life (pp. 1-62). Psychology Press.
- Button, S.B., Mathieu, J.E. and Zajac, D.M. (1996), "Goal orientation in organizational research: A conceptual and empirical foundation", Organizational Behavior and Human Decision Processes, Vol. 67 No. 1, pp. 26-48. doi: <u>10.1006/obhd.1996.0063</u>.
- Cellar, D.F., Stuhlmacher, A.F., Young, S.K., Fisher, D.M., Adair, C.K., Haynes, S. and Riester, D. (2011), "Trait goal orientation, self-regulation, and performance: A meta-analysis", Journal of Business and Psychology, Vol. 26, pp. 467-483.
- Chin, N.S., Khoo, S. and Low, W.Y. (2012), "Self-determination and goal orientation in track and field", Journal of Human Kinetics, Vol. 33, p. 151.
- Cojocnean, D. (2013), "Shaping and reshaping a "professional identity" in a private school context", Academia Science Journal, Vol. 2 No. 3, pp. 3-12.
- Elliot, A.J. and Murayama, K. (2008), "On the measurement of achievement goals: Critique, illustration, and application", *Journal of Educational Psychology*, Vol. 100 No. 3, pp. 613-628. doi: <u>10.1037/0022-0663.100.3.613</u>.
- Elliot, A.J. and Sheldon, K.M. (1997), "Avoidance achievement motivation: A personal goals analysis", Journal of Personality and Social Psychology, Vol. 73 No. 1, pp. 171-185. doi: 10.1037//0022-3514.73.1.171.
- Elliot, A.J., Murayama, K. and Pekrun, R. (2011), "A 3×2 achievement goal model", Journal of Educational Psychology, Vol. 103 No. 3, pp. 632-648. doi: <u>10.1037/a0023952</u>.
- Elliot, E.S. and Dweck, C.S. (1988), "Goals: An approach to motivation and achievement", Journal of Personality and Social Psychology, Vol. 54, pp. 5-12. doi: <u>10.1037/0022-3514.54.15</u>.
- Gong, Y., Wang, M., Huang, J.C. and Cheung, S.Y. (2017), "Toward a goal orientation–based feedback-seeking typology: Implications for employee performance outcomes", *Journal of Management*, Vol. 43 No.4, pp. 1234-1260.
- Hair, J.F., Astrachan, C.B., Moisescu, O.I., Radomir, L., Sarstedt, M., Vaithilingam, S. and Ringle, C.M. (2021), "Executing and interpreting applications of PLS-SEM: Updates for family business researchers", Journal of Family Business Strategy, Vol. 12 No. 3, p. 100392. doi: <u>10.1016/j.jfbs.2020.100392</u>.
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SE", European Business Review, Vol. 31 No. 1, pp. 2-24. doi: <u>10.1108/EBR-11-2018-0203</u>.
- Hair, J.F., Sarstedt, M., Pieper, T.M. and Ringle, C.M. (2012), "The use of partial least squares structural equation modeling in strategic management research: A review of past practices and recommendations for future applications", Long Range Planning, Vol. 45 No. 5-6, pp. 320-340. doi: 10.1016/j.lrp.2012.09.008.

- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", Journal of the Academy of Marketing Science, Vol. 43 No. 1, pp. 115-135. doi: <u>10.1007/s11747-014-0403-8</u>.
- Hofer, J. and Busch, H. (2011), "Satisfying one's needs for competence and relatedness: Consequent domain-specific well-being depends on strength of implicit motives", Personality and Social Psychology Bulletin, Vol. 37 No. 9, pp. 1147-1158. doi: 10.1177/0146167211408329.
- Hsieh, P., Sullivan, J.R. and Guerra, N.S. (2007), "A closer look at college students: Self-efficacy and goal orientation", Journal of Advanced Academics, Vol. 18 No. 3, pp. 454-476. doi: 10.4219/jaa-2007-500.
- Kaplan, A. and Maehr, M.L. (1999), "Achievement goals and student well-being", Contemporary Educational Psychology, Vol. 24 No. 4, pp. 330-358. doi: <u>10.1006/ceps.1999.0993</u>.
- Kaplan, A. and Maehr, M.L. (2007), "The contributions and prospects of goal orientation theory", Educational Psychology Review, Vol. 19, pp. 141-184. doi: <u>10.1007/s10648-006-9012-5</u>.
- Klein, H.J., Noe, R.A. and Wang, C. (2006), "Motivation to learn and course outcomes: The impact of delivery mode, learning goal orientation, and perceived barriers and enablers", Personnel Psychology, Vol. 59 No. 3, pp. 665-702. doi: <u>10.1111/j.1744-6570.2006.00050.x</u>.
- Krejcie, R.V. and Morgan, D.W. (1970), "Determining sample size for research activities", Educational and Psychological Measurement, Vol. 30 No. 3, pp. 607-610. doi: <u>10.1177/001316447003000308</u>.
- Mammen, A.S. and Avanesh, N.M. (2024), "Balancing the dialectic gap in the social context of work: Integrating self-determination theory with theory of heedful interrelating", Journal of Business and Management Studies, Vol. 6 No. 3, pp. 286-295. doi: 10.32996/jbms.2024.6.3.25.
- Mammen, A.S. and Avanesh, N.M. (2024a). "The mediating effect of heedful interrelating on self-determination and thriving at work among university faculty members", Revista de Gestão Social e Ambiental, Vol. 18 No. 5, p. e06809. doi: <u>10.24857/rgsa.v18n5-150</u>.
- Mammen, A.S. and Avanesh, N.M. (2024b). The development of core human values-based model for enacting heedful behaviour leveraging thriving at work mediation framework (Indian Patent No. 105161). Office of the Controller General of Patents, Designs & Trade Marks.
- Mammen, A.S. and Avanesh, N.M. (in press). Can Heedful Interrelating be a Self-Empowering Approach to Thwart Maladaptive Workplace Functioning? An Integrative Literature Review. South Asian Journal of Human Resource Management.
- Martela, F. and Riekki, T.J. (2018), "Autonomy, competence, relatedness, and beneficence: A multicultural comparison of the four pathways to meaningful work", Frontiers in Psychology, Vol. 9, p. 1157.
- Masri, T.I. (2018), "The professional identity of adjunct faculty: Exploratory study at a private university in the UAE", English Language Teaching, Vol. 11 No. 10, pp. 16-29. doi: 10.5539/elt.v11n10p16.
- McKinsey & Company (2022), "What is diversity, equity, and inclusion?", McKinsey & Company, 17 August. Available at: https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-diversity-equity-and-inclusion.
- Mouratidis, A., Michou, A., Sayil, M. and Altan, S. (2021), "It is autonomous, not controlled motivation that counts: Linear and curvilinear relations of autonomous and controlled motivation to school grades", Learning and Instruction, Vol. 73, p. 101433.
- Murcia, J.A.M., Gimeno, E.C. and Coll, D.G.C. (2010), "The achievement goal and self-determination theories as predictors of dispositional flow in young athletes", Anales de Psicología, Vol. 26 No. 2, pp. 390-399.
- Ntoumanis, N. (2001), "Empirical links between achievement goal theory and self-determination theory in sport", Journal of Sports Sciences, Vol. 19 No. 6, pp. 397-409. doi: <u>10.1080/026404101300149357</u>.
- Payne, S.C., Youngcourt, S.S. and Beaubien, J.M. (2007), "A meta-analytic examination of the goal orientation nomological net", Journal of Applied Psychology, Vol. 92 No. 1, p. 128. doi: 10.1037/0021-9010.92.1.128.
- Porath, C., Spreitzer, G., Gibson, C. and Garnett, F.G. (2012), "Thriving at work: Toward its measurement, construct validation, and theoretical refinement", Journal of Organizational Behavior, Vol. 33 No. 2, pp. 250-275. doi: <u>10.1002/job.756</u>.
- Reynolds, C. (1996), "Cultural scripts for teachers: Identities and their relation to workplace landscapes". In: M. Kompf, W.R. Bond, D. Dworet and R.T. Boak, (Eds.), Changing Research and Practice: Teachers' Professionalism, Identities and Knowledge. London: Falmer Press, pp. 69– 77.
- Rodd, J. (2013), "The relationship between self-determination, achievement goal orientation and satisfaction with the learning experience: Working with adult lifelong learners". Doctoral dissertation, State University of New York at Albany. Available at: https://eric.ed.gov/?id=ED560340.
- Rogers, C.R. (1961), On Becoming a Person: A Therapist's View of Psychotherapy. London: Constable.
- Rogers, C.R. (1964), "Toward a modern approach to values: The valuing process in the mature person", Journal of Abnormal and Social Psychology, Vol. 68 No. 2, pp. 160–167. doi: <u>10.1037/h0046419</u>.
- Russen, M. and Dawson, M. (2024), "Which should come first? Examining diversity, equity, and inclusion", International Journal of Contemporary Hospitality Management, Vol. 36 No.1, pp. 25-40. doi: <u>10.1108/ijchm-09-2022-1184</u>.
- Seijts, G.H., Latham, G.P., Tasa, K. and Latham, B.W. (2004), "Goal setting and goal orientation: An integration of two different yet related literatures", Academy of Management Journal, Vol. 47 No.2, pp. 227-239. doi: <u>10.5465/20159574</u>.
- Spreitzer, G.M. and Porath, C. (2014), "Self-determination as nutriment for thriving: Building an integrative model of human growth at work", In: M. Gagné, (Ed.), The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory, Oxford: Oxford University Press, pp. 245-258.

- Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S. and Grant, A.M. (2005), "A socially embedded model of thriving at work", Organization Science, Vol. 16 No.5, pp. 537-549. doi: 10.1287/orsc.1050.0153.
- Tuominen-Soini, H., Salmela-Aro, K. and Niemivirta, M. (2008), "Achievement goal orientations and subjective well-being: A person-centred analysis", Learning and Instruction, Vol. 18 No.3, pp. 251-266. doi: 10.1016/j.learninstruc.2007.05.003.
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B. and Lens, W. (2010), "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. doi: 10.1348/096317909X481382.
- VandeWalle, D. (1997), "Development and validation of a work domain goal orientation instrument", Educational and Psychological Measurement, Vol. 57 No.6, pp. 995-1015. doi: 10.1177/0013164497057006009.
- VandeWalle, D., Cron, W.L. and Slocum, J.W., 2001. 'The role of goal orientation following performance feedback', *Journal of Applied Psychology*, Vol. 86 No. 4, pp. 629-640. doi: <u>10.1037/0021-9010.86.4.629</u>.
- VandeWalle, D., Nerstad, C.G. and Dysvik, A. (2019), "Goal orientation: A review of the miles traveled and the miles to go", Annual Review of Organizational Psychology and Organizational Behavior, Vol. 6, pp. 115-144. doi: <u>10.1146/annurev-orgpsych-041015-062547.</u>
- Vansteenkiste, M., Timmermans, T., Lens, W., Soenens, B. and Van den Broeck, A. (2008), "Does extrinsic goal framing enhance extrinsic goaloriented individuals' learning and performance? An experimental test of the match perspective versus self-determination theory", Journal of Educational Psychology, Vol. 100 No. 2, pp. 387-397. doi: 10.1037/0022-0663.100.2.387.
- Whitmore, J.G. and Borrie, W.T. (2005), "Exploring the usefulness of the dispositional flow scale for outdoor recreation activities". In: *Proceedings of the 2005 Northeastern Recreation Research Symposium*, pp. 10-12. Newtown Square, PA: Forest Service, Northeastern Research Station.