

MEASURING THE SATISFACTION AND FRUSTRATION OF BASIC PSYCHOLOGICAL NEEDS IN THE WORKPLACE

Abstract

Researchers have been looking at the issue of psychological need satisfaction in the workplace since the 1930s. Self-Determination Theory (SDT), a concept that emerged in the 1980s, stands out from other theories by uniquely capturing basic psychological needs as (1) innate and (2) promoting psychological growth, internalization, and well-being. Allowing basic psychological needs to be met at work is essential for autonomous work motivation, positive attitudes, good behaviors, and employee well-being, while frustration of basic psychological needs at work is associated with higher levels of job insecurity, engaging in unproductive behavior at work, and higher stress related to work, which in turn predicts higher levels of somatic symptoms, emotional exhaustion, and absenteeism from work due to illness. Therefore, it is crucial to measure basic need satisfaction and frustration at work and adjust management to improve on these dimensions. The purpose of the research is to review the research tools used to measure the satisfaction and frustration of basic psychological needs at work within the SDT framework. To achieve the research objective, the review of scientific literature available in the EBSCOhost database: APA PsycInfo, APA PsycArticles on the keyword “basic psychological needs” AND “self-determination theory” AND “scale” was done along with reviewing the research tools available on the Center for Self-Determination Theory website. The collection obtained was completed using the snowball technique. A comprehensive and up-to-date review of tools used to measure satisfaction (and frustration) of basic psychological needs in the workplace was established within the framework of Deci and Ryan’s SDT.

Keywords: basic psychological needs, self-determination theory, SDT, BPNS, W-BNS, BPNSFS, need frustration, need satisfaction, organizational psychology

Streszczenie

Pomiar satysfakcji i frustracji podstawowych potrzeb psychicznych w miejscu pracy

Badacze od lat 30. XX wieku analizują kwestię zaspokajania potrzeb psychicznych w miejscu pracy. Teorię autodeterminacji (SDT), która pojawiła się w latach 80., wyróżnia spośród innych koncepcji unikalne ujęcie podstawowych potrzeb psychicznych jako (1) wrodzonych

i (2) promujących wzrost psychiczny, internalizację i dobrostan. Umożliwienie zaspokojenia podstawowych potrzeb psychicznych w pracy jest kluczowe dla przejawiania przez pracowników autonomicznej motywacji do pracy, pozytywnych postaw oraz korzystnych dla organizacji zachowań. Ponadto, jest ono kluczowe dla ich dobrostanu, podczas gdy frustracja podstawowych potrzeb psychicznych w pracy wiąże się dla pracowników z wyższym poziomem niepewności zatrudnienia, angażowaniem się w nieproduktywne zachowania w miejscu pracy oraz wyższym stresem związanym z pracą, co z kolei koreluje z wyższym poziomem objawów somatycznych, wyczerpania emocjonalnego oraz nieobecności w pracy ze względu na chorobę. Dlatego kluczowy jest pomiar zaspokojenia i frustracji podstawowych potrzeb psychicznych w pracy oraz dostosowywanie systemu zarządzania w celu poprawy tych wskaźników. Celem niniejszego badania jest dokonanie przeglądu narzędzi badawczych używanych do pomiaru zadowolenia i frustracji podstawowych potrzeb psychicznych w miejscu pracy w ramach SDT. Aby osiągnąć ten cel, przeprowadzono przegląd literatury naukowej dostępnej w bazach EBSCOhost: APA PsycInfo, APA PsycArticles na słowa kluczowe „podstawowe potrzeby psychiczne” ORAZ „teoria samoderminacji” ORAZ „skala”, a także przegląd narzędzi badawczych dostępnych na stronie internetowej Centrum Teorii Samoderminacji. Zgromadzoną kolekcję uzupełniono przy użyciu metody kuli śnieżnej. W efekcie ustalono kompleksowy i aktualny przegląd narzędzi służących do pomiaru zadowolenia (i frustracji) podstawowych potrzeb psychologicznych w miejscu pracy w ramach SDT.

Słowa kluczowe: podstawowe potrzeby psychiczne, teoria samoderminacji, SDT, BPNS, W-BNS, BPNFS, frustracja potrzeb psychicznych, satysfakcja potrzeb psychicznych, psychologia organizacji

Introduction

According to Deci and Ryan's Self-Determination Theory (SDT), humans have a natural inclination to move towards psychological growth, internalization, and achieving and maintaining well-being. This tendency can be supported or blocked by environmental factors, including factors present in the workplace [Ryan, Deci, 2000].

Psychological growth involves feeling intrinsically motivated, engaging in activities that are interesting and enjoyable on their own, that individuals would perform even in the absence of external reinforcement [Deci, Ryan, 1980]. The authors' use of the term “psychological growth” to refer to intrinsic motivation stems from the assumption that intrinsically motivated individuals “are engaged in a continuous, cyclical process of seeking or creating optimal challenges and then attempting to meet them”; in other words, intrinsic motivation leads to an individual's psychological growth [Deci, Ryan, 1980: 42].

Internalization represents the natural human tendency to transform external reasons for engaging in a given behavior into forms of motivation that are more internalized and integrated into the self [Deci, Ryan, 1995]. SDT distinguishes three types of extrinsic motivation, i.e., engaging in an activity for reasons other than the fact that the activity is interesting and rewarding in itself: (1) extrinsic motivation – engaging in an activity because one feels compelled to do so because others offer rewards for pursuing this activity and punishments for not doing so; (2) introjected motivation – an activity is undertaken because an individual feels

pride, shame or guilt when faced with engaging in it (or not doing so); (3) identified motivation – it is done because an individual recognizes that it is consistent with their core values. Extrinsic and introjected motivation are controlled because they are subject to external or internal pressure, while identified and intrinsic motivation remain autonomous. The main difference between identified and intrinsic motivation is that the behavior undertaken within identified motivation is not perceived as attractive and satisfying in itself, e.g. undertaking regular physical activity, even though the individual is not keen on exercise, but being a healthy and fit person is an important value for them [Van den Broeck et al., 2016].

Although according to SDT, everyone has a natural inclination toward psychological growth, internalization, and well-being, SDT accepts that this inclination is not always expressed or achieved. People may behave passively or even engage in unproductive behaviors that frustrate growth, internalization, and well-being [Deci, Ryan, 2000; Vansteenkiste, Ryan, 2013]. It happens when they lack what SDT describes as a basic nutrient to harness these natural tendencies. Deci and Ryan point out that, analogous to how plants need water, sunlight, and minerals to grow, people need the satisfaction of three psychological needs: autonomy, competence, and relatedness to achieve psychological growth, internalization, and well-being [Deci, Ryan, 2000].

The satisfaction of basic psychological needs leads to the manifestation of more autonomous forms of motivation and better mental health and well-being. It can be concluded that the basic human needs described in the Basic Psychological Needs Theory framework (BPNT): autonomy, competence, and relatedness are the most important of the constructs described within the SDT framework [Deci, Ryan, 2000].

According to the assumptions underlying Deci and Ryan's SDT, each of the basic psychological needs (i.e., autonomy, competence, and relatedness) should uniquely predict psychological growth, internalization, and well-being. This was confirmed by a meta-analysis by Van den Broeck et al. [2016].

The need for autonomy refers to acting with a feeling of psychological freedom [Deci, Ryan, 2000]. The need for autonomy derives from the sense of being at the root of one's action rather than being pushed towards the given action by external forces [de Charms, 2013]. The SDT authors paid particular attention to this need in the early stages of theory development when the researchers' main focus was on the negative influence of extrinsic motivators on the development and maintenance of intrinsic motivation [Deci et al., 1999]. As already mentioned in this paper, of the three basic psychological needs, the need for autonomy remains the most controversial, mainly due to the misunderstandings that have grown up around its nature. It is important to point out that, according to SDT, it does not refer to the need to act independently of others' instructions, i.e., an employee may have his/her need for autonomy satisfied when he/she follows a manager's instructions if he/she accepts them. On the other hand, the need for autonomy may be violated when an employee works on a task after working hours because of a looming deadline, although the manager has not given him/her such an instruction.

The other two basic needs identified in SDT – the need for competence and relatedness – are not controversial. The former became the focus of researchers when they tried to explain how verbal praise can translate into increased intrinsic

motivation, despite its extrinsic nature. [Deci et al., 1999]. Today, the need for competence within SDT is seen as a natural inclination to explore and manipulate the environment and seek optimal challenges. This need is also found in other theories, such as Bandura's social-cognitive theory, according to which self-efficacy is a primary motivator [Bandura, 1977].

The need for relatedness is about feeling connected to at least some people, in such a way that we care about them and they care about us. The importance of this need has already been mentioned by Baumeister and Leary [1995].

This need is fulfilled when people perceive themselves as members of a group and experience a sense of community and connection. At work, it could be satisfied, for example, by having friends at work, organizing integration events for employees, caring for their identification with the brand.

Researchers have been looking at the issue of satisfying psychological needs in the workplace since the 1930s. SDT, a concept that emerged in the 1980s, however, stands out from other theories by uniquely capturing basic psychological needs, as (1) innate and (2) promoting psychological growth, internalization and well-being [Deci, Ryan, 2000].

Psychological needs within SDT are viewed as innate, basic inclinations for all humans [Deci, Ryan, 2000], and thus they resemble physiological needs such as hunger or thirst [Hull, 1943]. In this way, SDT differs from other needs theories, such as McClelland's needs theory [McClelland, 1965], according to which the needs for achievement, power, and belonging are acquired through socialization and learning throughout an individual's life [cf. Murray, 1938]. McClelland's theory [1965] thus implies individual differences about which need a person feels and which predominates, while SDT assumes that each of the three basic needs (autonomy, competence, and relatedness) should be experienced by everyone. Moreover, none of them should be seen as more important. SDT sees those needs as essential; and neglecting any of it as having negative consequences for psychological growth, internalization, and well-being. [Van den Broeck et al., 2016] such as maladaptiveness or development of psychopathology [Bartholomew et al., 2011a; Chen et al., 2015; Olafsen et al., 2017; Vansteenkiste et al., 2020; Vansteenkiste, Ryan, 2013]. Such an assumption contrasts with theories that assume that needs are arranged hierarchically, such as Maslow's hierarchy of needs [1943], according to which needs higher up the hierarchy are only activated when lower-order needs get satisfied. SDT focuses on the satisfaction of needs rather than on the strength of those needs. On the other hand, SDT does not exclude the existence of individual differences in the strength of needs. However, according to the assumptions of SDT, even people who do not strongly desire satisfaction of a basic psychological need would achieve benefits from the satisfaction of that need [Deci, Ryan, 2000].

Allowing basic psychological needs to be met at work is essential for autonomous work motivation, positive attitudes, good behavior, and employee well-being [Deci et al., 2017; Olafsen, Deci, 2020]. Therefore, BPNT could be seen as the core of Deci and Ryan's SDT [Olafsen et al., 2021].

What distinguishes SDT from other needs theories is that it provides objective criteria for which needs are determined as basic [Van den Broeck et al., 2016].

Basic needs within the SDT framework are those whose satisfaction enables the expression of our natural tendencies towards growth, internalization, and well-being to a higher degree than the satisfaction of other needs. Such an account of basic needs makes it very difficult to expand its catalog [Deci, Ryan, 2000]. People may desire many things – hundreds of Facebook likes, power, fame, wealth, and captivating beauty, but they do not need them in the sense of SDT. In contrast, research shows that people who desire power and wealth generally do not enjoy well-being [Sheldon, Kasser, 1998].

Since the satisfaction of basic psychological needs is crucial for well-being and people spend a significant amount of time at work, it was essential for researchers to invent tools to measure it which could be very helpful for organizational psychologists to diagnose organizations and suggest improvements for managers.

Method

The aim of this article was to review research tools used to measure the satisfaction (and frustration) of basic psychological needs at work within the SDT framework. To achieve the research objective, the review of scientific literature available in the EBSCOhost database: APA PsycInfo, APA PsycArticles on the keyword “basic psychological needs” AND “self-determination theory” AND “scale” was done along with reviewing the research tools available on the Center for Self-Determination Theory website. The collection obtained was completed using the snowball technique.

Results

Three scales have been found to assess the satisfaction (and frustration) of basic psychological needs. Each addresses the flaws of the previous one. These tools are described below.

Basic Need Satisfaction at Work

A 21-item tool was developed to measure the satisfaction of basic needs at work Basic Need Satisfaction at Work [Deci et al., 2001; Deci, Ryan, 2000; Ilardi et al., 1993; Kasser et al., 1992]. The tool consists of three subscales: autonomy, competence, and relatedness.

The autonomy subscale consists of the following items: I feel like I can make a lot of inputs to deciding how my job gets done; I feel pressured at work. (reversed item); I am free to express my ideas and opinions on the job; When I am at work, I have to do what I am told (reversed item); My feelings are taken into consideration

at work; I feel like I can pretty much be myself at work; There is not much opportunity for me to decide for myself how to go about my work (reversed item).

The competence subscale consists of the following items: I do not feel very competent when I am at work (reversed item); People at work tell me I am good at what I do; I have been able to learn interesting new skills on my job; Most days I feel a sense of accomplishment from working; On my job I do not get much of a chance to show how capable I am. (reversed item); When I am working I often do not feel very capable (reversed item).

The relatedness subscale consists of the following items: I really like the people I work with; I get along with people at work; I pretty much keep to myself when I am at work (reversed item); I consider the people I work with to be my friends; People at work care about me; There are not many people at work that I am close to (reversed item); The people I work with do not seem to like me much (reversed item); People at work are pretty friendly towards me.

Work-Related Basic Need Satisfaction (W-BNS)

The need for autonomy subscale in the Work-Related Basic Need Satisfaction Scale [Van den Broeck et al., 2010] consists of the following items: I feel like I can be myself at my job; At work, I often feel like I have to follow other people's commands (reversed item); If I could choose, I would do things at work differently (reversed item); The tasks I have to do at work are in line with what I really want to do; I feel free to do my job the way I think it could best be done; In my job, I feel forced to do things I do not want to do (reversed item).

The need for competence subscale consists of the following items: I really master my tasks at my job; I feel competent at my job; I am good at the things I do in my job; I have the feeling that I can even accomplish the most difficult tasks at work.

The need for relatedness subscale consists of the following items: I don't really feel connected with other people at my job (reversed item); At work, I feel part of a group; I don't really mix with other people at my job (reversed item); At work, I can talk with people about things that really matter to me; I often feel alone when I am with my colleagues (reversed item); Some people I work with are close friends of mine.

Basic Psychological Need Satisfaction and Frustration Scale — Work Domain

This 24-item scale was adapted from the Basic Psychological Need Satisfaction and Frustration Scale [Chen et al., 2015] to assess needs satisfaction and frustration at work [Schultz et al., 2015].

The autonomy frustration subscale consists of the following items: Most of the things I do on my job feel like "I have to"; I feel forced to do many things on my

job I wouldn't choose to do; I feel pressured to do too many things on my job; My daily activities at work feel like a chain of obligations.

The relatedness frustration subscale consists of the following items: I feel excluded from the group I want to belong to at work; I feel that people who are important to me at work are cold and distant towards me; I have the impression that people I spend time with at work dislike me; I feel the relationships I have at work are just superficial.

The competence frustration subscale consists of the following items: When I am at work, I have serious doubts about whether I can do things well; I feel disappointed with my performance in my job; I feel insecure about my abilities on my job; When I am working, I feel like a failure because of the mistakes I make.

The autonomy satisfaction subscale consists of the following items: At work, I feel a sense of choice and freedom in the things I undertake; I feel that my decisions on my job reflect what I really want; I feel my choices on my job express who I really am; I feel I have been doing what really interests me in my job.

The relatedness satisfaction subscale consists of the following items: I feel that the people I care at work about also care about me; I feel connected with people who care for me at work, and for whom I care at work; At work, I feel close and connected with other people who are important to me; I experience a warm feeling with the people I spend time with at work.

The competence satisfaction subscale consists of the following items: I feel confident that I can do things well on my job; At work, I feel capable at what I do; When I am at work, I feel competent to achieve my goals; In my job, I feel I can successfully complete difficult tasks.

The most recent validation of the English and Norwegian versions of this scale was carried out by Olafsen et al. [2021]. The scale also consists of 24 items.

The autonomy frustration subscale consists of the following items: Most of the things I do at work, I do because I feel that I have to; At work I feel forced to do many things that I would not have chosen to do; I feel pressured to do many of the things I do at work; My daily activities at work feel like a continuous line of duties.

The relatedness frustration subscale consists of the following items: At work I feel excluded from the group that I want to be a part of; At work I feel that the people that are important to me are cold and distant towards me; I have the impression that people that I spend time with at work dislike me; I feel that the relations I have at work are only superficial.

The competence frustration subscale consists of the following items: I seriously doubt whether I can do things well at work; I feel disappointment by many of my achievements at work; I feel insecure about my abilities at work; At work I feel like a failure because of the mistakes I make.

The autonomy satisfaction subscale consists of the following items: I have a feeling of choice and freedom in what I do at work; I feel that the decisions I make at work reflect what I really want; At work I feel that the choices I make expresses who I really am; At work I feel that I do what really interests me.

The relatedness satisfaction subscale consists of the following items: I feel that the people I care about at work also care about me; I feel connected to the people at work who care about me and whom I care about; I feel closely connected to other people who are important to me at work; I experience a warm and good feeling with the people I spend time with at work.

The competence satisfaction subscale consists of the following items: I feel confident that I can do things well at work; I feel capable in doing what I do at work; I feel competent to reaching my goals at work; I feel that I can successfully complete difficult tasks at work.

Both versions of the BPNFS Scale at Work [Olafsen et al., 2021; Schultz et al., 2015] have been included in the latest version of the official manual of the Basic Psychological Need Satisfaction and Frustration Scale [Van der Kaap-Deeder et al., 2020].

Discussion

The Basic Need Satisfaction at Work tool is widely used, although it has not been rigorously validated [Gagné, 2003]. Greguras, Diefendorff [2009] complain about the tool's problems with reliability and high intercorrelation of subscales. Van den Broeck et al. [2010] raised concerns about the content validity of this scale. As noted by the researchers [Van den Broeck et al., 2010], some items refer to antecedents of need satisfaction, while others refer to outcomes of basic need satisfaction. A more recent scale addressing the aforementioned complaints is Work-Related Basic Need Satisfaction [Van den Broeck et al., 2010].

The authors of the Work-Related Basic Need Satisfaction scale [Van den Broeck et al., 2010] validated it in the traditional way, taking into account the recommendations made by Hinkin [1998]. It was possible to achieve reliability for all scales, with regard to basic needs, as well as a three-factor structure. In order to avoid problems with content validity, the researchers [Van den Broeck et al., 2010] developed the scale in such a way as to measure directly the satisfaction at work of the need for autonomy, competence, rather than the antecedents of these needs or their consequences.

Despite better operationalization of the satisfaction of basic psychological needs at work, some criticism has also been raised about this scale [Olafsen et al., 2015; Olafsen, Halvari, 2017; Tafvelin, Stenling, 2018]. These boil down to the issue of frustration of needs. Indeed, reversed items may, in fact, load need frustration rather than need satisfaction. However, as has been shown, these two concepts are not rather opposite ends of the same continuum, but separate concepts [Bartholomew et al., 2011b; Cordeiro et al., 2016].

Need frustration occurs when basic psychological needs are actively undermined as a result of the influence of the social context. [Vansteenkiste et al., 2020], e.g., the need for autonomy can become frustrated when someone is forced to act in a certain way and the need for relatedness when someone is excluded or rejected

from a group. Need frustration, then, is something other than just a lack of need satisfaction, which refers to more passive obstacles to the satisfaction of basic psychological needs, such as not having a choice, lacking skills, and not sharing interests with others in the group. Need satisfaction and frustration are theorized as being in an asymmetric relationship, i.e., lack of need satisfaction does not automatically entail need frustration, but on the other hand, need frustration entails lack of need satisfaction [Vansteenkiste, Ryan, 2013]. Frustration of basic psychological needs is an important predictor of harmful consequences [Bartholomew et al., 2011b; Chen et al., 2015; Martinent et al., 2015].

A longitudinal study by Olafsen et al. [2017] found that experiencing frustration of basic psychological needs at work was associated with higher levels of stress, related to work, which in turn predicted higher levels of somatic symptoms, emotional exhaustion, and absenteeism from work due to illness. Van den Broeck et al. [2014] found that frustration of three basic psychological needs acted as a mediator between job insecurity and engaging in unproductive behavior at work.

The Basic Psychological Need Satisfaction and Need Frustration scale responds to the criticism discussed above by including separate subscales for satisfaction and frustration of each of the three basic needs [Chen et al., 2015; Olafsen et al., 2021; Schultz et al., 2015]. It has been adapted to different cultures, languages, and contexts – including the domain of work (Basic Psychological Need Satisfaction and Need Frustration at Work).

Olafsen et al. [2021] have recently conducted an adaptation and validation of the above-described scale within the framework of self-determination theory within the work domain. This is important because, despite the growing interest in SDT in the context of organizational psychology [Gagné, 2014], there has been no formal validation of the BPNSFS scale for the work domain. Researchers [Olafsen et al., 2021] conducted confirmatory factor analyzes on three Norwegian samples and one English sample, and multigroup analyzes to demonstrate measurement invariance. Their results confirmed that the adaptation of the scale with its six-factor structure fitted the data well in all four samples, and partial measurement invariance was obtained across samples and languages. Furthermore, acceptable results were obtained in terms of internal consistencies for the subscales, as well as criterion validity of the scale [Olafsen et al., 2021].

Conclusions

Each of the following scales presented in this paper addresses the flows of its predecessors. The most recent, Basic Psychological Need Satisfaction and Need Frustration at work [Chen et al., 2015; Olafsen et al., 2021; Schultz et al., 2015] addresses the fact that need satisfaction and need frustration are separate concepts, concerning different antecedents, outcomes, and motivational processes [Bartholomew et al., 2011b; Cordeiro et al., 2016]. Therefore, it is particularly noteworthy.

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