

PERSONALITY AND WORK ETHIC VS. WORKAHOLISM: TEMPERAMENT, PERSONALITY TRAITS, AND WORK-VALUING BELIEFS AS PREDICTORS OF COMPULSIVE AND EXCESSIVE WORK

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HIGHLIGHTS

- Workaholism, i.e., work compulsion and excessive work is primarily associated with negative emotionality.
- Workaholism primarily affects highly reactive individuals who react strongly.
- Work addiction concerns highly reactive people who are at the same time active people.
- Work ethic appears as a significant predictor of workaholism.
- Beliefs that emphasize the value of effort are positive predictors of workaholism.

ABSTRACT

Background: The research presented here was designed to look for possible relationships between personality traits, including temperament, work ethic components and workaholism. Workaholism, i.e., work addiction was conceptualized as obsession and compulsion to work and excessive work. **Material and Methods:** The *NEO-Five Factor Inventory* and the *Emotionality, Activity, Sociability-Temperament Survey* were used to measure personality, including temperament. Work ethic was measured using the *Multidimensional Work Ethic Profile*, and workaholism was measured using the *Dutch Work Addiction Scale*. The survey was conducted at 2 time points 5 weeks apart. Predictors (personality, work ethic) were examined first and workaholism was examined after 5 weeks. A sample of 211 employees from various Polish organizations was surveyed. **Results:** The results of the canonical analysis indicate that negative emotionality, a tendency to react with emotions such as dissatisfaction (distress), and selected components of work ethic – namely, perceiving work as a moral obligation, work centrality, aversion to wasting time, and, to a lesser extent, the valuation of hard work – are significant predictors of work-related obsession, compulsion, and excessive work involvement. Activity also emerged as a significant, though weaker, predictor of workaholism. Low agreeableness was found to be a weak predictor of workaholism. **Conclusions:** The results of the study show that high arousability, i.e., the ease of responding with emotional arousal, and beliefs that value work, such as viewing work as a value and a duty, are important in predicting levels of workaholism. High activity, understood as vigor and sociability, as well as low agreeableness, are weaker predictors of work addiction. *Med Pr Work Health Saf.* 2025;76(5)

Key words: temperament, workaholism, personality traits, work ethic, work compulsion, centrality of work

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INTRODUCTION

The aim of this article is to present the results of a study examining the relationships between personality traits, beliefs constituting work ethic, and workaholism. This review of the existing literature provides a theoretical basis for addressing this topic and allows to anticipate associations between negative emotionality, activity level, work valuation, and both work compulsion and excessive work involvement. The research presented in this article contributes to a more comprehensive un-

derstanding of the relationship between work ethic and workaholism by taking into account the role of personality variables, including temperament, and aims to fill a gap in this area of inquiry. Specifically, there is a scarcity of studies that investigate the link between work ethic – understood as a set of beliefs that attribute value to work – and workaholism, particularly those employing a two-wave measurement design. The present study addresses this gap by implementing a two-stage research approach: in the first wave, the predictors (i.e., personality traits and work ethic) were measured, followed

by the assessment of the dependent variable – the components of workaholism – 5 weeks later.

The essence of workaholism and its personality predictors

This article considers workaholism as an obsessive-compulsive disorder (working compulsively) and addiction characterised by working excessively and an individual's self-imposed very high demands [1–3]. It leads overworking, abandoning other activities and adversely affects health [4]. At the core of workaholism defined in this way is an internal compulsion to perform work combined with the experience of loss of control, in which the workaholic engages in work despite an accompanying awareness of the negative consequences of doing so. Refraining from this activity leads to a build-up of suffering, anxiety and discomfort, emotional tension being their important component [5]. For the addict, work remains the only way to reduce the suffering they experience.

It is worth noting that the conceptualisation of the term workaholism has a long history, and the positive sides of this phenomenon have been mentioned by numerous authors, both for the organisation commissioning certain tasks to be performed and for the person doing the work, also making a distinction between workaholism and work engagement [6–9]. The obsessive and compulsive worker, in contrast to the passionate committed worker, often experiences work overload. The passionate person only experiences strain, which can also harm them, but they are able to make the choice to switch off from work [10].

Work addiction in the work craving model is an emotionally-motivated state of persistent engagement with work that manifests as an obsessive-compulsive style of work performance and neurotic perfectionism. It has been proven that this state can be directed towards overcompensating for low self-esteem and avoidance and/or reduction of negative emotions and emotional emptiness [5,6,10,11]. It can be noted that in the work craving model, the compulsive-obsessive style of doing work, related to the compulsion to do it is an important component of workaholism. A number of models consider this very component as the core of the term workaholism [4]. Correlates and predictors of workaholism considered as obsession and compulsion are neuroticism, conscientiousness, narcissism and perfectionism [4,12–14]. Research by Clark et al. [15] has shown that conditions of workaholism also include negative affect, components of perfectionism such as high standards and a discrepancy between the “real self” and the “ideal self.” Besides, agreeableness and extraversion are negative correlates of workaholism. In a study by Burke et al. [16],

high conscientiousness was found to be a predictor of this variable. A consistent finding of several studies is the recognition of significant positive associations between neuroticism and conscientiousness and workaholism [9,14,17].

Wojdyło [10] presented a list of factors of work obsessions and compulsions. On the one hand are the components of negative affect, i.e., strong negative emotions and deficits in the ability to self-regulate, i.e., to reduce the strength of these emotions. On the other hand, factors relating to low self-esteem and its overcompensation are considered. This compensation co-occurs with activity and enthusiasm, as well as the ability to plan and organise the completion of tasks, which are associated with extraversion [18].

As can be concluded from the above review, predictors of workaholism include personality traits, including temperament, such as neuroticism [9]. Temperament can be reduced to response style, i.e., the formal characteristics of behaviour, its energy and temporal characteristics. Responsiveness to stimuli can be weak or strong, fast or slow [18,19]. The aforementioned neuroticism is the tendency to react with negative emotions based on arousability. High arousability refers to a relatively constant tendency to respond to stimuli, high for a given person in the arousal of the nervous system. It is determined by biological mechanisms that enhance stimulation and thus determine the higher level of arousal. A manifestation of high arousability is negative emotionality including negative affect and neuroticism, while low arousability is manifested by extraversion, including activity and sociability [17–19]. Extraversion may contribute to workaholism, as workaholics tend to seek social feedback related to their achievements, competence, and success [17]. They are motivated by a desire to prove themselves and to receive approval or admiration from others [10].

Workaholism may be perceived as a discharge of easily created high arousal and a way to improve self-esteem. Firstly, work leading to the achievement of goals is a source of pleasure that reduces negative emotions or offers an escape from those emotions. Secondly, work as a predictable, controlled activity, and therefore of lower stimulus value, helps to lower the power of stimulation. Thirdly, effective work and successes serve to improve lowered self-esteem. It is noteworthy that people with high arousability level are characterised by lower self-esteem [18,19]. This may stem from the fact that their performance has often been less effective in the past because, according to the Yerkes-Dodson law, high arousal lowers performance. These individuals scored lower compared to others and their own standards, and were more of-

ten criticised or even humiliated by those around them. Achieving a good mastery of the skills and performing work that requires such skills improves self-esteem [18].

Beliefs and workaholism: work ethic and work addiction

Elements of the cognitive system, such as beliefs, can also be considered as predictors or even components of work obsessions and compulsions [4,10]. Workaholism can be fostered by beliefs such as: “I am not good enough,” “if I give my best, I will gain respect” [10]. Such cognitive content is associated with high negative emotionality, including low self-esteem [10,18]. These beliefs may also be associated with conscientiousness, perfectionism (giving one’s best) and low agreeableness, manifested, among other things, in distrust of people (people do not respect me). These can be seen as sources of overworking, which can lead to a reduction of negative emotions and a conditional improvement in self-esteem, allowing one to reach standards of neurotic perfectionism. This finds a cultural and social justification, as hard work inspires respect.

A specific set of beliefs is the work ethic. Work ethic means assigning a high value to hard work and diligence, stigmatizing idleness, discharging duties and believing that work should be done to the best of one’s ability. Fulfilling one’s duties here implies a moral obligation, and diligence is considered a virtue, i.e., a desirable moral trait [20,21].

In the psychological sense, work ethic is a syndrome of attitudes and beliefs, with strongly outlined emotional-judgmental components. Miller et al. [22] described 7 dimensions of the syndrome [20]:

- belief in the sense of hard work, the conviction that it leads to success and that it is a recipe for problems and difficulties in life,
- centrality of work, the conviction that it is the basic activity in life,
- distaste for wasting time, tendency to treat time as a valuable resource,
- distaste for leisure, i.e., the conviction that free time activities are less valuable,
- delay of gratification, recognising the value of rewards one has to wait for and the assumption that work in itself is a reward,
- self-reliance at work,
- morality and ethics, i.e., placing emphasis on honesty in relationships with others, the assumption that honest conduct should be the content of the work [21].

The results of the study showed that the predictors of workaholism, considered as obsession and compul-

sion with work, are centrality of work, self-reliance, distaste for wasting time, distaste for leisure as well as low willingness to act morally (the latter, however, being a weak predictor) [2].

The beliefs that compose work ethic are elements of a system of normative knowledge constructed from notions of “how things should be.” Work ethic refers to social values and norms. Based on research, it can be predicted that the recognition of values, norms such as “work is a good, a duty and it should be done well” determines the workaholic’s beliefs about his or her own work (e.g., “I have to work because in doing so I will show others my worth”) [2].

It is also worth noting that work ethic is a high valuation of action, and commitment. Previous research findings demonstrate a significant association of work ethic with work and organisational commitment, with extraversion, including activity and sociability, and with an action-emphasised active style of coping with stress [22,23]. It is worth adding that work ethic is also associated with the correlate of workaholism, which is conscientiousness [24].

Aim and hypotheses

The aim of the study was to examine whether and to what extent temperamental traits of arousability (including negative emotionality) and activity/extraversion (including vigour, enthusiasm and sociability), other personality traits (conscientiousness and agreeableness) and the aforementioned work ethic components are associated with work addiction [17–19]. The primary aim of this research is to fill a gap in the existing literature concerning the relationship between work ethic – conceptualized as a syndrome of evaluative beliefs about work – and workaholism. To date, only 1 study [2] has addressed work ethic as a multifaceted syndrome, measured using the *Multidimensional Work Ethic Profile* (MWEP) [22], and rooted in the tradition of research on the Protestant work ethic [20]. The present study also incorporates measurements taken at 2 time points. Moreover, the relationship between multidimensional work ethic and workaholism is examined within the broader context of workaholism’s association with personality traits, including temperament. After taking into account previous research findings on the relationship of personality components [17], work ethic and workaholism, the following research hypotheses were put forward:

- H1. Negative emotionality (the tendency to react with negative emotions such as dissatisfaction) is positive predictor of workaholism, which includes obsession and compulsion with work, i.e., working compulsively and working excessively leading to overwork. Negative emotionality, or the ease of negative

emotions, facilitates the emergence of workaholism, as these emotions are discomforts that can be reduced with work performance [10].

- H2. Broadly understood activity, including physical activity, vigour, tempo, and sociability (vigour, tempo, and sociability are components of extraversion), constitutes a positive predictor of workaholism. Broadly understood activity facilitates the initiation of action, including work-related tasks. Extraversion itself – particularly sociability – reflects a greater need for receiving feedback from others regarding one's achievements, skills, and successes, which sustains continued work engagement. The outcomes of such work are associated with receiving this feedback and social approval, which, in turn, is linked to the experience of positive emotions such as satisfaction [9,10,17].
- H3. Work ethic, understood as a set of evaluative beliefs about work and activity – particularly its components that emphasize the value of effort (such as hard work, the centrality of work, and work as a moral obligation) and the internal imperative to devote time to work (i.e., the belief that time not spent working is wasted) – serves as a positive predictor of workaholism. Work-valuing beliefs indicate that work serves as a means of coping with negative emotions and discomfort, which underlie the development of workaholism [2,20].
- H4. Conscientiousness is a positive predictor of workaholism. Conscientiousness, as a correlate of work ethic [24], entails valuing work, achievement motivation, and the pursuit of performing tasks well. This drive fosters work engagement and supports the perception of work as a means of coping with the discomfort that fuels workaholism [17,20].
- H5. Agreeableness is a negative predictor of workaholism. Low agreeableness, in turn, includes traits such as distrust and competitiveness, which may lead to taking on an excessive number of tasks, including those that should be carried out by others [9,15,17].

Associations of openness to experience with workaholism were not predicted, as research in this area is inconsistent (associations are very weak, often insignificant, in some cases positive and in some negative depending on the component of workaholism) [4,17].

MATERIAL AND METHODS

Participants, ethics and procedure

To test the hypotheses, a study was conducted involving 211 employees from various organizations in south-

ern Poland. The sample included 112 women (53%) and 99 men (47%). The study included people aged 22–66 years. The average age of those surveyed was almost 40 years ($M \pm SD$ 39.92 \pm 11.18 years). The largest number of people surveyed (106) had a tertiary education (50%), a secondary education (77 people – 37%), while the rest had a bachelor's degree (10 people – 4.5%) and a vocational education (17 people – 8%), as well as primary education (1 person – 0.5%).

The survey covered 40 people working in micro-enterprises, employing ≤ 9 people (19% of the sample), 46 employees of small companies (employing ≤ 49 people) (22% of the sample), 59 employees of medium-sized companies (≤ 249 people) (28% of the sample) and 66 employees of large enterprises (≥ 250 people) (31% of the sample). Representatives of various professions, involving working with people as well as technical ones (e.g., engineers, mechanics, IT specialists), were surveyed. The majority of those surveyed, 166 people (79% of the sample), were employed on the basis of an employment contract and were full-time employees. The remainder, 27 people (13%), were self-employed, while 18 people (8% of the sample) were employed under civil law agreements, zero hours agreements and contracts for performing specific work.

The average length of service of the respondents was just over 17 years ($M \pm SD$ 17.34 \pm 11.07 years). Forty-two people holding managerial positions were surveyed (20% of the sample). Participation in the study was voluntary and anonymous. The research project was approved by the Research Ethics Committee of the Faculty of Psychology in Katowice at SWPS University (No. WKEB94/04/2024).

The study was conducted in 2024, with questionnaire data collected at 2 time points in order to separate the measurement of predictors and the dependent variable over time. This aimed to avoid the common method bias and to get closer to the experimental design [25]. The predictors, i.e., personality (including temperament) and work ethic were examined first, followed by the explained variable (workaholism) 5 weeks later.

Measures

Personality, including temperament, was examined with 2 scales, the *NEO-Five Factor Inventory* (NEO-FFI) [26] and the *Emotionality, Activity, Sociability-Temperament Survey* (EAS-TS) for adults [27].

NEO-Five Factor Inventory

The NEO-FFI includes 5 scales, each with 12 items: *Neuroticism* (e.g., “I feel inferior to others”; $\alpha = 0.85$, $\omega = 0.85$), *Extraversion* (e.g., “I like to have a lot of peo-

ple around me”; $\alpha = 0.77$, $\omega = 0.78$), *Openness to Experience* (e.g., “I am intrigued by the patterns I find in art and nature”; $\alpha = 0.67$, $\omega = 0.68$), *Agreeableness* (e.g., “I try to be courteous to everyone I meet”; $\alpha = 0.75$, $\omega = 0.76$) and *Conscientiousness* (e.g., “I keep my belongings clean and neat”; $\alpha = 0.82$, $\omega = 0.82$). The Polish version of the NEO-FFI questionnaire [26] constructed by Costa and McCrae [28] was used. Respondents indicated their agreement with each item on a 5-point scale (1 – “strongly disagree,” 5 – “strongly agree”).

Emotionality, Activity, Sociability-Temperament Survey
Emotionality, Activity, Sociability-Temperament Survey was presented by Buss and Plomin [29] and translated into Polish by Oniszczenko [27]. This is the version of the instrument and has 4 items corresponding to each of the 5 subscales. Each of the items was rated on a Likert scale ranging from 1 (“not characteristic or typical of yourself”) to 5 (“very characteristic or typical of yourself”). This survey examines: *Emotionality-distress* (e.g., “I often feel frustrated”; $\alpha = 0.74$, $\omega = 0.75$); *Emotionality-fearfulness* (e.g., “I am easily frightened”; $\alpha = 0.59$, $\omega = 0.63$); *Emotionality-anger* (e.g., “I am known as hot-blooded and quick-tempered”; $\alpha = 0.61$, $\omega = 0.61$); *Activity* (e.g., “I often feel as if I’m bursting with energy”; $\alpha = 0.68$, $\omega = 0.69$); *Sociability* (e.g., “I find people more stimulating than anything else”; $\alpha = 0.57$, $\omega = 0.58$).

In line with Strelau’s analyses [18,19], it was decided that the sum of the *Neuroticism*, *Emotionality-distress*, *Emotionality-fearfulness* and *Emotionality-anger* scales indicated broadly negative emotionality ($\alpha = 0.71$, $\omega = 0.78$), while the sum of the *Extraversion*, *Activity* and *Sociability* scales was an indicator of broadly understood activity ($\alpha = 0.65$, $\omega = 0.82$). Negative emotionality was assumed to be a manifestation of high arousability, whereas activity was assumed to be a manifestation of low one [19].

Multidimensional Work Ethic Profile

To measure work ethic, the Polish version of the *Multidimensional Work Ethic Profile* (MWEP), a shortened version of the MWEP questionnaire, was used [21,22]. The questionnaire is composed of 35 items and 7 subscales (with 5 items in each scale), which correspond with 7 dimensions of work ethic: belief in the sense of hard work (*Hard Work*; $\alpha = 0.74$, $\omega = 0.74$), *Centrality of Work* ($\alpha = 0.81$, $\omega = 0.81$), distaste for wasting time (*Wasted Time*; $\alpha = 0.74$, $\omega = 0.75$), distaste for leisure (*Anti-leisure Sentiment*; $\alpha = 0.77$, $\omega = 0.78$), *Delay of Gratification* ($\alpha = 0.78$, $\omega = 0.80$), *Self-reliance* ($\alpha = 0.82$, $\omega = 0.83$) and morality and ethics (*Morality/Ethics*; $\alpha = 0.81$, $\omega = 0.81$). Five statements were added to the list of 35 items

mentioned above, related to the conviction that work is a value and a moral obligation (*Work as Moral Obligation* – WMO scale; $\alpha = 0.76$, $\omega = 0.78$).

Participants indicated their attitudes towards statements using a scale from 1 (“I strongly disagree”) to 5 (“I strongly agree”). Statistical analyses also used an index constituting the sum of all the 8 subscales, i.e., MWEP ($\alpha = 0.64$, $\omega = 0.67$), with the WMO scale [21].

Dutch Work Addiction Scale

Workaholism considered as compulsion and obsession with work and overworking was examined using the *Dutch Work Addiction Scale* (DUWAS) [30] in the Polish adaptation of Kożusznik et al. [31]. This tool comprises 2 subscales: *Working Compulsively* (WC) and *Working Excessively* (WE), each with 5 items (WC, e.g., “I feel that there’s something inside me that drives me to work hard”; $\alpha = 0.72$, $\omega = 0.73$; WE, e.g., “I seem to be in a hurry and racing against the clock”; $\alpha = 0.74$, $\omega = 0.74$). The 10 items are rated on a 4-point scale (1 – “almost never,” 4 – “almost always”). The sum of the 10 items serves as an indicator of workaholism (DUWAS; $\alpha = 0.83$, $\omega = 0.83$).

Statistics

To verify the hypotheses and to examine the simultaneous relationship between all personality traits (including temperament, i.e., negative emotionality and activity) and work ethic components with all dimensions of workaholism at the same time, a canonical analysis was applied, which was carried out using the statistical package Statistica 12.0 (StatSoft-TIBCO Software Inc., Palo Alto, USA) [32,33]. Canonical analysis allows to determine the extent of the simultaneous influence of a set of independent variables given the relationships between the variables in that set on a set of dependent variables given the relationships between the variables also in the latter set. The canonical analysis establishes the multiple determination structure of the individual but jointly considered variables, indicating the most significant variables. The personality dimensions and work ethic components (left set) were treated as independent variables (predictors) for the workaholism dimensions (right set).

RESULTS

Preliminary results

The first step of the analysis was to calculate the correlation coefficients. Table 1 contains descriptive statistics of the variables tested with the scales described above and the sums of these scales such as MWEP (work

ethic), negative emotionality, activity (the means obtained, standard deviations), correlations and intercorrelations between the variables tested.

As can be seen from Table 1, negative emotionality correlates moderately positively with workaholism and its components, i.e., compulsion and overwork. The components of work ethic correlate moderately and weakly with compulsion (WC) and overwork (WE), this being especially true for work as moral obligation, hard work, centrality of work and wasted time. It is worth noting that these components of work ethic correlate positively with conscientiousness and activity (the correlations with centrality of work and wasted time are moderate). Workaholism correlates positively and weakly with activity and conscientiousness. Agreeableness correlates weakly and negatively with the workaholism components.

Personality, work ethic and workaholism

Table 2 presents the results of the canonical analysis. The total redundancy for the set of dependent variables (dimensions of workaholism) was 27.21%. This means that 27.21% of the variance in workaholism may be explained with the included set of predictors – personality traits and work ethic components.

Among the 2 resulting pairs of canonical variates, only 1 (U1,V1) was found to be statistically significant for a linear relationship between the sets of personality traits, work ethic components and workaholism dimensions (Table 2). In order to determine the magnitude of the contribution that individual personality traits, work ethic components, and workaholism dimensions made to the canonical variate forming the pair, a factor loadings structure was applied. These loadings are a measure of the correlation of a given dimension with a given canonical variate (“factor”). Loads >0.3 were assumed to be indicative of a significant relationship between the trait and component in question and the canonical variate [34].

As can be seen from the data in Table 2, on the side of the independent variables (personality traits and components of work ethic), the pair (U1,V1) includes the canonical variate U1. With this factor, the highest positive correlations are shown by the personality traits and work ethic components: negative emotionality (0.61), centrality of work (0.57), work as moral obligation (0.50), wasted time (0.45). It should be noted that hard work and activity has a factor loading >0.3 (hard work – 0.34) and close to 0.4 (activity – 0.37) [34]. Agreeableness shows a negative correlation with the variable U1 (–0.31). It was decided for the U1 factor to be called “negative emotionality and high evaluation of work and activity”.

The “negative emotionality and high evaluation of work and activity” forms the pair in question with factor V1, which can be described as “work compulsion and overworking”. Indeed, the 2 dimensions of workaholism, i.e., working compulsively and working excessively, correlate most strongly with this variable (0.90 and 0.93, respectively).

The canonical pair in question (U1,V1) explains 13% of the variation in the set of predictors: personality traits and work ethic components, and 84% of the variation in the set of workaholism dimensions. The relationship in this canonical pair, i.e., the relationship of the linear function of the personality traits and work ethic components with the linear function of the workaholism dimensions, is significant and amounts to 0.56.

Based on the above analysis, H1 can be accepted: negative emotionality – that is the tendency to react with negative emotions such as dissatisfaction – is a predictor of workaholism. In this framework, it appears to be the strongest predictor.

The analysis also supports H2: activity is another predictor of workaholism, although it is a weaker predictor than negative emotionality.

Furthermore, based on the analysis of the results, H3 can be partially accepted: work ethic – particularly the valuing of energy and time investment in work (i.e., viewing work as a moral obligation, centrality of work, avoidance of wasting time, and to a lesser extent, hard work) – is a significant predictor of work obsession, compulsion to work, and excessive work. The remaining components are weaker and insignificant predictors.

Hypothesis 4 should be rejected: high conscientiousness did not prove to be a predictor of workaholism. However, H5 can be accepted: low agreeableness is a weak predictor of workaholism.

DISCUSSION

Research and analysis have therefore shown that workaholism considered as obsession and compulsion with work and working excessively is primarily associated with negative emotionality. This emotionality refers to the ease of reacting with negative emotions such as dissatisfaction, fear, anger and the tendency to react with tension and worry. It should be perceived as high arousability, i.e., the tendency to respond to stimuli with high arousal determined by physiological mechanisms that enhance stimulation and thus arousal [19].

It leads to the conclusion that workaholism primarily affects highly reactive individuals who react strongly [35]. On the one hand, the addiction here is a form of reducing

Table 1. Descriptive statistics (M±SD), correlations and intercorrelations between traits of personality: negative emotionality (i.e., sum of neuroticism [NEO-Five Factor Inventory – NEO-FFI], emotionality–distress, emotionality–fearfulness and emotionality–anger [Emotionality, Activity, Sociability–Temperament Survey – EAS-TS]), activity (i.e., sum of extraversion [NEO-FFI], activity and sociability [EAS-TS]), openness to new experiences, agreeableness and conscientiousness (NEO-FFI), components of work ethic (Multidimensional Work Ethic Profile – MWEF) and dimensions of workaholism (Dutch Work Addiction Scale – DUWAS), based on a study conducted in 2024 among 211 employees from various organizations in southern Poland

Variable	M±SD	Pearson's correlation																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Negative emotionality	51.17±14.70	–																
2. Activity	53.37±10.53	–0.26***	–															
3. Openness to new experiences	25.44±6.31	–0.08	0.19**	–														
4. Agreeableness	29.08±6.48	–0.28***	0.19**	0.07	–													
5. Conscientiousness	32.73±6.79	–0.21**	0.31***	–0.11	0.27***	–												
6. Work as moral obligation	17.55±3.82	0.17*	0.19**	–0.18**	0.11	0.32***	–											
7. Hard work	16.87±3.59	–0.01	0.24***	0.02	0.07	0.24***	0.32***	–										
8. Centrality of work	18.17±4.16	0.02	0.40***	0.22**	0.17*	0.27***	0.41***	0.38***	–									
9. Wasted time	17.93±3.60	0.17*	0.24***	0.09	0.05	0.37***	0.47***	0.30***	0.41***	–								
10. Anti-leisure sentiment	13.55±3.79	–0.03	0.19**	0.19**	0.08	0.07	0.19**	0.10	0.54***	0.19**	–							
11. Delay of gratification	16.92±3.94	0.00	0.00	0.03	0.07	0.15*	0.10	0.29***	0.23***	0.19**	0.12	–						
12. Self-reliance	20.13±3.31	–0.01	–0.13	0.07	–0.30***	0.12	–0.10	0.03	–0.13	0.10	–0.21**	0.06	–					
13. Morality/Ethics	22.40±2.79	–0.03	0.16*	–0.04	0.16*	0.20**	0.19**	0.02	0.15*	0.19**	0.10	–0.01	0.15*	–				
14. MWEF	125.98±13.43	0.03	0.31***	0.17*	0.09	0.39***	0.44***	0.59***	0.74***	0.65***	0.53***	0.54***	0.23***	0.38***	–			
15. Working compulsively	9.11±2.96	0.30***	0.19**	0.02	–0.17*	0.13	0.29***	0.18**	0.28***	0.25***	0.18***	0.15*	0.02	0.07	0.32***	–		
16. Working excessively	10.74±3.34	0.34***	0.19***	0.06	–0.16*	0.14*	0.23***	0.17*	0.31***	0.22***	0.11	0.10	0.00	0.06	0.27***	0.70***	–	
17. DUWAS	21.44±6.02	0.35***	0.21**	0.05	–0.18*	0.15*	0.28***	0.19**	0.32***	0.25***	0.15*	0.14*	0.01	0.07	0.32***	0.91***	0.94***	–

***p < 0.001, **p < 0.01, *p < 0.05.

Table 2. Traits of personality (including temperament, i.e., negative emotionality and activity), components of work ethic vs. dimensions of workaholism based on a study conducted in 2024 among 211 employees from various organizations in southern Poland

Variable	Canonical variates loading	
	U1	V1
Independent variable ^a		
negative emotionality	0.61	
activity	0.37	
openness to new experiences	0.08	
agreeableness	−0.31	
conscientiousness	0.26	
work as moral obligation	0.50	
hard work	0.34	
centrality of work	0.57	
wasted time	0.45	
anti-leisure sentiment	0.27	
delay of gratification	0.24	
self-reliance	0.02	
morality/ethics	0.13	
Dependent variable ^b		
working compulsively		0.90
working excessively		0.93

U1 – independent canonical variate, V1 – dependent canonical variate.
Canonical correlation between U1 and V1 0.56 ($p < 0.001$), total redundancy 0.27.
^a Separate variances 0.13, redundancies 0.04.
^b Separate variances 0.84, redundancies 0.27.

and diminishing arousal as well as an escape from emotions. On the other hand, it can be associated with the improvement of low self-esteem co-occurring with high arousability (more precisely, low self-esteem is a correlate, and even a component, of neuroticism) [18,26]. Those individuals may often have experienced lower self-efficacy, i.e., more often failing to achieve standards, more often being criticised and even humiliated by those around them. This may include such ineffectiveness in childhood possibly having triggered parents' excessive focus on it and their certain demands for standards, the achievement of which would evoke their conditional acceptance [4,10]. Negative emotions may thus stem from low self-esteem and, in turn, impair effective functioning, further reinforcing that low self-esteem.

This research has shown that obsessive, compulsive work concerns highly reactive people who are at the same time active people, characterised by high energy mobilisation (vigour and invigoration), enthusiasm and socia-

bility. Such a result confirms the observations and model of Wojdyło [5,10]. This also allows for the bold hypothesis that workaholism may affect individuals with an inharmonious temperament structure, characterized by a tendency toward overstimulation. Specifically, this could include individuals with higher activity (lower arousability) but also low endurance and higher emotionality (higher arousability) [18,19]. New research using the *Formal Characteristics of Behaviour – Temperament Inventory* is needed to verify this hypothesis [19]. Compulsivity and overworking may thus result from high temperamental activity, which is an escape from high arousability. Such arousability, however, correlates with low self-esteem. It can thus be concluded that, on the one hand, individuals predisposed to work addiction are more prone to experiencing negative emotions. On the other hand, these individuals may also exhibit a tendency to seek social rewards – an aspect of sociability, which is a component of extraversion. This is supported by previous research, which highlights workaholics' need for social feedback regarding their achievements, competence, and success [17]. Positive feedback, as a source of positive emotions, may serve to reduce negative emotions.

Another important predictor of workaholism is work ethic, which is a set of beliefs that highly value work and activity [20,23]. An important element of the work ethic is the valuing of effort and the willingness to do intense work combined with beliefs such as: “work is a value and should be done well,” “diligence determines a person's worth.” The results of this study suggest that such beliefs may co-occur with heightened emotionality and its correlate, low self-esteem, and thus with certain self-perceptions such as “I am worthless” and “I am ineffective” [10,28]. An intense engagement in work – valued and idealized by the work ethic – may serve as a means of reducing tension, alleviating negative emotions, and compensating for low self-esteem associated with such tension and emotions. More precisely, it is the excessive, neurotic form of work – overworking – that may fulfil this function. This behaviour may be driven by beliefs rooted in the work ethic, as well as by cognitive patterns characteristic of work addiction, such as the belief that “to feel happy, one must do everything as well as possible” [10].

Several mechanisms may thus be at play. First, there is the escape from negative emotions and psychological tension – an escape made possible through work, which is glorified by the work ethic. Second, overworking may function as a way of enhancing low self-esteem and gaining approval by meeting rigid performance standards, which may also be shaped by work ethic beliefs.

Workaholism can therefore serve as a means of reducing negative emotions and improving self-esteem through social approval, admiration, and the fulfilment of socially endorsed work ethic norms [2]. Adhering to these norms may lead to self-approval as well as recognition from others. Such approval, in turn, can elicit positive emotions that counteract negative ones. Ultimately, recognition and admiration may contribute to improving low self-esteem [10,36].

Furthermore, the work ethic, as a set of beliefs, may offer a framework for coping with negative emotions and life difficulties (e.g., the belief that “work and action will overcome everything”), which may further promote workaholic tendencies [22,23].

Finally, work ethic beliefs may provide workaholics with a means of rationalizing their addiction, thereby functioning as a defence mechanism. The workaholic may justify excessive working hours by framing their behaviour as a noble, socially respected activity, and may expect recognition – or even admiration – from others [2].

Another predictor of workaholism identified in this study – albeit a weak one – was low agreeableness. The relationship between low agreeableness and workaholism can be explained through the prism of distrust and hurt. Indeed, people with low agreeableness are characterised by distrust, which may stem from hurt experienced in the past. Distrusting others and attributing bad intentions to them can lead to overworking by taking over other people’s tasks [10].

Limitations of the study and future directions

The study analysed the associations of workaholism, understood as obsession and compulsion with work and overwork, with personality traits, including temperament and components of work ethic, attitudes towards work and beliefs about work. The inability to include other important variables, due to the volume of research questionnaires and time, is one of the limitations of this research. Future research should include a separate self-esteem indicator and verify its relationship with both work ethic and workaholism. Indeed, as the research results show, low self-esteem is associated with workaholism [36].

In addition to personality variables, a person’s temperament, which undoubtedly correlate with workaholism, the organisational and social contexts should also be taken into account in future research. Variables that are particularly worthy of attention in relation to the severity of workaholism are the culture and climate of an organisation [4]. Investigating those aspects of the organisation and how their subjective assessed by an employee may

help to explain the results obtained here and broaden the picture of the relationships between the variables discussed. It would be interesting to check for the relationship between organisational variables and personality traits, attitudes and beliefs about work.

In this study, the measurement of the predictors and the dependent variable were temporally separated to avoid common method bias [25]. The dependent variable was tested 5 weeks after measuring independent variables including personality and work ethic. This provides, to some limited extent, the possibility of causal inference. However, it is important to note that this research was not an experimental study and the selection was not randomised, but more of a quota [37]. Of the 450 people originally included in these studies, 211 eventually remained, reducing the representativeness of the sample, which would need to be increased in subsequent studies so that the range of conclusions drawn could be greater.

Practical implications

The findings of this research may contribute to the development of practical solutions to prevent the negative effects of workaholism. This can be achieved through improved planning of organizational work processes and the implementation of specific measures, such as employee education. Admittedly, this would require the monitoring of employees’ personalities and beliefs through systematic questionnaire surveys, which does not seem difficult to apply. The results of these surveys may be helpful in carrying out such measures in organisations in various industries. Organizations should monitor employees’ personality traits and beliefs (e.g., negative emotionality, strong work ethic) in order to identify individuals at risk of workaholism and implement appropriate preventive measures. It is advisable to promote a culture of work-life balance by offering training in stress and emotion management, as well as access to psychological support. Beliefs about the value of work – particularly those that equate professional performance with personal worth and social acceptance – should be subject to critical reflection and educational initiatives to prevent the reinforcement of unhealthy overworking patterns.

CONCLUSIONS

In summary, the strongest predictor of workaholism was negative emotionality, defined as a heightened tendency to experience negative emotions such as dissatisfaction, anger, anxiety, and low mood [18]. Another significant

predictor was work ethic, specifically its components such as viewing work as a moral obligation, the centrality of work, and aversion to wasted time, with hard work playing a comparatively lesser role. It should be added that the aforementioned components of the ethic are associated with activity, i.e., a somewhat weaker predictor of workaholism, and conscientiousness. It can be assumed that ethic-related beliefs allow work to be perceived as a way to reduce negative emotions and probably increase self-esteem (well-executed work is regarded as a fundamental source of an individual's value, and its completion is met with both self-approval and social recognition, which contributes to an enhanced sense of well-being).

The results of this study are considered an extension of consistent findings in psychology that indicate a positive association of negative emotions, neuroticism and conscientiousness with workaholism [14,17]. This has been enriched by the correlate of conscientiousness, namely work ethic. Although conscientiousness proved to be a very weak and statistically non-significant predictor in the present study, it is worth noting that it showed correlations with components of work ethic that emphasize the high (including moral) valuation of effort and activity. Low agreeableness, in turn, emerged as a weak yet significant predictor of workaholism in this context.

AUTHOR CONTRIBUTIONS

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Research methodology: Damian Grabowski,

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Statistical analysis: Damian Grabowski, Katarzyna Stapor

Interpretation of results: Damian Grabowski,

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