

Damian Grabowski

University of Silesia in Katowice, Department of Work
and Organizational Psychology, Institute of Psychology
damian.grabowski@us.edu.pl

WORKAHOLISM AND WORK ETHIC. WORK ETHIC DIMENSIONS AS PREDICTORS OF WORK ADDICTION

The article presents mutual relations between the dimensions of Workaholism and the components of work ethic in accordance with Max Weber's concept. The author presents the meanings of Workaholism and he assumes that it is a clinical category that refers to an obsessively-compulsive disorder. Work ethic presents the following attitudes: (1) perceiving work as a central value in life and assumption that (2) hard work leads to success. This ethic also represents the following components: (3) unwillingness to waste time, (4) disapproval of spare time (anti-leisure), (5) willingness to delay gratification, (6) being independent (self-reliance), (7) willingness to act honestly at work (morality/ethic). The research conducted on the sample of 309 employees showed that work ethic and Workaholism are mutually related. Factors that favour addiction to work are independence, treating work as a central value and unwillingness to waste time.

Keywords: work ethic, Workaholism, centrality of work

INTRODUCTION

The meanings of Workaholism

The term 'Workaholism' was introduced into psychology by Oates (1971) to refer to work addiction (Furnham, 1990). Researchers' opinions differ as to the definition and the ways to measure Workaholism. Clark, Lechhook, Taylor (Clark et al., 2010) notice that Workaholism is treated as dependence, a rigid behaviour pattern, a group of attitudes to work or a behavioural syndrome. This name refers to a multidimensional construct. The subjects around the definition of Workaholism are as follows: 1. being overwhelmed by thoughts and emotions linked to work (constant thinking about work and experiencing it) or 2. doing work to the

extent that exceeds pure fulfillment of duties and organizational roles, that is to say being driven by internal factors, not external ones like financial rewards.

At the beginning of the 90s. Spence and Robbins (1992) proposed a three-part Workaholism concept (Workaholism triad), which they defined as:

- a) a high degree of engagement in work;
- b) feeling of internal coercion;
- c) (high or low) degree of work satisfaction (which is typical of workaholics and enthusiastic workaholics) (Retowski, 2003).

Workaholism is double-faced. On the one hand it is a certain way of life, or more accurately a way of dealing with life problems that manifest themselves as discomfort, on the other it is a trap since



discomfort reduced for a while (which in fact brings relief and satisfaction) comes back with a vengeance (see Golińska, 2008; Wojdyło, 2010). For those addicted to this sort of behaviour work is a basic cognitive category, which carries the following message: work is a duty which I must perform (Hornowska, Paluchowski, 2007).

Hornowska and Paluchowski (2007) differentiated four groups of work dependence symptoms. These are: (1) loss of control over work – a group of symptoms which stem from work coercion; (2) a perfectionist work style or excessive striving to achieve perfection standards in fulfilling duties, which hinders efficient performance; (3) general work attitudes – a system of beliefs evaluating work based on protestant work ethic assumptions, according to which a person's value manifests itself in their industriousness or readiness to do hard work (maximum effort put in work gives evidence of the person's high value); (4) perceived oppressiveness of the employing organisation (beliefs that the organization expects from its employees maximum effort and long working hours e.g. devoting free time to work).

Burke, Matthiesen and Pallesen (Burke et al., 2006) conclude Workaholism is considered within the trait-and personality theories, dependence model, learning theory, cognitive model and family-systems theory. The above presented Hornowska and Paluchowski's perspective on work is part of the cognitive model of work addiction, which assumes the disorder is caused by specific beliefs and thoughts, self-standards or generally knowledge system (see Wojdyło, 2004, 2010). Workaholism formation is most frequently explained within (1) the theory of traits, (2) the theory that presents Workaholism as dependence from certain activities and (3) the learning theory (see Dudek, 2008).

Workaholism within the theories of traits

Burke, Matthiesen i Pallesen (Burke et al., 2006) discuss Workaholism within the theories of traits emphasizing the idea of a feature or trait. This theory treats the phenomenon of Workaholism as

a stable behavioural pattern, disposition which may escalate in certain situations. For example, a number of traits like obsessiveness, compulsiveness and high energy are linked to Workaholism. According to these theories Workaholism is a dysfunctional personality trait, a trait of lower grade which is linked to traits of higher grade like neuroticism, extrovertism, obsessiveness and conscientiousness. The research done by Clark, Lelchhook and Taylor (2010) showed that among significant predictors of Workaholism the following features can be distinguished: neuroticism, perfectionism, narcissism, emotionality with reference to negative emotions (fury, anger), as well as emotionality with reference to positive features (excitement).

Workaholism as addiction

Nonetheless, most frequently Workaholism is considered as dependence and included in a group of non-chemical addictions. On the other hand, Golińska (2008) notices physiological consequences of addictive performance of a gratifying work may be analogical to a chemical addiction since during work performance a level of certain neurotransmitters responsible for a biological basis of experienced emotions changes. An intensive lifestyle typical of workaholics may trigger increase in catecholamines secretion i.e. adrenaline and noradrenaline, both with similar effects to psychoactive substances. Adrenaline takes part in sustaining activity, which means incapacity to relax. Dependence on this neurotransmitter is from a psychological viewpoint a dependence on psychological changes described as work euphoria (Wojdyło, 2010).

Considering Workaholism as addiction puts stress on the gratifying dimension of work performance. Reduction through work of negative, unpleasant emotional states plays an important role here. Originally work might serve as a form of increasing low self-esteem, escape from life problems, which is associated with the feeling of pleasure. However, with the dependence rising negative emotions aggravate as work does not solve the source of problems, on the contrary it triggers



more (e.g. feeling of guilt because of neglecting family). Apart from that sad experiences appear due to breaking from work (withdrawal symptoms). Thus a workaholic rigidly keeps reducing these emotions through work (Dudek, 2008; Golińska, 2008; Wojdyło, 2003, 2004, 2010).

Workaholism within the learning theories

These theories (see Dudek, 2008) also presented as a behavioural perspective (see Malinowska, 2014) present Workaholism as the effect of learning. It occurs through classical, instrumental and model (social learning) conditioning, where positive and negative reinforcement play an important role. According to the concept of operant conditioning behaviour typical of a workaholic makes a given reinforcement factor stronger, which could be achieving success, high salaries, a promotion or a fast organizational or professional career, etc. Such reinforcements (positive ones) most often concern managerial representatives or specialists. This is why among them is Workaholism a more frequent phenomenon than among ordinary workers (Dudek, 2008).

Successful employees and at the same time workaholics may set an example in organizations for other workers (the theory of social learning). Wishing to achieve similar successes they copy workaholics, which leads to consolidation of a number of workaholic-typical behaviours in them (Malinowska, 2014, McMillan et al., 2001). There not copying such a pattern (typical of a workaholic) may be associated with negative reinforcements (unpleasant reactions of managers) and so everyone works intensively to avoid them.

Definition of Workaholism

In this article it is assumed that Workaholism is an obsessive-compulsive disorder and addiction, which is characterised by imposing very high requirements by an individual themselves, incapacity to regulate habits in the workplace or work excess linked to the resignation from most other kinds of life activities (Wojdyło, 2003). The key issue of this definition of Workaholism should be acknowledged

as internal compulsion to do work, which is hard to resist since ceasing to work, as well as ceasing to do this activity increases suffering or more precisely fear, anxiety or discomfort characterised above all by tension (Wojdyło, 2003; 2004). Thus work remains for a work addicted person the way to reduce this suffering. Workaholism understood in this way is an addiction related to an obsessive-compulsive personality type, that is such traits as neuroticism, perfectionism, rigidity (Wojdyło, 2005; see Burke et al., 2006).

Workaholism in this sense is also a syndrome, within which the main symptom is the internal coercion to work mentioned above (Wojdyło, Buczny, 2010). This symptom is specific for each type of Workaholism described by Robinson (1998) i.e. constant involvement in work (relentless workaholics), alternative phases characterised by coercion to work or its avoidance (bulimic workaholics), a constant need for change of activity (attention deficit workaholics) or those focusing on details concerning work (savoring workaholics) or those persistently assisting others (careaholic workaholics) (Wojdyło, Buczny, 2010, p. 68).

A significant element of Workaholism understood as an obsessive-compulsive disorder is an incapacity to stop thinking of work. Workaholics persistently plan their activity, keep thinking of the way to perform work that would ensure quality and productivity or persistently analyse the accomplished work (Wojdyło, Buczny, 2010).

Based on the research on the validity of the tool diagnosing Workaholism WART (Work Addiction Risk Test), a questionnaire by Robinson and his co-workers (e.g. Robinson, Philips, 1995) was prepared by Wojdyło (2005; see Flowers, Robinson, 2002). In this case Workaholism understood as an obsessive-compulsive disorder may be presented as a syndrome consisting of the following symptoms: (1) work is an obsession or compulsion, (2) a person experiences emotional arousal at work and strives to achieve high standards (perfectionism), (3) a person feels overloaded by work (experiences excessive work), (4) is result-oriented or (5) wants to know



how they fulfilled their duty, which is the result of low self-esteem. Besides, workaholics are usually self-centred, have communication problems, cannot delegate power or want to control the environment (Flowers, Robinson, 2002; Taris et al., 2005).

Summing up, the assumed definition of Workaholism refers to the area of pathology, in other words to the so called 'bad' Workaholism (Malinowska, 2014). Hence the article ignores exposing Workaholism as a norm, e.g. as engagement in work (van Beek et al., 2011), making no reference to such categories as an enthusiastic workaholic (Spence and Robbins, 1992).

Work ethic

This term appears quite frequently when considering the subject of Workaholism (e.g. Retowski, 2003; Hornowska, Paluchowski, 2007). Oates alone saw in work ethic sources of Workaholism. In fact work ethic that perceives work as a virtue and free time as a sin may probably be a contributing factor. Sennett (1998) in his description of work ethic revokes the figure of Benjamin Franklin described by Max Weber (1958). This diplomat was a man who behind a cheerful veneer was hiding deep fear of any pleasure and work obsession – he treated time as money and had a great aversion to free time. A similar aversion was shown by Jean Jacob Rousseau (Sennett, 2002).

Work ethic is a term first defined by German sociologist Max Weber (1958) with expressions like the spirit of capitalism, protestant ethic or professional ethic of ascetic Protestantism. The prototype of work ethic should be deemed first and foremost the definition of professional ethic belonging to the ascetic version of the protestant religion. The first sociological and psychological operationalizations of the term presented it as one-dimensional (e.g. Mirels, Garrett, 1971). According to new editions work ethic is a multi-dimensional construct as a psychological variable (see Mirels, Garrett, 1971). Miller, Woehr and Hudspeth (Miller et al., 2002; see Furnham, 1990) based on a factor analysis of item pools seven questionnaires to measure work

ethic and described its seven components. These are as follows (see Grabowski, 2012a):

1. Centrality of work. Faith in work for its own sake and conviction of its value in life. A person that treats work in such a way may feel satisfied by spending time on work.
2. Hard work. Faith in the virtue of hard work. Belief that such an activity makes a person better and leads to success.
3. Unwillingness to waste time, treated as a sin (Weber, 1958). This component is typical of attitudes and beliefs that reflect the necessity of active and productive use of time.
4. Delay of gratification. Being future oriented and delay in being rewarded. Belief that things one must wait for are of greatest value.
5. Unwillingness to free time. Negative attitudes towards free time, and to be more precise, to its abuse. Free time itself has in fact in this ethic a clear function to fulfill, which is regenerating power in a way to perform further work as well as possible.
6. Morality/ethic. Faith in fair and moral existence. Belief that people should be honest in doing business with others. A Christian order to respect others and readiness to act honestly.
7. Self-Reliance (independence), i.e. a component of individualism. Aiming of an individual to gain independence in everyday work. Belief that self-reliance is a key to success.

From a psychological point of view, work ethic is a system of attitudes and beliefs (belief-system) whose key issue is evaluating work i.e. perceiving it as a value, a moral duty or even goodness (see Baryła, Wojciszke, 2000). From this point of view of work a number of positive emotions arise which accompany a person performing work, including readiness to intensive performance which is perceived as a trait (industriousness), from a moral standpoint, however, it becomes a virtue.

Workaholism and work ethic

Cherrington (1980) and Furnham (1990) described Workaholism in consideration of work



ethic. The above mentioned Hornowska and Paluchowski (2007) show the beliefs of this ethic as a key element of Workaholism. However, studies are missing that would show links between the phenomena that made use of separate tools based on Weber's theory and the theory of Workaholism to measure these constructs. Based on literature review on work ethic and Workaholism two links between these variables may be assumed:

1. with reference to Workaholism work may be perceived as a duty, virtue (Hornowska, Paluchowski, 2007), even though workaholics need not be ethical behaviour oriented (Malinowska, 2014; Wojdyło, Buczny, 2010). Hence, it can be assumed that work ethic contributes to Workaholism (Oates, 1970). Work ethic binds a person to perceive work as a duty, whereas Workaholism is a duty addiction (Hornowska, Paluchowski, 2007).
2. Workaholism may, on the other hand, strengthen beliefs that constitute work ethic. This ethic may in fact be a rationalization of activities that form a disorder. In the article this dependence is ignored though, only the first one to be considered.

According to certain studies (Cherrington, 1980; Furnham, 1990; Oates, 1971; Paluchowski, Hornowska, 2007; cf Golińska, 2008), it is assumed that a system of attitudes and beliefs, as it is the case with work ethic, is a condition that favours work dependence or more accurately obsession (constant thinking of work), compulsion or feeling overloaded with work. Notwithstanding, for the work addiction to appear, other conditions should occur such as low self-esteem, fear or compulsiveness (Clark et al., 2010; McMillan et al., 2001; Paluchowski, Hornowska, 2007).

In this article a cognitive approach has been assumed, where symptoms of Workaholism (obsessive-compulsive disorders) are evoked by certain beliefs. Presumably the beliefs that constitute work ethic are elements of a normative knowledge system. A system of attitudes and beliefs, which is work ethic, refers to the values and social norms.

Values such as 'work is a good' and norms ('work is a duty and should be done well') and beliefs as to the value of work define the beliefs of a workaholic (I must work as in this way I'll show my own value) (Wojdyło, 2004).

HYPOTHESES AND RESEARCH QUESTIONS

This article aims at showing relations between Workaholism, its components and work ethic, including its dimensions. As noticed before, studies are insufficient to show the relations between these variables by measuring them with the tools prepared on the basis of chosen concepts of Workaholism and Max Weber's theory. This study attempts at filling this gap. In the article Robinson's concept of Workaholism was assumed, who perceives this phenomenon as a disorder and addiction (Wojdyło, 2005). Positive associations between work ethic and Workaholism were presumed to occur and the dimensions of work ethic were treated as predictors of the phenomenon of Workaholism. The following hypotheses were put forward:

1st hypothesis. Independence, i.e. self-reliance is positively linked with the symptoms of Workaholism or more precisely with control (H1a), obsession and compulsion (H1b) or being overloaded with work (H1c). Independence is a predictor of these symptoms of Workaholism.

2nd hypothesis. Evaluating hard work is positively linked with control (H2a), obsession and compulsion (H2b) and being overloaded with work (H2c). Perceiving intensive work in this way is a predictor of these symptoms.

3rd hypothesis. Centrality of work positively linked with control (H3a), obsession and compulsion (H3b), as well as being overloaded with work (H3c). Centrality of work is a predictor of these symptoms.

4th hypothesis. Unwillingness to waste time is positively linked with the symptoms of Workaholism such as control (H4a), obsession and com-



pulsion (H4b) or being overloaded with work (H4c). Perceiving work in this way is a predictor of these symptoms.

Apart from that negative relationships between symptoms of Workaholism and readiness to act morally were predicted to occur (5th hypothesis; symptoms: control – H5a, obsession – H5b and being overloaded – H5c) (see Wojdyło, Buczny, 2010; Malinowska, 2014), accompanied by very weak positive ones between symptoms of Workaholism and delay of gratification (6th hypothesis, H6a, H6b and H6c). On the one hand, delaying it is treated as a work addiction component (Cherrington, 1980), on the other the research shows there is a connection between Workaholism and impatience (Wojdyło, 2005). A positive relationship between symptoms of Workaholism (in particular work compulsion and work obsession) and a disapproval of free time (7th hypothesis; H7a, H7b and H7c) was also expected.

The question was also raised on the power of relationships between the dimensions of work ethic described in Weber's theory and symptoms of Workaholism such as control, a compulsive and obsessive character of work and being overloaded with it.

METHOD. CHARACTERISTICS OF RESEARCH METHODS AND THE PARTICIPANTS

In the study the following tools were used:

I. WART-R (Polish version). WART – Work Addiction Risk Test – a questionnaire prepared by Robinson and Philips (1995). WART was used in the adaptation of Kamila Wojdyło (2005). The Polish adaptation of WART showed satisfactory theoretical validity and reliability, however it lacked the reconstruction of American studies. Just like the original, the Polish adaptation of this questionnaire contains 25 statements, and the patients refer to them by means of a four-degree scale A-D (A=hardly, B=sometimes, C=often, D=almost always). Wojdyło and Buczny (2010) shortened

WART by 9 positions, creating at the same time a reviewed version of the questionnaire (WART-R). It consists of three scales:

1. control – tendency to fully control reality, the social environment (I get upset when I am in situations where I cannot be in control) (7 positions, $\alpha=0,67$);
2. obsession/compulsion – compulsive work performance, coercion to perform it and work obsession (I find myself continuing to work after my co-workers have called it quits) (6 positions, $\alpha=0,66$);
3. feeling overloaded with work – multi-tasking, (I seem to be in a hurry and racing against the clock) (3 positions, $\alpha=0,71$).

In the statistical analysis another rate was also used that sums up all the WART positions or WART-R ($\alpha=0,79$). In these studies the scale achieved the following fit indices of the three-factor model to the data in the performed confirmatory factor analysis: χ^2 (df) = 302.2 (101), RMSEA = 0.08, CFI = 0.90, sRMR = 0.076, NFI = 0.85. These results are similar to those obtained in the study by Wojdyło and Buczny (2010, pp. 73-74) and appear that the three-factor model provides a acceptable fit with the data (Konarski, 2009).

Wojdyło (2005) states in the version of the questionnaire with 25 positions result span is from 25 to 100 points and the questionnaire itself measures a fully developed dependence syndrome or a risk of its arising. The result from 67 to 100 points suggests addiction (coercion to do work) to a high degree, a result from 57 to 66 is a rate of minor addiction and from 25 to 56 suggests no dependence. The closer to 56, the higher the probability of developing Workaholism. The result of 16-position version of WART is contained between 16 and 64 points. In the presented sample the result was between 17 and 55 points, right tailskewed and leptokurtic (Mean=32.11; Median=32; Mode=28 (N=29); skewness=0.85; curtosis=1.18). The result 41 was obtained by 90 per cent of the patients. In the layout of results on a 100-point scale it was noticeable that 80 per cent of those examined achieved results up



to 56 points, 14 per cent from 57 to 66 points and 6 per cent between 67 and 85 (no one obtained a maximum result) only 6 per cent of those questioned may then be suspected of a fully developed syndrome of Workaholism, the majority though showed lack of work addiction or only its moderate degree (94 per cent).

II. The second questionnaire was the Polish adaptation of the Multidimensional Work Ethic Profile (MWEP), a questionnaire by Miller, Woehr i Hudspeth (2002). The Polish version (WPEP) was prepared by Grabowski and Chudzicka-Czupała (2015). Equivalence of the measurement by means of MWEP and WPEP (Chudzicka-Czupała, Cozma, Grabowski, Woehr, 2012), has been verified, as well as its validity and reliability (Grabowski, Chudzicka-Czupała, 2015). The Polish version of this scale shows acceptable equivalence of the measurement with the original English version. WPEP consists of 65 positions and seven scales, which are equivalent to the components of work ethic described above:

1. self-reliance/independence (SR) (I do not like having to depend on other people) (10 items) ($\alpha=0.78$);
2. hard work (HW) (If you work hard you will succeed) (10 items) ($\alpha=0.77$);
3. centrality of work (CW) (Even if I inherited a great deal of money, I would continue to work somewhere) (10 items) ($\alpha=0.77$);
4. unwillingness to waste time (Wasted Time – WT) (Wasting time is as bad as wasting justified) (8 items) ($\alpha=0.74$);
5. morality/ethic (ME) – readiness to act honestly towards others (Stealing is all right as long as you don't get caught) (10 items) ($\alpha=0.76$).
6. delay of gratification (DG) (The best things in life are those you have to wait for) (7 items) ($\alpha=0.68$);
7. unwillingness to free time, its disapproval (Antileisure – A-Lei) – a low disapproval is at the same time a high approval of free time (More leisure time is good for people) (10 items) ($\alpha=0.88$).

To measure intensity of each of the seven dimensions of work ethic a set of 5-point Likert scale was applied, where an examined person should choose an answer from 'I strongly disagree' to 'I strongly agree' having the following marks: SD, SA. The letter N stands for 'hard to say'. In statistical analyses another rate is also used which is the result of all the positions, that is WPEP-sum ($\alpha=0.87$).

In this study this scale obtained in the performed confirmatory factor analysis with the procedure of item-parceling (see Woehr et al., 2007) the following indices of the seven-factor model fit to the data: χ^2 (df) = 464.03 (168), RMSEA = 0.075, CFI = 0.94, sRMR = 0.075, NFI = 0.91. Such values of these indices indicate an acceptable degree of fit of the model to the data.

In order to obtain relationships between Workaholism and work ethic 309 persons were examined that were employed in companies in Upper Silesia and Cracow. They worked either for Polish or international companies (such as pharmaceutical, IT, coal-related, packaging companies). In the sample there were 160 women (52 per cent) and 149 men (48 per cent). An average age of the patients was no more than 30, the study comprised people at the age of 20-53, most of whom were 29 (30 persons), 58 persons (19 per cent) were between 31 and 35, 10 persons were 36. A few more persons had higher education (51 per cent), the others had secondary education (including 67 persons with technical post-secondary one). The study was carried out between 2011 and 2012. The participation in the study was voluntary and anonymous. The study comprised persons working in big (with over 250 employees) companies, at least one year long, who did not hold managerial positions and that were young as the above description shows.

RESULTS

To verify the hypotheses and answer to the questions on the intensity of the relationship between Workaholism and work ethic, the correlation



coefficient between separate scales of the examined variables and the global indexes (sums of WART-R and WPEP scales) shown in table 1 were first verified. Given the moderate asymmetry of some variables, e.g. WART-R, ME, the analyses were

enriched with a bootstrap analysis (Konarski, 2009). The obtained confidence interval within this analysis, which does not contain the value zero lets treat a given addiction as statistically significant.

Table 1. Correlations between Workaholism (WART-R) and work ethic (WPEP), N=309

| | M | SD | WART | Control | Obsession/compulsion | Overload |
|------------------------------------|--------|-------|----------------------|----------------------|----------------------|----------------------|
| M | - | - | 32.11 | 14.62 | 10.85 | 6.64 |
| SD | - | - | 6.74 | 3.51 | 2.96 | 2.13 |
| Self-Reliance (SR) | 34.74 | 5.40 | .357*** ^B | .338*** ^B | .205*** ^B | .287*** ^B |
| Hard work (HW) | 33.58 | 5.25 | .138* ^B | .125* ^B | .108 | .082 |
| Centrality of work (CW) | 33.94 | 5.53 | .251*** ^B | .176** ^B | .250*** ^B | .156** ^B |
| Unwillingness to waste time (WT) | 34.13 | 5.69 | .275*** ^B | .220*** ^B | .177** ^B | .264*** ^B |
| Morality/ethic (ME) | 40.44 | 5.37 | .150** ^B | .187** ^B | -.052 | .241*** ^B |
| Delay of gratification (DG) | 32.59 | 5.86 | .101 | .082 | .067 | .091 |
| Unwillingness to free time (A-Lei) | 28.03 | 7.04 | -.012 | -.087 | .177** ^B | -.141* ^B |
| WPEP | 237.46 | 24.72 | .280*** ^B | .226*** ^B | .219*** ^B | .209*** ^B |

Legend: *** – $p < .001$; ** – $p < .01$; * – $p < .05$;

^B – bootstrap analysis for 5,000 samples – 95% confidence interval did not contain zero value

As it may be concluded from the table, Workaholism (WART-R) correlates with work ethic moderately and positively, most strongly with self-reliance, unwillingness to waste time or perceiving work as life centre (CW), weakly though with the readiness to behave ethically (ME) (a negative correlation was assumed) or the evaluation of hard work (HW). No relationship between WART-R and delay of gratification (DG) or unwillingness to free time (A-Lei) was shown. Control, obsession/compulsion or feeling of being overloaded with work correlates with work ethic (WPEP) weakly. Positive correlations were observed between all WART scales and the ones with work in the centre, unwillingness to waste time and independence. The analysis showed insignificant low relationships between ME (very low and negative), HW (positive) and obsession/compulsion, HW and being overloaded with work, DG and control, obsession/compulsion (O/C) and being overloaded with work, as well as the unwillingness to free time (A-Lei) and control. A significant negative correlation was noted

between A-Lei and a feeling of being overloaded. A-Lei also correlates significantly and positively with obsession and work compulsion.

Most expectations were confirmed then; the strongest correlate of Workaholism is self-reliance, centrality of work and unwillingness to waste time, a weaker one was evaluation of hard work. A-Lei was positively linked with obsession and compulsion and (contrary to expectation) negatively with being overloaded with work (OW). DG does not correlate with Workaholism. Nevertheless, in contrast to what was predicted ME correlated differently with Workaholism, it also correlated weakly or positively with control and OW (negative correlation of ME with O/C in accordance with the predictions is low and insignificant).

Within the second stage, an analysis of multiple hierarchical regression was applied. Demographic variables (sex, age or education) and the components of work ethic were treated as independent variables, whereas separate WART scales as dependent ones. Four models were



constructed, in which global WART rate and its subscales were used. In the analysis two groups of variables were introduced, the first being demographic variables: sex, age and education. The second were WPEP scales, that is particular dimensions of work ethic.

Table 2. Workaholism (WART-R) and work ethic –hierarchical multiple regression analysis, N=309

| Dependent variable | Number of variables groups: Independent variable (beta)(bootstrap) | R | R ² | Δ R ² | F _{ΔR²} | SR ² |
|----------------------|---|-----|----------------|------------------|-----------------------------|-----------------|
| WART-R | 1. Demographic variables (DV): Education (.14 [*])(^B) | .16 | .03 | .03 | 2.67 [*] | .02 |
| | 2. DV and work ethic dimensions: Self-reliance SR (.31 ^{***})(^B) Centrality of work CW(.18 [*])(^B) | .42 | .18 | .15 | 7.86 ^{***} | .15 |
| Control | 1. DV Age (-.13 [*])(^B) Education (.15 ^{**})(^B) | .20 | .04 | .04 | 4.22 ^{**} | .03 |
| | 2. DV and work ethic dimensions: Age (-.11 [*])(^B) SR (.29 ^{***})(^B) | .39 | .15 | .11 | 5.61 ^{***} | .12 |
| Obsession/compulsion | 1. DV | .09 | .01 | .00 | .87 | .00 |
| | 2. DV and work ethic dimensions: SR (.23 ^{***})(^B) CW (.26 ^{***})(^B) Morality/ethic ME (-.18 ^{**})(^B) | .38 | .14 | .13 | 4.97 ^{***} | .11 |
| Overload | 1. DV: Education (.24 ^{***})(^B) | .24 | .06 | .06 | 6.27 ^{***} | .05 |
| | 2. DV and work ethic dimensions: SR (.19 ^{**})(^B) Unwillingness to waste time WT (.18 ^{**})(^B) | .39 | .15 | .09 | 4.62 ^{***} | .12 |

Legend: In the table only statistically significant relationships were presented (beta). SR² – adjusted R²
^{***} – p<.001 ; ^{**} – p<.01; ^{*} – p<.05;

^B – bootstrap analysis for 5,000 samples – 95% confidence interval did not contain zero value

As table 2 shows, the predictors of Workaholism among demographic variables turned out to be primarily education and age. As the study shows, first of all young persons tend to be workaholics (higher tendency to control), as well as those with a degree. These variables account for about 2 per cent of the variance of Workaholism, 3 per cent of the control and 5 percent of feeling overloaded. Introducing the regression of the ethic dimensions to the model was related to a significant increase of R² on average by 0.12. The predictors of Workaholism turned out to be tendency to self-reliance (SR), treating work as a central value in life (CW) and unwillingness to

waste time (WT). These variables stand for about 13 per cent of the variance of work addiction risk.

Tendency to control the environment (control) stands for self-reliance (SR) and treating work as a life centre (CW) (about 9 per cent of the explained variance). Work obsession and work compulsion is explained by treating work as a central life value (CW), self reliance (SR) and a lower readiness to moral behaviour (ME) (about 11 per cent of the explained variance). Being overloaded with work, on the other hand, is explained by self-reliance (SR) and unwillingness to waste time (WT) (about 7 per cent of the explained variance).



As table 2 shows, the dimensions of work ethic may be acknowledged as favourable for Workaholism because they stand for 7 to 11 per cent of the symptoms of this addiction. Given, however, quite significant, exceeding 0.4, correlations between some WPEP scales, e.g. CW and HW, (see Grabowski, Chudzicka-Czupala, 2015) which were introduced to regression analysis and the hardships that were connected with it to interpret the results of the analysis, another step concerning the analysis was to carry out the so called dominance analysis to find a more significant variable or predictor (Christopher et al., 2008). This analysis was performed by building a regression model with the participation of a singular variable (one dimension of work ethic), next the other six were introduced to the model, calculating additional R^2 allocated to the variable that was introduced at the beginning (table 3). Finally, mean R^2 were calculated, whose value indicates the significance of a given predictor in explaining a dependent variable.

Table 3. Workaholism (WART-R) and work ethic- dominance analysis, N=309

| Dependent variables (DV): 1 – WART-R; 2 – Control; 3 – Obsession/compulsion 4 – Overload | | | | | | | | | | | | |
|--|-------|------|------|------|------------------|------|------|------|-------------|-------------|-------------|-------------|
| DV: | R^2 | | | | Additional R^2 | | | | Mean R^2 | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| SR | .127 | .114 | .042 | .082 | .076 | .061 | .046 | .028 | .102 | .088 | .044 | .055 |
| HW | .019 | .016 | .012 | .007 | .004 | .001 | .006 | .003 | .012 | .009 | .009 | .005 |
| CW | .063 | .031 | .062 | .024 | .017 | .006 | .031 | .002 | .040 | .019 | .047 | .013 |
| UWT | .076 | .048 | .031 | .070 | .015 | .008 | .003 | .027 | .046 | .028 | .017 | .049 |
| ME | .023 | .035 | .003 | .058 | .002 | .001 | .025 | .006 | .013 | .018 | .014 | .032 |
| DG | .010 | .007 | .005 | .008 | .005 | .004 | .004 | .001 | .008 | .006 | .005 | .005 |
| A-Lei | .000 | .008 | .031 | .020 | .002 | .006 | .007 | .012 | .001 | .007 | .019 | .016 |

Legenda: Self-Reliance (SR); Hard work (HW); Centrality of work (CW); Unwillingness to waste time (WT); Morality/Ethic (ME); Delay of gratification (DG); Unwillingness to free time (A-Lei)

As table 3 shows, dominance analysis revealed the strongest predictor of separate dimensions of Workaholism is self-reliance. Apart from a dimension of work ethic, unwillingness to waste time (WT) and perceiving work as a central life value (CW) also play a role. They account for feeling overloaded and obsession respectively.

RESULT DISCUSSION

The shown analysis allow then to fully assume the 1st hypothesis (those marked as 1a, 1b, 1c) (independence is a dominant predictor of Workaholism symptoms) and the 6th hypothesis (a, b and c) (delay of gratification correlates with Workaholism symptoms weakly and insignificantly), as well as hypotheses 3b and 4c. The remaining hypotheses were partly confirmed, i.e. in one of the three analy-

ses, in the correlation analysis or in the regression analysis (hypotheses 5b and 2a). It means that hard work apart from delay of gratification correlates weakly with Workaholism symptoms. However, we should remember that both delay of gratification and hard work are positively correlated with the other dimensions of work ethic.

Readiness to act morally correlates positively with control and feeling overloaded, that is otherwise than the assumed 5th hypothesis. Such a result is not contradictory, however, with the results of the studies of other authors since negative correlation of honesty with Workaholism is first of all its negative correlation with obsession (Malinowska, 2014). In the same, negative way, contrary to the assumption of the 7th hypothesis, unwillingness to free time correlates with feeling overloaded (i.e. work approval and disapproval of other than work activities), which is also consistent with the



assumptions on Workaholism as perceiving working time in the category of free time, i.e. pleasure (Malinowska, 2014, p. 25). For someone who accepts work, it is a pleasure and its performance does not give the feeling of overload, on the contrary, it makes it diminish.

By summing the results of the above correlation, regression and dominance analyses, it can be noticed Workaholism is regarded a disorder (pathological state) (Malinowska, 2014), is associated with work ethic moderately or weakly, and a system of attitudes and beliefs, which is work ethic, or a system of normative knowledge may be acknowledged as a condition that favours this sort of Workaholism. A factor that indicates and triggers work dependence has rather to do with emotional states, including fear and low self-esteem, which is all in all defined as neuroticism (Clark et al., 1996; Hornowska, Paluchowski, 2007). The trait that neuroticism represents may be presented as a set of dysfunctional beliefs about oneself (e.g. a belief about own incompetence) (see Wojdyło, 2013). These beliefs may constitute the contents of feared-self (traits that a person does not desire to possess), whereas the beliefs of work ethic may constitute the contents of an ought-self (traits that a person should possess) or of the ideal-self (traits that a person wants to possess), the three cognitive structures that concern oneself (Wojdyło, 2004). The convergence of actual-self with the feared-self and divergence of the actual-self with the ought-self evoke negative emotional states and motivate a person to act. They act in the way to avoid these states. It can manifest itself through Workaholism for working may diminish convergence and divergence between these structures; a person may for example experience a belief that they are hard-working and valuable, which helps diminish the convergence of actual-self with feared-self that tells they are worthless (see Wojdyło, 2004). Supposedly Workaholism is associated both with a high level of neuroticism (see Burke et al., 2006), and high work ethic. In order to confirm it, new studies that would include both neuroticism, as well as work ethic rates

are necessary. The results of the study hereto show that work ethic, or more precisely self-reliance, treating work as a central value, unwillingness to waste time are associated with Workaholism and may be considered as conditions that favour work addiction occurrence. Based on the conducted studies, the following conclusions may be drawn:

1. Belief in self-reliance and avoidance of dependence on others (Miller et al., 2002) is connected with a higher tendency to control the environment.
2. Belief that each person should rely on themselves and treat work as life centre is probably associated with an intensification of obsession, readiness to act honestly with a decrease of this variable. The relation between work obsession and readiness to act honestly was obtained though only in the regression analysis (the correlation was insignificant). The dominance analysis did not confirm it. It could then be concluded that only by avoiding the dependence on others and emphasizing the importance of work probably increase the tendency to become work obsessed.
3. Feeling overloaded with work is mainly associated with self-reliance and unwillingness to waste time. A negative correlation between unwillingness to free time and overload was not confirmed by means of the regression and dominance analysis.

The relationship between particular symptoms of work addiction: control, obsession, overload and self-reliance may be referred to the studies concerning a positive relation of Workaholism with Type A behaviour pattern (Wojdyło, 2005), whose significant component is a belief in the value of competition. It is linked with work obsession just like the obsession with self-reliance. The studies show work ethic correlates with Type A behaviour pattern and a need to achieve something (Furnham, 1990). Consequently, it may be assumed that work ethic, or in fact self-reliance, may be associated with work obsession through beliefs on the value of competition. Wojdyło indicates (2005) that the



basis of competition is a belief that one must be better than others and achieve better results. They are conditioned among workaholics by the avoidance strategy orientation, in other words what matters is the relationship between a feared-self and an ought-self or an ideal-self. A thesis that self-reliance is shaped through a competitive work market and cultures of numerous organizations that impose competition, fighting for a position, devoting means for organizational aims (Malinowska, 2014) should not be entirely rejected though.

The obtained relationship between obsession and perceiving work as a central value confirmed Hornowska and Paluchowski's model (2007), in which a significant element constitutes views on work based on protestant ethic that make a person vulnerable to become work addicted. The core of the matter is the belief that work defines the value of a person and the perception of work as a significant element of life (see Szpitalak, 2012).

A relationship between unwillingness to waste time with being overloaded with work is also confirmed by other studies (see Malinowska, 2014). Workaholism is linked with the tendency to save time and the feeling of pressure and lack of time. One may assume the beliefs that time is a value and should be saved may evoke the urge to realize many aims, and in result the feeling of being overloaded with work. On the other hand, being overloaded with work may trigger many situations in which time is wasted, which in consequence leads to strengthening the conviction that it must be saved.

To round up the article, it may be stated work ethic and Workaholism considered as a pathological state are moderately linked, and such dimensions of work ethic as tendency to self-reliance (conviction that independence leads to success), perception of work as a central value, unwillingness to waste time may be only acknowledged as conditions that favour work addiction. By assuming this thesis, other ways to explain these relationships cannot be rejected, namely that Workaholism may contribute to certain beliefs that provide a rational explanation of work dependence (see Cherrington,

1980). Secondly, self-reliance, evaluation of work and unwillingness to waste time may be reinforced by the market requirements and organizations (see Hornowska, Paluchowski, 2007). Work did become a rare value and so of value, whereas organizations often value self-reliance and efficiency connected with saving time.

Nevertheless, the above conclusions may solely be referred to the population of people in their 30s, with a higher or secondary education that work in large organizations (such a group underwent the study). This being so, future research should comprise people with vocational education, as well as managers, employees of average and small companies and inhabitants of other than Upper Silesia or Lesser Poland regions. It would be worth controlling the held position variable to a greater degree instead of using quite a wide category like not holding a managerial position.

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