Analyzing correlates of the GBWS of the Working Excessively Questionnaire (WEQ)

Abstract

This article presents the results of correlation studies on the General Beliefs About Work Scale (GBWS) of the Working Excessively Questionnaire (WEQ), developed by Hornowska and Paluchowski (2007). GBWS consists of items describing possible beliefs about work. Many of them refer to the attitude towards the working hours. The results of the GBWS may be used to find internal factors that contribute to excessive workload. Our aim was to analyze the psychological correlates of a belief that work defines the value of a person. We formulated hypotheses concerning the relationship between the GBWS and constructs like attachment style, temperament traits, hope for success, self-esteem and demographic data.
Streszczenie


The Working Excessively Questionnaire (WEQ) is an instrument measuring the excessive workload. The content of its items includes causes and risk factors, as well as potential consequences of this phenomenon. The final version of the questionnaire is a result of research carried out in the years 2001-2013 (Hornowska, Paluchowski, 2007, 2013; Paluchowski, Hornowska, 2003, 2013).

The instrument consists of 65 items. Based on the results of the factor analysis and the content of individual items, we have proposed the following four scales of the Working Excessively Questionnaire:

1) Lack of Control Over Work Scale – LCWS
2) Perfectionist Working Style Scale – PWSS
3) General Beliefs About Work Scale – GBWS
4) Perceived Oppressiveness of the Organization Scale – POOS

General Beliefs About Work Scale

The General Beliefs About Work scale consists of 19 items, describing possible beliefs about work. They are based on an approach which defines people’s value through their diligence, which is understood as working hard and working long hours. That is why many items of the GBWS refer to the attitude towards working time. A belief that the more a person works, the better (a high score on the scale), may constitute one of the internal factors that contribute to excessive workload.

Based on the content analysis of individual scales, that had been previously conducted, we have differentiated two clusters for the GBWS (Figure. 1):
GBWS_1 Diligence as a measure of a person
GBWS_2 Work time as a measure of a person

It could be said that for individuals who score high on the GBWS work is a measure of their worth. To them, a diligent person is a worthy person. At the same time, a high score indicates a great importance that working hours have for the individual. This type of beliefs may lead directly to the risk of work addiction. Although people’s beliefs in themselves do not indicate excessive workload, they may point to attributing the importance of work in their lives. This may form a foundation for the tendency to allocate to work the time which, before, was intended for rest or family (a high score on the Lack of Control Over Work Scale).

In research carried out on a sample of 2658 individuals, the results of the GBWS showed a satisfactory level of internal consistency (Cronbach’s $\alpha = 0.9$). Correlations of individual items with the total score ranged between 0.34 and 0.69.
Hypotheses

Based on literature and the results of previous research, we formulated the following hypotheses regarding the GBWS of the WEQ questionnaire:

**H.1 Individuals who score high on the GBWS are characterized by a high evaluation of their competencies, but a low evaluation of their intimate relationships.**

An evaluation of one’s competencies is one of the major determinants for taking action. Comparison of the demands coming from an external situation with an evaluation of one’s ability to handle them influences the decision about engaging in different activities. Although, a person’s self-esteem and belief in self-efficacy are based on previous experiences, successes and failures of an individual; therefore, can change during the person’s life (Huang, 2010). Consequently, it may be assumed that individuals, for whom work is a measure of their worth, and who attribute special importance to working long hours, will positively evaluate their competencies. By ascribing a special role to work and by spending a lot of time working, they create opportunities for themselves to acquire skills and improve effectiveness, which in turn contributes to the formation of a high self-evaluation of one’s competencies. Concentration on work and evaluating people through their working hours may have negative consequences for relationships with their loved ones. One of the consequences may be work-to-family conflict (e.g. Bonebright, Clay, Ankemann, 2000; Chodkiewicz, 2011; Ho, Chen, Cheung, Worthington, Jr., 2013; Robinson, Flow- ers, Ng, 2006; Robinson, 2001; Shimazu, Demerouti, Bakker, Shimada, Kawakami, 2011). Therefore, concentration on work-related activities may lead to a person’s neglect of interpersonal relationships, especially with the loved ones. Therefore, we can assume that the experience of deficits in one’s relationships with their loved ones leads to a lowered self-evaluation in the context of intimate relationships.

**H.2 Individuals who score high on the GBWS are characterized by their insecure attachment pattern.**

Attachment pattern influences an individual’s functioning in many areas. Together with personality traits and self-esteem, it also determines one’s attitude towards work and other things related to work (see: Neustadt, Chamorro-Premuzic, Furnham, 2006; Richard, Schat, 2011). Secure attachment style is viewed as optimal. Other attachment styles are seen as a kind of pathology and have a negative impact on interpersonal relations. Attachment styles are formed in early childhood. Caregivers (parents) perform a central role in this process. It has been shown that parental attitudes in childhood are associated with later functioning in the work
environment and attitude towards work (Lewandowska-Walter, Wojdyło, 2011). Consequently, we can assume that insecure attachment pattern may lead to the beliefs that give priority to work. Such defensive attitude may incline the person to attach a lot of importance to work as they strive for a positive opinion about themselves from their superiors and coworkers.

**H.3 Individuals who score high on the GBWS are characterized by their low sociability and high hope for success.**

Sociability, seen as a tendency to seek contact with others and spend time in a group, correlates with many constructs. It is sometimes seen as an element of temperament, sometimes as a personality trait. In the latter case, it is comparable to extraversion. It has been shown that extraversion correlates positively with work satisfaction (Golińska, 2008). However, people who see work as a main value in their life may prefer to spend time at work, instead of committing it to social contacts. Consequently, we can assume that a high score on the GBWS will be associated with a low tendency to seek social interactions.

Snyder (2002) describes hope for success as a belief in a person’s ability to deal with difficulties effectively. This belief also pertains to having appropriate competencies, which enable the person to succeed. Individuals with high hope for success are more persistent in fulfilling their aspirations and more effective in overcoming obstacles. Thus, we can assume that individuals who attach a lot of importance to work in their lives and who spend a lot of time at work will approach challenges with more optimism and will expect success.

**H.4 Individuals who score high on the GBWS enter intimate relationships less frequently than individuals who score low on this scale.**

One consequence of spending a lot of time at work may be a lack of a permanent life partner. Concentration on work may make building a satisfactory intimate relationship with another person difficult. A lot of research points to difficulties in the relations between partners engaged in professional careers (e.g. Bakker, Demerouti, Burke, 2009). Therefore, we can assume that a number of individuals who prioritize work do not enter intimate relationships at all.

**H.5 Individuals who score high on the GBWS declare a higher sense of mission in their profession.**

The sense of mission in a person’s profession is a belief that the performed work is of an exceptional character, responds to other people’s needs and has a direct influence on their life and health. Because of that it requires high engagement. Working in a missionary profession is often associated with the necessity to un-
dertake actions that are beneficial to others but come at a personal cost to oneself (Czerw, Borkowska, 2010; Bajcar, Borkowska, Czerw, Gąsiorowska, 2011).

Engaging in the missionary work may be related to a belief that performing this particular type of work is a factor that determines the worth of a person. It could be said that attaching special importance to work in one’s life is a consequence of a need to fulfill the needs of others through one’s work. Thus, readiness to spend much time at work and to work overtime seems to be a natural consequence of the sense of mission in one’s profession.

Participants

A total of 252 individuals were tested, 76 of whom did not provide complete demographic data. There were 65.5% women and 34.5% men in the sample.

All used instruments were pen-and-paper based. They were arranged into sets. Each set consisted of a WEQ questionnaire and additional measures, which were matched according to the number of items, as well as time and cognitive effort required to complete them. This procedure was strictly followed to prevent any potential artifacts, stemming from the characteristics of the tested sample, each person was allocated their set randomly5.

Measures

Apart from the Working Excessively Questionnaire (WEQ), the study used the following measures:

**Multidimensional Self-esteem Inventory – (MSEI)**

MSEI was developed by E. J. O’Brien and S. Epstein (1988) and adapted to Polish by Fecenec (2008); it is a multidimensional questionnaire that measures self-esteem, understood here as evaluative, affectively saturated beliefs about oneself. It consists of 116 items in 11 scales (O’Brien, Epstein, 1988; Fecenec, 2008):

- Global Self-esteem Scale (10 items): global self-concept, constituting self-description on a meta-level

Components of self-esteem (eight particular areas):

(a) Competence (10 items) – evaluation of one’s skills and efficacy

(b) Lovability (10 items) – evaluation of forming intimate relationships

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5 The sizes of the samples tested for individual hypotheses will differ, due to the followed procedure. They are presented in the description of results.
(c) Likability (10 items) – evaluation of being liked by others

(d) Personal Power (10 items) – evaluation of one’s ability to direct people and influence their behavior

(e) Self-control (10 items) – evaluation of one’s perseverance and ability to control impulses and emotions

(f) Moral Self-Approval (10 items) – evaluation of the level of agreement between one’s professed values and their application in life

(g) Body Appearance (10 items) – evaluation of one’s appearance and sexual attractiveness

(h) Body Functioning (10 items) – evaluation of one’s health and physical fitness

- Identity Integration (10 items) – sense of coherence, having control over one’s life in different areas, and the effectiveness of self-esteem

- Defensive Self-Enhancement (10 items) – tendency to worry excessively about a person’s image in the society, combined with frequently presenting oneself in a self-aggrandizing way and seeking acceptance from others

Subject responds on a the five-point scale. Raw score is computed by summing up points for every answer. Fifty-seven items are reversed – result must be converted by the formula \(1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1\). In ten scales, score range from 10 to 50, in DSE scale minimal score is 16 and maximal is 80. Although, we used raw score in our study, for diagnostic purposes, one should convert it into the sten scale.

High score on Global Self-Esteem Scale and in each component of Self-Esteem Scale indicates that individuals have positive feelings about their competencies. Low score, on the other hand, suggests negative self-evaluation in every area.

High score on Identity Integration Scale indicates consistent identity and a sense of control over life. Individuals with low scores have problems with defining their own identity, do not always know what they aim for and have difficulty with decision making.

High score on Defensive Self-Enhancement Scale indicates a tendency to seek social approval and show one’s self in a positive light. Low scores suggest that individuals do not succumb to social influence, are independence and show no tendency to defensive self-enhancement.
The Relationships Questionnaire (RQ)

RQ Questionnaire was developed by Bartholomew and Horowitz (1991); it identifies the style of attachment in interpersonal relations, both friendly and romantic. It consists of four items, describing different attachment styles:

a) Secure
b) Fearful
c) Preoccupied
d) Dismissing

The participant’s task is to indicate one answer that best characterizes their emotional contacts. Individuals who indicate having a secure attachment style are described by the ability to create lasting and satisfying relationships and to trust in them. Subjects whose description corresponds with fearful attachment style are characterized by fear of being rejected, and the pursuit of excessive closeness. Indications of ambivalent style suggest a desire for self-acceptance by seeking approval from a loved one. Dismissing style describes people who by avoiding close relationships and maintaining a sense of independence protect themselves from disappointment.

Temperament Survey for Adults (EAS-TS)

A questionnaire developed by Arnold H. Buss and Robert Plomin, (1984) and adapted to Polish by Włodzimierz Oniszczenko (1997), measures temperament that is understood as a complex of genetically inherited traits, which manifest already in early childhood. The instrument measures three basic traits: Emotionality (and its components - distress, fear, and anger), Activity and Sociability. Emotionality is linked to arousal of autonomic nervous system - responsiveness of sympathetic nervous system and the speed of inducing a physiological response, regardless of what type of emotion it applies to: distress, fear, anger. Activity is associated with behavior, physical energy and motor activities (on a continuum from stillness to energetic behavior). The components of activity are tempo (of activity - fast walking, running, speaking) and vigor (strength and intensity of reactions - loud laughter, loud walk, strong push while opening the door). Sociability is a tendency to seek contact with other people - organizing activities in a manner allowing the individual to be surrounded by as many people as possible and to keep establishing social interactions. A desire to be around people and avoid loneliness is the main motivation here.

Questionnaire consists of 5 scales:

(a) Emotionality - distress
(b) Emotionality - fear
(c) Emotionality - anger
(d) Activity
(e) Sociability

Instrument contains 20 items (4 per scale) concerning a person’s behavior. Answers are scored from 1 to 5 (1 - “totally disagree” 5 - “totally agree”), towards, and sometimes away from higher level of trait (in the latter case one should reverse the score). Scale score is computed by summing up points for every answer (from 4 to 20). We used raw score in our study, however, for diagnostic purposes one should convert it into the sten scale.

High score on the sub-scales of Emotionality is connected to high responsiveness of sympathetic nervous system and high speed of inducing physiological response to stimuli. Additionally, high score on E-D, E-F, or E-A scale indicates a tendency to response with distress, fear, or anger in most situation. Low score indicates low emotional responsiveness.

High score on the Activity Scale indicates a high level of behavioral arousal (tempo and vigor) while performing daily activities. It can also indicate high need for tension release. Low score is linked to individuals who reduce their range and speed of activity.

High score on the Sociability Scale indicates a tendency to seek contact with others, strong perception of social reinforcements, and low tolerance to loneliness. Individuals with high sociability tend to seek stimulation. Low on the S scale is linked to stimulation avoidance.

The Hope Scale

The Hope Scale was developed by C.R Snyder (2002) and adapted to Polish by Łaguna, Trzebiński and Zięba (2005). It is a questionnaire that measures the hope for success. It is based on C.R Snyder’s (2002; Snyder et al., 1991) Hope Theory. Hope is a positive motivational state that bases on two types of beliefs (Łaguna, Trzebiński, Zięba, 2005, p. 5-7):

- First: a belief in the ability to complete undertaken activities despite any obstacles, fatigue and doubt. It is called the belief in person’s agency.
- Second: a perception of self as competent and capable of completing the intended tasks effectively. It is known as the capability to derive pathways to desired goals.

The questionnaire consists of 12 items: 4 measure agency, 4 measure capability to derive pathways to desired goals, and 4 serve as buffer items. Subject responds on the eight-point scale. Raw score is computed by summing up points for every
answer (total score) and for each separate component - Agency and Pathways. Total score ranges from 8 to 64. We used raw score in our study, however, for diagnostic purposes one should convert it into the sten scale. High score indicates a person’s high hope for success.

High level of hope positively correlates with positive emotions, good mood, psychological adjustment, declaration of higher self-esteem (when compared to individuals with lower level of hope), lower level of depression, better social functioning: quality of relationships, positive attitude towards relationships, social competencies, tolerance, perception of social support, as well as higher academic achievements for students and better handling the situation of illnesses.

Results and discussion

_H.1 Individuals who score high on the GBWS are characterized by a high evaluation of their competencies, but a low evaluation of their intimate relationships._

To verify the above hypothesis, we calculated Pearson’s r correlations (for N = 69) between the results of the WEQ questionnaire GBWS and the Competence and Lovability scales of the MSEI questionnaire.

The correlation for the Competence scale equaled r = 0.49; p < 0.001. In this case, we have found a positive correlation. High scores on the GBWSs were associated with high scores on the Competence scale. This indicates that individuals for whom work is a measure of their worth show high self-evaluation in relation to their competencies. Since work is perceived as extremely important, even crucial to the functioning of the individual, the aspiration to be as competent at work as possible seems natural. Self-evaluation is not always associated with an adequate attitude towards self. To examine, whether a high self-evaluation of competencies may be defensive in character and whether it might arise from a need to present oneself favorably, we calculated an additional correlation between the GBWS and the Defensive Self-Enhancement scale of the MSEI questionnaire. It was found to be statistically insignificant (p = 0.22). Therefore, we can assume that individuals who attach a lot of importance to working hours (high score on the GBWS), are characterized by high self-evaluation of their abilities and competencies, which is not defensive in character, but it is rather a result of a valid observation of person’s behaviors. The Pearson’s r coefficient for the Lovability scale equaled r = 0.15; p = 0.21. The correlation between the results of the GBWS and the Lovability scale of the MSEI questionnaire was found to be statistically insignificant. Thus, we can conclude that beliefs
about work are not related to either high or low self-evaluation in the context of intimate relationships. The obtained results seem to correspond with attachment style (see: hypothesis 2) and being/not being in a long-term relationship (see: hypothesis 4).

**H.2 Individuals who score high on the GBWS are characterized by their insecure attachment pattern.**

To examine whether individuals characterized by an insecure attachment style differ from those with a secure attachment style, according to their score on the GBWS, we conducted a one-way analysis of variance (N = 70). Attachment style declared in the RQ attachment questionnaire was the grouping factor. Individuals who reported a fearful, preoccupied or dismissing style were categorized as insecurely attached (30 individuals). Their results were compared with the results of the securely attached individuals. The difference between the GBWS scores of the groups was found to be statistically insignificant $F(1,68) = 2.81; p = 0.1$. Therefore, the attachment style in intimate relationships is not related to beliefs about work and working hours.

**H.3 Individuals who score high on the GBWS are characterized by their low sociability and high hope for success.**

To test the above hypothesis we calculated correlations between the results of the GBWS and the results of the Sociability scale of the EAS questionnaire, as well as between the results of the GBWS and the total score of the Hope Scale (N = 53).

The Pearson’s $r$ coefficient for the Sociability and GBWSs equaled $r = -0.1; p = 0.46$. Therefore, the relationship was found to be statistically insignificant. Beliefs about a special role that work has in a person’s life are not associated with having a lower tendency to seek social interactions. It is possible that individuals who score high on the GBWS may be characterized by the contact kept with a different type of social circle. If they tend to evaluate people through the perspective of their work, it is possible that those people, with whom they maintain social interactions, come from their work environment or are connected to it. This hypothesis requires further research since the results of the EAS questionnaire do not allow for a definite confirmation of this assumption. The fact that the relationships between work-related phenomena and seeking social interactions are ambiguous is also emphasized by the research on extraversion. The research of Clark, Lelchook and Taylor (2010), found no relationship between extraversion (measured by the Big Five questionnaire) and the Work Addiction Risk Test (WART; Robinson, 1999).
We calculated Pearson’s r coefficient for the GBWS and the total score of the Hope Scale - $r = -0.21; p = 0.14$. Thus, the relationship between variables was found to be statistically insignificant. However, the correlation was negative opposite to the predicted direction. In the course of the further analysis, we calculated correlations between the results of the Hope Scale, the sub-scales GBWS_1 – diligence as a measure of a person and GBWS_2 – work time as a measure of a person. The correlation with the GBWS_1 sub-scale was found to be insignificant ($r = 0.08; p = 0.58$). However, the correlation with the GBWS_2 scale turned out to be significant ($r = -0.31; p < 0.05$). Negative direction of the correlation indicates that individuals who attach special importance to working hours (high score on the GBWS_2) are characterized by a low hope for success. Due to beliefs about the necessity of working long hours, success seems out of reach. Somewhat paradoxically (contradictorily to our assumptions), the belief about the necessity to work long hours may have demotivating influence and may diminish hope for success at work. Interpretation of data also allows a reverse direction of the relationship – it is the lack of hope for success that induces the person to believe that working hours are extremely important. Therefore, both approaches – “it is good to work a lot, but it is still not enough for me to succeed,” as well as – “I will not succeed anyway, but it would be better if I worked a lot,” seem to be possible illustrations of the beliefs of an individual who scores high on the GBWS_2 sub-scale, but low in the total score of the Hope Scale. On the other hand, individuals who did not attach much importance to working hours (low score on the GBWS_2) are characterized by a high hope for success (high total score on the Hope Scale). They do not have to work long hours since they believe that they will succeed anyway.

**H.4 Individuals who score high on the GBWS enter intimate relationships less frequently than individuals who score low on this scale.**

In order to test the hypothesis about the differences in the scores on the GBWS between individuals who declare being in a long-term relationship (161 individuals) and individuals who did not declare it (79 individuals), we conducted a one-

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<th>Hope Scale</th>
<th>GBWS</th>
<th>GBWS_1</th>
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<tr>
<td>Coefficients $r$</td>
<td>-0.21</td>
<td>-0.08</td>
<td>-0.31</td>
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<td>$p$ values</td>
<td>0.14</td>
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way analysis of variance (N = 240). Its results indicate a lack of statistically significant difference – F(1,238) = 0.2; p = 0.65. This shows that neither attaching a special importance to a person’s work or treating it as a measure of a person’s worth is related to making decisions about intimate relationships of an individual. Also, attaching great importance to working hours does not have a negative impact on having a partner. The obtained results seem to correspond with the results of the MSEI questionnaire (see: hypothesis 1).

**H.5 Individuals who score high on the GBWS declare a higher sense of mission in their profession.**

To test the above hypothesis, we used the index of the sense of mission from the WEQ questionnaire (Paluchowski, Hornowska, Haładziński, Kaczmarek, 2013a). It assumes that individuals whose scores fall above the seventy-fifth percentile are characterized by a sense of mission in their profession. The remaining individuals are classified as not having the sense of mission in their work. Being categorized as having or not having the sense of mission was a grouping factor in the analysis of variance. The dependent variable here were the results on the GBWS. The results of the conducted ANOVA (N = 238) revealed a statistically significant effect of the sense of mission in one’s profession F(1,236) = 4.64; p < 0.05. A higher mean score on the GBWS was obtained for the “missionary” individuals (49.2 versus 45.4 for “non-missionary” individuals). Statistical analysis indicates that individuals who attach greater importance to work are also characterized by a higher sense of mission in their profession. The obtained results seem to agree with our predictions. The belief that one’s profession is missionary leads to the belief in high importance of the preformed work, which has a genuine influence on the functioning of others. Hence, the time spent at work becomes truly significant and cannot be overestimated. Therefore, the sense of mission justifies committing long hours to work and makes the person doing the work more worthy. This can lead directly to work addiction (see also the results of research on the LCWS scale; Paluchowski, Hornowska, Haładziński, Kaczmarek, 2013a).

**Conclusion**

The conducted research confirmed the hypothesis about a high evaluation of competencies by individuals who attach a lot of importance to work in their lives. It could be said that, since work is especially critical to them, the evaluation of their abilities constitutes a critical element of their self-esteem. Caring about a high self-esteem, they try to engage in activities which allow them to maintain a posi-
tive evaluation of their competencies. As the research shows, individuals who evaluate work highly do not tend to enhance their self-esteem or to present themselves in a self-aggrandizing way.

However, the hypothesis about low self-evaluation in the dimension of intimate relationships of individuals who prioritize work and working hours was not confirmed. Therefore, it seems that the beliefs about work are not related to the quality of formed relationships or one’s satisfaction from the relationships. This result corresponds with another unsupported hypothesis, speaking about differences in beliefs about work in individuals remaining in stable relationships and their single counterparts. Therefore, it could be said that the beliefs about work and working hours are not related to changes in the way a person functions in private life.

The result concerning sociability was also other than predicted. We found no differences in sociability between individuals with different attitudes towards work and different levels of importance attached to it. Thus, it turned out that the tendency to seek social interactions is relatively independent from one’s beliefs about work. Beliefs may have a moderating influence as they might indicate a particular way of satisfying the need for social interaction as well as the potential social circle, within which the participant might keep satisfying social contacts. Accordingly, we can assume that the need for forming interpersonal relationships is the same while the way it is realized depends on the beliefs of an individual. The raised hypothesis seems worthy of further investigation.

There were also no differences observed between individuals holding different beliefs about work as to their declared attachment style. The fault might lie with the instrument that measures the attachment, which is a relatively simple diagnostic tool. On the other hand, it is possible that beliefs about work and working hours are formed later in life and are not related to childhood attachment styles.

We found interesting results while testing the hypothesis about hope for success and its relationship with beliefs about work. The results of the test suggest that the direction of a relationship is opposite to what we predicted. However, this was found not to apply to the whole scale, but to its second sub-scale (GBWS_2), which contains items regarding one’s attitude towards working hours. A negative relationship means that the more importance was attached to working hours, the lower one’s hope for success was. The other way around, the higher the hope for success was the less importance was attached to working hours.

The hypothesis about a relationship between a sense of mission in one’s profession with beliefs about work was confirmed. Individuals with a high sense of mission attributed high value to work and perceived it as defining the worth of a person; they also emphasized the importance of working long hours.
References


