The contagious effect of bullying knowledge hiding: exploring the role of job stress and power values

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Abstract
Purpose – Bullying knowledge hiding has been recently identified as a manifestation of knowledge hiding behavior. As a relatively new concept, it is still underexplored. Previous research has focused on the antecedents of bullying hiding. However, there is a lack of research on the negative consequences that bullying hiding may have on employees. This study aims to uncover the effects of supervisor bullying hiding on employees knowledge behavior. The study also aims to examine the moderating effect of power values and the mediating effect of job stress.
Design/methodology/approach – Data were gathered in two waves from 444 employees with higher education in Poland. Data collection was conducted in July and August 2022. A general linear model mediation analysis with jamovi Advanced Mediation Models software was used to examine the hypotheses.
Findings – The results indicate that bullying knowledge hiding by supervisors triggers subordinates' job stress and aggression in the form of bullying knowledge hiding toward co-workers. Contrary to expectations, job stress does not mediate the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers. Power-dominance values, contrary to power-resources values, moderate the above relationship.
Practical implications – As bullying hiding has significant potential to spread among organizational members, managers seeking to reduce it should check the personal values of job applicants and employees.
Originality/value – Based on the behavioral contagion and frustration-aggression-displacement theories, to the best of the author's knowledge, this study is the first to investigate the relationships between supervisor bullying hiding, job stress, power values and subordinate bullying hiding toward co-workers.
Keywords Bullying knowledge hiding, Job stress, Power values, Power-dominance, Power-resources

1. Introduction
In the last decade, many researchers have been interested in counterproductive knowledge behavior in organizations (Bari et al., 2023; Bernatović et al., 2022; Fauzi, 2023). Empirical studies have generally confirmed that such behaviors have a detrimental impact on individual and organizational performance (Chatterjee et al., 2021; Gonçalves et al., 2023). One of these behaviors is knowledge hiding, which is defined as intentional concealment of requested knowledge (Connelly et al., 2012). With the growing interest in knowledge hiding, scholars have attempted to identify behaviors that are specific to this phenomenon. In 2012, Connelly et al. (2012) divided knowledge hiding into three behaviors (also called dimensions or strategies): evasive hiding, playing dumb and rationalized hiding. In 2018, Jha and Varkkey (2018) identified a fourth form of knowledge hiding behavior: counter-questioning. Recently, Yuan et al. (2021) indicated
that a set of knowledge hiding behaviors is not complete and identified a new manifestation of knowledge hiding known as bullying hiding.

Bullying hiding refers to knowledge hiders behaving contemptuously and abusively toward a knowledge requester and instead of knowledge sharing, knowledge hiders ask questions that undermine the competence of the requesters (Yuan et al., 2021). Unlike other knowledge hiding behaviors, bullying hiding does not refer to providing incorrect information or promising sharing knowledge later (evasive hiding), feigning ignorance (playing dumb) or justifying not sharing knowledge (rationalized hiding). It is an example of emotionally abusive behaviors that are characterized as “hostile verbal and non-verbal, non-physical behaviors directed by one or more persons toward another that negatively affect the target’s sense of him/herself as a competent person and worker” (Keashly et al., 1997, p. 176). These behaviors have a significant damaging potential for attitudes and well-being of the victim employee (Pradhan and Gupta, 2021; Tepper, 2000). Yuan et al. (2021) suggested that bullying hiding may have more harmful effects for requesters and knowledge exchange in organizations than other knowledge hiding behaviors, because it seriously damages requesters’ self-esteem and self-confidence. Therefore, the authors called for further studies on the negative consequences that bullying hiding may have on employees. The present study responds to this call and fills several research gaps in the literature on organizational behaviors and knowledge hiding.

Literature reviews indicate that the phenomenon of bullying hiding has been underexplored. So far, only Yuan et al. (2021) and Serenko (2023) have investigated the concept of bullying hiding. Those authors focused on the antecedents of bullying hiding, including interpersonal distrust, knowledge complexity and implicitness and personality disorders. However, there is a lack of research on the consequences of supervisor bullying hiding on attitudes and well-being of employees. Previous studies have focused on the effects of other abusive behaviors in organizations, including workplace bullying and abusive supervision. For example, abusive supervision was found to be related to workplace deviance (Michel et al., 2016), lower job satisfaction (Palanski et al., 2014), lower helping behavior (Asim et al., 2023), less knowledge sharing (Choi et al., 2019), increased turnover intentions (Haar et al., 2016) and knowledge hiding (Agarwal et al., 2021; Offergelt and Venz, 2023). According to the theory of behavioral contagion (Wheeler, 1966), antisocial behaviors are likely to be imitated by co-workers. Moreover, the frustration-aggression–displacement theory (Berkowitz, 1989; Dollard et al., 1939) assumes that that frustrating events lead to aggressive responses.

However, aggression may not be directed to the source of frustration, but displaced toward innocent but less powerful targets, such as co-workers (Dmdarević, 2021; Khalid et al., 2018; Serenko and Abubakar, 2023). Hence, based on these theories, supervisor bullying hiding may be a frustrating event that triggers imitative behavior in the form of bullying hiding toward co-workers.

The original formulation of the frustration-aggression–displacement theory assumed that frustration always led to some form of aggression and vice versa (Dollard et al., 1939). However, this theory has undergone changes and modifications. Currently, it is assumed that frustration does not always lead to aggression, and the relationship between frustration and aggression is influenced by many factors that may be both mediators and moderators of this relationship (Berkowitz, 1989; Breuer and Elson, 2017).

When employees are treated disrespectfully and humiliatingly, they experience job stress (Rubbab et al., 2022) that may appear in response to abusive supervision (Park et al., 2018) and supervisor knowledge hiding (Zhang and Min, 2021). Previous research on organizational aggression (Chen and Spector, 1992; Fox and Spector, 1999) also suggested that frustrating events lead to emotional reactions (such as feelings of stress) and then to behavioral reactions (such as interpersonal aggression). Moreover, supervisor bullying hiding may be perceived as a resource-draining factor. According to the conservation of resources (COR) theory and the desperation principle (Hobfoll et al., 2018),
work stressors may activate employees’ aggressive defense mechanisms to avoid further loss of resources. Consequently, employees may engage in aggressive and harmful behavior to compensate stress and loss of resources (De Clercq et al., 2019). In line with the above reasoning, job stress may be a mediator of the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers.

Berkowitz (1989) developed the frustration–aggression–displacement theory and suggested that individual differences may decide whether frustration leads to aggression. One of the characteristics of individuals is their hierarchy of personal values (Sagiv et al., 2017). Values affect individuals’ behaviors and attitudes and make it possible to evaluate events, actions and people (Schwartz and Cieciuch, 2022). Among a wide set of different values, power values are related to individualism, the desire to control people and social resources (Schwartz et al., 2012), predisposition to competition (Rogoza et al., 2016) and unethical behavior (Mubako et al., 2021). Hence, among individual differences, power values may moderate the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers.

The main purpose of this study is to investigate the relationships between supervisor bullying hiding, job stress, personal values and bullying hiding toward co-workers. In particular, the objective of this study is to examine whether:

- supervisor bullying hiding has a direct effect on subordinate bullying hiding toward co-workers; and
- job stress mediates and power values moderate the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers.

This study contributes to the literature in several ways. It extends research on the underexplored phenomenon of bullying hiding and its consequences for organizational members. Based on the behavioral contagion and frustration–aggression–displacement theories, this study proposes and tests a model in which supervisor bullying hiding has a direct and indirect, through job stress, effect on subordinate bullying hiding toward co-workers. This study also proposes that two personal values, power-dominance and power-resources, may strengthen the above direct relationship.

2. Theoretical background and hypotheses development

2.1 Bullying hiding

The concept of bullying hiding is rooted in two domains of research on behavior in the organization: workplace bullying and knowledge hiding. Workplace bullying means “harassing, offending, socially excluding someone or negatively affecting someone’s work tasks” (Einarsen et al., 2011, p. 22). The features of bullying are persistency and power disparities (Rai and Agarwal, 2018). Persistency indicates that bullying occurs repeatedly and regularly over a period of time, whereas power disparities mean that the perpetrator must have some power over the target. The power might be derived from organizational position (formal power), personality traits (personal power) or access to informal sources of information (Rai and Agarwal, 2018). Knowledge hiding is defined as “an intentional attempt by an individual to withhold or conceal knowledge that has been requested by another person” (Connelly et al., 2012, p. 65).

Several main behaviors (also called strategies or dimensions) of knowledge hiding have been identified, including evasive hiding, rationalized hiding, playing dumb (Connelly et al., 2012) and counter-questioning (Jha and Varkkey, 2018). Yuan et al. (2021) found that bullying behavior is also observed in knowledge exchange in organizations and termed it bullying hiding. This type of knowledge hiding behavior is characterized by abusive treatment of requesters to protect “knowledge power.” In particular, instead of sharing knowledge, a knowledge provider may use contemptuous language to make statements
and ask questions that undermine the competence of the requesters; for example, “whether, as a professional, do you really have to ask that kind of question?” (Yuan et al., 2021). Such statements may damage the self-confidence and self-respect of requesters and discourage requesters from asking further questions and knowledge acquisition. In this way, the knowledge provider achieves his/her goal and avoids sharing his/her knowledge.

Here, this study makes a distinction between supervisor bullying hiding and subordinate bullying hiding. Supervisor bullying hiding is defined as bullying knowledge hiding directed by a supervisor toward his/her subordinate, whereas subordinate bullying hiding is a behavior directed by subordinates toward co-workers.

### 2.2 Supervisor bullying hiding and subordinate bullying hiding

Supervisor bullying hiding is behavior that is perceived negatively by a subordinate. An employee exposed to bullying hiding may feel humiliated and despised. This behavior violates the principles of respect and courtesy at work. As a consequence, supervisor bullying hiding can trigger counterproductive knowledge behavior. The impact of supervisor bullying hiding on a subordinate's counterproductive knowledge behavior can be explained by behavioral contagion and frustration–aggression–displacement theories (Berkowitz, 1989; Dollard et al., 1939; Wheeler, 1966).

The basic assumption of the frustration–aggression–displacement theory is that frustrating events lead to aggressive responses, but the specific response is influenced by cognitive factors such as the interpretation and appraisal of the frustrating situation. Cognitive appraisal processes can determine the extent to which individuals perceive an event as frustrating and whether they believe aggression is an appropriate response. Frustration appears when people cannot achieve their goals. In the organizational context, frustrating events can be defined as “situational constraints in the immediate work situation that block individuals from achieving valued work goals or attaining effective performance” (Fox and Spector, 1999, p. 917). The strength of frustration depends on how important the goal is to the individual and how close he or she is to reaching that goal (Berkowitz, 1989; Kuppens and Van Mechelen, 2007). Moreover, unexpected, unreasonable and illegitimate obstacles to goal attainment are more likely to evoke frustration and aggression than obstacles that are expected, reasonable and legitimate (Berkowitz, 1989). The frustration–aggression–displacement theory also assumes that targets of aggression can be both perceived sources of frustration and also individuals who are not responsible for the cause of frustration. The former case is an example of retaliatory behavior, whereas the latter case is a behavior described as displaced (Breuer and Elson, 2017). A displacement of aggression to substitute targets may result from the threat of punishment for retaliatory actions (Berkowitz, 1989).

This study proposes that supervisor bullying hiding is a frustrating event that leads to aggressive behavior in a form of bullying hiding toward coworkers. An employee has the right to collect knowledge needed to perform a task and achieve work goals. When knowledge transfer is blocked by a supervisor, particularly in a manner that is aggressive and disrespectful, such as bullying hiding, an employee may feel disappointed and frustrated. Moreover, frustration and aggressive response are more intense if a person is close to achieving a goal (Breuer and Elson, 2017). Hence, the employee’s awareness that a supervisor does not want to share necessary knowledge, despite it being available, may cause strong negative emotions and the employee’s aggressive retaliatory behavior. How employees interpret and perceive supervisor bullying hiding can impact their emotional and behavioral responses. For example, if someone appraises bullying hiding as intentionally unfair, they may be more likely to respond aggressively. On the other hand, if they perceive supervisor bullying hiding as accidental or unintentional, they may be less likely to engage in aggressive behavior. However, according to the frustration–aggression–displacement theory, an aggressive reaction to frustration may not be directed at the source of frustration.
If there is high threat of being punished, an individual may refrain from aggressive behavior toward a source of frustration and displace this aggression to substitute targets (Berkowitz, 1989). Hence, in the organizational context, if the source of frustration is a supervisor, the subordinates can withdraw from overt retaliatory behavior because this behavior is not in the interest of the subordinates and can worsen their position at work. However, they may displace their aggression toward innocent, but easy, safe, less powerful and available targets, such as co-workers (Đmdarević, 2021; Khalid et al., 2018; Serenko and Abubakar, 2023). Hence, a subordinate’s anger caused by supervisor bullying hiding may activate defense mechanisms such as displacement and find an outlet in aggressive verbal actions toward innocent co-workers.

The frustration–aggression–displacement theory does not describe whether a frustration event and displaced aggression are similar or completely different behaviors. The type of aggression that supervisor bullying hiding evokes might be explained by the theory of behavioral contagion (Wheeler, 1966). Behavioral contagion is “a kind of spontaneous, unsolicited and uncritical imitation of another’s behavior” (Ogunlade, 1979, p. 205). The theory of behavioral contagion assumes that a person may experience a conflict between the desire to behave in a certain way and the internal restraints that prevent that behavior. However, if such a person witnesses the behavior in question being performed by another person, internal restraints against such behavior are reduced. Consequently, the likelihood of performing the behavior in question increases. The nature of the internal conflict mentioned above distinguishes behavioral contagion from other types of social influence, including conformity (Wheeler, 1966).

Behavioral contagion is more likely to occur when the initiator and the follower are in a similar situation (Ogunlade, 1979). Furthermore, the literature review indicates that antisocial behaviors are more contagious than prosocial ones and are reinforced by social proximity (Dimant, 2019). Therefore, empirical research confirmed the contagion effect of undesirable or deviant behaviors among co-workers, including withdrawal behavior (Eder and Eisenberger, 2008), safety violations (Liang et al., 2018), employee turnover (Porter and Rigby, 2021) and knowledge sabotage in the workplace (Serenko and Abubakar, 2023; Serenko and Choo, 2020). Moreover, employees may imitate not only the behavior of peers, but also the behavior of superiors. Superiors are well suited as role models because they usually have frequent contact with subordinates, power and credibility (Offergelt et al., 2019). Hence, subordinates have many opportunities to observe superior behavior and are likely to mimic it (Mawritz et al., 2012). When a superior engages in bullying hiding, he or she sends a signal to a subordinate that such behavior is acceptable. Consequently, the subordinate will reduce his/her internal restraints that have prevented such behavior.

In summary, this study assumes that supervisor bullying hiding evokes frustration and aggression. As the aggression induced in the victims is unlikely to be directed toward supervisors (perpetrators), it is displaced toward other co-workers. Moreover, bullying hiding is aggressive and contagious behavior, which is emulated by victims of such behavior. Therefore, the following hypothesis is proposed:

H1. Supervisor bullying hiding is positively related to subordinate bullying hiding toward co-workers.

2.3 Supervisor bullying hiding and job stress

Research conducted by Spector et al. (Chen and Spector, 1992; Fox and Spector, 1999) extended the theory of frustration–aggression–displacement to the phenomenon of organizational aggression. They suggested that frustrated events lead to emotional reactions (such as job dissatisfaction, stress and anger) and then to behavioral reactions (such as interpersonal aggression, hostility and intention to quit). This study adopts this frustration–aggression sequence and proposes that supervisor bullying hiding is a source
of stress for the victim, which then evokes counterproductive knowledge behavior toward co-workers.

The relationship between supervisor bullying hiding and job stress may have several explanations. First, job stress refers to the feeling of emotional discomfort in response to work-related stressors (Rizwan et al., 2014; Rubbab et al., 2022). Emotional discomfort includes feelings of being tense, anxious, hurried or downhearted (Vasse et al., 1998). Bad relationships with supervisors/colleagues are examples of work stressors (Vasse et al., 1998). In particular, job stress may appear when employees are treated in a neglectful, disrespectful and humiliating way (Rubbab et al., 2022). Treating an employee in this way is characteristic of supervisor bullying hiding. In line with this reasoning, previous empirical research has confirmed that abusive supervision contributes to subordinate psychological stress (Park et al., 2018). Second, job stress also occurs when the supervisor hides knowledge (Zhang and Min, 2021). Supervisor bullying hiding, similar to knowledge hiding, hinders access to knowledge and thus makes it difficult for the subordinate to complete a task. Failing a task, partially accomplishing it or delays in its accomplishment can be sources of job stress. Third, as Zhang and Min (2021) indicated, managers’ counterproductive knowledge behavior limits access to experience and expertise, which reduces opportunities for career and personal development. Therefore, a subordinate may have a feelings of stalled careers and the associated stress. Fourth, prior research has suggested that managers’ knowledge hiding is negatively related to psychological safety (Jiang et al., 2019). Similarly, bullying hiding can create a sense of threat and insecurity. When subordinates do not feel safe at workplace, they start to experience job insecurity (Chandrasekaran and Mishra, 2012) and job stress (Rangrez et al., 2022). Therefore, the following hypothesis is proposed:

\[ H2. \text{ Supervisor bullying hiding is positively related to a subordinate’s job stress.} \]

This study also proposes that job stress mediates the relationships between supervisor bullying hiding and subordinate bullying hiding toward co-workers. This mediating effect is supported by the conservation of resources (COR) theory (Hobfoll, 1989).

According to the COR theory, people strive to acquire, protect and foster resources that they perceive as valuable. Resources are understood as both tangible goods (such as property) and intangible goods (knowledge, good interpersonal relations, time, etc.). When an individual’s resources are exhausted or threatened with loss, the individual experiences a feeling of stress, in response to which he or she tries to limit the loss of resources, but may also try to gain new resources. However, one of the basic principles of COR theory is that the loss of resources is much more salient than their gain (Hobfoll, 2001).

Supervisor bullying hiding can be perceived as a resource-draining factor. It creates an unfriendly work environment that may take away the sense of security at work and deplete psychological safety. While an appropriate relationship between a supervisor and a subordinate should support and nurture the creation and maintenance of resources, supervisor bullying hiding limits this by withholding organizational knowledge and may cause stress to the subordinate. Hence, supervisor bullying hiding is supposed to act as a work stressor that consumes subordinates’ psychological resources. According to COR theory, such negative work experiences activate the defense mechanisms of employees to avoid further loss of resources. Furthermore, as the desperation principle of COR theory states, these defense mechanisms are often aggressive and may be irrational (Hobfoll et al., 2018). These mechanisms might include knowledge hiding (Feng and Wang, 2019; Rubbab et al., 2022) or other deviant knowledge behaviors, including bullying hiding.

Employees who experience stress may not be able to respond to knowledge request from co-workers because they aim to protect already depleted psychological resources, including energy (Rubbab et al., 2022). In addition, as knowledge is a key resource, employees are likely to protect that resource as a priority, particularly when their position is
increasingly threatened by the supervisor’s behavior. Employees may start to hide knowledge from their co-workers to protect their expert power that is valuable for their organization (Jha and Varkkey, 2018). In the face of supervisor knowledge hiding and perceived stress, employees will not only try to protect their resources but may also behave aggressively, in accordance with the desperation principle of COR theory. As suggested by De Clercq et al. (2019), employee involvement in aggressive and harmful behavior can compensate for stress and loss of resources. Therefore, harmful behaviors in the form of bullying hiding toward co-workers can be a way of releasing negative emotions, making the employee feel better. Previous empirical research indicated that psychological distress can mediate between poor treatment by organizations and knowledge hiding behavior of employees (Bhatti et al., 2023; Rubbab et al., 2022). Nevertheless, we do not know much about the consequences of supervisor bullying hiding. Thus, based on the above arguments, the following hypothesis is stated:

**H3.** Job stress mediates the relationship between supervisor knowledge hiding and subordinate bullying hiding toward co-workers.

### 2.4 Moderating role of personal values

Personal values allow people to define what is good, worthy and important in their life. They are “broad, trans-situational, desirable goals that serve as guiding principles in people’s lives” (Sagiv et al., 2017, p. 630). These values are ordered by their subjective importance in a relatively stable over time hierarchical system (Schwartz and Cieciuch, 2022). The higher a value is in the hierarchical system, the greater its motivational role and influence on the attitude and behavior of the individual. However, people have significantly different hierarchies of values (Sagiv et al., 2017).

One of the most prominent theories of values was presented in 1992 by Schwartz, who then refined it in 2012 with colleagues (Schwartz, 1992; Schwartz et al., 2012). According to this theory, 19 values are structured in a circular motivational continuum, where adjacent values are motivationally compatible and opposing values are motivationally opposed. Among 19 values, power-dominance and power-resources were distinguished. Power values are associated with individualistic value orientations and include having social power, wealth and authority (Konsky et al., 2000). Power-dominance is defined as “power through exercising control over people,” whereas power-resources is “power through control of material and social resources” (Schwartz et al., 2012, p. 669). These two values are part of higher-order value termed self-enhancement. Self-enhancement values put self-interest first and are opposed to self-transcendence values that emphasize caring for others.

Previous studies have investigated the impact of values on behavior toward others, specifically which values predict whether an individual is likely to cooperate and help others or not. It has been found that competing is compatible with emphasizing power values (Rogoza et al., 2016), while cooperating is compatible with benevolence values (Sagiv et al., 2011). Power values are negatively related to agreeableness (Vecchio, 2023) and prosocial behavior (Lönqvist et al., 2013). This is in line with other studies indicating that managers who emphasized self-enhancement values are less likely to engage altruistic behavior than managers who emphasized self-transcendence values (Sosik et al., 2009). Individuals who give priority to self-enhancement values express fewer transformational behaviors, such as intellectual stimulation and fostering acceptance of group goals (Castillo et al., 2018). Moreover, they are predisposed to engage in unethical behaviors, including bribery, deception and falsification, to achieve selfish goals (Mubako et al., 2021). Previous studies have also indicated that personal values can moderate relationships between different organizational phenomena and individual behavior and attitudes (Dalvi-Esfahani et al., 2017; Iqbal, 2021; Taştan and Davoudi, 2017). For example, individualistic personal values, which are significantly correlated with power values (Oishi et al., 1998), shape the relationship between task conflict and knowledge hiding behaviors (Boz Semerci, 2018).
Based on the above argument, this study proposes that power values have an impact on how individuals react to supervisor bullying hiding. As individuals with high power values want to control people and social resources, their self-interest is threatened when they face supervisor bullying hiding. Consequently, they may react in more intensive, aggressive and selfish ways than individuals who strongly value self-transcendence values. They may apply a strategy of bullying hiding toward co-workers to protect their knowledge resources, maintain dominance over co-workers and deprive co-workers of confidence. This leads to the following hypothesis:

\[ H4a \] Power-dominance will moderate the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers, such that the relationship will be stronger for employees who are high in power-dominance than for employees who are low in power-dominance.

\[ H4b \] Power-resources will moderate the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers, such that the relationship will be stronger for employees who are high in power-resources than for employees who are low in power-resources.

The research model is presented in Figure 1.

3. Research methodology

3.1 Sample and data collection

To test the proposed model, data were obtained from a survey questionnaire distributed among employees in Poland. Data collection was carried out in collaboration with a certified online survey company, one of the largest in Poland, the Ariadna National Research Panel (panelariadna.pl). The online questionnaire was completed by registered members of the company panel who were then rewarded with points that can be exchanged for prizes. There are several benefits to using an online panel (Andreeva and Zappa, 2023; Serenko and Choo, 2020). First, it allows researchers to gather large amounts of data in a relatively short time, from respondents with different backgrounds and from different geographical locations, which improves the generalizability of the results. Furthermore, an online panel ensures the anonymity of respondents, which can promote more honest and accurate responses, particularly for sensitive topics, such as bullying hiding. Finally, it allows the use of various screening criteria. To be a respondent in this study, panel members must meet the following screening criteria:

![Proposed model](image-url)
Having a direct supervisor. This criterion was crucial for the study, because the respondent was to assess the behavior of his direct superior.

Higher education. This criterion aimed to ensure that respondents had the appropriate knowledge that they could share.

A full-time employment contract, and at least two years of work experience with their current employer. These criteria aimed to ensure that respondents were employees and had the appropriate work experience to share with co-workers. Similar screening criteria have been used in previous studies of counterproductive knowledge behavior (Kmieciak, 2022; Serenko, 2023).

To improve the quality of collected data and exclude inattentive respondents, two check-items were included in the questionnaire. These items had a form of directed queries, as suggested by Abbey and Meloy (2017).

Data collection was conducted in July and August 2022. Employees were surveyed at two time points to avoid serious common method bias (CMB) (Podsakoff et al., 2012). In the first survey, participants rated the predictor variable (supervisor bullying hiding), the mediator variable (job stress) and two moderator variables (power-dominance and power-resources). After one week, responses on the dependent variable (subordinate bullying hiding toward co-workers) were collected from the same respondents. On the first occasion, 654 questionnaires were obtained. On the second occasion, 512 questionnaires were received back. Sixty-eight respondents who failed one or two attention check items were removed from the study. Hence, the final sample consisted of 444 respondents. Among them, 53.4% were women. The average age of the participants was 41.8 years (SD = 10.3). Regarding educational background, 18.0% had a bachelor’s degree, 68.9% had a master’s degree and 13.1% had a PhD. The average job tenure with the current employer was 11.7 years (SD = 9.7).

The data reported in this manuscript were collected as part of a larger data collection, and one variable (supervisor bullying hiding) has been used in another manuscript. A data transparency table has been included in the Appendix 2.

### 3.2 Measures

The questionnaire was administered in Polish. The scales for bullying hiding and job stress were translated into Polish following the back-translation procedure proposed by Brislin (1986). In the case of power-dominance and power-resources, the Polish translation of the scales designed by Schwartz et al. (2012) was taken from the work of Cieciuch and Schwartz (2018). The Appendix 1 includes a full list of items that were used in the study.

#### 3.2.1 Bullying hiding

The three-item scale proposed by Yuan et al. (2021) was adapted to measure supervisor bullying hiding and subordinate bullying hiding toward co-workers. The scale was adapted to assess the behavior of the respondents and their supervisors’ behavior. Respondents were asked to assess how often they and their supervisors behave in a specific way, on a scale ranging from 1 (never) to 5 (very often).

#### 3.2.2 Job stress

Job stress was measured using the four-item scale from Motowidlo et al. (1986). Respondents were asked to answer using a five-point Likert scale, where 1 indicates strongly disagree and 5 indicates strongly agree.

#### 3.2.3 Power values

Scales for power-dominance and power-resources from the revised portrait values questionnaire (PVQ-RR) measuring basic individual values developed by Schwartz et al. (2012) were used. The six items began with “Here we briefly describe some people. Please read each description and think about how much each person is or is not like you” (taken from Schwartz et al., 2012). Items were rated on a scale ranging from 1 (very much unlike me) to 6 (very much like me).
3.3 Data analysis

The analysis was conducted with the statistical package jamovi 2.3.21 (The jamovi project, 2022) and advanced mediation models module (Gallucci, 2023).

3.4 Common method bias

The study used self-report questionnaires as the only measurement method, which may raise concerns about whether CMB is a threat to the reliability of the collected data. To minimize the risk of CMB, several procedural remedies were applied:

- data collection was conducted at two time points;
- including attention check-items in the questionnaire;
- ensuring the anonymity of respondents;
- ensuring respondents that there are no right or wrong answers; and
- using different scale anchors (“never” vs “very often,” “strongly agree” vs “strongly disagree” and “very much unlike me” vs “very much like me”) to reduce respondents’ frustration and improve accuracy.

Furthermore, the Harman single-factor test was used to detect CMB (Podsakoff et al., 2003). The factor analysis revealed that a general single factor explained only 27.5% of the total variance, hence below the 50% threshold. It suggested that CMB is not a serious threat in this study.

4. Results

4.1 Measurement model

Series of confirmatory factor analyses were performed to determine the suitability of the measurement model. The hypothesized model (Figure 1) with five constructs showed a good model fit of the data: \(\chi^2 (94) = 194, p < 0.001; \text{CFI} = 0.97; \text{TLI} = 0.96; \text{SRMR} = 0.04;\) and \(\text{RMSEA} = 0.05.\) The model was compared to a single-factor model \(\chi^2 (104) = 2306, p < 0.001; \text{CFI} = 0.41; \text{TLI} = 0.32; \text{SRMR} = 0.19;\) and \(\text{RMSEA} = 0.22\) and four-factor model treating power-dominance and power-resources as a single factor \(\chi^2 (98) = 479, p < 0.001; \text{CFI} = 0.90; \text{TLI} = 0.87; \text{SRMR} = 0.06;\) and \(\text{RMSEA} = 0.09.\) This four-factor model had worse fit indices than the five-factor model, indicating a distinction between the two variables: power-dominance and power-resources. These results show the five-factor model’s superiority over the other measurement models.

Moreover, as Cheung et al. (2023) recommended, additional tests for internal consistency, convergent validity and discriminant validity of measurement scales was conducted. Internal consistency was assessed using Cronbach’s \(\alpha\) and McDonald’s \(\omega.\) These two values were above the 0.70 threshold. Convergent validity was evaluated using average variance extracted (AVE). AVE values exceeded the 0.50 threshold (Table 1). Discriminant validity was assessed using the Fornell–Larcker criterion and the heterotrait–monotrait (HTMT) ratio of correlations. In line with the Fornell–Lacker criterion, the square root AVE of each construct was greater than its correlation with the other latent constructs (Table 2). Finally, the HTMT values were below the recommended maximum value of 0.85 (Cheung et al., 2023). In summary, the measurement model showed adequate validity and reliability.

4.2 Structural model

The tested structural model is shown in Figure 2. The \(R^2\) determination coefficient value is 0.176 for subordinate bullying hiding toward co-workers, which can be considered as a low value (Sanchez, 2013).
The bootstrapping technique was used to test hypotheses. As presented in Table 3, supervisor bullying hiding is related to subordinate bullying hiding ($\beta = 0.282, p < 0.001$) and to job stress ($\beta = 0.259, p < 0.001$); hence, $H1$ and $H2$ are supported. Power-dominance strengthens the relationship between supervisor bullying hiding and peer-to-peer bullying hiding ($\beta = 0.143, p = 0.047$), supporting $H4a$. As presented in Table 4, at the low level of power-dominance ($-1$ SD), the relationship between supervisor bullying hiding and peer-to-peer bullying hiding was insignificant ($\beta = 0.144; p = 0.084$). However, at the high level of power-dominance ($+1$ SD), the relationship was stronger and significant ($\beta = 0.420, p < 0.001$). Contrary to expectation, power-resources does not moderate the relationship ($\beta = 0.007; p = 0.926$), so $H4b$ is rejected. The results of a bootstrap test also confirmed that an indirect effect of supervisor bullying hiding on subordinate bullying hiding through job stress is insignificant (Table 5). Therefore, $H3$ is rejected.

5. Discussion and implications

5.1 Discussion

This study explored the consequences of supervisor bullying hiding. By applying behavioral contagion and frustration-aggression-displacement theories, the study revealed that
Figure 2  Structural model

![Diagram showing the structural model with relationships between Supervisor Bullying Hiding, Job Stress, Subordinate Bullying Hiding, Power-Dominance, and Power-Resources.]

Notes: *p < 0.05; **p < 0.001; bootstrapping with 1,000 re-sampling
Source: Created by author

Table 3  Structural model results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Estimate</th>
<th>95% BC CI</th>
<th>β</th>
<th>z-value</th>
<th>p-value</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1. Supervisor bullying hiding → subordinate bullying hiding toward co-workers</td>
<td>0.266</td>
<td>[0.173; 0.358]Sig.</td>
<td>0.282</td>
<td>5.51</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>H2. Supervisor bullying hiding → job stress</td>
<td>0.328</td>
<td>[0.226; 0.437]Sig.</td>
<td>0.259</td>
<td>6.14</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>H4a. Supervisor bullying hiding^power-dominance → subordinate bullying hiding toward co-workers</td>
<td>0.106</td>
<td>[0.002; 0.213]Sig.</td>
<td>0.144</td>
<td>1.98</td>
<td>0.047</td>
<td>Yes</td>
</tr>
<tr>
<td>H4b. Supervisor bullying hiding^power-resources → Subordinate bullying hiding toward co-workers</td>
<td>0.005</td>
<td>[−0.094; 0.134]Nsig.</td>
<td>0.007</td>
<td>0.09</td>
<td>0.926</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: BC CI: biased corrected confidence interval; Sig.: a significant direct effect at 0.05; Nsig.: a non-significant direct effect at 0.05; Bootstrapping based on n = 1,000 subsamples
Source: Created by author

Table 4  Moderating effects on the direct relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers

<table>
<thead>
<tr>
<th>Moderator levels</th>
<th>Estimate</th>
<th>95% BC CI</th>
<th>β</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power-dominance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean − 1 SD</td>
<td>0.136</td>
<td>[−0.015; 0.295]Nsig.</td>
<td>0.144</td>
<td>1.73</td>
<td>0.084</td>
</tr>
<tr>
<td>Mean + 1 SD</td>
<td>0.397</td>
<td>[0.236; 0.561]Sig.</td>
<td>0.420</td>
<td>4.91</td>
<td>0.000</td>
</tr>
<tr>
<td>Power-resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean − 1 SD</td>
<td>0.260</td>
<td>[0.089; 0.409]Sig.</td>
<td>0.275</td>
<td>3.25</td>
<td>0.001</td>
</tr>
<tr>
<td>Mean + 1 SD</td>
<td>0.273</td>
<td>[0.124; 0.479]Sig.</td>
<td>0.288</td>
<td>3.02</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Notes: BC CI: biased corrected confidence interval; Sig.: a significant direct effect at 0.05; Nsig.: a non-significant direct effect at 0.05
Source: Created by author
supervisor bullying hiding has a significant impact on subordinate bullying hiding toward co-workers (H1). This finding confirmed that antisocial behaviors of supervisors are contagious because they are likely to be imitated by subordinates. This finding is in line with those of Dimant (2019), indicating that social proximity amplifies the contagion of antisocial behavior and that antisocial behavior is more contagious than prosocial behavior. Moreover, this finding is also in line with frustration–aggression–displacement theory, which states that frustration and aggression can be displaced toward innocent objects (Berkowitz, 1989). This displacement is especially justified when the source of frustration is a powerful supervisor against whom retaliatory behavior would be too risky (Drndarević, 2021; Khalid et al., 2018; Serenko and Abubakar, 2023). Cognitive processes, such as evaluation of potential targets and decision-making, can influence the choice of the displaced target. Finally, this finding is also consistent with previous studies showing that abusive supervision (Pradhan et al., 2020; Wang et al., 2021), punitive supervision (Sarwar et al., 2021) and supervisor knowledge hiding (Kmieciak, 2022; Offergelt and Venz, 2023) are positively related to subordinate knowledge hiding.

Based on previous work on the frustration–aggression sequence (Fox and Spector, 1999), the present study tested whether supervisor bullying hiding is a predictor of job stress (H2). Previous work has suggested that frustrated events lead to negative emotional reactions, including feelings of stress, anxiety and anger (Fox and Spector, 1999). The present study argued that treating subordinates in a disrespectful and humiliating way and depriving them of access to knowledge creates a sense of threat and uncertainty in the workplace. Moreover, by knowledge hiding, supervisor bullying hiding creates challenges for subordinates in completing job tasks and may reduce opportunities for personal development (Zhang and Min, 2021). Inadequate task completion, partial achievement, delays and feelings of having a stalled career can all contribute to job stress. The findings supported this line of reasoning and showed that supervisor bullying hiding is a predictor of job stress. This finding is consistent with previous studies indicating abusive supervision (Park et al., 2018), supervisor social undermining (Schwepker and Dimitriou, 2022) and supervisor knowledge hiding (Zhang and Min, 2021) as serious work stressors.

The present study does not provide evidence that job stress mediates the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers (H3). A mediation analysis indicated that job stress is not the antecedent of bullying hiding. This finding contradicts the COR theory used to support H3. Also, this finding is not in line with previous studies suggesting that occupational stress may affect knowledge hiding (Jneid, 2023), and that psychological distress can mediate between bad treatment by organizations and employee knowledge hiding (Bhatti et al., 2023; Rubbab et al., 2022). As argued in the hypothesis development section, supervisor bullying hiding may be perceived as a resource-draining factor because it causes job stress, thus consuming subordinates’ psychological resources. Moreover, the present study assumed that aggressive behavior can compensate for job stress and loss of resources (De Clercq et al., 2019). However, it turns out that this job stress is not a sufficient reason for aggressive and contemptuous behavior toward co-workers. A possible explanation for this finding is related

<table>
<thead>
<tr>
<th>Path</th>
<th>Direct effect estimate</th>
<th>95% BC CI</th>
<th>Indirect effect estimate</th>
<th>95% BC CI</th>
<th>Total effect estimate</th>
<th>95% BC CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3: Supervisor bullying hiding job stress subordinate bullying hiding toward co-workers</td>
<td>0.273 [0.124; 0.479] Sig.</td>
<td>0.013 [−0.006; 0.037] Ns</td>
<td>0.280 [0.198; 0.361] Sig.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: BC CI: biased corrected confidence interval; Sig.: a significant direct effect at 0.05; Nsig.: a non-significant direct effect at 0.05

Source: Created by author
to the behavior of employees in the face of job stress. People try to reduce job stress, or at least not increase it. Resorting to aggressive or contemptuous behavior escalates conflicts and creates a toxic work environment (Andersson and Pearson, 1999; Giorgi, 2012). Hence, employees who experience job stress may refrain from actions (such as bullying hiding directed toward co-workers) that provoke conflicts with co-workers and lead to even more stress at work.

By borrowing from the theory of basic individual values (Schwartz, 1992; Schwartz et al., 2012), the present study investigated power values as an amplifier to the effect of supervisor bullying hiding. The study reasoned that because individuals with high power values want to control people and social resources, are more competitive (Rogoza et al., 2016) and predisposed to engage in unethical behaviors (Mubako et al., 2021), they may react to supervisor bullying hiding more aggressively than individuals with low power values. The study’s findings partly support this argument. The study reveals that power-dominance, contrary to power-resources (H4b), moderates the relationship between supervisor bullying hiding and subordinate bullying hiding toward co-workers (H4a). A possible explanation for this finding is that individuals who hold strong power-dominance values and desire control over others feel their self-interest is seriously jeopardized when they encounter supervisor bullying hiding. As a result, their response may be more intense, aggressive and self-centered compared to individuals with low power-dominance values. There is a lack of comparative studies of the moderating role of power-dominance and power-resources values in the relationship between knowledge hiding constructs. However, the finding of the present study is consistent with the suggestion that individual differences may decide whether frustration leads to aggression (Berkowitz, 1989). Moreover, this finding is consistent with previous research indicating that power values increase the propensity to competition (Rogoza et al., 2016) and unethical behavior (Mubako et al., 2021).

5.2 Implications for theory

This study contributes to the literature in the following aspects. First, the study applied behavioral contagion and frustration–aggression–displacement theories to explain the impact of supervisor bullying hiding on subordinates. Previous studies have mainly used social exchange theory, conservation of resources theory, social learning and psychological ownership theory in the context of counterproductive knowledge behavior (for a review, see Rezwan and Takahashi, 2021). However, Serenko and Abubakar applied frustration–aggression–displacement theory to analyze knowledge sabotage and recommend this theory to other counterproductive knowledge behavior. Responding to this call, the present study has shown that behavioral contagion and frustration–aggression–displacement theories might be useful for explaining the consequences of supervisor bullying hiding. The theory of behavioral contagion (Wheeler, 1966) suggests that bullying hiding may be imitated. In turn, the frustration–aggression–displacement theory (Berkowitz, 1989; Dollard et al., 1939) indicates that the victims of supervisor bullying hiding may not engage in retaliatory but risky action toward a powerful supervisor, but will instead displace their anger toward innocent co-workers.

Second, this study used a scale for bullying hiding behavior proposed by Yuan et al. (2021). Previous research on knowledge hiding behavior has usually used scales for evasive hiding, playing dumb, rationalized hiding (Connelly et al., 2012) and, to a much lesser extent, counter-questioning (Jha and Varkkey, 2018; Zhai et al., 2023). So far, the scale for bullying hiding has only been applied in two empirical studies, conducted in China (Yuan et al., 2021) and the USA (Serenko, 2023). The current study has confirmed that the scale is also valid and reliable in a different cultural context: Poland.
Third, the findings highlight that supervisor bullying hiding has a detrimental effect on employee behavior and well-being. The consequences of bullying hiding have not been investigated in the management literature. This study has shown that bullying hiding might have a contagious nature and spread undesirably among organizational members, which is in line with behavioral contagion theory (Wheeler, 1966). In particular, supervisor bullying hiding has a direct effect on subordinate bullying hiding toward co-workers, which is in line with the displacement principle in the frustration-aggression-displacement theory (Berkowitz, 1989). In addition, experiencing such a supervisor behavior evokes job stress among subordinates. Therefore, this study found that supervisor bullying hiding, similar to abusive supervision (Park et al., 2018) and workplace bullying (Hauge et al., 2010), is a serious work stressor.

Fourth, the present study advances our knowledge on the role of personal values in reaction to aggressive behavior. The study confirmed that values may affect individuals’ behaviors (Schwartz and Cieciuch, 2022) and found that power-dominance strengthens the relationship between supervisor bullying hiding and peer-to-peer bullying hiding. However, such a moderating role was not found in the case of power-resources. Therefore, employees who want to control others react more aggressively to the disrespectful and humiliating behavior of supervisor than employees who are interested in controlling resources. Supervisor bullying hiding appears to be extremely adverse and unfavorable for those who want to promote themselves by controlling co-workers, so their displaced aggression is particularly intense.

5.3 Implications for practice

This study offers three main practical implications. First, managers should be aware of the consequences of supervisor bullying hiding and take action to reduce it. Managers often ignore disrespectful supervisors’ behavior, treating it as behavior that does not have a significant or direct impact on organizational performance. Nevertheless, supervisor bullying hiding entails a number of negative consequences, including worsening the flow of knowledge in the organization and causing stress and aggressive behavior among other employees. Therefore, managers should actively reduce this type of behavior by promoting an appropriate organizational culture along with a zero-tolerance policy for bullying hiding. Employees should be made aware of what bullying hiding behavior is and what are the dangers associated with it. To identify supervisor bullying hiding, managers can use employee surveys in which supervisors are assessed in terms of bullying hiding. Team-building exercises that focus on collaboration between supervisors and subordinates, open communication and sharing knowledge can be helpful in terms of reducing bullying hiding.

Second, managers should consider bullying hiding behavior when appointing new supervisors. Candidates who have previously revealed bullying hiding behavior toward co-workers may be bad role models and have a negative impact on future subordinates. Therefore, for a comprehensive insight into past behavior of candidates for supervisor positions, co-workers should be consulted. The inquiry should focus on candidates’ previous reactions on knowledge requests and incidents of bullying hiding behavior.

Third, knowledge of the role of values in response to supervisor bullying hiding might be useful for human resources managers. This knowledge is especially important if bullying hiding is a significant challenge in the organization. Therefore, during recruitment, a questionnaire that measures basic individual values can be applied, such as the revised portrait values questionnaire (PVQ-RR) (Schwartz et al., 2012). This makes it possible to select job candidates with a hierarchy of values as desired by the employer. If the goal of the organization is to limit the spread of bullying hiding, then a candidate with a high power-dominance value will not be a suitable employee. On the other hand, if an organization strives to create a culture of competition between employees, then people with higher power values might be suitable candidates for work in such an organization.
5.4 Limitations and future research directions

This work has certain limitations. First, some limitations are related to the methodology. Data collection was based on self-report questionnaires, which raises concerns about CMB. In addition, given that the study used a paid online panel, the panelists may have completed the survey too quickly and without due attention because their main goal might have been to achieve a reward rather than to provide credible answers. Although many procedural remedies were applied, including check items (see subsection 3.4), future studies may adopt other methods of data collection to ensure the generalizability of the findings. Second, this study used as potential moderators only two of the 19 basic personal values proposed by Schwartz et al. (2012). Future research might investigate whether values other than power values moderate the relationship between supervisor bullying hiding and subordinate bullying hiding. For example, it is interesting to examine whether benevolence values might weaken the above relationship. Third, in addition to personal values, other personality characteristics might have an impact on bullying hiding. A promising new trend is to examine personality disorders in the context of knowledge hiding behavior (Kmieciak, 2022; Serenko, 2023). Therefore, including personality disorders as moderators in the research model may be a valuable extension of the current study. Fourth, supervisor bullying hiding evokes subordinates’ job stress; however, the results of the study indicate that that job stress does not lead to subordinate bullying hiding toward co-workers. This finding is contrary to our expectations and requires further empirical research. Furthermore, future research should also explore other mediators of the relationship, such as emotional exhaustion (Lee et al., 2018; Long et al., 2023).

6. Conclusion

The current study fills a gap in research on the consequences of bullying knowledge hiding. To better understand the relationships among supervisor bullying hiding, job stress, personal values and subordinate bullying hiding toward co-workers, this study applied and showed usefulness theories from psychology and sociology domains, such as the behavioral contagion and frustration-aggression-displacement theories. The study suggests that supervisor bullying hiding should not be left unchecked because it spreads easily among employees and creates a stressful work environment. Given the moderating role of power values in the relationship between focal constructs, the result of this study may be helpful for practitioners and encourage them to focus on personal values as factors that may facilitate or inhibit knowledge hiding.

References


The jamovi project (2022), “Jamovi”.


**Appendix 1. Items**

**Supervisor bullying hiding (adapted from Yuan et al., 2021)**

- SBH1. Your supervisor says this is “so simple” and “think about it yourself!”
- SBH2. Your supervisor says, “Do you not know that the company has relevant regulations about that?”
- SBH3. Your supervisor asks “whether, as a professional, do you really have to ask that kind of question?”, and tell you to “think about it!”

**Subordinate bullying hiding toward co-workers (adapted from Yuan et al., 2021)**

- BH1. I say this is “so simple” and “think about it yourself!”
- BH2. I say, “Do you not know that the company has relevant regulations about that?”
- BH3. I ask “whether, as a professional, do you really have to ask that kind of question?”, and tell him/her to “think about it!”
Power-resources (Schwartz et al., 2012)
- PR1. Having the feeling of power that money can bring is important to him
- PR2. Being wealthy is important to him
- PR3. He pursues high status and power

Power-dominance (Schwartz et al., 2012)
- PD1. He wants people to do what he says
- PD2. It is important to him to be the most influential person in any group
- PD3. It is important to him to be the one who tells others what to do

Job stress (Motowidlo et al., 1986)
- JS1. My job is extremely stressful
- JS2. Very few stressful things happen to me at work (R)
- JS3. I feel a great deal of stress because of my job
- JS4. I almost never feel stressed because of my work (R)

Note: R: reverse coded

Appendix 2

<table>
<thead>
<tr>
<th>Table A1</th>
<th>Data transparency table</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variables in the complete data set</strong></td>
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</tr>
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<td>Variable 2.</td>
<td></td>
</tr>
<tr>
<td>Variable 3.</td>
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<tr>
<td>Variable 4. Job stress</td>
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<tr>
<td>Variable 5.</td>
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<td>Variable 6.</td>
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<tr>
<td>Variable 7. Power-dominance</td>
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<td>Variable 8. Power-resources</td>
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<td>Variable 9. Subordinate bullying hiding</td>
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<tr>
<td>Variable 10.</td>
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</tr>
</tbody>
</table>

**Notes:** The data reported in this manuscript were collected as part of a larger data collection. Findings from the data collection have been reported in separate manuscripts. The current manuscript MS1 focuses on variable 1, 4, 7, 8 and 9, while MS2 (the manuscript under review) focuses on variables 1, 2, 3, 5, 6 and 10.

**Source:** Created by author

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