

The impact of monitoring and sanctioning and perceived loafing towards revenge motive and tendency to commit counterproductive work behaviors within the academic workplace

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Abstract

Within the actual practical day to day activities, even within an academic setting, counterproductive work behaviors (CWB) exist. Taking note of the harm that CWBs are able to induce on both individuals and organizations, it would seem appropriate that antecedents of CWBs be clearly understood. More so within an academic setting, wherein there is a system of monitoring and sanctioning in placed, CWBs should be kept to a minimum. However, this is not the case, previous CWB studies suggests a moderate occurrence of deviant behaviors within academic institutions. To better understand this phenomenon, the current study hypothesized that *perceived loafing* (PL) of peers is mediated by an individual's *revenge motive* (RM), which in turn affects the prevalence of CWBs. Furthermore, the current study also investigates the role of *monitoring and sanctioning* (MAS) towards an individual's tendency to loaf. Participants are 935 teachers employed during the 2015 school year in Taiwan. Survey items include the Mulvey and Klein's (1998) *loafing scale*, Jones' (2009) *revenge motive scale*, Fine, Horowitz, Weigler, and Basis's (2010) *monitoring and sanctioning scale*, and Hu, Hung, and Ching's (2015) *CWB Taiwan scale* (CWB-T). Using the statistical method of structured equation modelling (SEM), results suggest that PL has an increasing effect on both RM and CWB-T. In addition, RM seems to act as a mediator between PL and CWB-T, while MAS exhibits a decreasing effect on PL. In sum, findings suggest that in order for academic institutions to minimize the occurrence of CWBs, appropriate monitoring and sanctioning must be implemented.

Keywords: work attitude; teacher; deviant behavior; loafing; monitoring; sanctioning; counterproductive work behavior; revenge motive; mediation

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1. Introduction

Studies has proven that a healthy workplace can lead to increase productivity (Danna & Griffin, 1999). A healthy workplace would mean that the organization practices and promotes work-life balance, employee growth and development, health and safety, recognition, and employee involvement (Grawitch, Gottschalk, & Munz, 2006). More important is the *sense of equality* within the workplace (Cornelius, 2002). However, this sense of equal treatment is tested, when the honest employee experiences coworkers getting away with *loafing* (Mulvey & Klein, 1998). Recent studies have categorized loafing as a type of deviant or counterproductive work behavior (CWB) (Ahmadi, Bagheri, Ebrahimi, Rokni, & Safari-Kahre, 2011), wherein its effect can be *damaging* to the organization (Semmer, Tschan, Meier, Facchin, & Jacobshagen, 2009).

Similar to other workplace, CWB exists even within academic institutions (Fox, Spector, & Miles, 2001; Fox & Stallworth, 2010; Y.-L. Hu, Hung, & Ching, 2015; Salami, 2010). One might thought that the implementation of a school wide positive behavior support (Sugai & Horner, 2008; Sugai & Horner, 2009), should diminish if not minimize any misconducts or deviant behaviors. However, even with a monitoring and sanctioning system in place, loafing within the workplace still thrive (Carpenter, 2007). In Taiwan, teaching within a public academic institution can be translated into being tenured for life. Permanent teachers working in public elementary or high school are actually considered as public servant and/or government employees; thus, most of the faculty tends to work till they retire. More important is that as long as the teacher is working within the boundaries of what is expected of them, rarely does a faculty get terminated. In effect, faculty might become relax and let down their guard, hence, CWBs becomes a common activity (Y.-L. Hu et al., 2015).

Within the above-mentioned issues, the current study hypothesizes that *perceived loafing* (PL) of peers and/or co-teachers is mediated by an individual's *revenge motive* (RM), which in turn affects the prevalence of CWBs. Furthermore, the current study also investigates the role of *monitoring and sanctioning* (MAS) towards an individual's tendency to loaf. As with understanding of the various inter-relationships of the different antecedents of CWBs, further policy that can help minimize or even hinders deviant behaviors from occurring can be properly implemented.

2. Background literature

2.1 Counterproductive work behavior

The notion of CWB is not new with various studies suggesting different structures and concepts (Marcus, Taylor, Hastings, Sturm, & Weigelt, 2016). Different interpretations of the behaviors are shown in different studies, some common concepts are *unethical behaviors* (G. E. Jones & Kavanagh, 1996; Reiss & Mitra, 1998; Umphress, Bingham, & Mitchell, 2010), *deviant behaviors* (Bennett & Robinson, 2000; Peterson, 2002; Robinson & Bennett, 1995), and even *anti-social behaviors* (Bodla & Danish, 2011; Giacalone & Greenberg, 1997). However, one specific common fact is that CWBs seems to exists in all types of workplace (Spector et al., 2006).

A distinct idea within CWB is that it may be targeted towards the organization or to a specific individual within that organization (Robinson & Bennett, 1995). In addition, CWB can also be distinguished by the extent of its damage, such as the behavior might be *minor* or *simple* as *reading newspaper during office hours* or the

serious issues of *theft* and *sabotage* (Y.-L. Hu et al., 2015). Simply put, CWB can be considered as an *intentional act* that is contrary to the institution's goal (Gruys & Sackett, 2003; Sackett, 2002). Note the word *intentional*, denoting that the perpetrator is aware of what he or she is doing (Martinko, Gundlach, & Douglas, 2002).

Looking into the various factors in classifying CWBs, Robinson and Bennett (1995) mentioned four distinct classification. The four factors are *production deviance* – these are the minor behaviors that are still considered harmful towards the institution, such as low work quality, *property deviance* – these are the major offenses that are damaging to the institution, such as theft, *political deviance* – these are the minor behaviors towards peers and co-workers, such as blaming or finger pointing, and *personal aggression* – these are the major offenses towards peers and co-workers, such as abuse and harassment (Robinson & Bennett, 1995, p. 565). Later on, Spector et al. (2006) re-classify the four factors into five groups, namely: *abuse towards others*, *production deviance*, *sabotage*, *theft*, and *withdrawal*. Withdrawal in the workplace is best described as exhibiting altruism, lateness to work, and absenteeism (Barling & Phillips, 1993; Hammer, Bauer, & Grandey, 2003; Paillé & Grima, 2011), while the remaining four are previously discussed and self-explanatory.

In Taiwan, a recent study on the CWB model in Taiwan (CWB-T) by Hu et al. (2015) noted eight distinct factors that are present within the academic workplace. The factors are as follows: *time theft* (TT) – these include any form of improper or inappropriate reasons for reducing work hours, *inappropriate use of resources* (IUR) – these include the deliberate use, waste, theft, or destruction of schools' properties, *inappropriate student-teacher relationship* (ISR) – these include any inappropriate, unethical, or unprofessional interactions between teachers and students, *inappropriate parent-teacher relationship* (IPR) – these include any inappropriate, unethical, or unprofessional interactions between teachers and parents, *lack of professionalism* (LOP) – these include all the reasons resulting to poor teaching performance, might be from the lack of pedagogical and professional content knowledge in the part of the teacher, *apathy* (AP) – these include the lack of enthusiasm and/or altruism, and unwilling to improve oneself, *political tactics* (PT) – these include forming alliances to gain control of a situation and/or initiate personal attacks, and *reluctant to accept administrative duties* (RAD) – these include the situation wherein a teacher is unwilling to accept any administrative responsibilities besides teaching (Y.-L. Hu et al., 2015, p. 71).

In sum, the concept of CWB is both varied and multi-dimensional. More importantly, the effects of CWB are serious, no matter if it is just a simple and minor action. Within the school, students are able to observe how teachers undertake their everyday activities. Students are able to learn by just observing their teachers (Lumpkin, 2008), therefore, it is quite important that CWB be kept to a minimum within the academic workplace.

2.2 Loafing

The concept of *loafing* has been evolving. Even within a study published twenty years ago, Sunoo (1996) already noted the changing nature of loafing. To further understand loafing, some early papers are discussed. Starting with a seminal German literature, Moede (1927) noted that within a *rope pulling task*, adding people to the task (or increasing the group size) is not actually equivalent to sum of all the individual efforts of each of the group member. In other words, within any given task, increasing the number of people working on the task does not necessary translate to faster task completion. Adding individuals to the task might even promote *social loafing* (Latané, Williams, & Harkins, 1979). This is more evident when an individual believes that his or her own personal contribution to the group effort is *vague* and *unrecognized* (Liden, Wayne, Jaworski, & Bennett, 2004; Mulvey & Klein, 1998; Price, Harrison, & Gavin, 2006). In fact, as the group size increases, the chances of social loafing also increases (Breckler, Olson, & Wiggins, 2006).

As the concept of loafing evolves, the extent of *time wasted* in the workplace also increases. There is already a *blurring* of the thin line between working and loafing, while, at the same time, new ways in wasting time are also forming. Sunoo (1996) noted the *uncertainty* of what can be considered as loafing. For instance, the need for

sales agents to familiarized with all of the company's products, which is usually done through browsing the company's website. In fact, *how can a manager tell if the employee is really studying or just browsing other sites?* In reality, the practice of **self-responsibility** in part of the employee and the employer **having faith** or **believing** in their employees, as far more encouraging in the workplace (Sunoo, 1996). With the advent of the social networking era, loafing now takes the form of cyberspace as what is known as **cyberloafing** (Ahmadi et al., 2011; Çınar & Karcioğlu, 2015; Lim & Chen, 2012; Lim & Teo, 2005). Needless to say, the problem of loafing is increasing and exists in all types of organization (Kidwell, 2010).

As for the various causes of loafing, Price and his colleagues (2006) noted the two prominent reasons for loafing, which are **dispensability** and **fairness**. As mentioned before, **dispensability** happens when an employee perceived that his or her work contributions as negligible; hence, they will just let the other employees with greater responsibility accomplished the task (Price et al., 2006). As with fairness within the workplace, much research has been made in this line of thinking. Fairness in the workplace is affected, when **inequality** is perceived by the employee (Ahmadi et al., 2011; Hung, Chi, & Lu, 2009; Murphy, Wayne, Liden, & Erdogan, 2003). More so, when the employee is a member of a certain age group, ethnicity/culture, gender, or even marital status (Tsaw, Murphy, & Detgen, 2011); when the **majority rule** always take precedence, fairness in the workplace is affected. In essence, the occurrence of loafing in the workplace is greatly influenced by how *management decision making* take place and how each individual employee *value* his or her own work within the organization.

2.3 Monitoring and sanctioning

The notion of monitoring and sanctioning within the workplace is a fairly new concept, wherein the idea is initially discussed within organizational studies. Early studies suggest that monitoring and sanctioning to be observed between peers in order to prevent and preempt misconduct (Lazega, 2000). However, some believed that mutual monitoring can actually decrease the willingness of the group members to cooperate with each other (Orr, 2001). Monitoring and sanctioning ironically is usually compared with the Orwell's classic *1984*, which cited the possibility of **somebody is always watching over** (Alge & Hansen, 2014). Although the notion of **Big brother** seems to denote a negative atmosphere, nonetheless, monitoring seems to work better when used appropriately with just the right amount sanctioning (Zoghbi-Manrique-de-Lara, 2011).

In some studies, it is noted that monitoring also moderates the occurrence of both integrity and CWB (Fine, Horowitz, Weigler, & Basis, 2010), which performs a sort of policing within the workplace. In other words, *when there is a policeman on the corner, people behave and patiently wait for the red signal to turn green, before driving on, however, one can just take a right turn when the cop is not around*. In another spectrum, within the academic setting, monitoring and sanctioning is often portrayed within students (Kelly, 2008; Sloep et al., 2007), appropriate discipline actions are actually seen as a necessity in supporting positive behaviors (Sugai & Horner, 2008; Sugai, Sprague, Horner, & Walker, 2000). In sum, as teachers are role models of integrity and accountability, proper monitoring and sanctioning can be seen as just normal day to day function within the school.

2.4 Revenge motive

As mentioned in the above literature, when inequality exists within the workplace, employees react. This inequality or sometimes also referred to as injustice is believed to be quite related to the occurrence of CWB (D. A. Jones, 2009). More important is that the resulting reaction from the presence of injustice and/or inequality within the workplace can be manifested in terms of a type of **revenge** (Skarlicki & Folger, 1997). A unique perspective is that this urge for revenge is often considered as a mediator for **retaliatory behavior**; attitudes that can be considered as CWBs (Hung et al., 2009). However, this is contingent to the perceived level of procedural justice or in other words how monitoring and sanctioning is actually taking place (Aquino, Galperin, & Bennett, 2004). In essence, the desire for revenge can be seen as a way to get even with the perceived inequality that is

happening in the workplace.

3. Design

3.1 Framework

This quantitative study is designed as a cross-sectional one, wherein data is collected at one point in time (Mann, 2003). Data is collected in order to evaluate a proposed model explaining the CWB within Taiwan academic setting. Based on the previous mentioned literature, the framework of this study builds on the theory of perceived loafing (PL), monitoring and sanctioning (MAS) within the campus, revenge motive (RM) as an aggressive intention, and the concept of CWB-T. Within the model, it is assumed that PL and MAS are the latent *independent variables* (IV), while RM as the latent *mediator*, and CWB-T as the latent *dependent variable* (DV). Proposed hypotheses are as follows (see figure 1 for the hypothesized theoretical model of the study):

- Hypothesis 1 (H1): PL has significant positive effect on RM.
- Hypothesis 2 (H2): RM has significant positive effect on CWB-T.
- Hypothesis 3 (H3): RM mediates the relationship between PL and CWB-T.
- Hypothesis 4 (H4): MAS has significant negative effect on CWB-T.

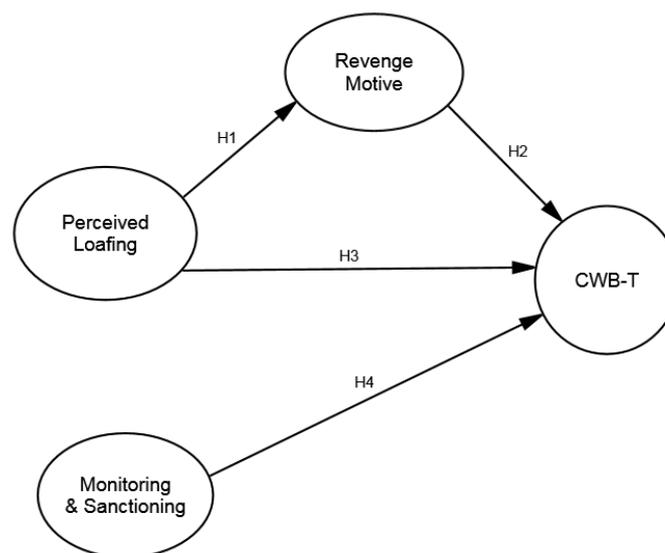


Figure 1. Hypothesized theoretical model

3.2 Participants

Participants of the study are 935 teachers from randomly selected primary and secondary (junior and senior high school) schools from the Northern and Central Taiwan region. Table 1 shows the various demographical backgrounds of the participants. The numbers of male and female teachers are almost equal with 467 and 468 respondents respectively. Of the participants 30% are teachers with teaching only duties, 35% are teachers who are also class advisers (these teachers have additional responsibilities of taking care of the students during homeroom periods), 27% are teachers with administrative duties (these are teachers that have lesser teaching loads, but need to assume other responsibilities as an administrator), 6% are administrative staff, and the remaining 3% are school principals. For the respondents' educational attainment, 45% of the teachers have a bachelor's degree, while the remaining 55% are graduate degree holders (either masters or doctoral degree). This

is actually quite impressive, wherein more than half of the participants have high educational attainment.

As for the participants' school location, 44% are from the Northern Taiwan (the capital region: Taipei and New Taipei City), while 47% are from the Central Taiwan area. For the school size, 10% are from small schools (these are schools with 12 or less than 12 classes), 44% are from medium schools (number of classes of medium schools are from 13 to 48 classes), and 46% are from large schools (these are schools with more than 48 classes). For the school district, 70% are from the urban cities, 25% are from the rural areas, and the remaining 5% are from remote locations such as the outer islands and/or mountain regions.

Table 1

Participants' demographic background (N=935)

Demographics	n	%	Demographics	n	%
Gender			School location		
Male	467	50%	Northern Taiwan	411	44%
Female	468	50%	Central Taiwan	437	47%
Position			School size		
Subject teacher	276	30%	Small (12 class and below)	94	10%
Teacher w/ class adviser duties	324	35%	Medium (13 to 48 class)	413	44%
Teacher w/ administrative duties	251	27%	Large (49 class and above)	428	46%
Administrative staff	53	6%	District		
School Principal	31	3%	Urban (city)	652	70%
Educational attainment			Rural	234	25%
Bachelor degree	424	45%	Remote (outer islands and/or mountain region)	49	5%
Graduate program	511	55%			

3.3 Procedures

A call to participate in the study was disseminated to strategically selected schools located at the Northern and Central Taiwan region. Schools were selected to reflect the actual ratio based on the school size gathered from the 2015 Ministry of Education database. After the school selection process, an invitation for volunteer participation was sent. To comply with the requirements of the research protocol, participants are informed that they are allowed to skip any question or withdraw from survey any time they wish. After one month of data collection, a total of 935 valid responds are collected. Data analysis included the recoding of the CWB-T scores, social desirability check, reliability check, and model fit analysis using the structured equation modelling (SEM).

3.4 Measures

Counterproductive Work Behaviors Taiwan (CWB-T) – The CWB-T is recent scale developed by Hu and her associates (2015) specifically designed for collecting the perceived CWB occurrence within an academic setting. Within their study, a total of eight factors are determined. The factors are as follows: **time theft (TT)** – these include any form of improper or inappropriate reasons for reducing work hours, **inappropriate use of resources (IUR)** – these include the deliberate use, waste, theft, or destruction of schools' properties, **inappropriate student-teacher relationship (ISR)** – these include any inappropriate, unethical, or unprofessional interactions between teachers and students, **inappropriate parent-teacher relationship (IPR)** – these include any inappropriate, unethical, or unprofessional interactions between teachers and parents, **lack of professionalism (LOP)** – these include all the reasons resulting to poor teaching performance, might be from the lack of pedagogical and professional content knowledge in the part of the teacher, **apathy (AP)** – these include the lack of enthusiasm and/or altruism, and unwilling to improve oneself, **political tactics (PT)** – these include forming alliances to gain control of a situation and/or initiate personal attacks, and **reluctant to accept administrative duties (RAD)** – these include the situation wherein a teacher is unwilling to accept any administrative responsibilities besides teaching (Y.-L. Hu et al., 2015, p. 71). The composite reliabilities (CR) of the original factors range from .83 to .92.

Items are initially collected with a 4-point Likert (1932) type scale ranging from 0 to 3; denoting never to always. These are recoded based on Hu et al. (2015) suggestions to either **0** for *none* occurrence and **1** for *possible* occurrence. Hence, items are now dichotomous ranging from *none* to *possible* occurrence. After recoding, Cronbach (1951) alpha values of the factors are computed again with resulting to increased reliabilities. Lastly, in order to lower the complexity of the computation, the eight factors are used into the model as manifest variables.

Perceived loafing (PL) – To collect the perceived loafing of coworkers, the current study used the scale developed by Mulvey and Klein (1998) exhibiting a four item scale, for instance: *Teachers in my school are trying as hard as they can do* (reverse coded) and *Teachers in my school are contributing less than I anticipated*. Responses are collected based on a 4-point Likert (1932) type scale denoting 1 as strongly disagree to 4 strongly agree. Lastly, Cronbach (1951) alpha reliability of the original scale is computed at .74, denoting a reliable scale.

Revenge Motive (RM) – To collect the tendency for revenge, the current study used the scales developed by Jones (2009), wherein there are two factors with two duplicating items each referring to either *organization* or *coworkers*, namely: Revenge motive towards the organization (RMTO) and revenge motive towards coworkers (RMTC). Sample items are as such: *If I were mistreated by the school, the satisfaction of "getting even" would outweigh the risks of getting caught* (RMTO) and *If I were mistreated by my coworkers, it would feel good to "get back" in some way* (RMTC). Responses are also collected based on a 4-point Likert (1932) type scale denoting 1 as strongly disagree to 4 strongly agree. Cronbach (1951) alpha reliabilities of the original scales are computed at .87 and .82, denoting a quite reliable scale. Lastly, according to the study made by Hung et al. (2009) and Jones (2009), both RMTO and RMTC should be regarded as two latent variables separately in order to predict CWB-Organization and CWB-Individual. However, in our model, CWB-T is considered as a higher order factor; hence, both CWBs towards organization and individual are already included. Therefore, within the current study, RMTO and RMTC are combined to form one single construct called **revenge motive** (RM).

Monitoring and sanctioning (MAS) – For the current study, monitoring and sanctioning is collected with the use of the *security control norm* scale developed by Fine et al. (2010) to measure the perceived monitoring and consequences of CWBs. Within their scale, eight items were used to collect the perceived *monitoring and sanction* dimension of security control norm. Some items are *Employees' understandings of what happens if they deviate from company policy and instruction*, *This workplace tends to deal strictly with employees who deviate from policies and instructions*, and *This place of work actively monitors and inspects its employees*. However, it is noted that the security control norm scale is highly related to an individual's integrity (Furnham & Taylor, 2011), hence, within the academic setting, it would be in the teachers' nature to be aware of the monitoring and sanctioning that is occurring within the academic workplace. Original Cronbach (1951) alpha reliabilities of the scale is computed at .80 with data collected using a 4-point Likert (1932) type scale denoting 1 as strongly disagree to 4 strongly agree. Lastly, in order to lower the complexity of computation, the researchers used the mean score of the eight items and place the resulting mean into the model as a single indicator.

3.5 Reliability and validity

It is always important that within a self-reported survey; especially within sensitive issues such as CWB, that the case of social desirability is handled carefully (Fisher & Katz, 2000; Kreuter, Presser, & Tourangeau, 2008; van de Mortel, 2008). To handle this situation, the current study followed the recoding scheme of Hu et al. (2015), wherein the initial Likert (1932) type scale ranging from **0 to 3** for the CWB-T; denoting the perceived occurrence of CWBs from *never to always*, was recoded into either **0 for none occurrence** and **1 for possible occurrence** of CWBs. After the recoding of the CWB-T items, all of the Cronbach (1951) alpha reliabilities increased slightly. Therefore, making the scale more reliable (Cohen, Manion, & Morrison, 2007).

As for the effects of social desirability, the current study also administered the 10 item short-form of Marlowe-Crowne Social Desirability Scale (SDS) (Fisher & Katz, 2000) together with the other scale and

compared the correlation of the results with the different CWB-T factors. Table 2 shows the various mean scores of the SDS scale. As for the correctional analyses, results show that only three CWB-T factors are slightly correlated with SDS. Such as IUR with $r = .067$, $p = .041$, $n = 935$, ISR with $r = .085$, $p = .010$, $n = 935$, and LOP with $r = .076$, $p = .020$, $n = 935$. In sum, most of the CWB-T factors are still unaffected by SDS, hence, results of the scale can be considered as an actual reflection of the CWB situations within the academic workplace.

Table 2

Mean scores of social desirability scale (N=935)

Code	Factor/Items/Cronbach Alpha reliability	M	SD
SDS	Social Desirability Scale ($\alpha=.76$)	2.48	0.40
SD01*	There have been times when I was quite jealous of the good fortune of others	2.08	0.70
SD02*	I sometimes feel resentful when I don't get my own way	2.16	0.70
SD03*	On a few occasions, I have given up doing something because I thought too little of my ability	2.21	0.85
SD04*	There have been occasions when I took advantage of someone	1.91	0.75
SD05*	I can remember "playing sick" to get out of something	1.91	0.80
SD06	I have never been irked when people expressed ideas very different from my own	2.61	0.72
SD07	I am always courteous, even to people who are disagreeable	2.85	0.68
SD08	No matter who I'm talking to, I'm always a good listener	2.97	0.68
SD09	I'm always willing to admit it when I make a mistake	3.04	0.59
SD10	When I don't know something I don't mind at all admitting it	3.07	0.59

Note. Data collected using 4-point Likert scale. *Reverse coded items.

3.6 Descriptive statistics

For the data analysis, the current study used the Statistical Package for the Social Sciences (SPSS) version 20 software to accomplish the various computation, while the model verification is accomplished using the statistical method of structure equation modelling (SEM) with the help of the program Amos version 20 software. Table 3 shows the various mean scores of the CWB-T items and factors, together with the various Cronbach (1951) alpha reliabilities. Note that the reliabilities of the CWB-T factors ranges from .70 to .89 reflecting a reliable instrument (Cohen et al., 2007).

Looking at the mean scores, Table 3 shows that **TT** has the highest perceived occurrence with an overall mean score of 0.66; denoting that around 66% likely occurrence of stealing time and doing inappropriate tasks. Actually these are in fact considered as **loafing** (Brock, Martin, & Buckley, 2013; Snider, 2001). Highest item within TT are *Doing personal stuff while on duty* with a mean of 0.86, *Being online (personal internet surfing; FB) while on duty* with a mean of 0.75, *Chatting while on duty* with a mean of 0.73, *Leaving without asking for leave* with a mean of 0.71, and *Coming to school late and/or going home early* with a mean of 0.70. The occurrence of these CWBs is actually quite high, as their mean scores are higher than 70% indicating a high chance of happening within the academic workplace.

Table 3

Mean scores of CWB-T items (N=935)

Code	Factors/Items/Cronbach Alpha reliability	M	SD
TT	Time Theft ($\alpha=.81$)	0.66	0.31
TT01	Lying about being sick	0.45	0.50
TT02	Leaving without asking for leave	0.71	0.45
TT03	Coming to school late and/or going home early	0.70	0.46
TT04	Asking for leave regardless of the work situation	0.39	0.49
TT05	Doing personal stuff while on duty	0.86	0.35
TT06	Being online (personal internet surfing; FB) while on duty	0.75	0.43
TT07	Chatting while on duty	0.73	0.44

Table 3 ... continued

Code	Factors/Items/Cronbach Alpha reliability	<i>M</i>	<i>SD</i>
IUR	Inappropriate Use of Resources ($\alpha=.70$)	0.29	0.30
IUR01	Waste of school's resources	0.52	0.50
IUR02	Occupying school's resources as if one's own property	0.44	0.50
IUR03	Stealing school resources	0.11	0.31
IUR04	Destruction of school's resources	0.09	0.29
ISR	Inappropriate Student-teacher Relationship ($\alpha=.85$)	0.50	0.34
ISR01	Favoritism or discriminating specific students	0.72	0.45
ISR02	Improper student punishment	0.63	0.48
ISR03	Mocking students	0.51	0.50
ISR04	Discrimination against students	0.22	0.41
ISR05	Deliberate singling out of specific students	0.33	0.47
ISR06	Focusing only on students with good grades and ignoring others	0.49	0.50
ISR07	Separated and cold towards students' problems	0.57	0.50
IPR	Inappropriate Parent-teacher Relationship ($\alpha=.81$)	0.28	0.34
IPR01	Deliberate concealment or providing misleading information	0.36	0.48
IPR02	Improper behavior in front of parents	0.37	0.48
IPR03	Encouraging parents to go against the school	0.24	0.43
IPR04	Conniving with parents	0.14	0.34
IPR05	Ignoring or unwilling to communicate with parents	0.32	0.46
LOP	Lack of Professionalism ($\alpha=.85$)	0.55	0.37
LOP01	Inadequate teacher preparation	0.57	0.50
LOP02	Not following proper curriculum	0.55	0.50
LOP03	Saying improper things during class	0.50	0.50
LOP04	Too few or too much assignments/class activities	0.70	0.46
LOP05	Casual checking of students' assignments	0.43	0.49
LOP06	Improper use of teaching pedagogy (such as too much movie time)	0.54	0.50
AP	Apathy ($\alpha=.82$)	0.59	0.35
AP01	Unwilling to undergo tutoring	0.40	0.49
AP02	Lacks teaching enthusiasm	0.73	0.44
AP03	Wrong use of educational resources	0.75	0.44
AP04	Lacks professional content knowledge	0.48	0.50
AP05	Unwilling to participate in professional development workshops	0.60	0.49
AP06	Lacks the motivation to join professional development programs	0.61	0.49
PT	Political Tactics ($\alpha=.89$)	0.46	0.38
PT01	Gossiping	0.72	0.45
PT02	Spreading wrong/bad information	0.43	0.49
PT03	Improper verbal conduct	0.36	0.48
PT04	Deliberate neglect or ignoring others	0.52	0.50
PT05	Deliberate singling out others	0.42	0.49
PT06	Forming small groups/alliances to go against others	0.45	0.50
PT07	Convincing others to go against the school	0.35	0.48
RAD	Reluctant to accept Administrative Duties ($\alpha=.79$)	0.61	0.37
RAD01	Unwilling to cooperate with school administration	0.51	0.50
RAD02	Going against all educational reforms	0.49	0.50
RAD03	Unwilling to undertake administrative responsibilities	0.75	0.43
RAD04	Miscommunication between teachers and administrators	0.69	0.46

Note. Mean scores recoded into either 0 - no occurrence, 1 - possible occurrence.

Following *TT*, the second highest CWB-T factor is **RAD** with an overall mean score of 0.61. Note that the item *Unwilling to undertake administrative responsibilities* with a mean score of 0.75 denotes that around 75% of the time, faculty has refrained from accepting other duties except teaching. In addition, the CWB-T factor **AP** also has an overall mean of 0.59, which is still quite high. It is sad that around 73% of the time, respondents perceived that teachers *Lacks teaching enthusiasm* with a mean of 0.73. Furthermore, teachers also commit *Wrong use of educational resources* with a mean of 0.75. Lastly, within the **LOP** factor, the item *Too few or too much assignments/class activities* with a mean of 0.70 is also quite high. These results are actually in-line with the recent finding of Ching, Tsay, Hu, and Hung (2016), wherein **TT** and **RAD** are the highest CWB-T factors

within the academic setting. In sum, these CWBs are seen as occurring within a moderate to high level. It is hoped that the succeeding sections should be able to shed some light with regards to the impact of perceived loafing, and monitoring and sanctioning towards an individual's revenge motive and counterproductive work behaviors.

Table 4 shows the various overall mean scores of the other factors and items used. Note that this part of the study is only distributed to 575 respondents, while the table below only depicts two items from each of the factors used in the scale. In addition, the data is collected with the use of a 4-point Likert (1932) type scale denoting 1 as strongly disagree to 4 strongly agree. Cronbach (1951) alpha reliabilities are computed from .68 to .77, hence, scale can be considered as reliable. As for the correlational analyses of the factors, Table 5 shows the various results with all the factors except *MAS* are quite correlated with each other.

Table 4

Mean scores of perceived loafing, revenge motive, and monitoring and sanctioning (n=575)

Code	Factors/Items/Cronbach Alpha reliability	M	SD
PL	Perceived loafing ($\alpha=.71$)	1.98	0.42
PL01*	Teachers in my school are trying as hard as they can do	1.93	0.48
PL02	Teachers in my school are "free-loaders"	1.77	0.57
PL03	Teachers in my school are contributing less than I anticipated	2.09	0.61
PL04*	Given their abilities, teachers in my school are doing the best they can	2.12	0.64
RMTO	Revenge motive towards organization ($\alpha=.69$)	2.23	0.51
RMTO1	If I were mistreated by the school, the satisfaction of "getting even" would outweigh the risks of getting caught	2.13	0.54
RMTO2	If I were mistreated by the school, it would feel good to "get back" in some way	2.33	0.63
RMTC	Revenge motive towards co-worker ($\alpha=.77$)	2.25	0.54
RMTC1	If I were mistreated by my coworkers, the satisfaction of "getting even" would outweigh the risks of getting caught	2.14	0.57
RMTC2	If I were mistreated by my coworkers, it would feel good to "get back" in some way	2.35	0.63
MAS	Monitoring and sanctioning ($\alpha=.68$)	2.22	0.50
MAS1	This workplace tends to deal strictly with employees who deviate from policies and instructions	2.02	0.64
MAS2	This place of work actively monitors and inspects its employees	2.42	0.63

Note. Only two sample items from each of the different type of factors are presented above. Data collected using 4-point Likert scale. *Reverse coded items.

Table 5

Correlational analysis of the various factors (N=935)

Factors	TT	IUR	ISR	IPR	LOP	AP	PT	RAD	PL	RMTO	RMTC	MAS
TT	1											
IUR	.627**	1										
ISR	.592**	.647**	1									
IPR	.516**	.635**	.688**	1								
LOP	.578**	.615**	.722**	.674**	1							
AP	.545**	.563**	.663**	.625**	.750**	1						
PT	.520**	.534**	.638**	.660**	.642**	.659**	1					
RAD	.504**	.495**	.561**	.579**	.630**	.690**	.698**	1				
PL	.193**	.234**	.200**	.266**	.197**	.240**	.259**	.258**	1			
RMTO	.285**	.243**	.274**	.309**	.231**	.278**	.321**	.246**	.315**	1		
RMTC	.295**	.246**	.287**	.355**	.279**	.328**	.348**	.305**	.372**	.780**	1	
MAS	-.069	-.084*	-.054	-.014	-.011	-.034	.014	.022	.210**	.235**	.276**	1

Note. ** $p < .01$ (2-tailed). * $p < .05$ (2-tailed). Shaded values = no significant correlation.

4. Model verification

4.1 Preliminary analyses

For the preliminary analysis, CR and average variance extracted (AVE) of the proposed model was used to prove the reliability and validity of measurement model, while the structure model was used to explain the relationship and effect among latent variables. SEM was estimated using the maximum-likelihood method in the AMOS 20 program (Arbuckle, 2011). With the different (uneven/unequal) number of items for each of the factor, for simplicity, the overall mean scores of each of the factors are used to represent the different variables. Multivariate normality test was used to examine whether the data met the normality assumptions underlying the maximum-likelihood procedure used to test the models in the present study. The results of the multivariate normality test indicated that the data were multivariate normal, multivariate kurtosis was 12.30. Hence, maximum-likelihood method was considered appropriate (see Tables 3 and 4 for the various overall mean scores and standard deviations).

4.2 Measurement model

Before a structural model is tested, Anderson and Gerbing (1988) suggested conducting a confirmatory factor analysis to examine whether the measurement model provides an acceptable fit to the data. Once an acceptable measurement model is developed, the structural model can be tested. Furthermore, following (Tucker and Lewis (1973), Byrne (2009), and Hu and Bentler (1999) suggestions, six fit indices were used to assess goodness of fit for the models. The indices are as such: the *goodness of fit index* (GFI; values >0.90 indicate good fit), the *comparative fit index* (CFI; values >0.90 indicate good fit), the *Tucker-Lewis index* (TLI; values >0.90 indicate good fit), the *non-normed fit index* (NFI; values >0.90 indicate good fit), the *root-mean-square error of approximation* (RMSEA; values <0.08 indicate good fit), and the *standardized root mean square residual* (SRMR; values <0.08 indicate good fit).

A test of the measurement model resulted in a relatively good fit to the data ($\chi^2 = 184.90^{***}$, $df = 72$, GFI = .93, CFI = .96, TLI = .95, NFI = .94, RMSEA = .066, SRMR = .035). All of the standardized loadings of the measured variables on the latent variables were statistically significant with $p < .001$ (see Table 6). CR of the latent variables ranging from .73~.93, AVE ranging from .48~.79, while both CR and AVE are fit to the standards suggested by Fornell and Larcker (1981) and Hair, Black, Babin, and Anderson (2010). Therefore, all of the latent variables appear to have been adequately operationalized by their respective indicators. In addition, most of correlations among the independent latent variables, the mediator latent variable, and dependent latent variables were statistically significant with $p < .001$ (see Table 7 for the correlational analysis and Table 8 for the factor loadings, CR, and AVE of the measurement model).

Table 6

Model fit indices

Indices	Measurement model	Structural model	Criteria
n	309	626	
χ^2	184.90 ^{***}	356.74	
df	72	73	
GFI	.93	.93	>.90
CFI	.96	.95	>.90
TLI	.95	.94	>.90
NFI	.94	.93	>.90
RMSEA	.066	.068	<.08
SRMR	.035	.040	<.05

Note. *** $p < .001$.

Table 7

Correlations matrix for the Measurement Model (33% sample, n = 309)

Latent variables	(1)	(2)	(3)	(4)
(1) CWB-T	1			
(2) Revenge motive	.42***	1		
(3) Perceived loafing	.35***	.46***	1	
(4) Monitoring and sanctioning	-.02	.29***	.31***	1

Note. *** $p < .001$. Shaded values = no significant correlation.

Table 8

Factor loadings for the Measurement Model (33% of sample, n = 309)

Factors/Items	Standardized factor loading	SE	t	AVE	CR
CWB-T					
TT	.68			.63	.93
IUR	.73	0.08	12.72		
ISR	.83	0.09	14.30		
IPR	.82	0.09	14.05		
LOP	.85	0.10	14.53		
AP	.84	0.09	14.40		
PT	.80	0.10	13.87		
RAD	.77	0.10	13.38		
Revenge motive				.79	.88
RMTO	.85				
RMTC	.93	0.08	14.06		
Perceived loafing				.48	.73
PL01	.63				
PL02	.78	0.16	9.43		
PL03	.66	0.15	9.08		
Monitoring and sanctioning					
MAS	1.00				

Note. All standardized factor loading are significant ($p < .001$).

4.3 Structural model for testing the mediated effects

For the testing of the mediated effects of the structural model, SEM was also used. Within the computation for the mediated effects, PL and MAS were taken as latent IV, RM as latent mediator, and CWB-T as latent DV. Results of SEM analysis shows a **good fit** of the model to the data with $\chi^2=356.74^{***}$, $df = 73$, GFI = .93, CFI = .95, TLI = .94, NFI = .93, RMSEA = .068, SRMR = .040 (see Figure 2). In addition, path effect (or sometimes referred to as direct effect) are computed to be significant with $p < .001$, while exhibiting a medium effect size.

Furthermore, MacKinnon, Lockwood, Hoffman, West, and Sheets (2002) noted the many approaches in examining mediation with consideration for Type I error and statistical power. They mentioned that although most studies used the strategy as proposed by Baron and Kenny (1986); which has the least power, many also relied on the application of the Sobel (1982) in examining the significance of mediation effect. However, there is evidence that the distribution of the mediation effect is not normal (Bollen & Stine, 1990; MacKinnon & Dwyer, 1993; Stone & Sobel, 1990), while the utilization of the significance tests such as the *Sobel test*, which assumes a normal distribution when examining the mediation effect, is actually not appropriate. Therefore, in order to remedy this, Shrout and Bolger (2002) suggested the use of the **bootstrap method**, which they proposed should be a better way of examining mediation.

Within Shrout and Bolger (2002) suggestion, the bootstrap method acquires 95% confidence intervals (CI) for the indirect effect by resampling procedure. Based on the central limit theorem, bootstrap method is still considered to be robust even if the distribution of mediation effect is not normal. If 95% CI for the estimates of

the indirect effects based on 5000 indirect effect estimates does not include zero, then it can be concluded that the indirect effect is statistically significant at the .05 level. Therefore, after the structural models were examined through the AMOS 20 program, the bootstrap procedure was used to test whether or not the indirect effects were statistically significant.

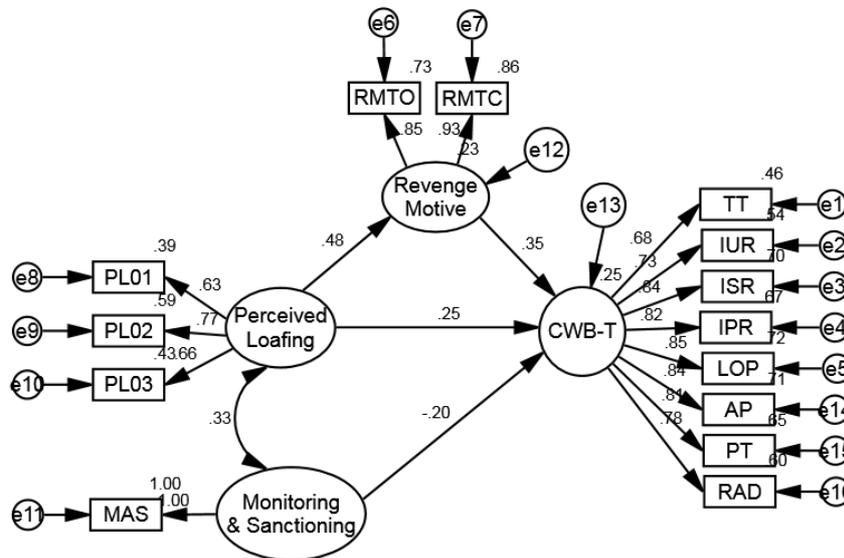


Figure 2. Structure equation model with maximum likelihood estimates (standardized)

It is computed that the indirect effect (or mediation effect) from *PL* to *CWB-T* is $-.17$. The 95% CI for the estimates of the indirect effects ranges from $.11$ ~ $.24$ and does not include zero, therefore, it can be concluded that the mediation effect is statistically significant at the .05 level (see Table 9). In practical terms, results show that within the Taiwan school campus, *RM* plays the role of mediator between *PL* and *CWB-T*. In addition, the total effect is computed using the summation of the direct and indirect effect, hence, the total effect from *PL* to *CWB-T* is $.42$, with 95% CI for total effects ranging from $.29$ ~ $.52$ and does not include zero. Therefore, the total effect is also statistically significant at the .05 level. Lastly, the total effect from *MAS* to *CWB-T* is computed to be $-.20$ with the 95% CI for total effects ranging from $-.30$ ~ $-.10$ and does not include zero, hence, the total effect is statistically significant at the .05 level. This result suggests a good *explained variance* on *CWB-T* in both *positive* and *negative* path (see Figure 2 and Table 9 for more details).

Table 9

Bootstrap analysis of Structural Model (67% of sample, $n = 626$)

Path	Standardized Coefficient	95% CI
H1 Perceived loafing → Revenge motive	.48***	
H2 Revenge motive → CWB-T	.35***	
H3 Perceived loafing → Revenge motive → CWB-T	.17	.11~.24
H4 Monitoring and sanctioning → CWB-T	-.20***	
Total effect on CWB-T by Perceived loafing	.42	.29~.52
Total effect on CWB-T by Monitoring and sanctioning	-.20	-.30~-.10

Note. *** $p < .001$.

5. Conclusion

Achieving equality within the workplace is important. Inside the school, students are able to learn not only during class time, but also by just observing how their teachers interact. Therefore it is quite important that teachers are always providing a good role model for the students to follow. In other words, teachers should always be aware of their behaviors and attitudes. Within the studies of organizational workplace, many revealed

that there always exists a certain amount of CWB. This also holds true within academic institutions, wherein recent studies have shown that there are moderate occurrences of some types of these deviant behaviors. In Taiwan, previous CWB studies within the academic setting have shown that stealing time (or killing time) as the highest rated deviant activity, which the current study also confirmed. Furthermore, the occurrence of these CWB seemed to have increased as compared to previous findings.

As for the underlying relationship between PL, RM, MAS, and CWB-T, the current study proposed a structural model depicting a theory in explaining the occurrence of these deviant behaviors within the Taiwan school campus. Using the statistical method of SEM, results suggest that PL has an increasing effect on both RM and CWB-T. In addition, RM seems to act as a mediator between PL and CWB-T, while MAS exhibits a decreasing effect on PL. Therefore, the proposed hypotheses (1 to 4) are all supported. The test of mediation also confirmed the mediator role of RM between PL and CWB-T. In sum, one path from PL and RM will tend to increase the CWB-T, while the other path from MAS can decrease CWB-T.

These findings actually suggest that even within the school setting, monitoring and sanctioning of faculty should be practiced religiously. Although that policies preventing and/or preempting the occurrence of CWBs might actually be in place even long before, many still are not aware of their existence. More importantly, since most full-time teachers within national (or public) institutions are tenured, they do not have the fear of being laid off. In some sense, nobody wants to be the whistle blower, and break the status-quo. It is hoped that the current study can become an eye opener for policy changes that would help decrease the levels of CWBs within the academic setting. Lastly, in terms of the methodology, Baron and Kenny (1986) noted that if the path of the direct effect is still *significant*, the mediation of the model can only be considered as only having *partial mediation*, therefore, there might still be other effective mediator that can be taken into consideration in future studies with regards to CWB within the academic setting.

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6. References

- Ahmadi, H., Bagheri, F., Ebrahimi, S. A., Rokni, M. A. N., & Safari-Kahre, M. (2011). Deviant work behavior: Explaining relationship between organizational justice and cyber-loafing as a deviant work behavior. *American Journal of Scientific Research*, 24(103-116).
- Alge, B. J., & Hansen, S. D. (2014). Workplace monitoring and surveillance research since "1984": A review and agenda. In M. D. Coovert & L. F. Thompson (Eds.), *The psychology of workplace technology* (pp. 209-237). New York, NY: Routledge.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
<http://dx.doi.org/10.1037/0033-2909.103.3.411>
- Aquino, K., Galperin, B. L., & Bennett, R. J. (2004). Social status and aggressiveness as moderators of the relationship between interactional justice and workplace deviance. *Journal of Applied Social Psychology*, 34(5), 1001-1029. <http://dx.doi.org/10.1111/j.1559-1816.2004.tb02581.x>
- Arbuckle, J. L. (2011). *IBM SPSS Amos 20 user's guide*. Armonk, NY: IBM.
- Barling, J., & Phillips, M. (1993). Interactional, formal, and distributive justice in the workplace: An exploratory study. *The Journal of Psychology*, 127(6), 649-656. <http://dx.doi.org/10.1080/00223980.1993.9914904>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349-360.

- Bodla, M. A., & Danish, R. Q. (2011). Moderating role of social exchange perceptions between perceived organizational politics and antisocial behavior. *Journal of Economics and Behavioral Studies*, 3(5), 279-286.
- Bollen, K. A., & Stine, R. A. (1990). Bootstrapping goodness-of-fit measures in structural equation models. *Sociological Methods and Research*, 21(2), 205-229. <http://dx.doi.org/10.1177/0049124192021002004>
- Breckler, S. J., Olson, J., & Wiggins, E. (2006). *Social psychology alive*. Andover, Hampshire: Cenage Learning.
- Brock, M. E., Martin, L. E., & Buckley, M. R. (2013). Time theft in organizations: The development of the time banditry questionnaire. *International Journal of Selection and Assessment*, 21(3), 309-321. <http://dx.doi.org/10.1111/ijisa.12040>
- Byrne, B. M. (2009). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). New York, NY: Taylor Francis.
- Carpenter, J. P. (2007). Punishing free-riders: How group size affects mutual monitoring and the provision of public goods. *Games and Economic Behavior*, 60(1), 31-51. <http://dx.doi.org/10.1016/j.geb.2006.08.011>
- Ching, G. S., Tsay, W.-R., Hu, Y.-L., & Hung, C.-H. (2016). Counterproductive work behaviors within academic institutions: A myth or a reality. *International Journal of Research Studies in Psychology*, 6(1), 1-14. <http://dx.doi.org/10.5861/ijrsp.2016.1629>
- Çınar, O., & Karcioglu, F. (2015). The relationship between cyber loafing and organizational citizenship behavior: A survey study in Erzurum/Turkey. *Procedia - Social and Behavioral Sciences*, 207(20), 444-453. <http://dx.doi.org/10.1016/j.sbspro.2015.10.114>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York: Routledge.
- Cornelius, N. (2002). *Building workplace equality: Ethics, diversity and inclusion*. London: Thomson.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 197-334. <http://dx.doi.org/10.1007/BF02310555>
- Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25(3), 357-384. <http://dx.doi.org/10.1177/014920639902500305>
- Fine, S., Horowitz, I., Weigler, H., & Basis, L. (2010). Is good character good enough? The effects of situational variables on the relationship between integrity and counterproductive work behaviors. *Human Resource Management Review*, 20(1), 73-84. <http://dx.doi.org/10.1016/j.hrmr.2009.03.010>
- Fisher, R., & Katz, J. E. (2000). Social-desirability bias and the validity of self-reported values. *Psychology & Marketing*, 17(February), 105-120.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <http://dx.doi.org/10.2307/3151312>
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59(3), 291-309. <http://dx.doi.org/10.1006/jvbe.2001.1803>
- Fox, S., & Stallworth, L. E. (2010). The battered apple: An application of stressor-emotion-control/support theory to teachers' experience of violence and bullying. *Human Relations*, 63(7), 927-954. <http://dx.doi.org/10.1177/0018726709349518>
- Furnham, A., & Taylor, J. (2011). *Bad apples: Identify, prevent and manage negative behavior at work*. New York, NY: Palgrave Macmillan.
- Giacolone, R. A., & Greenberg, J. (1997). *Antisocial behavior in organizations*. Thousand Oaks, CA: Sage.
- Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2006). The path to a healthy workplace: A critical review linking healthy workplace practices, employee well-being, and organizational improvements. *Consulting Psychology Journal: Practice and Research*, 35(3), 129-147. <http://dx.doi.org/10.1037/1065-9293.58.3.129>
- Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment*, 11(1), 30-42. <http://dx.doi.org/10.1111/1468-2389.00224>
- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. Upper Saddle, NJ: Pearson.
- Hammer, L. B., Bauer, T. N., & Grandey, A. A. (2003). Work-family conflict and work-related withdrawal behaviors. *Journal of Business and Psychology*, 17(3), 419-436. <http://dx.doi.org/10.1111/10.1023/A:1022820609967>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <http://dx.doi.org/10.1080/10705519909540118>
- Hu, Y.-L., Hung, C.-H., & Ching, G. S. (2015). Examining the counterproductive work behaviors within Taiwan academic setting: A pilot study. *Higher Education Evaluation and Development*, 9(1), 63-82.

- <http://dx.doi.org/10.6197/HEED.2015.0901.04>
- Hung, T. K., Chi, N. W., & Lu, W. L. (2009). Exploring the relationships between perceived coworker loafing and counterproductive work behaviors: The mediating role of a revenge motive. *Journal of Business and Psychology*, 24(3), 257-270. <http://dx.doi.org/10.1007/s10869-009-9104-6>
- Jones, D. A. (2009). Getting even with one's supervisor and one's organization: Relationships among types of injustice, desires for revenge, and counterproductive work behaviors. *Journal of Organizational Behavior*, 30(4), 525-542. <http://dx.doi.org/10.1002/job.563>
- Jones, G. E., & Kavanagh, M. J. (1996). An experimental examination of the effects of individual and situational factors on unethical behavioral intentions in the workplace. *Journal of Business Ethics*, 15(5), 511-523. <http://dx.doi.org/10.1007/BF00381927>
- Kelly, S. (2008). Social identity theories and educational engagement. *British Journal of Sociology of Education*, 30(4), 449-462. <http://dx.doi.org/10.1080/01425690902954620>
- Kidwell, R. E. (2010). Loafing in the 21st century: Enhanced opportunities - and remedies - for withholding job effort in the new workplace. *Business Horizons*, 53(6), 543-552. <http://dx.doi.org/10.1016/j.bushor.2010.06.001>
- Kreuter, F., Presser, S., & Tourangeau, R. (2008). Social desirability bias in CATI, IVR, and web surveys: The effects of mode and question sensitivity. *Public Opinion Quarterly*, 72(5), 847-865.
- Latané, B., Williams, K., & Harkins, S. (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology*, 37(6), 822-832. <http://dx.doi.org/10.1037/0022-3514.37.6.822>
- Lazega, E. (2000). Rule enforcement among peers: A lateral control regime. *Organization Studies*, 21(1), 193-214. <http://dx.doi.org/10.1177/0170840600211003>
- Liden, R. C., Wayne, S. J., Jaworski, R. A., & Bennett, N. (2004). Social loafing: A field investigation. *Journal of Management*, 30(2), 285-304. <http://dx.doi.org/10.1016/j.jm.2003.02.002>
- Likert, R. (1932). *A technique for the measurement of attitudes*. New York: Columbia University Press.
- Lim, V. K. G., & Chen, D. J. Q. (2012). Cyberloafing at the workplace: Gain or drain on work? *Behaviour & Information Technology* 31(4), 343-353. <http://dx.doi.org/10.1080/01449290903353054>
- Lim, V. K. G., & Teo, T. S. H. (2005). Prevalence, perceived seriousness, justification and regulation of cyberloafing in Singapore: An exploratory study. *Information & Management*, 42(8), 1081-1093. <http://dx.doi.org/10.1016/j.im.2004.12.002>
- Lumpkin, A. (2008). Teachers as role models teaching character and moral virtues. *Journal of Physical Education, Recreation & Dance*, 79(2), 45-50. <http://dx.doi.org/10.1080/07303084.2008.10598134>
- MacKinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17(2), 144-158. <http://dx.doi.org/10.1177/0193841X9301700202>
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104.
- Mann, C. J. (2003). Observational research methods. Research design II: Cohort, cross sectional, and case-control studies. *Emergency Medicine Journal*, 20, 54-60. <http://dx.doi.org/10.1136/emj.20.1.54>
- Marcus, B., Taylor, O. A., Hastings, S. E., Sturm, A., & Weigelt, O. (2016). The structure of counterproductive work behavior: A review, a structural meta-analysis, and a primary study. *Journal of Management*, 42(1), 203-233. <http://dx.doi.org/10.1177/0149206313503019>
- Martinko, M. J., Gundlach, M. J., & Douglas, S. C. (2002). Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment*, 10(1-2), 36-50. <http://dx.doi.org/10.1111/1468-2389.00192>
- Moede, W. (1927). The guidelines of performance psychology [Die richtlinien der leistungs-psychologie]. *Industrial Psychotechnics [Industrielle Psychotechnik]*, 4, 193-207.
- Mulvey, P. W., & Klein, H. J. (1998). The impact of perceived loafing and collective efficacy on group goal processes and group performance. *Organizational Behavior and Human Decision Processes*, 74(1), 62-87.
- Murphy, S. M., Wayne, S. J., Liden, R. C., & Erdogan, B. (2003). Understanding social loafing: The role of justice perceptions and exchange relationships. *Human Relations*, 56(1), 61-84. <http://dx.doi.org/10.1177/0018726703056001450>
- Orr, S. W. (2001). The economics of shame in work groups: How mutual monitoring can decrease cooperation in teams. *Kyklos*, 54(1), 49-66. <http://dx.doi.org/10.1111/1467-6435.00140>
- Paillé, P., & Grima, F. (2011). Citizenship and withdrawal in the workplace: Relationship between organizational citizenship behavior, intention to leave current job and intention to leave the organization. *The Journal of Social Psychology*, 151(4), 478-493. <http://dx.doi.org/10.1080/00224545.2010.507266>
- Peterson, D. K. (2002). Deviant workplace behavior and the organization's ethical climate. *Journal of Business*
-

- and *Psychology*, 17(1), 47-61. <http://dx.doi.org/10.1023/A:1016296116093>
- Price, K. H., Harrison, D. A., & Gavin, J. H. (2006). Withholding inputs in team contexts: Member composition, interaction processes, evaluation structure, and social loafing. *Journal of Applied Psychology*, 91(6), 1375-1384. <http://dx.doi.org/10.1037/0021-9010.91.6.1375>
- Reiss, M. C., & Mitra, K. (1998). The effects of individual difference factors on the acceptability of ethical and unethical workplace behaviors. *Journal of Business Ethics*, 17(14), 1581-1593. <http://dx.doi.org/10.1023/A:1005742408725>
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38(2), 555-572.
- Sackett, P. R. (2002). The structure of counterproductive work behaviors: Dimensionality and relationships with facets of job performance. *International Journal of Selection and Assessment*, 10(1-2), 5-11. <http://dx.doi.org/10.1111/1468-2389.00189>
- Salami, S. O. (2010). Job stress and counterproductive work behavior: Negative affectivity as a moderator. *The Social Sciences*, 5(6), 486-492.
- Semmer, N. K., Tschann, F., Meier, L. L., Facchin, S., & Jacobshagen, N. (2009). Illegitimate tasks and counterproductive work behavior. *Applied Psychology*, 59(1), 70-96. <http://dx.doi.org/10.1111/j.1464-0597.2009.00416.x>
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422-445. <http://dx.doi.org/10.1037/1082-989X.7.4.422>
- Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82(3), 434-443. <http://dx.doi.org/10.1037/0021-9010.82.3.434>
- Sloep, P., Kester, L., Brouns, F., Van Rosmalen, P., De Vries, F., De Croock, M., et al. (2007). Ad hoc transient communities to enhance social interaction and spread tutor responsibilities. In V. Uskov (Ed.), *The sixth IASTED international conference on web-based education* (pp. 549-554). Calgary, Canada: Acta Press.
- Snider, L. (2001). Crimes against capital: Discovering theft of time. *Social Justice*, 28(3), 105-120.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology 1982* (pp. 290-312). San Francisco, CA: Jossey-Bass.
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68(3), 446-460. <http://dx.doi.org/10.1016/j.jvb.2005.10.005>
- Stone, C. A., & Sobel, M. E. (1990). The robustness of estimates of total indirect effects in covariance structure models estimated by maximum likelihood. *Psychometrika*, 55(2), 337-352. <http://dx.doi.org/10.1007/BF02295291>
- Sugai, G., & Horner, R. (2008). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy*, 24(1-2), 23-50. http://dx.doi.org/10.1300/J019v24n01_03
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tiered system approaches. *Exceptionality*, 17(4), 223-237. <http://dx.doi.org/10.1080/09362830903235375>
- Sugai, G., Sprague, J. R., Horner, R. H., & Walker, H. M. (2000). Preventing school violence: The use of office discipline referrals to assess and monitor school-wide discipline interventions. *Journal of Emotional and Behavioral Disorders*, 8(2), 94-101. <http://dx.doi.org/10.1177/106342660000800205>
- Sunoo, B. (1996). This employee may be loafing: Can you tell? Should you care? *Personnel Journal*, 75(12), 54-62.
- Tsaw, D., Murphy, S. M., & Detgen, J. (2011). Social loafing and culture: Does gender matter? *International Review of Business Research Papers*, 7(3), 1-8.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1-10. <http://dx.doi.org/10.1007/BF02291170>
- Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of Applied Psychology*, 95(4), 769-780. <http://dx.doi.org/10.1037/a0019214>
- van de Mortel, T. F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, 25(4), 40-48.
- Zoghbi-Manrique-de-Lara, P. (2011). Predicting nonlinear effects of monitoring and punishment on employee deviance: The role of procedural justice. *European Management Journal*, 29(4), 272-282. <http://dx.doi.org/10.1016/j.emj.2011.03.003>

