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## The Impact of Workplace Bullying on Workers' Psychological and Emotional Well-Being: A Study of 139 University Staff in Ghana

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### **Abstract:**

*This study was geared towards unearthing the prevalence and effect of bullying on the psyche and emotions of university workers in Ghana. Hitherto, nothing has been heard about how bullying affects individuals within these Ivory Towers although by word of mouth, the phenomenon is said to be occurring in most places. 139 respondents were sampled from selected universities in Ghana via a snowball approach. Data was subsequently collected from them using a structured questionnaire and the results were then tabulated and a Chi-Square test was used to test the significance of the relationship between experiencing bullying acts and the three variables. MANOVA as well as an independent T-Test were deployed to analyse the intervening effect of gender on the effect of bullying on the individual. The research findings corroborate many of the conclusions drawn in bullying. This study reveals clearly that university staff in Ghana who have experienced bullying behaviour had a significantly higher level of negative self-worth (depression, disempowerment (feeling of helplessness) and disrespect) than respondents who have not experienced bullying behaviour. This implies that bullying behaviour has significant influence on an individual's self-worth. However, the findings from this study are given under a differentiated cultural background and a study of the influence of culture on the prevalence of bullying is forthright. Furthermore, a longitudinal survey is also encouraged to add knowledge of the long-term effect of bullying on university staff. The prevalence of workplace bullying in the nation's universities should be further investigated and policies framed to ensure the psychological and physiological well-being of the nation's knowledge workers and to secure the future of education in Ghana.*

**Keywords:** *Bullying, university staff, emotional health, emotional well-being, organisational outcomes.*

### **1. Introduction**

Bullying has been on the research plate for many years and that for the wrong reasons. Bullying has been labelled in other research work as bullying, abusive supervision, tyranny, toxic leadership etc. and it is identified by "repeated and persistent negative actions towards one individual or group which involves a perceived power imbalance and creates a hostile environment" (Salin, 2003, p.1214). It includes the emotional abuse and mistreatment of employees, primarily at the hands of supervisors, but may include peer bullying; verbal abuse such as shouting, insulting, threatening, undermining, changing aspects of an employee's work without providing sufficient notice, withholding information (Brotheridge, 2013), excluding individuals (Lee and Brotheridge, 2006), unrealistically high or unfair expectations, holding hostage needed favours such as time off; ridiculing and disrespecting a person publicly; saddling the person with too much work which devalues personal life; overly-controlling a person and by so doing killing sense of initiative and self-worth; picking on the target's weaknesses, using social isolation, name calling to , setting up a subordinate to fall; downgrading other peoples' capabilities (Bassman, 1992 In Bassman and London, 1993), scapegoating subordinates (Gregory et al., 2013).

Its negative effects on both the individual and the organisation have been so pronounced that organisations like the Workplace Bullying Institute in their 2010 report have raised concerns. Bullying behaviour has been described in many adjectival varieties. A bully is said in broad terms, to generally 'act in an arbitrary and self-aggrandizing manner'; 'belittle subordinates', 'lack 'consideration for others'; 'forces conflict resolution'; 'discourages initiative'; and 'use non-contingent punishment' (Starratt et al,2010).Specific acts according to Starratt et al (2010) may include: being unfriendly, antagonistic, intimidating, displeasing, upsetting, and manifesting in behaviours such as, Playing favorites, dealing dirty work as punishment, threatening employees, Blurring the lines between personal and professional, Talking behind employees' backs, Putting employees down, criticizing publicly, setting unrealistic expectations, Telling lies; and Illegal practices.

Furthermore, Rayner and Hole, (1997) indicates that some acts include denying the employee access to information important to her career or job, giving the employee very little work to do, constantly trivializing an employee's views and opinions. regularly humiliate the employee with the use of put-downs/insults/sarcasm, pressure the employee to resign from the organization, label employee as

‘stirrer’ or trouble maker, shout or scream at employee repeatedly, encourage other workers to ‘gang up’ on the employee, constantly criticize or ‘nit-pick’ his or her work and constantly ignore his request for help or advice. These undesirable management behaviours (Gregory et al., 2013) are problematic to individual and corporate goals and can result in high levels of anxiety (Bordia and Tang, 2009), disempowerment (feeling of helplessness) (Ashforth, 1997), psychological disempowerment, emotional exhaustion and turnover intentions (Tepper, 2000), job dissatisfaction (Tepper, 2000), employee job neglect (Karimi et al., 2014) poor or negative organisational citizenship behaviour (Gregory et al., 2013) etc. Bullying practices have been shown to cause various psychological and physical symptoms. At the individual level, the effects of bullying behaviour is in two parts: The Psychological effects and the Physiological effects.

### *1.1. The Psychological Effects of Bullying on the Individual*

These include the following: lower job and life satisfaction, lower normative and affective commitment, and higher continuance commitment, conflict between work and family, and psychological distress, prolonged stress. Prolonged stress at work is associated with psychological disorders such as anxiety and depression (Weinberg and Creed, 2000). The psychological symptoms include feeling of disempowerment (feeling of helplessness) (Ashforth, 1997) generalized stress, anxiety (Bordia and Tang 2009), depression and difficulty concentrating, emotional exhaustion (Tepper, 2000), low levels of self-esteem (Hobman et al., 2009), impaired judgment, anger, memory loss and inability to concentrate, irritability and anxiety (Appelbaum and Roy-Girard, 2007).

### *1.2. The psychosomatic Effect of Bullying at the Workplace*

According to the psychosomatic hypothesis, negative affect causes physical health problems. It seems plausible that victims of Bullying would suffer psychological distress and consequently suffer physical symptoms. For example, anxiety arising from threats made at the workplace could, over time, lead to stomach disorders. Stress contributes to the development of disease because it disrupts the body’s equilibrium (Djurkovic et al., 2006). There is strong evidence that negative psychological states are morbid. For example, there is a high degree of comorbidity between anxiety and medically unexplained symptoms (MUS) (De Gucht et al, 2004). Furthermore, prolonged stress leads to chronic cardiovascular over activity, which is an etiological factor for cardiovascular disease and hypertension (McEwen, 1998).

### *1.3. The Physiological Effects of Bullying Behaviour on the Individual*

The physical symptoms include: sleep disruption, stomach disorders, headaches, body ache, exhaustion and rapid heart rate. Other physiological effects known are changes in blood pressure, muscle tension, impaired judgment, irritability, anxiety, anger, an inability to concentrate and memory loss. Appelbaum and Roy-Girard (2007) suggested that a negative work environment can have severe effects on employee health: ‘employees might suffer from psychological effects, such as; impaired judgment, irritability, anxiety, anger, an inability to concentrate and memory loss’ (Appelbaum and Roy-Girard, 2007). Zapf (1999)’s study also identified that victims of workplace bullying displayed higher levels of anxiety and depression as well as lower levels of reported self-esteem and high turnover intentions. Bullying is thus an etiological factor for many mental health problems and can render victims susceptible to serious physical conditions such as cardiovascular diseases (Fitzgerald and Eijnatten, 2002; Kivimaki et al., 2003).

### *1.4. Effects of Bullying at the Organisational Level*

The effects of bullying behaviour are generally referred to as ‘Organisational Outcomes’. These include the functional and relational activities and behaviours of members of an organisation. Some of these include: deviant behaviour, aggression, revenge, (Heames et al., 2006), work-alienation, low unit cohesiveness, low leader-endorsements and low levels of performance leading to a loss to the organisation. For instance, in the USA alone, a record amount of \$200 billion is lost each due to employee deviance (Appelbaum and Roy-Girard, 2007). Co-worker relationships have been known to be distorted by bullying behaviour leading to low organisational Citizenship behaviour and low team-spirit (Heames and Harvey, 2006). Employees are said to provide coworker psychological support and perform extra duties when they have a positive leader-follower relationship with their managers. Other areas of organisational life affected by Bullying behaviour include bottom-line performance problems for the organisation (Gregory et al., 2012), low motivation and low commitment (Gregory et al., 2013) Bullying behaviour has also been associated with low level employee perception of justice and subordinate resistance behaviours (Tepper et al., 2009)

## **2. Research Objectives**

The main objectives of this research is to identify the effects of bullying on individual Sense of empowerment. The study also identifies the effects of bullying on individual’s Emotional wellbeing. Also, the study identifies the effects of bullying on individual Sense of self-worth within the Ghanaian context.

### *2.1. Method*

A total of 139 respondents were sampled via snowball approach. Of this number, 72 were males and 67 were females. Three items were scaled and respondents were asked to indicate the degree to which they agreed or disagreed with each of the items. The results were then tabulated and a Chi-Square test was used to test the significance of the relationship between experiencing bullying acts and the three variables. Manova as well as an independent T-Test were deployed to analyse the intervening effect of gender on the effect of bullying on the individual. The findings are presented and discussed below

### 3. Results and Discussion

Table 1: Results of respondents' perception of disempowerment (feeling of helplessness) as a consequence of an experience of workplace bullying.

	Frequency	Percent
Strongly disagree	7	5.0
Disagree	23	16.4
Undecided	26	18.6
Agree	44	31.4
Strongly agree	40	28.4

Table 1: Disempowerment (feeling of helplessness):  
Source: field data (2015)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.709 <sup>a</sup>	4	.013
Likelihood Ratio	13.064	4	.011
Linear-by-Linear Association	6.622	1	.010
N of Valid Cases	134		

Table 2: Chi-Square Test results on the relation between experience of bullying and Disempowerment (feeling of helplessness)  
Source: field data (2015)

The table above shows that 84 of the respondents who experienced bullying acts affirmed (agreed or strongly agreed) that bullying acts results in depression. A further 30 of the respondents also witnessed others suffer from depression as a result of experiencing bullying acts. Put together, 61 respondents report disempowerment (feeling of helplessness) as an effect of bullying. The chi-square test above shows that there is a significant relationship between experiencing bullying acts and having a sense of disempowerment (feeling of helplessness) [ $\chi^2 = 12.709, p < 0.05$ ].

	Frequency	Percent
Strongly disagree	13	9.5
Disagree	18	13.1
Undecided	19	13.9
Agree	26	19.0
Strongly agree	61	44.5

Table 3: Results of respondents' perception of Emotional ill-being (depression) as a consequence of an experience of workplace bullying.  
Source: field data (2015)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.646 <sup>a</sup>	4	.156
Likelihood Ratio	7.102	4	.131
Linear-by-Linear Association	4.564	1	.033
N of Valid Cases	131		

Table 4: Chi-Square test of the significance of relationship between experience of bullying and Emotional ill-being (feeling of depression)  
Source: field data (2015)

87 respondents affirmed (agreed or strongly agreed) that bullying acts causes depression. However, the chi-square test did not show any significant relationship between experience of bullying acts and depression [ $\chi^2 = 6.646, p > 0.05$ ].

	Frequency	Percent
Strongly disagree	17	12.8
Disagree	19	14.3
Undecided	22	16.5
Agree	32	24.1
Strongly agree	43	32.3

Table 5: Results of respondents' perception of negative self-worth (feeling overlooked and disrespected) as a consequence of an experience of workplace bullying.  
Source: field data (2015)

The table above shows that 20 of the respondents who experienced bullying acts agree from one degree that bullying acts make them feel overlooked and disrespected. A further 23 of the respondents have interacted with bullying victims who reported negative self-worth (feeling overlooked and disrespected) as a result of experiencing bullying acts. An independent T-Test was also conducted to measure the effect of bullying on both gender who have experienced disempowerment (feeling of helplessness), emotional ill-being (depression) and negative self-worth and (sense of being overlooked and disrespected)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.024 <sup>a</sup>	4	.017
Likelihood Ratio	12.841	4	.012
Linear-by-Linear Association	.216	1	.642
N of Valid Cases	127		

Table 6: Chi-Square Tests  
Source: field data (2015)

The chi-squares disclose a significant relationship between bullying acts and feeling of negative self-worth (being overlooked and disrespected) [ $X^2= 12.024$ ,  $p<0.05$ ]. All the three variables above, helplessness, feeling of helplessness and feeling of being overlooked and being disrespected are representative of employee sense of disempowerment, emotional well-being and negative self-worth. The Chi-Square tests on the relationship between workplace bullying and each of the variables indicates clearly that there is a relationship between bullying in the university and the three variables. A further independent T-test was carried out to ascertain if gender had anything to do respondents' feeling of negative self-worth. Results of the independent T-test is shown below in table 7.

	N	Mean	SD
Disempowerment: Male	69	3.74	0.98
Female	59	3.61	1.19
Emotional Wellbeing: Male	69	3.88	1.23
Female	59	3.83	1.35
Self-Worth: Male	69	4.01	1.12
Female	59	2.75	1.38

Table 7: An Independent T test on the influence of gender on feelings of disempowerment, emotional wellbeing and self-worth as a result of experiencing bullying.  
Source: field data (2015)

The above table shows means and standard deviations scores of males and females on the effects of workplace bullying (Disempowerment, Emotional Wellbeing and Self-Worth respectively).

A MANOVA was also done to test the significance of gender as a moderator in the relationship between workplace bullying and the three variables. The results are as follows:

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
GENDER	Disempowerment	.529	1	.529	.452	.502
	Emotional Wellbeing	.091	1	.091	.055	.815
	Self-Worth	51.195	1	51.195	32.882	.000
Error	Disempowerment	147.338	126	1.169		
	Emotional Wellbeing	209.378	126	1.662		
	Self-Worth	196.172	126	1.557		
Total	Disempowerment	1881.000	128			
	Emotional Wellbeing	2116.000	128			
	Self-Worth	1753.000	128			

Table 8: A MANOVA test on Gender as a moderator  
Source: field data (2015)

The Multivariate Analysis Table shows that males and females did not differ on disempowerment as an effect of workplace bullying [ $F_{(1,126)} = .452$ ,  $p>0.05$ ]. On the same vein, gender did not have any significant effect on emotional wellbeing as an effect of workplace bullying [ $F_{(1,126)} = .055$ ,  $p>0.05$ ]. However, gender had a significant effect on self-worth as an effect of workplace bullying [ $F_{(1,126)} = 32.882$ ,  $p<0.05$ ]. The multiple comparison table is therefore prepared.

	Male	Female
Male	-	1.27*
Female	-	-

Table 9: Multiple Comparison Table comparing males and females on Self-Worth  
Source: field data (2015)

A further testing of the variance in the gender-based differences of the effect of bullying as seen above showed that males had significantly higher levels of negative self-worth as an effect of workplace bullying than females. The reasons for the above are not too hard to find. Prior studies done on males' conceptualization of self-worth versus women's conceptualization of self-worth provide significant explanation for the results shown above. Though the results of prior studies as mentioned above differ in perspectives, it is generally agreed that men have a different value base from where they derive their sense of self-worth than women (Markus & Oyserman, 1988; Miller, 1986). Women are said to operate from a *collectivist, ensemble* point of view whereas men are more individualistic, independent minded with need to feel being connected to or attuned to on one hand and fulfilling the goals of being autonomous and superior to others respectively (Josephs et al, 1992). Women are reported to be more emotionally responsive in situations of bullying (Brotheridge & Lee, 2010). However, in this study males showed significantly higher levels of negative self-worth than females. This is correlates to the Ghanaian societal role casting for males which casts the man as an epitome of pride. Males are therefore more predisposed to feeling disrespected and to low self-worth when subjected to bullying acts in the workplace.

		N	Mean	SD	Df	t	P
Self-worth	Males	72	11.36	3.19	137	3.435	0.001
	females	67	9.36	3.88			

Table 10: The Influence of gender on effects of bullying (self-worth)  
Source: field data (2015)

The above table shows that males ( $m=11.36$ ,  $SD=3.19$ ) had a significantly higher level of negative self-worth (depression, disempowerment (feeling of helplessness) and disrespect) than females ( $m=9.36$ ,  $SD= 3.88$ ). Statistically stated, [ $t_{(137)}= 3.435$ ,  $p<0.05$ ]. The above table shows that respondents who have experienced bullying behaviour (mean= 11.80,  $SD=3.01$ ) had a significantly higher level of negative self-worth (depression, disempowerment (feeling of helplessness) and disrespect) than respondents who have not experienced bullying behaviour ( $m=9.36$ ,  $SD= 3.88$ ). Statistically stated, [ $t(134)= 3.08$ ,  $p<0.05$ ]. This implies that bullying behaviour has significant influence on an individual's self-worth.

#### 4. Conclusion

Employee health is crucial towards high performance and increased productivity. Many factors contribute to or hinder an employee's well-being especially psychological well-being. This research's findings indicate that indeed bullying at the work place has tremendous negative effect on employees' health (Appelbaum and Roy-Girard, 2007). The most crucial but often silent dangers to an employee's health has been said to be psychosomatic illness which can lead to physical health problems (Djurkovic et al., 2006). For example, De Gucht et al, (2004) have proposed that there is a relationship between anxiety and medically unexplained symptoms (MUS) and prolonged stress leads to chronic cardiovascular over activity, which is an etiological factor for cardiovascular disease and hypertension (McEwen, 1998). Physiological effects have also been suggested such as changes in blood pressure, muscle tension, impaired judgment, irritability, anxiety, anger, an inability to concentrate and memory loss. Depression has been also reported as being a predictor of lowered levels of self-esteem and high turnover intentions (Fitzgerald and Eijnatten, 2002; Kivimaki et al., 2003). This study reveals clearly that university staff in Ghana who have experienced bullying behaviour (mean= 11.80,  $SD=3.01$ ) had a significantly higher level of negative self-worth (depression, disempowerment (feeling of helplessness) and disrespect) than respondents who have not experienced bullying behaviour. This implies that bullying behaviour has significant influence on an individual's self-worth.

#### 5. Policy Implications

The findings of this study require urgent attention because of the snowball effects of the outcomes of bullying among university staff on knowledge transfer and the general productivity levels of academic institutions in Ghana. If faculty and staff of universities, who are to deliver on the nation's manpower needs themselves have emotional and psychologically deficits, how can the nation harness and benefit from their mine of knowledge towards execution of national development agenda? The prevalence of workplace bullying in the nation's universities should be further investigated and policies framed to ensure the psychological and physiological well-being of the nation's knowledge workers and to secure the future of education in Ghana.

#### 6. Implications for Research

The findings of this research are limited in the sense that it was a cross-sectional study. Although there is the tendency for a prolonged study to negatively affect the external validity of the findings because of 'interaction effect of testing' (Best and Khan, 1993), further longitudinal survey is also encouraged to add knowledge on the long-term effect of bullying on university staff. Secondly, longitudinal pre-entry and post-career psychological survey on the well-being of university staff is proposed in order to sufficiently identify and cure elements within the university environment that are a menace to sustainable educational development of the nation.



## 7. References

- i. Appelbaum, Steven H and Roy-Girard, David (2007). Toxins in the workplace: affect on organisations and employees. *Corporate Governance*, 7 (1), 17-28.
- ii. Ashforth, B.E. (1997). Petty tyranny in organizations: a preliminary examination of antecedents and consequences. *Canadian Journal of Administrative Sciences*, 14 (2), 126-140.
- iii. Bassman, E (1992). *Abuse in the Work place: Management Remedies and Bottom Line Impact*, Quorum Press, Westport In Bassman, Emily and London, Manuel (1993) *Abusive Managerial Behaviour*. *Leadership & Organization Development Journal*, 14 (2), 18-24.
- iv. Baumeister, R.F. and Leary, M.R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117 (3), 497-529.
- v. Bordia, P and Tang, R. L (2009). Abusive Supervision in advertising relationships: investigating the role of social support. *Applied Psychology: An International Review*, 58, 233-256. In Xiaqi,
- vi. Ding; Kun, Tian; Chongsen, Yang and Sufang, Gong (2012) *Abusive Supervision and LMX- Leaders' emotional intelligence as antecedent variable and trust as consequence variable*. *Chinese Management Studies*, 6 (2), 257-270.
- vii. Brotheridge, Celeste M (2013). Explaining Bullying: using theory to answer practical questions. *Team Performance Management*, 19 (3/4), 185-200.
- viii. Brotheridge, Celeste M. and Lee, Raymond T. (2010). Restless and confused. Emotional responses to workplace bullying in men and women. *Career Development International*, 15 (7), 687-707.
- ix. De Gucht, V., Fischler, B. and Heiser, W. (2004). Neuroticism, alexithymia, negative affect, and positive affect as determinants of medically unexplained symptoms. *Personality and Individual Differences*, 36, 1655-67.
- x. Djurkovic, N., McCormack, D. and Casimir, G. (2006). Neuroticism and the psychosomatic model of workplace bullying. *Journal of Managerial Psychology*, 21 (1/2), 73-88.
- xi. Fitzgerald, L. and Eijnatten, F. (2002). Chaos speak: a glossary of chaordic terms and phrases. *Journal of Organizational Change Management*, 15 (4), 412-23.
- xii. Gregory, Brian T; Osmonbekov, Talai; Gregory, Sean T; Albritton, David M and Carr, Jon (2013). *Abusive Supervision and Citizenship behaviors: exploring boundary conditions*. *Journal of Managerial Psychology*, 28 (6) 628-644.
- xiii. Heames, Joyce and Harvey, Mike (2006). Workplace bullying: a cross-level assessment. *Management Decision*, 44(9), 1214-1230.
- xiv. Heames, J.T., Harvey, M. and Treadway, D. (2006). Status inconsistency: an antecedent to bullying behavior in groups. *International Journal of Human Resource Management*, 17, 348-361.
- xv. Hobman, E.V., Restubog, S.L.D., Bordia, P. and Tang, R.L. (2009). *Abusive supervision in advising relationships: investigating the role of social support*. *Journal of Applied Psychology*, 58 (2), 233-256.
- xvi. Josephs, Robert A; Tafarodi, Romin. W. and Markus, Hazel Rose (1992). Gender and Self-Esteem. *Journal of Personality and Social Psychology*, 63(3), 391-402.
- xvii. Kets de Vries, M. (2006). The spirit of despotism: understanding the tyrant within. *Human Relations*, 59 (2), 195-220.
- xxviii. Kivimaki, M., Virtanen, M., Vartiainen, M., Elovainio, M., Vahtera, J. and Keltikangas-Jarvinen, L. (2003). Workplace bullying and the risk of cardiovascular disease and depression. *Occupational and Environmental Medicine*, 60, 779-783.
- xix. Lee, R. and Brotheridge, C. (2006). When prey turns predatory: workplace bullying as a predictor of counter aggression/bullying, coping and well-being. *European Journal of Work and Organisational Psychology*, 15 (3), 352-377.
- xx. Markus, H. and Oyserman, D. (1988). Gender and thought: The role of the self-concept In M. Crawford & M. Hamilton (Eds.) *Gender and thought* (pp.100-127). New York: Springer-Verlag.
- xxi. McEwen, B. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine*, 338, 171-179.
- xxii. Miller, J. B. (1986). *Toward a new psychology of women* (2nd ed.). Boston: Beacon Press.
- xxiii. Rayner, C. and Hoel, H. (1997). A summary review of literature relating to workplace bullying. *Journal of Community and Applied Social Psychology*, 7, 181-191.
- xxiv. Salin, D (2003). Ways of explaining workplace bullying. A review of enabling, motivating and precipitating structures and processes in the work environment. *Human Relations*, 56 (10), 1213-1232.
- xxv. Starratt, Alison & Grandy, Gina. (2010). Young workers' experiences of abusive leadership. *Leadership & Organization Development Journal*, 31 (2), 136-158.
- xxvi. Tepper, B.J., Carr, J.C., Breaux, D.M., Geider, S., Hu, C. and Hua, W. (2009). Abusive supervision intentions to quit and employees' workplace deviance: a power/dependence analysis. *Organizational Behavior and Human Decision Processes*, 109 (2), 156-167.
- xxvii. Tepper, B.J (2000). Consequences of Abusive Supervision. *Academy of Management Journal*, 43 (2), 178-190.
- xxviii. Weinberg, A. and Creed, F. 2000). Stress and psychiatric disorder in health care professionals and hospital staff. *Lancet*, 355, 533-537.
- xxix. Workplace Bullying Institute (n.d.), available at: [www.workplacebullying.org](http://www.workplacebullying.org)
- xxx. Zapf, D. (1999). Organizational, work group related and personal causes of mobbing/bullying at work. *International Journal of Manpower*, 20 (1/2), 70-85.