

The Psychological Contract for Work Stress: Employer Demands Versus Employee Choice

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The purpose of this paper is to explore in greater detail the concept of employers and employees seeking a balance or equilibrium in work. Increasing demands of employers are directly related to an increase in work stress and strain in employees. Work strain creates psychological and physical ailments in employees and dramatically decreases work performance or time, creating a need to examine this timely topic. It is proposed that exploration is needed for a rounded understanding of the complexities of the employee and employer relationship, and how to develop the psychological contract, or work equilibrium for both parties.

For years the incessant tug-of-war between the employer demands and the employee choice has confounded researchers and organizational psychologist. According to Patterson (2001), the increased downsizing of companies often result in employees' minimizing their devotion and dependence on the company while maximizing employers' requirement of employees to be flexible and adaptable. This tug-of-war process, called the psychological contract, seems to have acquired its foundations from an organizational psychologist named D. M. Rousseau. Rousseau (2001) is able to provide some interesting constructs that explain some aspects of the psychological contract. Further, the author is able to explain how violations of the contract likely result in acute behavioral and emotional responses to the breach.

According to Rousseau (2001), a contract represents a stable and durable promise typified of a model or schema. Most importantly, Rousseau defines the term psychological contracts as an individual's belief that an agreement is mutual or common between parties. Throughout the article, Rousseau notes that the contracts can contain verbal and nonverbal cues between the parties and may or may not contain high to low levels of consciousness. Since most of these views are created during a social atmosphere, the nature and complexity of the contract varies between the individuals and their primary setting. For example, a psychological contract created between two professors in a research institution is likely to be more complex in nature compared to that of a retail worker and a retail store (Rousseau, 2001). Moreover, the most basic level of complexity among all contracts often result in the most beliefs and promises to obligations.

Once failure results in meeting those obligations, disbelief in promises creates either consciously or uncon-

sciously often manifest negative behavioral and attitudinal changes. Rousseau suggests psychological contracts are a form of schema, which are difficult for individuals, regardless of education or mental complexity to change. In the process of breaking the contract, the 'wronged' individual has difficulty reverting back to prior conditions (Rousseau, 2001). However, individuals who are not as skilled in partaking psychological contracts are more likely to lose trust in a contract violation than a highly skilled or experienced individual.

Although Rousseau provides valuable foundational concepts, the researcher, D. E. Guest is able to expound upon the process and necessity for psychological contracts to new areas. Guest, a work and organizational psychologist explores the attitudinal and behavioral consequences of psychological contracts (Guest, 2004). Guest summarizes that employer-employee relationships tend to be idiosyncratic in nature, in which the contract is negotiated between the individual and the company. This contract is created as soon as the employee is hired or very soon after. Idiosyncratic deals tend to be broad and complex in nature, leaving it vulnerable to issues of trust and perceptions of unfairness, breach and violations (Guest, 2004).

Interestingly, Guest develops a figure designed to explain framework and possible process of an employer-employee psychological contract. First, the contextual and background factors must be applied. Each individual has varying characteristics. Some of these characteristics are age, education, experience, race or income. Additionally, the company has characteristics, such as size, private or public and business strategy, that shape how the contracts are created. For simplicity, the employee and employer can be generalized. Second, policy and practice of information to

the employee through direct participation, employment relations and the work environment. Third, the development of a psychological contract develops through promises, encouragement and obligations. Fourth, the state of the contract determines the level of trust, usually through the act or commitment to fairness. Last, as the contract solidifies, the attitudinal and behavioral outcomes are identified. If the contract is intact, positivity and balance in work-family commitments, job performance, motivation and satisfaction is likely to occur. Violation of the psychological contract results in poor job security, motivation, attendance and most importantly, high levels of work stress (Guest, 2004).

One of the most compelling aspects of Guest's article involves the necessity of the Human Resources Department, or HR, to help maintain the psychological contract. Guest reports that although the concept of fairness and trust are relatively difficult to measure, so is the concept of the psychological contract. However, the role of HR should heavily emphasize maintenance of fairness, trust, promises and obligations rather than solely emphasizing policies and practices (Guest, 2004). Moreover, HR is designed to address attitudinal and behavioral outcomes, usually after the psychological contracts have been broken. Guest suggests more inclusion of HR is needed in maintaining fairness and trust to avoid negative outcomes, such as work stress, between the employee and employer. Surprisingly, Guest is not alone in this conclusion. Vloeberghs and Faes (2003) and Uen, Chien and Yen (2009) provide interesting perspectives on the role HR plays in the psychological contract between employers and employees.

The Role of Human Resources

Vloeberghs and Faes (2003) note that in current trends reflected globally, HR departments are growing and changing in order to meet the demands of expanding companies into different cultures and geographical areas. The burden of HR is to apply policies and personnel that address the ever-changing work environment and work culture that reflect the changing demographics. Whether these demographics are race, sex, age or any other discriminating category. The ability of HR to adapt and change is important, because it reflects upon the company's ability to have an adequate supply of workers to meet customer demands and be profitable. Past analysis of trends suggest HR has a record of lack-luster innovation, enactment of policies that reflect inflexibility and a propensity to be very simplistic and ambiguous in nature, especially when it comes to the employees (Vloeberghs & Faes, 2003). However, fierce competition among businesses and global expansion forced revitalization and restructuring of HR. Specifically, the nature of the "work force demographics force HR efforts to involve employee involvement and partici-

pation, which results in the creation of a 'fair participation process' and building of trust and acceptance" (Vloeberghs & Faes, 2003). Restructuring of dramatic increases in employee participation forces HR to treat employees as individuals and appeal to their humanistic values, rather than robotic entities and paper files.

In the interest of maintaining an efficient work atmosphere, HR now has a new role in the 'fair participation process' (Vloeberghs & Faes, 2003). HR helps to facilitate and mediate the building of trust, fairness and acceptance, which are components of the new psychological contract between the employees and employers (Vloeberghs & Faes, 2003). HR no longer focuses on administrative duties or solely enforcing employers demands onto employees; instead, HR must focus on creating dialogues and discussion of requested policy changes between employees and employers. Any employee or employer concerns or grievances are discussed openly, in hopes of dispelling the perception of the employer's tyrannical sovereignty (Vloeberghs & Faes, 2003).

Workplace Consequences: Work Stress

According to Lait and Wallace (2002), work stress is likely the result of unmet or unfulfilled expectations from unsatisfying professional work experiences. Additionally, autonomy, collegiality and interaction all have key roles in the development or sustaining of work stress (Lait & Wallace, 2002). Autonomy refers to the individual's ability to perform job tasks unsupervised and under the individual's control, in which less control and more supervision results in higher levels of stress. Collegiality refers to teamwork and support among co-workers and other professionals, in which good working relationships result in lower levels of stress (Lait & Wallace, 2002). Interactions refer to the employee's expectant levels of interaction with clients, in which professionals jobs that require interaction with clients but do not receive any interaction with clients are likely to see a rise in job stress (Lait & Wallace, 2002).

In the study by Lait and Wallace, 62 human service worker organizations and 514 human service workers in Alberta Canada participated in surveys on how work conditions affect job stress (Lait & Wallace, 2002). The study found that the job's ability to meet the worker's job expectations decreased work stress (Lait & Wallace, 2002). Moreover, the client interaction and working conditions are tied with the worker's expectations and whether or not stress results (Lait & Wallace, 2002). The authors suggest that the worker's expectations are a major factor for work stress. Work conditions, such as interaction with customers, collegiality and autonomy, are tied to work expectations in the creation of work stress. This suggests that the work environment that the worker is preparing to contribute expertise is their ideal conditions, and fail-

ure for employers to maintain this balance results in an increase in work stress.

While Lait and Wallace look at factors that contribute to work stress, Gakovic and Tetrick (2003) look specifically at psychological contract breaches and how it contributes to work strain. Work strain results from long periods of work stress, in which the worker is close to experiencing burnout/chronic illness or disease from work fatigue. As employers downsize and restructure, coupled with increasing job demands, lack of social support and control increases are often symptoms of psychological contract breaches but result in the employee experiencing job dissatisfaction and burnout (Gakovic & Tetrick, 2003). The authors once again utilize Rousseau's definition of a psychological contract between the employer and employee to explain the concept of work strain on behalf of the employee. Moreover, failure of the employer to meet established obligations and expectations result in attitudinal and behavioral outburst, which often hurts the employer.

Workplace Consequences: Job Dissatisfaction

Gakovic and Tetrick (2003), unfortunately, acknowledge that psychological contract breaches are common practice among employers and further decrease the ability of the employee to fully trust the employer or any other employers in the future. The practices of employers disavowing their psychological contracts often result in the attempts of the employers to enact drastic restructuring and organizational changes at the cost of the employee (Gakovic & Tetrick, 2003). As a result the employee is likely to experience work strain, which can be categorized in two ways, job dissatisfaction and emotional exhaustion (Gakovic & Tetrick, 2003).

In order to measure the role that contract breaches play in employee's emotional exhaustion and job dissatisfaction, the authors surveyed 161 employees of large corporations about work related attitudes and behaviors (Gakovic & Tetrick, 2003). The authors found that increased job demands increased emotional exhaustion, while unfulfilled obligations resulted in increase of both job dissatisfaction and emotional exhaustion. As a whole, the study suggested that breach of the psychological contract plays a role in the employee experiencing work strain, which is a very significant finding (Gakovic & Tetrick, 2003).

While Gakovic and Tetrick (2003) looked at work strain terms of job dissatisfaction and emotional exhaustion, Demerouti, Pascale, Bakker, Schaufeli, & Hox (2009) looked at work strain in terms of absenteeism, presenteeism and burnout. Absenteeism refers to the employee repeatedly displaying issues showing up for work in a timely matter while burnout is similar to the term emotional exhaustion. Interestingly, the au-

thors delve into the concept of presenteeism, which is defined as "being at work when you should be at home, either because you are ill or because you are working such long hours that you are no longer effective" (Demerouti et al., 2009). Interestingly, presenteeism, rather than absenteeism, results in significant loss of productivity and resources, but is often difficult for employers to discover.

The authors aim at looking at the relationship between job demands, presenteeism and burnout among 258 nurses in the form of questionnaires. The authors found that increasing job demands tend to increase the rate of presenteeism and that presenteeism and emotional exhaustion are reciprocal, which increases the feelings of exhaustion over time (Demerouti et al., 2009). The reciprocal nature of emotional exhaustion and presenteeism in the presence of high job demands establishes a direct link of work strain to poor well-being (Demerouti et al., 2009). Likewise, the authors found that presenteeism presents an additional work hazard and employers must work harder to recognize presenteeism in employees, so that it can be avoided as much as possible in the future (Demerouti et al., 2009).

Restubog, Zagenczyk, Bordia, and Tang (2013) look at the importance of the psychological contract and the reactions and behaviors that result from the breaching of the contract. By surveying 168 supervisor-employees pairing in pharmaceutical companies, the authors discovered that after contract breaches, employees purposely engage in deviant behavior (Restubog et al., 2013). This provides support for theories that suggest that the violation of the contract could result in harmful and aggressive behavior for the employer. Further, the authors were able to note that unfulfilled contract terms resulted in the stronger negative emotional and behavioral displays (Restubog et al., 2013). In a similar study by Van der Vaart, Linde, and Cockeran (2013), psychological contracts and changes in work environments contribute to the employees' behavior and whether violation of the contract will cause the employee to quit. 246 participants from various backgrounds answered questionnaires and a rigorous array of quantitative data analysis were performed. The authors concluded that if the psychological contract was not in a good state before it was violated, the employee is likely to leave that particular organization (van der Vaart, Linde, & Cockeran, 2013). The combination of the two aforementioned articles suggests any breach of the psychological contract by employers does not necessarily result in work stress or strain, but definitely involves negative consequences for both the employer and employee.

Implications for Future Practice and Conclusion

Upon initial meeting and procurement of services, the psychological contract between the employer and the

employee is likely to be established. The maintenance of this contract heavily relies upon the perception of the employee, in which fairness and trust has been established. Psychological contracts are not static concepts, but rather fluid and ever-changing. Therefore, it is relatively easy for one side, most likely to be the employer, to change or damage the contract without acknowledgment from the employee. Although communication must exist between the employee and employer, the new role of the HR departments is to facilitate and mediate employee and employer demands and obligations in an open discussion in order to facilitate mutuality. However, many HR departments fail to establish a humanistic view of the employees and tend to stick as close to administrative duties and policy and procedure enforcement. In turn, psychological contract breaches often result in attitudinal and behavioral changes that have ramifications for both sides. In addition, the psychological contract breach tends to weigh heaviest on the employee, resulting in work stress, work strain, presenteeism, physical ailments, illness and emotional exhaustion. Moreover, spillage from these effects also creates an imbalance in the employee's work-family concept, effectively damaging family bonds sometimes beyond repair.

The purpose of this literature review is to reflect upon the basic communication difficulties general "able-bodied" employers and employees have on a regular basis. If communication between the working class is underwhelming, applying these same issues to individuals with disabilities raises some level of concern. According to Szymanski and Parker (2010), rehabilitation counselors recognize the disadvantages that individuals with disabilities must face on a day-to-day basis. Moreover, these disadvantages could be multiplied when the rehabilitation counselor is looking to place disabled individuals with a skeptical employer, which accounts for a large amount of employers (Stensrud, 2007). If "abled-bodied" individuals have difficulty communicating with their employer, in which extreme neglect and miscommunication could result in work strain or even a disability, what does this say about individuals with disabilities? Looking at the current research suggests placement without the acknowledgement of the psychological contract could result in exacerbation of the individual's disability. In the future, more research needs to be acquired about this subject area and how it affects individuals with disabilities, a highly vulnerable yet sizable portion of the population worldwide.

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The P Problem Fallacy

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This article explains that the “P problem” is based on the use of inappropriate data. (Brookshire & Forlines, 2014). The data are specific to all “average disabled persons.” The conclusion of the authors is that 79% to 91% of the reduction in worklife for those with a disability is a result of the participation rate, not the employment rate. That is correct, but only for “average disabled persons.” Part of the reason for this is what they call the “try rate.” However, only a small percentage of the “average disabled persons” cohort group is involved in litigation. The major premise of which they draw this conclusion is inaccurate. There is no “P problem” and the notion of a “try rate” is insulting to persons with a disability. And, it is particularly insulting to nonparticipants who are unable to perform any type of substantial, or gainful work activity.

The article entitled “The P Problem and the Estimation of Worklife Expectancy Losses in Personal Injury Cases” (Brookshire & Forlines, 2014) states in the abstract that: “It is shown that 79%-91% of the statistical decline in worklife expectancy for the self-defined disabled is a decline in participation rates, not the employment rate, which are the more typical focus of forensic vocational analysis.” While the assertion is accurate, it is meaningless. The authors use data to present a so called problem that no competent expert would ever use. The data are specific to all persons with a disability which is why participation rates are so low, ranging from 31.4% to 40.5%, before adjusting for unemployment. There is no relationship between the data presented by the authors and the way in which vocational experts define probable levels of employment or probability of working for a specific individual through use of the Current Population Survey (CPS) or the American Community Survey (ACS) data.

The authors are using average disabled rates of participation and employment ignoring gender, level of education, age grouping, or severe versus non-severe disability. It is an approach that has no significance because the data are not disaggregated. Using only one of the variables defined above, severity of disability, produces a significant alteration of the numbers as we will see. The CPS and ACS data specific to all disabled persons is reproduced in Table 1 as presented by the authors. Notice that the PE rates fall significantly below a fifty percent level. The distortion is corrected when data specific to gender, level of education, age grouping, and severe versus non-severe disability are employed.

In order to understand what the authors are attempting to demonstrate, it is important to understand certain definitions specific to “participation rate” and “employment rate.” A participation rate is comprised of persons who are either employed or actively seeking employment. The participation rate ignores the issue

Table 1
CPS Data. Analysis of Worklife Losses for Average Disabled Persons

		Non-Disabled	Disabled	% Decline
2013	(P) Participation Rate	76.2%	31.4%	58.8%
	(E) Employment Rate	92.8%	85.3%	8.1%
	PE Rate	70.7%	26.8%	62.1%
2012	(P) Participation Rate	80.8%	40.5%	49.9%
	(E) Employment Rate	91.3%	81.4%	10.9%
	PE Rate	73.8%	33.0%	55.3%

of unemployment. It includes both part-time and full-time employed persons and it ignores those who are underemployed. A joint probability of participation and employment identifies those individuals who are engaged in some type of substantial, gainful work activity, commonly referred to as employed. Non-participants, those who choose not to work for whatever reason, are ignored in computing an employment rate. These include the young, homemakers, the elderly, the severely disabled, and those who have given up looking for work.

An employment rate is a subset of the participation rate and therefore it ignores those who are non-participants. A joint probability of participation and employment considers those who are unemployed and the joint probability of participation and employment is comprised of those who are both participating and employed. In effect, it is identical to the employment-to-population ratio or the joint probability of participation and employment as the authors demonstrate mathematically in their "1,000 persons—population," with "800 employed or actively seeking work" also called the P rate. They further note that 720 of these 800 are actually employed. The authors demonstrate this in their article with data as reproduced in Table 2.

Note that in the table, the P rate is equal to 80% or 800 of the 1,000 persons in the population. The employment rate is 90% or 720 persons of the 800 who are participating. It is most important to note that the employment-to-population ratio is 720/1,000 or 72% and that the joint "PE rate" is 80% times 90% or 72%, the same as the employment-to-population ratio. Hence the reason that many persons familiar with the data as Cornell (Employment and Disability Institute, 2014), (World Health Organization, 2011), and (Gamboa Gibson Worklife Tables [GGWT], 2015) use the term "employment rate" interchangeably with joint probability of participation and employment. Technically, it is the "employment-to-population ratio" (EPR) that is equivalent to the "joint probability of participation and employment." There is no difference between a work rate and a joint probability of participation and employment. It is noteworthy that the ACS data and the employment rate definition used in

the GGWT is the same as that used by Bureau of Labor Statistics (BLS), Office of Disability and Employment Policy (ODEP) that defines the employment status for persons with a disability. However, by creating the distinction without a difference the authors reveal a faux concern for precision which reflects nothing more than a "sciolism on stilts."

The language used by the authors, "employment," is similar to the language confusion that exists with the term "inflation," an imprecise term that is used interchangeably with the term wage growth and compensation growth. Technically, inflation is the Consumer Price Index (CPI), which is comprised of a basket of goods and services measured from one time period to the next. It presumably measures the increased cost of goods and services, but ignores the value increase of an item. By way of example, an automobile has greater value today than in the past because of seatbelts, tires that are less likely to blow out, and electronic signals that sound when backing up and getting close to another vehicle.

Measuring value increase would be difficult, costly, and probably not worth the cost. Inflation is an estimate. It is imprecise, but serves a useful purpose. It is similar to the term "employment," equally imprecise but it serves a useful purpose; it is particularly useful to describe persons with a non-severe disability because such persons experience lower levels of employment throughout the life expectancy. Employment levels are the primary building block of a worklife expectancy.

As an aside, wage growth is greater than inflation. Compensation growth is greater than wage growth because it includes fringe benefits. Yet, it is not uncommon for all three of these measures to be referred to as inflation even though there is a distinct difference between the three. There is no difference between a joint probability of participation and employment or an employment-to-population ratio or a "work rate."

The data they do provide are based on statistical averages of all disabled without regard for any of the disaggregation that typically occurs when defining a worklife expectancy for a specific individual with a disability. The result is a significant distortion of reality for the bulk of the cases referred to a vocational expert for evaluation. Table 3 provides data specific to males and females with a high school diploma or equivalent as well as for males and females with a baccalaureate degree. In fact, there are eleven different levels of educational attainment for the CPS and thirteen levels for the ACS. Tables from the CPS are presented for illustrative purposes only. ACS data are similar. All levels of education for both the CPS and ACS are found in the GGWT.

An inspection of Table 3 reveals that the joint probabilities of participation and employment or the PE rates vary as a function of age grouping. The male

Table 2
Definitions Related to Worklife Expectancy

Participation (P) Rate	=	$\frac{800}{1,000}$	= 80%
Employment (E) Rate	=	$\frac{720}{800}$	= 90%
Employment-to-Population Ratio	=	$\frac{720}{1,000}$	= 72%
Joint PE Rate	=	80% x 90%	= 72%

high school grouping specific to "not disabled" increases from age 25 through age 54 and begins to decline at age 55 and falls below fifty percent at age 65. Those with a non-severe work disabling condition have the highest rate of employment from age 25 through 54, and fall slightly below fifty percent at 55 years of age.

The all disabled grouping is the same as the average disabled grouping used by Brookshire and Forlines. This category is rarely if ever used in an evaluation because it is comprised of both the non-severe and the severely disabled. It is important to note that the probabilities are significantly below the fifty percent level even when gender, education level, and age grouping are considered.

The male bachelor degree grouping produces higher levels of employment for all three categories, but the probabilities of employment for the "not severely disabled" fall below fifty percent at 65 as opposed to 55 for the male high school category. It is noteworthy

that the not severely disabled category experiences lower levels of employment through most of the age span. When these employment levels are combined with a probability of life specific to a 25 year old male with a baccalaureate degree and no disability versus a non-severe work disabling condition, worklife expectancy values of 37.6 years and 29.6 years are produced when the joint probabilities of life, participation, and employment are considered in aggregate.¹

An inspection of the female employment rates at each education level vary somewhat from males, but across the board a reduction in employment occurs when disability is considered. The categories specific to worklife expectancy for persons with a non-severe work disabling condition are less than those with no disability.

Brookshire and Forlines introduce for the first time a "try rate," which ostensibly is designed to ferret out those individuals who are not trying to obtain employ-

Table 3
ASEC PE Rate Summary

	Males						
	16-24	25-34	35-44	45-54	55-64	65-74	75-84
High School Diploma or Equivalent							
Not Disabled	0.657	0.835	0.881	0.882	0.782	0.295	0.130
Not Severely Disabled	0.488	0.704	0.688	0.685	0.444	0.121	0.041
All Disabled	0.210	0.258	0.212	0.188	0.132	0.084	0.034
Bachelor Degree							
Not Disabled	0.789	0.901	0.941	0.934	0.815	0.393	0.164
Not Severely Disabled	0.603	0.803	0.816	0.766	0.538	0.199	0.067
All Disabled	0.495	0.485	0.458	0.390	0.272	0.157	0.060
	Females						
	16-24	25-34	35-44	45-54	55-64	65-74	75-84
High School Diploma or Equivalent							
Not Disabled	0.576	0.658	0.748	0.785	0.654	0.214	0.064
Not Severely Disabled	0.414	0.475	0.591	0.567	0.375	0.094	0.027
All Disabled	0.227	0.219	0.190	0.151	0.109	0.062	0.022
Bachelor Degree							
Not Disabled	0.781	0.800	0.778	0.821	0.717	0.290	0.108
Not Severely Disabled	0.621	0.717	0.703	0.688	0.502	0.133	0.042
All Disabled	0.376	0.432	0.387	0.321	0.211	0.103	0.041

ment and are either unemployed or are non-participants. They ignore the reality that very few of the non-participants in either the CPS or the ACS survey are involved in litigation. The "try rate" is without a statistical basis. It is as unlikely that any such statistical data would ever be published in a meritorious economics journal. Producing such values would be cost prohibitive much like measuring the value added over time to the inflationary component of automobiles.

The "P problem" is a figment of the imagination of the authors. It is designed to "create doubt" in much the same way as cigarettes were marketed to create doubt that the product was cancer producing in the fifties and into the seventies. It has been cited in a written communication many years ago by the CEO of one of the major tobacco companies that "Our Product Is Doubt," meaning cigarettes. The objective was to create doubt that the cigarettes increased the probability of cancer. The product of the "P problem" and the "try rate" is to create doubt that those with a disability on average experience significantly lower levels of participation and employment when there is a non-severe or a severe disability grouping.

The authors conclude their article with six recommendations. The first recommendation is that experts "may wish to refrain from asserting a specific worklife expectancy loss in a personal injury case." The above statement is based on the belief that the expert must be "comfortable with relevant literature on worklife expectancy, and the participation and employment components of possible reduction in worklife due to injury."

A careful reading of the GGWT provides the necessary background and expertise to utilize the tables effectively. The narrative in the publication identifies seven Appellate Court decisions from five different states supporting the lower courts in allowing testimony specific to the methodology and the worklife tables. There has never been an Appellate Court decision disallowing testimony specific to the tables from a lower court. In the most recent Appellate decision in May of 2012 in Louisiana, the defense appealed for a reversal to the State Supreme Court. The writ was denied. The Appellate decisions are cited at the end of the article prior to the bibliography.

With regard to the relevant literature, the authors note that "the CPS and the ACS do not provide accurate or reliable data on the earnings and employment of people with disability." They cite Ciecka et al. (2002), Jones (2005), Jones (2006), and Ireland (2005[sic]) as though the articles published in the *Journal of Legal Economics* (JLE) and the *Journal of Forensic Economics* (JFE) are meritorious. In fact, the authors cited are critical of the CPS data only and not the ACS. More importantly, neither of the journals in which criticism of the government data has been published are considered reputable in that universities

having a "publish or perish" policy do not consider the journals when consideration is given to tenure, promotion, or meritorious pay. If the authors dispute this, let them identify an economics department in a U.S. university that finds either of the journals acceptable for consideration specific to publication.

Two authors from France, Combes and Linnemer (2010) performed a ranking of 1,168 economics journals throughout the world². The rankings which can be identified by going to the website in the endnote². The paper is a fairly sophisticated study that can be obtained by emailing the address indicated in endnote³. The paper created rankings to include "AAA," "AA," "A," "B," "C," and "D" journals. The economic journals critical of the government data are ranked by the authors as "D" journals. The JFE is ranked in the bottom 40% of the 1,168 journals identified and the JLE is in the bottom 2%.

The authors cite Hale (2008), attributing to him that neither the CPS or the ACS was "intended to be used to make a specific disability diagnosis or draw conclusions about an individual." They are stating the obvious. There has never been and there will never be a survey research assessment specific to either a specific disability, i.e., back injury, brachial plexus injury, hand injury, or injury to knees prohibiting prolonged standing or specific to an individual. The government, through the CPS and ACS, collects survey data that can be used for a wide range of non-severe and severe physical, mobility, cognitive, or work disabling conditions. The data can be effectively used in estimating what is likely to occur for a particular individual with a particular type of impairment. (GGWT)

The government data resulting in worklife expectancy values serve as an aid to the Trier of Fact and the worklife expectancy values are statistical averages. It is ultimately up to the Trier of Fact, i.e., the jury or a judge in a bench trial, to adjust the worklife expectancy value up or down after hearing the totality of the information. This means that the Trier of Fact can conclude that the worklife expectancy estimate for a person with a disability should be considered worse than or better than the statistical average. Is there anyone who really believes that an expert, who opines that an individual is a malinger or that a particular individual has avoided employment and has chosen to become a nonparticipant is in a better position to make such a determination than the members of the jury or the Trier of Fact. The adversarial legal process is such that the totality of all the information available is received at the time of trial.

The second recommendation is a conclusion that a worklife loss analysis must "emphasize a decline in the ability to try to find work." The authors state the conclusion is "based upon statistical sources discussed in this article" which identify "the problem(s) of participation rates" and what the "rates may mean to fo-

rensic vocational experts – and the forensic economists who utilize their work.”

The P problem is a fallacy resulting from the authors’ belief that a participation rate for all disabled persons is the appropriate participation rate to use when in fact it is rarely, if ever used. The participation rate for those with a “non-severe disability” is more like that of a cohort group comprised of “not disabled” than average disabled or “all disabled” as identified in Table 3.

In conclusion three, the authors suggest that “the vocational rehabilitation expert should be prepared to discuss participation versus employment rate reasons for declines in worklife expectancy due to injury,” presumably as defined by Brookshire and Forlines. In so doing, the expert simply needs to call attention to the distortion created by the authors in assuming that it is appropriate to use participation rates specific to all persons rather than to a disaggregated grouping. It is believed that most vocational rehabilitation counselors recognize the fact that non-participation is a function of many factors most of which trump the so-called “try rate” advanced by the authors. A PE rate is not equivalent to a try rate. Many who are non-participants are still looking for employment even after they are defined as non-participants because of a BLS deadline for participation.

Conclusion four of the authors suggests that the expert should be prepared to discuss “voluntary versus involuntary declines in participation and how any voluntary declines relate to the duty to mitigate damages.” While there are some experts who attempt to categorize themselves as experts on malingering, it is a slippery slope for any expert to venture into such territory without a complete understanding of the data causing persons to “give up trying” to find employment. More importantly, the issue is always capacity to work and earn money so whether or not an individual is employed or not employed is a function of the expert judgment of the vocational rehabilitation expert. How does one measure voluntary declines in participation or employment?

In conclusion five the authors suggest that “worklife expectancy differences” are dominated by declines in participation rates primarily, not employment rates. However, the authors use a crude estimate in grouping both genders, all levels of educational attainment, and by using an average disabled category generated through the age groupings 16 to 64. An inspection of Table 3 reveals the profound differences in PE rate when the data are disaggregated by gender, level of educational attainment, age groupings, and most importantly when examining PE rates for those with a non-severe work disabling condition.

Conclusion six states that the defense expert should “investigate the participation versus employment nature of a worklife loss.” Their article has accomplished supposedly the objective for the defense expert, so it

should not be difficult to investigate. The authors further state that the defense expert “should understand the issues of involuntary versus voluntary declines in labor force participation.” I agree, it should be thoroughly investigated and understood. When that occurs, the defense expert will abandon the conclusions of the authors. Keep in mind, the PE rate for “average disabled persons” has no meaning when the GGWT are used appropriately.

There is no “P problem,” but there is a significant “disability problem.” Persons with disability are disproportionately represented as living below the poverty level. In addition, over the years disability researchers have identified the way in which earnings and employment levels differ when compared to those individuals without disability. It is generally accepted by rehabilitation professionals familiar with disability data that such persons, if employed year-round full-time, earn less than their non-disabled counterparts. In addition, rehabilitation professionals are aware of the fact that disability results in lower levels of employment when compared to a cohort group without a disability. Also, it is generally recognized by rehabilitation professionals that participation rates for all persons with a disability are significantly less than fifty percent. The profession itself exists because of difficulty those with a disability have in obtaining and retaining employment.

Approximately 27 years ago, the first worklife expectancy values for persons with a work disabling condition were published (Gamboa, 1987). In 1999, the first article critical of the tables was published by Skoog and Toppino (1999). Prior to and subsequent to that time there have been hundreds of Frye and Daubert challenges. Less than one percent have been successful in part or in whole.

The most recent critical article by Brookshire and Forlines provides more of the same with a new wrinkle or two. The wrinkles are called the “P problem” and the “try rate.” What we know is that the courts are overwhelmingly supportive at the district court level in accepting the government data and the worklife expectancy tables resulting from the government data specific to the CPS and the ACS. The expectation is that the district court support will continue and that it is likely that future Appellate Court decisions will continue to be favorable, providing the experts use the tables appropriately.

Appellate Court Decisions

Anderson, Kenneth v. Tommie L. Rogers, et al. 2012. No 2012-CC-1468 (Supreme Court of Louisiana, October 8).

Anderson, Kenneth v. Tommie L. Rogers, et al. 2012. No. CW 12-00542 (State of Louisiana Court of Appeal, May 29).

- Knitowski, Dennis J. v. Frank M. Gundy, Jr. and State of New Jersey and John Glover.* 2011. A-5945-09T1 (Superior Court of New Jersey, Appellate Division, November 10).
- Johnson v. CSX Transportation, Inc.* 2006/2008. 04 L 4146 (Appellate Court of Illinois, December 24).
- Cox and Tube City LLC, d/b/a/ Olympic Mill Services v. Allen Matthews.* 2007. 45A05-0803-CV-183 (Court of Appeals of Indiana, February 12).
- Stichnoth, Justin v. Shafer & Freeman Lakes Environmental Conservation Corporation.* 2007. 91A04-0611-CV-661 (Court of Appeals of Indiana, November 29).
- Shaheen v. Advantage Moving and Storage, Inc. and William T. Urban.* 2003/2006. 1-04-1079 (Appellate Court of Illinois, December 1).
- Nilavar v. Osborn.* 2000. C.A. No. 99-CA-53, T.C. No. 96-CV-0343 (Court of Appeals of Ohio, April 7).

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Endnotes

- ¹ Source: GGWT, 2015. The probabilities emanate from the 2005-2014 Current Population Survey Supplement. The all disabled or average disabled grouping and the severely disabled grouping result in worklife expectancy values of 16.7 years and 5.2 years respectively.
- ² http://www.vcharite.univ-mrs.fr/PP/combes/CL_Ranking_with_econ_correction.pdf
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