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**IN THE COURT OF COMMON PLEAS
DAUPHIN COUNTY, PENNSYLVANIA**

Judy Farina and John Farina,)	
husband and wife,)	
)	
Plaintiffs,)	
)	
vs.)	No. 1329-CV-2002
)	
Hershey Entertainment and Resorts, Inc. d/b/a)	
Hersheypark,)	
)	
Defendant.)	

Affidavit of Anthony M. Gamboa, Jr., PhD, MBA

COMES NOW, Anthony M. Gamboa, Jr., PhD, MBA, being first duly sworn upon his oath states the following:

Defense has filed a motion to exclude my testimony. This motion centers around the following key areas:

1. Presence of a disability
2. Fringe benefits
3. Validity of the data
4. Relevance to Ms. Farina

Each of these points is refuted in the discussion that follows. The motion mentions both Dr. Andrew Gluck and me. As I am expected to be the one testifying in this case, however, the affidavit will be solely from me.

1. Presence of a disability

The key issue in the Defense’s motion is their contention that Ms. Farina does not have a work disability. This contention is the basic reason for their belief that Ms. Farina has not sustained any loss of annual earnings or worklife expectancy. Defense seems to feel that a return to work precludes the possibility of both a work disability and a lifetime loss of earnings. As part of this, Defense contends that I am not capable of opining on the effects of her limitations on her ability to work and earn money. These contentions are incorrect, as will be shown in the sections that follow.

1.1. Medical v. Vocational Expertise

In their motion, Defense states that my opinion that Ms. Farina meets the definition of work disability is not based on any evidence of record. In addition, they state that, because I am not a medical doctor, that I cannot say that Ms. Farina is prevented from working. This is incorrect.

First, I do not say that Ms. Farina is incapable of working. As clearly noted in my report, I do believe that she will be able to continue working for a substantial period of time. Because of her injury, however, it is my opinion that, over her worklife expectancy, she will not be able to earn as much or to work as long as she would have had the injury not occurred.

Defense objects to the fact that I am not a medical doctor, claiming that I am rendering a medical opinion without proper qualifications. In doing this, Defense demonstrates their apparent confusion regarding the boundaries between medical and vocational experts. Typically, a medical doctor diagnoses a plaintiff's physical or cognitive complaints and limitations and opines on the resulting restrictions. A vocational expert then translates the impact of the client's restrictions in the world of work, interpreting their impact on various occupations and expected earning capacity.

The medical report of Dr. Kevin L. Kunkle (September 10, 2003) indicates that at the time of her last visit, Ms. Farina "continued to manifest evidence of fibular nonunion." In addition, medical reports indicate that, as a result of her leg injuries, Ms. Farina has a limp when she walks extensively, walks fast, or when she gets tired. This is consistent with the limitations that Ms. Farina reported to me during my interview with her. She reports that her job requires her to see patients in various parts of the hospital and that she must be able to respond quickly when necessary. She noted that she experiences pain most of the time and has swelling at the end of the night. She reports having trouble walking over uneven ground and that she must hold on to something when squatting. She notes that as a result of her problems, she has had to turn down overtime opportunities.

Despite the Defense mischaracterization of my Ph.D. into Economics, I actually have extensive training and experience as a vocational and economic expert (See Attachment A). I have a PhD in Guidance and Counseling, specializing in vocational counseling and have since completed post-doctoral study in vocational rehabilitation and the economics of disability. I have twenty-five years experience within the field of disability as a vocational counselor, researcher, university professor, and vocational expert with the U.S. Department of Health and Human Services.

With this background, I offer the trier of fact a review of Ms. Farina's impairments in conjunction with her age, education, and work experience to assess the impact of the impairments on her lifetime ability to work and earn money. Based on these facts, it is my opinion that she meets the US Census Bureau's definition of work disability and that her earning capacity and worklife expectancy will be reduced.

This is consistent with methodology prescribed by Defense expert, Dr. James Rodgers. In a recent paper¹ he notes, “If an injured plaintiff has impairments that will cause his or her worklife expectancy to be significantly diminished, then a vocational expert should be hired to explain those facts as they pertain to this particular plaintiff.”

1.2. Residual Capacity

As noted previously, Defense seems to feel that a return to work precludes the possibility of both a work disability and a lifetime loss of earnings. Vocational experts and rehabilitation professionals know that this is not true. Just because Ms. Farina missed only a few weeks of work and was able to return to work as a respiratory therapist does not mean that she is whole compared to her pre-injury capabilities. Having a work disability does not mean that a person cannot work. It does mean that the individual is not likely either to work as long or to earn as much as they would have absent disability.

The presence of a disability is widely known to affect both earnings and worklife expectancy. This finding is documented in results from various surveys, including the decennial Census, the Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP) from the Census Bureau,² the National Health Interview Survey (NHIS) from the National Center for Health Statistics,³ and the *N.O.D./Harris Survey of Americans With Disabilities*.⁴ The disability effect is the cause of such events as the passage of the well-known Americans with Disabilities Act (ADA),⁵ the existence of the Department of Labor’s Office of Disability Employment Policy,⁶ and the practice of rehabilitation counseling, just to name a few.

For the purpose of assessing loss of earnings for Ms. Farina, I have used data from the CPS. The CPS is the primary source of employment data for persons in the United States, the source of the government’s monthly unemployment rates that are widely quoted by the media. As part of the CPS, the Census Bureau gathers data on the employment and earnings experience of persons with and without disability.⁷ They find that persons with a work disability are not likely to work as much or to earn as much as persons without a disability.

¹ Ciecka, James E., James D. Rodgers, and Gary R. Skoog. “The New Gamboa Tables: A Critique.” Unpublished manuscript.

² Data from the decennial Census, CPS, and SIPP can be found on the Census Bureau website at <http://www.census.gov/hhes/www/disability.html>

³ One example is a study by Stapleton, et al. (1997) that accesses data from the NHIS. <http://aspe.hhs.gov/daltcp/reports/eshclit.htm>

⁴ <http://www.nod.org>

⁵ <http://www.usdoj.gov/crt/ada/adahom1.htm>

⁶ <http://www.dol.gov/odep/welcome.html>

⁷ These data are gathered in the Annual Social and Economic Supplement to the March Current Population Survey.

In addition, private research (Gibson 2000 and 2001; Yelin 1996; Yelin and Trupin 1997; McCollister and Pflaum 2004; See Attachment B) has shown that employed persons with a work disability, both not severe and severe, are more likely to become unemployed than persons without a work disability. If unemployed, they are less likely to find employment. These differences become more profound with age.

In assessing loss of earnings, what is important is the lifetime effect of the impairment. Even if we were to assume that Ms. Farina's work disability has not had an impact in terms of past work, it is shortsighted to think that this will never impact work in the future. Such an opinion goes against the numerous studies finding that disability does affect ability to work. As documented in the aforementioned studies, the impact of work disability is exacerbated with age. Also, people with a work disability are more likely to lose a job, and when out of work, suffer a significantly reduced likelihood of finding reemployment.

Simply put, Ms. Farina meets the definition of work disability in that she has limitations that limit her ability to perform work as well as she would have been able had she not been injured.

1.3. Increased earnings

Defense makes repeated references to the fact that Ms. Farina's earnings have increased since her return to work, claiming this invalidates my analysis. My review of the case indicated that Ms. Farina has had to turn down multiple opportunities for overtime since returning to work due to her reduced stamina. Consistent with that loss, it is reasonable to assume that whatever earnings she currently enjoys would have been greater if she were without the disability and able to earn added overtime pay.

The data I applied from the Current Population Survey isolates the average earnings of people of Ms. Farina's education working full-time, year-round. Those without a work disability earn, on average, 16.2% more than their counterparts with a work disability (but still able to work full-time⁸). This is consistent with Ms. Farina's complaint from reduced overtime opportunities. Therefore, I opined that absent disability her earnings would increase at a level equal to the national average.

The fact that her earnings have increased since the time of my analysis makes little relative impact. She continues to turn down opportunities for overtime earnings due to her physical limitations. If I applied the statistical increase to her current earnings the overall impact compared to my analysis would be minimal.

⁸ Defense contention (p.11) that this "average apparently applies to all disabled females, regardless of the specific type of disability" is clearly wrong. The average is specific to females of Ms. Farina's education and to only those persons with a disability that are still capable of working year-round, full-time. This latter qualification obviously limits the data to persons with non-severe disabilities.

1.4. *Havens v. Tonner*

Defense uses *Havens v. Tonner* in an attempt to support their contentions. The situation in *Havens*, however, is not appropriately applied to this case.

In *Havens*, the plaintiff returned to work and continued to work for 3½ years following injury. After leaving his employment for reasons unrelated to the injury, plaintiff's doctor and economist testified that he was totally disabled. On appeal, the Superior Court found a return to work for 3½ years contradictory to a finding of total disability and disallowed testimony related to the total disability.

The current case is similar to *Havens* only in the fact that the plaintiff returned to work. Defense misunderstands "disability" if they feel the cases are similar beyond this. Defense appears to believe that "disability" and "total disability" mean the same thing. They do not.

I do not believe that Ms. Farina is totally disabled, as is obvious from reading my report. My analysis assumes that Ms. Farina can work and will continue to work for some time. This does not negate the possibility of lifetime loss. My analysis looks only at the *reduction* in her lifetime earnings based on the probability that, over her lifetime, she will have lower earnings and worklife expectancy than she would have had she not been injured.

2. Fringe benefits

Defense states that my analysis assumes "that Farina does not receive fringe benefits equal to or greater than 22% of her earnings" and continues on to criticize that fact that I did not discuss the specifics of her current fringe benefit package.

Contrary to Defense's first statement, my analysis does assume that while she is working, Ms. Farina receives and will continue to receive fringe benefits equal to 22% of her salary. This figure is based on data from the US Bureau of Labor Statistics related to the earnings and fringe benefits received by civilian workers (See Attachment C). The reality of the modern US work force is that employees can be expected to have frequent changes in employers. To tie her fringe benefits to a single employer would only lend illusory exactness. It is reasonable to assume that, over the course of her worklife expectancy, she will receive benefits equal to that of the national average. The only loss of fringe benefits I have considered is the loss that will occur as a result of her reduced worklife expectancy.

3. Validity of the data

Defense voices several complaints regarding *The New Worklife Expectancy Tables* supposedly used for estimating Ms. Farina's worklife expectancy. My analysis did not use *The Tables*, but did use the same underlying data. My responses, therefore, will focus on the data used to derive my opinion.

3.1. Definition of disability

Apparently, Defense is confused by the fact that definitions of disability vary by organization and by purpose. I will briefly describe some of the varying definitions and the definition that is appropriate for evaluating loss of lifetime earnings.

Before measuring the effect of disability on earnings and employment, it is necessary to define what is meant by disability. Depending on the desired focus, different groups and surveys will define disability differently. The Veterans Administration (VA) and the Social Security Administration, for instance, each have their own definitions, which vary considerably. Males considered disabled by the VA who do not otherwise have a work disability enjoy levels of employment comparable to males without a work disability (Gibson, 2001; see Attachment B), whereas individuals found to be disabled under Social Security law are unable to perform any type of substantial, gainful work activity. Other organizations have definitions that may not consider work effects, except within the context of the overall social effects of impairment.

Another popular definition comes from the Americans with Disabilities Act (ADA), which defines disability as existing in persons with a physical or mental impairment that substantially limits one or more of the major life activities. The ADA definition, however, is very broad in that it includes people who do *not* have limitations in the kind or amount of work they can perform, i.e., they do not have a work disability. For forensic purposes, when assessing loss of lifetime earnings, the most relevant data pertain to those persons who have a work disability, the definition used in the US Census Bureau's Current Population Survey (CPS). This is the exact issue addressed by Mr. John McNeil, formerly with the Census Bureau, in an affidavit (Attachment D).

3.2. Possibility of a change in disability status

Defense notes the fact that the worklife expectancy statistics I use do not consider the possibility of a change in disability status, for instance, the possibility of future disability in a person currently nondisabled. Though this is true, it misses a crucial point that needs to be considered. Gibson (1998; see Attachment E) noted:

A disabled person faces a risk of further disabling injuries at least as high as a nondisabled person's risk of an initial injury. Use of *The WLE Tables* is primarily intended for forensic settings where *the change* in a person's worklife from nondisabled to disabled is the primary concern. Study of the nondisabled worklife alone (in cases of partial disability) has little value without a corresponding disabled worklife.

Defendants offer this criticism with no suggested solution. The fact is, there is no source for computing such probabilities. One could potentially be derived for the nondisabled population, but such statistics are beyond modern science for the population with disabilities. To factor it on one side of the equation and not the other would be inequitable.

Finally, *Culver v. Slater Boat Company* (722 F.2d 114, 5th Circuit, 1983) notes that there are some possibilities we simply do not factor in our computations of lost earnings:

Arriving at a reasonable estimate of anyone's financial future involves estimates of a whole spectrum of factors. We commonly exclude many relevant factors from consideration on the basis that they are so speculative that they cannot accurately be determined. For example, we consider only work-life expectancy and do not take into account the possibility that a worker will change to work that is more pleasurable but pays less. When considering the loss suffered as a result of the death of a wage-earner, we do not consider the likelihood that a widowed spouse may remarry. Nor do we take into account the stability of an already accomplished remarriage, or the age, appearance or personality of the surviving spouse.

Granted, I factor the probability of the plaintiff's death at each future age. However, death is certain. Divorce or (further) disability is not.

3.3. Condition-specific Worklife Statistics

Defense objects to the worklife expectancy statistics I used because they are not specific to particular conditions or types of impairment. In short, they object to the fact that the statistics are derived from an average for females with a not severe work disability and an education level equivalent to Ms. Farina's. They feel the group of "not severely disabled" is too broadly defined. They offer no alternative measure that meets their condition-specific criteria.

Economists, actuaries, insurance companies, and gambling establishments use population averages when making rational bets on human outcomes. The basic belief is that in the absence of more specific and precise information, the best predictors of outcomes are statistical averages or relative frequencies. For example, economists (forensic and otherwise) commonly make inferences on expected income based upon a person's level of education. Yet, education is obviously a very broad classification. People with a baccalaureate degree can have vastly divergent results in the labor market. Following this, it is not true that disability data would have to be disaggregated by type, severity, or duration of disability in order to be reliable or meaningful.

Even if segregated data existed, its use would be limited at best. Persons with the same diagnosis and the same length of time since injury can have dramatically different experiences in terms of their experience in the workplace, especially when education level is factored in. Consider an example of two men with identical hand injuries resulting in reduced grip strength and limited range of motion. This injury would have an enormous impact on a carpenter, who would likely need to leave his employment. For an English professor, however, the effect may be minimal.

Also, when looked at from a vocational perspective, many different types of conditions can result in identical work-related impairments (e.g., both a knee injury and a lung ailment can result in a restriction to sedentary work). Impairments from non-injury related causes can result in work disability of varying degrees, with minimum to maximum impact. What is relevant is the effect of the impairment, whatever the cause, on a person's capacity to work and earn money.

What the criticism does point to is the fact that statistics of all sorts must be used responsibly and applied by persons familiar with the issues involved. When assessing persons with disability, for instance, the user must be familiar with the effects of impairment on ability to work and earn money as well as the experiences of persons with disability in the labor market. In assessing the impact of Ms. Farina's future capacity to work and earn money, I have considered all of the relevant vocational factors in estimating her earning capacity and worklife expectancy.

3.4. Methodology not accepted

Defense claims that the methodology and data applied in my analysis are not accepted. As proof, they offer the opinions of their own retained experts – hardly an independent measure of general acceptance.

One of the Defense experts, Dr. Rodgers, distorts the CPS disability measures by claiming “people with a disability who are working are automatically excluded because to meet the very definition of disability the person must suffer an impact on his employment.” This contention is obviously wrong. An impact on employment does not mean the person is totally disabled, as discussed earlier. If Dr. Rodgers' claim was accurate, the CPS would by definition report probabilities of employment for all persons with a work disability at 0%. In fact, as shown in my report, the probabilities are quite high for those with a not severe disability. This can only result by having the majority of respondents with a disability in the work force.

In fact, there are numerous government and independent researchers who use CPS data for studying the effects of disability. Attachment F contains a partial list of this research, some of which is described in the paragraphs that follow.

Various independent researchers use CPS data in research on the employment experiences of persons with a work disability. In a presentation before the National Association of Forensic Economics (NAFE) in November 2000, John McNeil, a special assistant for disability statistics for the U.S. Census Bureau, now retired, reaffirmed the application of CPS data for the study of persons with a work disability. As part of the presentation, he produced a study entitled “Employment and Earnings of Individuals 18 to 64 by Disability Status: Data from the March 2000 Current Population Survey.” The study explores the participation and employment rates for persons with work disability using the same data used in *The New Worklife Expectancy Tables*. In addition, he signed an affidavit (See Attachment D) stating he sees no reason why the CPS data for work disability cannot be used in the manner applied by Vocational Econometrics. He also authored an article further supporting use of CPS data for studying worklife issues for people with a work disability (McNeil, 2002).

Herman Miller functioned as the chief of the Population Division of the Census Bureau. He has also signed an affidavit (Attachment G) noting that the CPS data are "the most appropriate source for studying the employment experiences of people with a work disability."

In addition, both government and non-government researchers rely on the CPS employment rates and earnings figures for non-forensic purposes. Burkhauser, Daly, and Houtenville (2000), for example, used data from the March supplement of the CPS to compare the employment experience of people with and without disability during the 1990s business cycle. This paper was published through the Rehabilitation Research and Training Center (RRTC) for Economic Research on Employment Policy for Persons with Disabilities at Cornell University. The Cornell RRTC has also published several other papers using CPS data on persons with a work disability. These include three papers by Houtenville (2000) that studied the prevalence, employment rates, and household income of people with disability, as well as a paper by Burkhauser, Houtenville, and Wittenburg (2001) that compared the employment trends of persons with work limitations using the CPS and two other government surveys.

Daly, Burkhauser, and Houtenville (2000) published a paper through the Federal Reserve Bank of San Francisco that used CPS data to study the work and income of men with disability. Acemoglu and Angrist (1998), both with the Department of Economics at MIT, published a paper in the *Journal of Political Economy* that used CPS data to study the impact of the ADA on the employment of people with disability.

Researchers at the University of California, San Francisco, also use CPS data to study persons with a disability. This work includes an article published in the U.S. Bureau of Labor Statistics' *Monthly Labor Review* (Yelin and Katz, 1994) that used both the CPS and the National Health Interview Survey to study the participation trends of people with and without disability during the period from 1970 to 1992. Yelin (1996) and Yelin and Trupin (1997) used the CPS to study the participation and employment of people with and without disability during the mid-1990s.

Government researchers have also used CPS data to study the experiences of people with and without work disability. The U.S. Census Bureau measured the participation and employment rates and average earnings of people with and without disability and published the results in two key documents (1983 and 1989). In 2001, the Census Bureau issued a press release that included basic information from the CPS on the prevalence, employment, earnings, and education of people with a work disability.

The research list above is not meant to be complete. It does, however, give an idea of the variety of researchers using CPS data. The use of the CPS by this sampling of government and non-government researchers corroborates the validity of the CPS for the purpose of studying the work experience of people with a work disability.

The extensive use of the CPS data for research on employment issues provides corroborative evidence of the validity of the data. Independent researchers from various institutions and with various purposes would not all use the CPS data unless the data were meaningful.

4. Relevance to Ms. Farina

Defense objects to my analysis and the data used, stating that it contains “so many unsupported assumptions” that it cannot be considered applicable to Ms. Farina, personally. Most of this centers on their contention that Ms. Farina is not disabled and will suffer no loss of earnings or worklife expectancy.

Defense is correct in one aspect – even if a person has a disability, but the disability is not expected to affect their ability to work and earn money during their life, then there is no loss of earnings. This, however, is not the situation in this case.

Ms. Farina notes that she has already had to turn down overtime opportunities because of her injury. Obviously, then, even though she is working full-time, she has not earned at the same level that she would have had the injury not occurred. In estimating the effects of the injury on her future *lifetime* earnings, which is what I must do in this case, it is reasonable to use average differences in earnings between people with and without a work disability who have an education level comparable to Ms. Farina’s. That is what I have done.

In addition, based on her limitations, it is my opinion as a vocational economic analyst that, over the course of her life, her worklife expectancy will be reduced. This is based in part on the research noted in Section 1.2, that people with a work disability are more likely to become unemployed than are people without a work disability and that this difference increases with age. In estimating this loss of worklife, I use statistics for people like her, women with and without a work disability who have completed some college course work, but who have not completed a baccalaureate degree.

Forecasting a plaintiff’s future earnings stream is not an exact science. There is no single step in the loss computation process that enjoys universal acceptance in the relevant community. As such, it is predictable that experts will disagree on the method for computing lost earnings. This is true of defining earning capacity, computing worklife expectancy, projecting earnings growth, and determining discount rates.

Perhaps defense is frustrated by lack of a scientific formula to precisely predict the future employment of the plaintiff and calculate the resulting earnings impact. My opinion deals with the future of a human being, something that can never be known with absolute certainty. The U.S. Supreme Court recognized the inexact nature of assessments for lost earnings in its 1983 decision in *Jones and Laughlin Steel Corporation v. Howard E. Pfeifer* 462 U.S. 523. The Court stated that

by its very nature the calculation of an award for lost earnings must be a rough approximation. Because the lost stream can never be predicted with complete confidence, any lump sum represents only a ‘rough and ready’ effort to put the plaintiff in the position he would have been in had he not been injured.

In my analysis regarding Ms. Farina’s loss of lifetime earnings, I have used my education and experience and considered her age, education, work history, and work-related limitations in combination with statistics for people like her on the effect of disability on

work. Based on this combination of facts, I have come up with a reasonable estimate of the effect of Ms. Farina's disability on her lifetime ability to work and earn money.

FURTHER, THE AFFIANT SAYETH NAUGHT.

Anthony M. Gamboa, Jr., PhD, MBA
Senior Vocational Economic Analyst

Subscribed and sworn to before me, a notary public, in this ____ of February 2004.

Notary Public

My Commission Expires _____