

Beyond Sportspersonship

**An Ecological and Social Cognitive
Developmental Framework for CDTA and
NITA Sanctioned Junior Tournament Tennis**

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Charles Cunningham

Abstract

Eight years ago I began an investigation of junior tournament play sanctioned by the Chicago and Northern Illinois District Tennis Associations (CDTA/NITA). The purpose was to examine junior (player) behavior against the backdrop of the district's sportspersonship model and psychosocial development theory to discover possible antecedents to problem (antisocial) behavior. Internal observation took place during officiating assignments as a United States Tennis Association (USTA) certified roving official. External observation involved viewing tournament play from a spectator vantage point, which included anecdotal reference to player behavior garnered through conversations with parents, coaches, tournament directors, and other certified officials.

While the majority of observed player behavior was consistent with the district's sportspersonship model and psychosocial development theory, a significant amount of antisocial behavior did occur. Against this backdrop, five possible antecedents to antisocial player behavior were revealed:

- 1) Divergent performance models unreconciled by some players and parents when negative experiences attributable to self-governance occurred during play
- 2) Scant, superficial, and sometimes non-existent direct adult supervision during play
- 3) Competitive environment where the demands of self-governance appeared incompatible with the existing socioemotional functional level of some players
- 4) Absence of comparable sport settings from which models of youth prosocial behavior during the storm and stress of competition could be emulated
- 5) Scant intentional education and training initiatives connecting sportspersonship theory to practice

Empirical and anecdotal evidence suggests that the rigid tenets of self-governance, under-construction (developing) player self-systems, and scant direct adult supervision represents a toxic mix that potentially leads to antisocial player behavior. Toxicity may also be fueled by player achievement goals more ego than task-oriented, especially when such orientation exceeds socioemotional maturity. In addition, toxicity may be fueled by an apparent marginalized view of parental influence. Because of parent-child

attachment, parent response to negative experiences during tournament play may have a strong impact on player behavioral tendencies. Evidence suggests that these conditions have ecological and social cognitive underpinnings which may serve as antecedents to antisocial player behavior.

Introduction

Sportspersonship has become a hot topic of conversation within the CDTA/NITA. Depending upon who you ask, this conversation has been prompted by antisocial behavior exhibited during sanctioned tournament play by players and parents that appears to have increased in both frequency and egregiousness. As part of my investigation I asked district stakeholders with a well-documented and substantial investment in sanctioned junior tournament play to share thoughts on player/parent behavior and what follows is a sample of what was said:

“Point System creates the wrong behavior from a young age. Europeans don't start ranking until around 14 ... We start at age 7 with Stars and Trophies needed to advance from orange ball to green ball. Points ... at the younger ages...create wrong behaviors....too many parents put way too much pressure on their kids. ...in the 10U crowd it is surprising the amount of negative influence parents are invoking. Kids are constantly turning their heads to the window after every point to see the parent's reaction. I have seen parents lie, accuse other players to their faces of cheating after matches as well as getting into fights with each other.”

Parent/coach/tournament director

“I think that the biggest problem in junior tennis is the parent's lack of understanding the process of learning how to be a good junior and eventually adult player. In 10 and under they interfere with matches tell their children that the opponents are cheating or that they are not calling out balls, out, etc. Eventually the parents withdraw from the debates about line calls etc. Parents should be speaking to their children about attitude, effort and gratitude that they can play tennis.”

Coach/tournament director

“Thinking about USTA tournaments and a subject which should be addressed is the withdrawal of players in tournaments once they lost in main draw or consolation draw. In my opinion this sends the wrong message to the junior players. A reason of sickness or injury is appropriate. To quit because of a loss is not a good reason. This tells juniors the only important

thing is winning. I think parent behavior has the biggest influence. Although difficult to manage, I do think USTA can put in place better structure and communications to gain more neutral behavior from parents. Tennis is different than other sports, as you point out, because it requires self-governance from adolescents. Therefore, I do think parents can't have free reign to behave the way they do in other sports."

Parent

"I have noticed a tendency among players and parents to blame the other player for a loss, rather than acknowledging that the other player played a better match. I think that this does not help anyone. Limited positive training for players/parents; competition structure and parents add significant pressure to players."

Coach/tournament director

"Some positive factors about junior tennis ...I have met lifelong friends! I have grown up around the Chicago tennis community, and I look forward to going to class every day after school and every day in the summer to see my second family. There has constantly been the same group of people over the years all around the Midwest that I look forward to seeing each tournament. Some negative factors are the fact not everyone is friendly and honest. Over the years especially during matches not everyone gets a long and as a result fights and negative relationships are built. Most of the time you repeatedly see these people over the years, and as a result tension grows. The negative relationships are not just between juniors; the negativity spreads to the parents."

Junior player

"One of the best things about junior sanctioned tournament tennis is it teaches kids to stand on their own two feet, think for themselves, and deal with adversity. This helps to ultimately build strong willed, independent adults. Secondly, because of making your own line calls and penalties that occur on your own side of the court; it provides kids with the opportunity to treat others fairly and honestly, or not. The biggest negatives about it are that some parents and coaches aren't strict enough in teaching some children that fairness and honesty are the best policy. Therefore, too much cheating occurs. This comes in part from the second negative, that the tournament environment and striving for the 'almighty athletic scholarship', creates an environment of too much pressure way too soon in a child's development. This in turn causes too much 'specializing in the one sport of tennis', instead of playing multiple sports competitively thru at least middle school."

Parent

"I think that the expectations and actions of parents can make sanctioned tournament play stressful for their own kids and for their kids' opponents. I have seen some pretty outrageous behavior, and I thought it would get better as _____ got older and progressed in her play, but I haven't really seen improvement yet. Of course, I have also seen parents who pressure children during practice, too. The best part of playing sanctioned tournaments for _____ has been meeting and making friends with so many kids from so many different backgrounds. She has met some of her closest friends at tournaments."

Parent

"In my opinion the problems and/or best things about junior tennis are one and the same. It is the variable that we just don't know until it presents itself. It begins with a player's knowledge of the rules and how they are applied to promote fair play, attitude of the individual player, and presentation of a player's social skills, much of which is governed by parental expectation of result during a tournament. Overall I find that juniors that display anger, or meltdown from the beginning to the end of a match, if they don't win every point, or behave in such a way that practically requires an official to be present at their court for the entirety of their match, exhibit control issues, trust issues, and lack basic social skills. They are not seemingly being taught how to build their game, confidence, patience and their knowledge of the rules and the importance of being students of the game by practicing all of the above during each tournament. Parents need much of the same for different reasons as well as adjusting their agenda and expectations of a junior player. What I don't know is just as important. For instance, how parents actually raise their children, speak to them, and discipline them. A players' on-court behavior can be altered by these interactions adversely as well."

USTA official

"I think your question about whether or not children and adolescents are at a developmental stage in which they can adhere to a strict moral standard is a good one. I think that parental expectations are very relevant to how parents and children behave. However, I also think that there are a few more variables at play. First, I think that, while there is not an issue of salary or earning money outright, the question of possible scholarships enters into parental and player expectations and understanding. Tennis is an expensive sport. I would also question whether or not that enters into how parents behave during matches and in their expectations of their children. I think it also makes tennis a different kind of sport. Are parents of tennis players different because the demographics of tennis do not reflect the general population? In any

developmental model, a child's temperament also enters into on court behavior.

Parent

One can glean from the above that sportspersonship issues are varied and complex. Are they *player* centered, *parent* centered, or *system* centered, or a combination of all three? From the above one might surmise that parent behavior significantly influences player behavior; yet, evidence gathered from observation of a substantial amount of tournament play the past two years suggests that on-site sportspersonship initiatives e.g. pre-tournament speeches, postings, and (signed) documents related to behavior appear to center more on players. (A well-written and substantive handout on sportspersonship geared specifically towards parents/coaches is posted on the CDTA website). Thus, while the above sampling is small, such substantial reference to parent behavior by stakeholders implies a belief by some that the sportspersonship messaging displayed at tournament venues may not take into account the impact of parent behavior on players. A plausible explanation is that on the surface, players are the most visible and logical target for sportspersonship initiatives, which explains the apparent marginalized view of parental influence.

While I applaud the sportspersonship initiatives of the CDTA/NITA and many tournament directors, a fortuitous encounter has led me to discover new information which may direct more attention to the influence of parents on player behavior.

In 2009 I began sharing my concerns with what appeared to be an increase in antisocial player behavior with fellow officials, parents, and tournament directors. Concurrently, I also began informal (non-degree) graduate study at The University of Illinois at Chicago (UIC) in preparation for entry into a master's program in education. While my course work at the time had little connection to adolescent behavior, this decision to pursue graduate study led me to begin thinking about player behavior developmentally, sensing that many issues I observed (and managed) during tournament play as a roving official may have underpinnings that needed exploration in order to better understand behavior displayed on court. In 2010 I began formal graduate study, where a substantial amount of my course work centered on youth development and educational psychology. After a few foundation courses on adolescent development and motivational theory, remaining

course work required that I apply this new knowledge to a formal and structured youth setting. Given my substantial engagement with junior tournament tennis as an official, this became the focal point of my subsequent research.

The result of this encounter is this quality management report. Combining more than thirty years of officiating junior tennis with six years of graduate study, new knowledge has emerged that may strengthen the connection between district sportspersonship theory and practice.

From my view, two positives are apparent with district tournament play. One, while sportspersonship issues are legitimate, antisocial player/parent behavior is, by far, the exception (see table 1).

Subjective Assessment of Observable Incidents of Antisocial Behavior During a Random Sample of CDTA/NITA Sanctioned Tournaments

Event (N/C)	M	Viewing	Player							Parent						TM
			O/C/P/D	1	2	3	4	5	6	7	1	2	3	4	5	
N L2 G 12	1	O/P	1		1						1		1	1		8
N L4 B 10, 12,14,16 G10		O/P														47
		O/P														8
N L4 B14, 16		O/P														11
N L4 B 12, 16 G 10, 16	1	O/P	1			1								1	1	20
	2										1					
C L4 B 12- 16 G 12-14	1	O/P							1							40
	2		1						1							
	1													1		23
	2				1				3							
C L4 B14, 18 G 12	1	O/D	2													20
6 events	8		5		2	1			5		2		1	2	2	177

Table 1

Legend: Event: N=NITA, C=CDTA; M: match#; Viewing: Open, Closed, Proximal, Distal; TM: total # of matches for the day

Player behavior:

1. Questioning line call with **accusatory** tone such as “that ball was not out!”
2. Degrading/derogatory remark directed toward or about opponent after point
3. Disrespect for authority such as questioning official’s decision e.g. overrule
4. Throwing racquet (as opposed to dropping)
5. Verbal/visible obscenity
6. Taunting
7. Other i.e. manipulating score; disrespecting spectator

Parent/coach behavior

Inappropriate parent/coach involvement (during/after play) with:

1. Own player
2. Players’ opponent
3. Opponents’ parent/coach
4. Official
5. TD
6. Reaction to line call

[The above chart shows that during 6 CDTA/NITA events, external direct observation of play revealed only 20 incidents of problem player/parent behavior (as described in the above legend) involving 8 of 177 matches played.]

And when compared to sportsmanship in other youth structured and organized sports, nothing I have observed would qualify sanctioned junior tournament tennis as the *poster child* for antisocial behavior. Two, without question, district leadership has orchestrated a well-designed sportsmanship agenda for players, parents, and tournament directors calculated to address the few celebrated instances of behavior inconsistent with its *theory of change*. And even though evidence of measurable (and visible) impact of existing sportsmanship initiatives on antisocial behavior may be limited (at the moment), I fervently believe that, in principle, *they got it right*. Thus this report is not intended to *reinvent the wheel*.

A considerable amount of knowledge about youth and adult behavior has been derived from my studies. Central to this knowledge is my belief that a more developmental view of sportsmanship may prove beneficial. This view integrates player interaction with a competitive environment broader in scope than that reflected by match play alone. And a significant element of this broader scope is the role of adult behavior, before, during, and after play. Ultimately, my aim is to blend research-based evidence into existing sportsmanship initiatives and suggest implementation strategies that may lead to measurable and sustained behavioral change across the landscape of CDTA/NITA sanctioned junior tournament play.

SWOT Analysis of the CDTA/NITA Sanctioned Junior Tournament Environment

Strengths	Weaknesses
Youth engagement across a broad socioeconomic spectrum Youth participate volitionally Youth perceive activity as fun Youth exhibit high level of integrity	Psychologically unsafe environment due to scant supervision and adult support during play Many youth lack self-regulatory efficacy required by self-governance to manage conflict during play Youth often called upon to make adult decisions that are not (developmentally) age appropriate
Opportunities	Threats
Youth improve interpersonal communication skills Youth develop a more trusting disposition towards opponents Youth begin to see the interdependent nature of tennis competition Youth develop initiative with respect to resolving conflicts falling under the "Code" when a roving official is not present or readily available	Stakeholder satisfaction with current competitive climate (status quo) Stakeholder interest with winning as desired primary outcome Stakeholder interest in using youth to grow the game rather than using the game to grow youth

Environmental Scan of CDTA/NITA Sanctioned Junior Tournament Play

Most adults associated with junior tournament play district-wide probably agree that behavior contrary to established sportspersonship guidelines is by far the exception. Yet the need to address antisocial behavior during play remains strong. The purpose of this scan was to provide a general albeit subjective assessment of the tournament environment from an ecological perspective in order to identify adult behaviors that might serve as antecedents to antisocial player behavior. Using guidelines contained in the CDTA sportspersonship manual and the *Youth sports development model* (Smith et al, 1989) as a baseline measure, my assessment method consisted of observing on-site adult behavior during roving officiating assignments over a three-year period encompassing approximately 265 days of match play, with the focus on adult supervision, parent/coach response to on-court player conflict, and evidence of intentional teaching.

Supervision was measured by the on-court presence of a USTA certified roving official. According to USTA guidelines/procedure, a roving official can only make (most) officiating decisions while *directly observing* a specific court and while *positioned at the tennis net post*. Also, during play, except for a court monitor, a roving official is the only person permitted to assist players. Table 2 illustrates the average amount of time play was directly supervised by a solo roving official during an eight-month period. On

average, over the course of 281 matches, an individual match was directly supervised *less than half of the actual playing time*. (Also during this period more than 100 CDTA/NITA sanctioned junior tournaments were held without a certified official on site).

Junior Tournament Supervised vs Unsupervised Play (September 2014-April 2015)								
Matches	Start of play	Finish	M1	M2	M3	M4	Average length of a match (hours/minutes)	Average time directly observing a match
10	9:15a	4:50p	1:52	1:19	:50	1:05	1:16	:45
8	2:10p	5:45p	:24	:54	1:24	:42	:51	:27
8	6:15p	9:15p	:35	:45	:55	:47	:46	:22
17	2:05p	9:20p	:50	:33	:59	1:07	:52	:25
4	2:15p	3:30p	:44	1:10			:57	:19
8	5:15p	9p	1:03	1:18	1:36	:55	1:13	:28
4	1:15p	5:00p	:58	1:06	1:22	1	1:06	:56
7	6:30p	9:40p	1:02	1:02	:41	:56	:55	:27
17	3:20p	9:20p	2:06	1:04	2:05	1:05	1:35	:21
6	2:15p	7:00p	1:12	1:08	1:20	1:36	1:19	:47
17	5:25p	10:00p	:49	:45	:30	1:07	:48	:16
12	5:10p	8:30p	1:28	1:31	:28	:49	1:04	:17
2	6:00p	6:45p	:45	:45			:45	:22
8	7:10p	9:00p	:40	:46	1:18	1:38	1:05	:14
12	5:10p	8:40p	1:04	1:10	:44	1:11	:62	:18
6	11:40a	7:40p	1:15	1:15	1:20	:42	1:08	1:08
2	4:10p	6:00p	1:18	1:52			1:35	:55
13	3:45p	9:15p	1:03	1:57	:52	:57	1:12	:25
17	3:35p	9:40p	:55	:48	:54	1:34	1:03	:22
26	2:40p	8:30p	1:00	1:29	2:35		1:01	:14
11	5:10p	9:35p	1:20	1:30	:40	:58	1:07	:24
2	10:05a	11:30a	:52	1:19			1:05	:42
22	3:05p	9:50p	:47	1:00	1:13	1:00	1:00	:18
16	6:10p	10:25p	1:08	:58	1:20	:54	1:05	:12
22	12:10p	10p	1:24	1:52	1:05	2:13	1:39	27
4	2:05	6:05	1:05	1:12	2:03	2:28	1:42	1:00
281							1:07	:30

Table 2

Assessment of parent behavior centered on observable response to on-court player conflict e.g. questioned line calls, overrules, scoring disputes, foot faults etc. Most responses (often visible to players) were negative, accusatory, or suspicious in nature, and contrary to CDTA/NITA tenets of sportspersonship. For example:

"I need you to watch my son's match. His opponent just called a ball out that landed in the middle of the court."

"You need to watch him. He made some bad calls yesterday."

"Please keep an eye on the father. I believe he is coaching his son."

“Why did you leave my son’s match? Twice they lost track of the score and as a result my son lost a game he should have won.”

“Can you watch my son’s match? His opponent is making some bad calls and because of culture my son is reluctant to complain or ask for an official.”

I was called to the lobby at a tournament to intervene between two parents engaged in an argument over alleged coaching.

The parents of a player became upset that the opponent’s parents were clapping after points their daughter lost due to a missed shot. They became upset with me when I explained that applauding on lost points is not against the rules of tennis.

A tournament director was verbally abused by a parent over the phone because his son was defaulted from a tournament after failing to show due to the parents’ failure to note the correct start time for the match.

Observable intentional prosocial teaching by tournament directors varied in uniformity and substance. Only 3 of 30 tournament sites displayed signage related to sportspersonship and provided (optional) oaths regarding conduct for players to sign before going on court. Only 2 provided (optional) self/opponent post-match behavior assessment forms for players to fill out. Pre-match instructions addressed match format, with only a few tournament directors using language specifically promoting and reinforcing prosocial player and parent behavior. With close line calls being a primary source of player conflict, of significance was the fact that only a few tournament directors addressed such things as the proper way to question a call and, given the difficulty of consistently making accurate calls, the importance of trusting an opponents’ judgment. Most tournament directors gave instructions on how to request a line official as well as the importance of calling the score before each point.

In general, this environmental scan revealed significant displays of antisocial parent behavior during tournament play. Also, intentional teaching practices specifically geared toward minimizing antisocial parent behavior during play were scant. Further, a substantial amount of actual playing time was conducted without direct and proximal adult supervision.

Ecology of the Sanctioned Junior Tournament Environment

When antisocial player behavior is examined developmentally, it becomes clear that a number of environmental influences come to bear on what is externalized during play. The importance of ecology and its relationship to the developmental trajectory of players cannot be overstated. Adolescence defines the period of development where significant changes to biological and psychosocial characteristics are progressing along a trajectory from child-like to adult-like behaviors (Lerner, 2005). And this development does not take place in a vacuum. Rather, this transitioning is regulated by the interplay of influences - both internal and external - of which the environment plays a significant role (Bandura, 1991). This influence is cross-contextual and extends beyond the immediate setting characterized by sanctioned junior tournament play. This report focuses on those influences most visibly identified with and proximal to this setting and whose impact may be best measured in terms of sportspersonship.

Development Vs Justice Performance Model

With any organized and structured youth competitive sport, as it reveals itself through the practices of players and adults, the trajectory of expectations and subsequent socioemotional behavior takes shape and becomes defined by the influence of two divergent performance models.

Development describes the model where the primary aim is using competitive sport as a *vehicle for fostering and reinforcing life skills*, part of which is equipping youth with the socialization tools necessary to function in a civil society (Smith & Smoll, 1997). This learning, and thus development, is achieved through teaching practices that are *intentional*. Competing, or striving to win, is embedded in this model, as facing and learning how to overcome failure or adversity as presented in social settings such as sport participation serves as a prerequisite for becoming a fully functioning adult. So, while necessary with this model, the competitive outcome is viewed as a *means to an end, not an end in itself*.

Justice describes the model where *competitive outcome becomes an end in itself*. This model is best exemplified in professional sports where perceived value and success are

ascribed to one's effort primarily as it contributes to winning (Smith et al, 1989). Unlike the development model where learning takes center stage, here, teaching/learning is embedded in the activity only as they relate to how well an athlete competes and whether or not the desired end-result i.e. winning is achieved. Also with this model, much attention is paid to and emotion evoked by decision-making that affects outcome. Subsequently, those having a vested interest in outcome often display little tolerance with decisions deemed questionable or wrong. Thus, officiating, and the manner in which justice is perceived to be upheld, becomes highly scrutinized.

Herein lies one of the most significant antecedents to antisocial behavior in sanctioned junior tournament tennis and organized youth sports in general; *the presence of two mutually exclusive desired outcomes*.

Striving to win is an embedded component of any competitive sport. With professional sports, the livelihood of participants rests in the balance, which justifies winning as the primary aim. With youth sports, however, in theory, striving to win should be balanced with the higher aim of *learning life lessons through participation*. I contend that how well these two models are reconciled by players and parents/coaches determines in large part whether youth competitive sport develops *character* or *characters* (Broun, 1941 as cited in Goldstein & Iso-Ahola, 2006).

The difficulty of this reconciliation is not unique to junior tennis. Youth sports such as baseball, soccer, and basketball have their share of celebrated instances of player and parent/coach antisocial behavior. Unique to junior tennis, however, is the individualized and interpersonal nature of tournament play, as well as what may be a *tacit* aura surrounding expectations of many parents/coaches tied to *hidden* personal agendas. As an individual sport, ego orientation in junior tennis tends to be high, and increases as participation continues. And because self-governance (and scant officiating) requires players to manage rules and decisions affecting outcome, the safeguard of impartial officiating (and direct adult supervision) found in other youth sports is lacking. Also, because of USTA regulations and self-governance, coaching support is prohibited until and unless a third set or match tie-break is played. Further, evidence exists suggesting

that some antisocial behavior in junior tennis may be fueled by parent *vicarious desires* and *anticipated financial reward* for their investment.

A major step in reducing antisocial behavior in sanctioned junior tournament tennis is reconciling these two performance models at both player and parent levels. Later I will address reconciliation from a player perspective. Here I will address it from a parent perspective.

My introduction highlighted the perception held by some CDTA/NITA stakeholders regarding the systematic manner in which a parents' failure to reconcile the two performance models transforms into antisocial behavior that often causes and reinforces similar behavior in players. Having engaged in conversations with many parents/coaches, tournament directors, and fellow officials the past few years regarding antisocial player behavior, when the subject of negative parent influence surfaced, *bad parenting* was the most often ascribed reference. As I processed these conversations, it became apparent that such references were often *emotionally charged* and rarely offered little in the way of a possible behavioral explanation. Rather than jump on the *bad parenting* bandwagon, I turned to research literature in order to discover, behaviorally, the *why* behind the *what*. In cross-referencing research articles on parenting and youth behavior, a possible explanation for *good* parents doing the *wrong* thing emerged.

Research evidence aside, I don't discount the possibility that a relatively small number of parents may have preexisting *internal* issues regarding child rearing not necessarily precipitated by but brought to light by junior tournament participation. In such instances, short of attrition, there may be little that can be done to reverse the trajectory of their antisocial tennis behavior. However, for what I consider to be the majority of parents whose tennis behavior belies their constitution away from the game, I suspect they have succumbed to *global aspirational amnesia*, a condition I have conceptualized and modeled after Kahn's theory of *Environmental generational amnesia* (2002). Global aspirational amnesia describes the temporal effect of *repeated exposure to experiences shaped by the justice model* on the normative behavior of a well-meaning parent. Under

this influence, a parent's behavioral reference point once *centered on a child's developmental needs gradually shifts towards those centered on performance outcome*.

Environmental generational amnesia evolved from a child study of pollution in Houston Texas, where findings suggested that, even growing up in one of the most polluted cities in the United States and possessing a fair amount of knowledge of its harmful environmental effect, a disproportionate number of children in the study failed to acknowledge this effect on their health. It is theorized that gradual increased exposure to such conditions over time led to a gradual change in children's perceptions about their immediate environment, *resulting in a normative shift in terms of what once constituted clean air* (Kahn, 2002).

With junior tennis parents, I suspect this condition may serve to explain expectations and accompanying antisocial behavior surrounding their child's tournament participation that belie those harbored on a more global level. At the outset, well-meaning parents encourage and support participation in sanctioned tournament tennis in part because of a child's expressed interest in doing so, as well as seeing this as a healthy activity that can enhance socialization development. Initially, winning matches has relative importance; yet, even when winning occurs less than what may be desired, failure experienced at the entry level, no matter how frequent, is considered part and parcel to competing, and as such an *essential element of the development process*. Hence, at this stage of participation, global and competitive aspirations exist *harmoniously*. However, as time progresses and noticeable improvement is seen in a players' performance ability, I suspect two environmental conditions reshape the motives and subsequent expectations of some parents regarding how success, during tournament play, is measured.

The first is what I see as *repeated exposure to performance models in other youth sports and professional tennis*. In both settings what is consistently observed by parents (and players) is *uniformity in the manner justice is meted out*. The safeguard of impartial officiating consistently assures that decisions affecting outcome will be (relatively) accurate and made without personal bias. With the embedded province of self-governance in sanctioned junior tournament tennis, however, competitors perform under

an *honor system* which relies heavily on *personal integrity* when decisions affecting outcome must be made. And, unfortunately, no uniform (and consistent) safeguard exists in junior tennis for instances where honor is breached. Also, this system governing competitive sport does not present itself in any other setting, youth or professional. Like the children in the Houston study, *is it possible that what parents (and players) are repeatedly exposed to in a competitive sport context skews normative behavior to such an extent that this significant difference is overlooked?*

The second condition is what I see as the *self-serving needs and desires of parents overriding the best interests of the child*. It is not a stretch to say that many if not most adults associated with CDTA/NITA sanctioned junior tournament tennis would contend that it is a *money sport*. One only need look at the apparel, equipment, and expenses related to development e.g. lessons and practice court time, as well as tournament play both in and out of district to agree with this statement. With some families, especially those with more than one participating junior, the financial and time investment can be staggering. And as with any investment, a parents' desired return in some *tangible* form is to be expected. With some junior tennis parents it appears that tangible may be mistaken for *material*. And the difference is significant. Tangible returns in junior tennis tend to be associated with *global aspirations related to prosocial development*, a significant part of which is allowing a child to learn how to manage emotions when facing negative experiences during tournament play. With these aspirations *learning and development takes center stage* and parents tend to exercise *a relatively consistent and high level of tolerance and restraint* when their child is the victim of a perceived injustice. On the other hand, material returns tend to be associated with *rankings and performance results that may potentially lead to college scholarship offers* (and in some instances a professional career). With these aspirations *performance outcome takes center stage*, and subsequently, *little tolerance and restraint* is exercised with perceived injustice. And still another consideration (indirectly) associated with material return may be a parents' *missed opportunity* for personal achievement in tennis or another sport being *superimposed* upon a child's competitive experience.

Both conditions just described may explain antisocial parent behavior. In some instances a parents' motive and expectations may be influenced by one or the other. In

others, motive and expectations may be influenced at different times or simultaneously by both. In either case, when a parent succumbs to one or both of these conditions, *does this mean that motives and expectations associated with global aspirations have completely disappeared?* In the absence of concrete evidence as to what may lie in the hearts and minds of such parents on either side of this coin, what's left as a plausible explanation is my theory that the temporal effect of exposure to environmental conditions directly associated with the justice model may have led to a state of global aspirational amnesia, which in turn explains *antisocial behavior exhibited by well-meaning parents*.

The Sanctioned Junior Tournament Environment as a Structural Entity

Another antecedent to antisocial player behavior may be the unique structure of tournament play i.e. *self-governance*. Few would argue the point that many instances of antisocial behavior stem from the inability of some players to manage negative experiences occurring during play and that such experiences emanate from its interactive and interpersonal nature. Having examined tournament play developmentally the past seven years, I suspect that the *one-size-fits-all* nature of self-governance, while noble in theory, in practice fails to account for variances in the existing level of socioemotional function of some players. Given this, and the amount of antisocial player behavior that continues to be displayed in CDTA/NITA tournaments, it appears an examination of the infrastructure of tournament play may shed new light on issues surrounding sportspersonship.

Developmentally, adolescence can be characterized as *a period of construction* whereby through interaction with the world in various contextual settings, youth engage in an on-going process of *interpreting reality by means of experimentation* (Nakkula & Toshalis, 2006). Embedded in this process is the maturation of *self-systems* which, in part, becomes a measure of socioemotional growth. Subsequently, this process of trial and error becomes individualized which, *behaviorally and temporally*, leads to a great deal of variance with each adolescents' socioemotional trajectory.

When the above is juxtaposed upon the uniform structure of the junior tournament experience, one can extrapolate that expecting every player to function on the same

socioemotional level within the defined/rigid tenets of sportspersonship *may be unreasonable*. To illustrate this I must attempt to explain tournament play as a structural entity.

Structurally, four distinct yet interrelated components comprise the junior tournament experience, described as: 1) tournament play itself; 2) rules governing play; 3) adult supervision; 4) roving officiating. As with any structure, soundness (integrity) is measured by the presence of flaws within its foundation. With junior tournament tennis, structural integrity can therefore be measured by how tournament play, rules, adult supervision, and officiating impact player behavior. From this one can surmise that sportspersonship i.e. prosocial player behavior is contingent upon the fidelity of this relationship. And it is this fidelity I wish to address.

Structurally, ecologically, and behaviorally, antisocial player behavior can be traced to a breakdown of some substance related to a players' interaction with one or more of these components. This is to say that at various moments during the course of a match, experiences occur that for some reason trigger a negative emotional response, which often leads to displays of antisocial behavior. Against the backdrop of a substantial amount of research literature, I have analyzed antisocial player behavior through direct observation and anecdotal reference. And having done so, a picture has emerged that may shed light on how the components mentioned above may compromise the fidelity of sportspersonship.

The most significant component in the junior tournament foundation is the *competitive experience*. Tournament play represents a juniors' most obvious and fundamental interaction with the environment. And this interaction, as suggested by social cognitive theory, is experienced in three distinct but interrelated contexts, described as *selected*, *imposed*, and *created*. (Bandura, 2005).

The selected environment is the *physical act of competing*, described as such because participation is, for the most part, volitional. Embedded in this choice is a players' expectation that (specific) performance outcomes will be realized. Also embedded in this choice is the realization that no matter how well he prepares, once a match begins,

these desired outcomes may not be realized due to his level of play or that of his opponent.

The imposed environment is not competition itself. It is the *rules of competition as defined by self-governance*. This province dictates that players self-manage score, line calls, and all decision-making related to outcome. And when disagreement occurs, benefit of doubt must *always* be given to one's opponent. The same performance expectations are harbored in this environment as the above. Here, however, two caveats are embedded. One is that regardless of how well a player prepares, realization of some or all performance expectations may be affected by an opponents' *integrity*. Two is my belief that because of this variable, if given the choice, most if not all players would prefer to operate under the same (officiating) conditions experienced in other youth sports; hence, an imposed environment.

This brings us to the created environment. As shown, conditions are embedded in the selected and imposed environments which can have a profound impact on the trajectory of a match and realization of desired outcomes. Of greater significance is the impact of these conditions or variables on a players' socioemotional function. While poor personal performance, an opponent's superior performance, or an opponent's decision-making cannot be directly controlled, what can be directly controlled is the emotional value attached to these experiences at the time they occur. From this one can surmise that antisocial player behavior is the result of a (*chosen*) negative internalized perception and interpretation of an experience occurring during play which subsequently transforms into a negative external response. The created environment contains the safeguard of *self-influence (personal agency)*, which is the behavioral function a player must engage in order to manage negative emotions triggered by experiences occurring during play (Bandura, 2005). A template for this environment will be presented after I reveal the third structural component that influences a players' socioemotional trajectory which is the manner in which tournament play is *supervised*.

"Merriam-Webster's" definition of supervision is "*Critical watching or oversight for the purpose of ensuring proper control.*" Supervision of sanctioned junior tournament play takes on two forms. The first is supervision provided by USTA certified officials, with

support (as available) from court monitors. And this form of supervision (observation) is either *direct* or *indirect*. With multiple courts in use (as is often the case), indirect observation of play *occurs from a distance e.g. a court away or from the stands*. Direct observation of play is *viewing a specific court while standing at the net post*, which, according to USTA guidelines/procedure, is the only way a certified official or court monitor can make (most) critical decisions pertaining to play e.g. overruling a line call. And as shown earlier (refer to table 2, pg. 9), when roving officials are used, an individual match is directly observed less than half of the playing time. This is inevitable since, with multiple courts in play, only 1 can be directly observed at a time. And aside from occasions where a roving official is directly observing a court, indirect observation is also affected by an officials' *discretionary rest periods* during which he may be on-site but not necessarily in position to view courts in play. These conditions all impact an officials' ability to ensure proper control. And even when court monitors are used, their ability to ensure proper control is limited because only certified officials are authorized to use code violations as a means of deterring antisocial behavior. In addition, according to USTA tournament regulations, certified officials are only required at Level 3 events or higher. And because the majority of CDTA/NITA tournaments are Level 4, where certified officials are only *recommended*, this means that the majority of district tournaments are conducted with one certified official for an entire event, and in some instances none, which leads to scant, inconsistent, and sometimes superficial supervision at the entry/development level of play.

Ostensibly, parent/coach observation from the viewing area is a form of supervision. As a roving official (and occasionally as a spectator) I can attest to the fact that antisocial player behavior, which, at times, is egregious, is often *directly observed by parents/coaches*. And in some instances the parent/coach exhibited behavior is *more egregious than that of the player*. Rarely have I observed a parent/coach *directly (and immediately)* address a players' antisocial behavior during a match. Parent/coach disassociation with and apparent tolerance of player behavior that would, in other social settings, be deemed unacceptable (and addressed) is a manifestation of the global aspirational amnesia i.e. justice model influence previously discussed. Subsequently, under this influence, depending upon its strength, a parent/coach is likely to substitute

sportspersonship with *gamesmanship*, which is the belief that behaving in an antisocial manner is *a justifiable means to the desired outcome of winning*. Still another factor may be USTA regulations regarding coaching. A parent/coach may be hesitant to address a players' antisocial behavior out of concern that such communication (depending upon what is said) may be interpreted by an opposing parent/coach as an attempt (in some way) to influence outcome, and that such behavior should be addressed by the official or tournament director. The reality is, such reasons for parent/coach disassociation notwithstanding, this form of adult supervision is also scant, situational, and distal, representing yet another structural flaw that may compromise the fidelity of sportspersonship.

A component of the sanctioned junior tournament experience that garners a significant amount of attention from players, parents/coaches, and tournament directors is the interplay between (roving) officiating and self-governance. Besides scant presence, also unique to sanctioned junior tournament play is *variance in roving approach/philosophy of certified officials*. From the vantage point of many players, parents/coaches, and tournament directors, *perceived* inconsistency with roving officiating involvement often compromises the envelope of *psychological safety* needed for a healthy, structured, and prosocial oriented youth activity. The variance observed in officiating practices at different tournaments (and sometimes even within the same event) often confuses and frustrates players, as jurisdiction regarding decision-making - *especially critical ones directly affecting outcome* - vacillates between the on-court official and players. As a consequence, the *centerpiece of adult supervision* during junior tournament play - *roving officials* - often by timing of involvement or lack of, further serves to compromise the fidelity of sportspersonship.

Modeling Behavior

Throughout the human lifespan, learning as well as patterns of thought and behavior is significantly influenced by what we are repeatedly exposed to in the environment (Bandura, 2005). Thus *social* and *symbolic* modeling represents a third environmental condition which influences player behavior. In the context of sanctioned junior tournament tennis, this suggests that how a player thinks and behaves (including on-

court persona) may in some way be influenced by functional attributes characterized by peers and possibly a favorite professional tennis player. In a learning context few would argue that chosen equipment and apparel as well as playing style of some juniors is readily seen by this exposure. Examples are *grunting* and celebratory *gesturing*. If these and other sometimes emotionally driven behaviors exhibited each weekend by developing junior competitors aren't learned from what is seen (and heard) by watching, let's say, US Open tennis, one must ask, "*How, in a "ten-year old" does such behavior evolve?*" Two problems are posed by this youth learning model when it influences a players' reference point for behavior when negative experiences occur during play. One relates to the development and justice performance models earlier described. The other relates to the *playing conditions*.

Competing for fun, socialization, and life skills development is far different than competing for one's livelihood. As such, with the professional model, where competing to win is the highest aim, such an emotional (and financial) investment quite naturally will at times lead to player behavior that, while appropriate in the "*US Open final*," may be inappropriate in the "*back draw final of a Boy's 12's L4 event*," where much less rests in the balance with outcome.

Self-governance represents a playing condition *distinctly different* from other youth sport settings. Without question, most antisocial player behavior in junior tennis is triggered by an *opponents' decision-making*, especially when no official is present. When a negative experience such as a perceived incorrect line call occurs, a junior has no youth sports model from which a prosocial behavioral response *under similar conditions* might be emulated. Uniform/impartial officiating embedded in other youth sports mitigates most if not all interpersonal conflict that is constantly present in junior tennis.

From the naked eye I can only speculate as to what if any correlates exist linking a players' thinking and behaving to what she may be exposed to in peer or professional environmental settings. However, given the significant contribution modeling appears to have as a behavioral construct, I suggest a more formal investigation of this phenomenon would replace speculation with empirical evidence. (Modeling behavior in a different context will be addressed later.)

A Social Cognitive and Constructivist Template for the Created Environment

Thus far evidence has been presented suggesting that the connection between sportspersonship theory and practice may be weakened by the inability of some players to consistently initiate positive responses to negative experiences during tournament play. When encountering negative experiences, the nature and structure of tournament play, combined with insufficient adult support and supervision, overwhelms some players to the point where exhibiting antisocial behavior appears to be the only recognizable response. As stated earlier, the purpose of the created environment is to nurture a players' innate capacity to initiate personal agency through which a prosocial response can be exhibited when encountering negative experiences. Grounded in social cognitive theory, the template for this response must be *co-constructed with input from parents and other adults associated with tournament play*. The importance of this cannot be overstated. While personal agency is a self-initiated experience, success is best achieved through *scaffolding*, or working within a juniors' *Zone of proximal development* (Vygotsky, 1978 as cited in Chaiklin, 2003).

From this point forward I will attempt to explain antisocial player behavior from a social cognitive perspective and offer suggestions as to how this development theory can be used to redirect the socioemotional trajectory of players whose propensity for antisocial behavior may be, by sportspersonship standards, acute. I must also add that due to the expanse and complexity of this behavioral theory, I have chosen to extract from it the constructs I believe (for now at least) most relevant to antisocial behavior in the context of sport participation, specifically sanctioned junior tournament play.

In creating a template for the created environment I must begin with an encouraging point. An in-depth examination of social cognitive theory has led me to believe that the sanctioned junior tournament environment, in spite of conditions which appear to be antecedents to antisocial behavior, does, in a developmental sense, *serve as fertile ground for the engagement of personal agency*. An element of adolescent development, which serves as a (relatively) accurate barometer of prosocial growth, is how well youth navigate the storm and stress of daily life in various social settings, of which tennis is but

one. Thus, with juniors, personal agency is actualized by means of encountering and managing negative experiences that occur during tournament play.

In tournament play, a players' cognitive and emotional response to a negative experience is the primary determinant of the trajectory of subsequent externalized behavior. This response lies at the heart of antisocial player behavior and the need for the created environment. The role played by emotion and cognition in influencing player on-court behavior looms large in terms of how antisocial behavior is addressed. Because of this importance I will share several views on how these constructs are defined. According to Deci (1980), *emotion is a stimulus reaction to something real or imagined in the environment*. As postulated by Jones (2003), *the fidelity or strength of an emotion is determined by perceived relevance*. Further, as theorized by Gross (1998), *emotion is an internal mechanism used to measure the time lapse between a goal and its realization*. In other words a positive emotion indicates a short time lapse whereas a negative emotion indicates a longer time lapse. Also, a *dual process* has been ascribed to emotion by Baumeister et al (2007) which distinguishes *conscious emotion from automatic affect*. Here research suggests that *conscious emotion may be guided by forethought or contemplation whereas automatic affect is more reflexive or spontaneous*. (The significance of the latter two descriptions with respect to antisocial player behavior will come forth a bit later.) Cognition is *ascribing value to events encountered in the environment*, a process which subsequently becomes a precondition or cause of emotion (Lazarus, 1991). As described by Jones (2003), *cognition is a decision-making mechanism that generates and maintains emotional states*. Further, while emotion is a stimulus reaction (Deci, 1980), it is *the process of cognition that first determines valence relative to one's personal well-being* (Jones, 2003).

Encountering negative experiences during junior tournament play is inevitable. So too is some display of emotion by a player based upon valuation given to such experiences. The good is that a players' emotional investment in the competitive experience, whether positive or negative, indicates that a level of importance is being attached to some intrinsic or extrinsic desired outcome. In other words, in terms of tournament play, at the end of the day, *what happens, matters*. However, the bad is that, without some regulatory mechanism to guide a players' emotional response to negative experiences,

the likelihood of a negative emotional response when such experiences occur may increase in both fidelity and frequency according to their perceived threat to goal attainment.

The importance of a regulatory mechanism for emotional control in junior tournament tennis is underscored by both the frequency and origin of negative experiences. Competitive tennis is a *failure* sport. Each point is *won* or *lost*, and statistically, over the course of a match, more *errors* are made than *winners*; hence a high *mistake index* (see table 3). Singles play is highly *interactive and interpersonal*, with communication between opponents (either verbal or implied) occurring on every point (see table 3). And because of self-governance, *a substantial amount of critical decision-making affecting outcome* is imbued in this process, which brings *ego-orientation* into the picture. This means that (perceived) material success or failure in tennis is far more likely to be linked to *personal efficacy* or *self-worth* than with team sport participation. As a consequence, self-governance and high ego orientation, coupled with other influential behavioral factors, has a potentially negative impact on the fidelity of *trust behavior*. Subsequently, when cognitive and emotional dispensation is juxtaposed upon junior competitive tennis, this environment becomes fertile ground for the toxicity that fuels antisocial player behavior.

Subjective Quantitative Measure of Interpersonal Communication Between Opponents During a Random Sample of CDTA/NITA Tournaments

Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
G L4 14	1:04		V	I	V	I				
		A	23	11	12	5	15	22		1
		B	29	11	7	11	1	40	1	
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L 4B 12	1:16		V	I	V	I				
		A	56		38		10	52		
		B	53	6	33	13	1	53		
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L4 B16	54		V	I	V	I				
		A	19	22	12	16	3	47	1	
		B	35	6	24	7	5	30	2	
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L4 G16	:41		V	I	V	I				
		A	35	3	24	7	4	18		
		B	17	7	16	5		43		
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L4 G12	1:31		V	I	V	I				
		A	43	11	38	13	8	61		1
		B	58	2	40	8	6	54	1	
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L3 G12	:57		V	I	V	I				
		A	9	34	24	13	22	35	2	1
		B	11	25	20	27	1	37	1	
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L3 G12	:48		V	I	V	I				
		A	5	27	10	8	22	19		1
		B	25	1	16	22		32		5
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L3 G 14	1:00		V	I	V	I				
		A	25	3	43	2	13	27	4	
		B	35	9	13	22	2	44	1	
Event	Time	Player	Score		Line call		Winner	Error	QLC	QS
L2 G 12	:44	A	V	I	V	I				
		B	19		3	2		37	1	
			17	1	16	3	4	4	1	

Table 3

Legend: V/I (verbal/implied communication); QLC/QS (questioned line call/score)

During 8 matches 507 instances of interpersonal communication occurred. Score: verbal 146/implied 100; Line call: verbal 145/implied 99; Questioned line calls 10; Questioned score 7

Winner/error ratio: 64/235 = approximately 1/5 (21%)

The sole function of the created environment is that of reprogramming one's cognitive and emotional response to negative experiences. In other words, in order for a player to

initiate a prosocial response to a negative experience, *a change in interpretation and valuation of what is perceived must occur.*

Reprogramming one's response to negative experiences does not occur as a result of random, uncalculated acts. Rather, the regulatory mechanism within the created environment is constructed by means of a specific set of behavioral tools already housed within a players' self-system but remain dormant or unrecognized until acted upon. This construction begins with *intentionality.*

Intentionality is planning. Planning is a *chosen or calculated cognitive and emotional response to environmental stimuli based upon recognized options.* However, such intentional action in and of itself does not determine whether any resultant consequence will be favorable or unfavorable. (Bandura, 2001). For example, a player responds to a lost point by (*intentionally*) hitting a ball out of the playing area resulting in a point penalty being assessed by an official. While the consequence i.e. point penalty was not (necessarily) intended, the cognitive and emotional response to the lost point precipitating the officials' action was. Thus, the duality of intentionality is that exercising this element of personal agency occurs independently of whether any consequence will be beneficial or detrimental to a players' desired outcome (Bandura, 2001).

Intentionality alone won't lead to a prosocial response to a negative experience. Purposeful action must be *goal-guided.* *Forethought* is the cognitive tool used to anticipate likely consequences and desired outcomes as they relate to one's response to perceived stimuli in the environment (Bandura, 2001). For example, a player perceives an incorrect line call has been made. In absence of an official to confirm/overrule, a cognitive and emotional response is immediately formulated with intentionality. However, without forethought, his response is likely to be *reflexive* rather than *conscious* (Baumeister et al, 2007). A reflexive response eliminates consideration that he may, in fact, be wrong in his perception; that the perceived incorrect line call was possibly the result of visual error (in which case forethought may have elicited a more empathic response); or that (because of self-governance) the line call will stand regardless of his expressed objection. Subsequently, this lack of anticipatory self-guidance is likely to trigger an *undesired* display of antisocial behavior.

Still another step in the process of reprogramming one's cognitive and emotional response to negative experiences is that of combining intentionality and anticipatory self-guidance with what Bandura (2001) refers to as *self-reactiveness*. Intentionality and forethought create options and action steps for one's emotional response. However, motivation and appropriate action must be *self-initiated* in order for the desired emotional response to be actualized. Again, when a player feels victimized by a perceived incorrect line call, forethought allows both positive and negative responses to be recognized as options from which she must choose. Recognition of the positive emotional response alone won't move her in this direction. Self-reactiveness serves as the *conduit* between her thought and subsequent action. This is to say that absence of evaluative self-engagement (Bandura, 2001) means that *the possibility of a negative emotional response to a negative experience is just as likely to occur as the opposite*.

Engagement of the regulatory mechanisms just described is central to the process of redirecting one's behavioral tendencies. However, in order for the desired effects resulting from this reprogramming to be sustained or become habitual, *an internal audit or self-examination of one's actions must be initiated*. This is best accomplished through the process of *self-reflectiveness* (Bandura, 2001). Reflective practice is looking introspectively at one's experiences and, in the face of challenges, making a *conscious assessment of what is working and what is not* (Amulya, 2004). During a match, when a player responds angrily after committing an unforced error, often the lingering effect of this negative emotional response continues well after the experience, sometimes up until the start of (or even during) the next point. Without some degree of reflective action, this lingering emotional effect may lead to subsequent performance breakdowns completely *unrelated to the initial unforced error*.

Intentionality, forethought, self-reactiveness, and self-reflectiveness have been presented as behavioral tools that are part of a players' self-regulatory system. A connection has been shown between these constructs and how their presence or absence influences the manner in which a player responds to negative experiences during tournament play. Once these constructs are recognized, however, effective engagement is measured by a players' level of *self-regulatory efficacy*. In order for this self-system to develop, a player must first *believe that she has the capability of*

exercising some degree of control over her response to negative experiences (Bandura, 2001). Next, she must develop *consistency with choosing the appropriate response*. This is where the role of social cognitive and constructivist developmental theory becomes critical. Constructivism suggests that meaningful interaction with the environment facilitates *self-knowledge*, (Lutz & Huitt, 2004) and that collaboration with adults i.e. scaffolding will move an adolescent from *co-dependence* to *independence* (Vygotsky, 1978 as cited in Chaiklin, 2003). Positive youth development suggests that the environment in which youth are engaged should be *psychologically safe* and have the presence of *supportive and caring adults* (Gano-Overway, 2009). And social cognitive theory suggests that self-influence is highly dependent upon the *consistency and proximal self-monitoring of one's behavior* (Bandura, 1991). The structure of sanctioned junior tournament play presents a number of challenges to this developmental process. However, before addressing them I will explain how this process, under the right conditions, can lead to a more positive socioemotional trajectory.

The first step in improving self-regulatory efficacy is identifying the source of negative experiences that lead to antisocial player behavior. During tournament play, negative experiences emanate from one of three sources: 1) Personal performance; 2) An opponents' performance; 3) An opponents' decision-making. For example, if the negative experience is personal performance e.g. an unforced error, the negative emotional response is *self-directed* and categorized by denigrating remarks like *"How can I miss that shot?"* or, *"This is the worst I have ever played!"* If the negative experience is an opponents' performance e.g. a winner, the negative emotional response may be (and often is) directed towards one's opponent and categorized by denigrating remarks like *"You are so lucky!"* or *"Get out of your tree!"* If the negative experience is a perceived incorrect line call, the negative emotional response is (always) directed at one's opponent and categorized by remarks ranging in tone from an innocent query such as *"Are you sure?"* to ones more antagonistic and accusatory *"That ball was on the line!"* or *"You are such a hook!"*

While all three represent legitimate triggers of antisocial player behavior, I have chosen to focus on the latter two which reflect antisocial behavior directed towards an opponent, in particular, behavior linked to self-governance.

Socialization is a key tenet of both social cognitive and constructivist theory. This is also true of positive youth development theory which focuses on developing assets that will help youth lead healthy lifestyles and thrive in civil society (Benson, 2006 as cited in Gano-Overway, 2009). Thus, remaining consistent with these development theories, my primary interest is using self-regulatory efficacy as a mechanism for increasing the likelihood of player behavior that is *intended to help another*, which defines prosocial behavior (Gano-Overway, 2009).

I contend that the more egregious displays of antisocial player behavior are linked to questioned line calls, score disputes, and various forms of gamesmanship, all of which represent negative experiences directly linked to self-governance and scant officiating. As mentioned earlier, player interaction and potential for conflict occurs on every point. By rule, after each point the server must call the score, and, except for shots hit into the net, verbal (or implied) *in* or *out* calls must be made on shots which land close to any line. Any breakdown with one of these (frequent) transactions has the potential for becoming a negative experience which a player must reconcile with her emotions. And we know that a players' negative emotional response is often reflexive or spontaneous and strongly influenced by the perceived relevance of an experience to a desired outcome. Also, in extreme instances a threat to personal well-being may become an influential factor. From a socialization perspective this in turn may be interpreted (temporarily at least) as a lack of care for her opponents' feelings and an erosion of trust. Self-regulatory efficacy triggers a prosocial emotional response that is empathic. In some research, empathic behavior has been linked to a prosocial response when a negative experience is caused by another individual (Eisenberg & Miller, 1987). Just as important to prosocial behavior is *trust*, which is "*An expectancy held by an individual that the behavior (verbal or nonverbal) of another individual ... would be altruistic and personally beneficial to himself*" (Frost et al, 1978 as cited in Blomqvist (1997).

Judging from most observed displays of antisocial player behavior, I suspect that perceived threat to personal well-being (psychological threat) and goal realization (ego-threat) are the primary impediments to empathy and trust. Self-regulatory efficacy has a dual effect on a players' response to negative situations caused by an opponent. The more capable he feels that he can positively manage a negative experience e.g. a perceived incorrect line call, the more likely he is to show regard for and trust in his opponents' decision. In contrast, when self-confidence in personal behavior is lacking, the result is *internal unrest* that may lead to *social disconnectedness* with respect to his opponent (Gano-Overway, 2009).

Given the interactive and interpersonal nature of junior competitive tennis, the importance of self-regulatory efficacy and the constructs of empathy and trust in helping a player learn how to initiate a prosocial response to a negative experience cannot be overstated. And the reprogramming facilitated by the behavioral tools of intentionality, forethought, self-reactiveness, and self-reflectiveness is the sole means by which this new behavioral response can manifest. There is, however, a duality contained within this process. Self-regulatory efficacy primarily manifests within the experiential setting of tournament play. However, also critical is the nurturing and reinforcement in this endeavor brought about by interaction with parents/coaches before, during, and after a match. This duality is necessitated, in part, by the elements of *time* and *decision-making*. Once a match begins, continuous play rules limit time between points, games, and sets. Also, self-governance requires line calls to be made promptly. The pace of play dictated by these constraints may compromise engagement of forethought, self-reactiveness, and self-reflection as a player attempts to manage negative experiences that occur. An antisocial response to a perceived incorrect line call isn't preceded by forethought. It is a reflexive or spontaneous emotional response which, in absence of forethought, lessens the likelihood of self-reactiveness to be initiated. Subsequently, in absence of self-reactiveness, the option of a prosocial response may not be recognized. And, as often observed, the after-effect of this negative response is not mediated by a period of self-reflection. Because of continuous play, little time is afforded a player to recover from what has just occurred and prepare for the next point. (The absence of

forethought and reflection is most evident when a negative experience after one point has a carryover effect into the next or series of points.)

As evident by the above, when self-regulatory efficacy is challenged by a negative experience during play it becomes extremely difficult for a player to reprogram in isolation. This is where adult influence becomes critical. I mentioned duality in terms of enhancing self-regulatory efficacy. Psychological or ego threat brought about by a negative experience often increases in fidelity when a player sees a negative reaction by a parent/coach. For example, expressing displeasure with a line call, a player immediately looks to the stands. The subsequent reaction by the parent/coach can be calculated to either *quell the negative response or reinforce it*. (On many occasions I, as a roving official, have witnessed a players' negative emotional response to a questioned line call elevate to another level after seeing a similar response from a parent/coach.)

Let me summarize earlier thoughts regarding the co-construction of adolescence in the specific context of junior tournament antisocial player behavior. Antisocial behavior is part and parcel to a player's interaction with and on-going process of interpreting reality through experimental behavior and trial and error (Nakkula & Toshalis, 2006).

Embedded in this process is the maturation of self-systems. Until maturation is reached a great deal of variance is likely to be found in how players respond to negative experiences during play, and, as is often observed, this response can be antisocial. Co-construction of self-regulatory efficacy is dependent upon the establishment of reciprocal relationships with adults (Bronfenbrenner, 1999 as cited by Fraser-Thomas et al, 2005). Also important is engagement with a caring and empathic environment which must be nurtured and reinforced by parents/coaches (Gano-Overway et al, 2009). Further, as a deterrent to antisocial behavior, psychological safety i.e. stability, predictability, security etc. must be facilitated by the presence of supportive adults, in this case a parent/coach (Eccles & Gootman, 2002).

Every time a player responds negatively to a score dispute or perceived incorrect line call and looks up in the stands, the opportunity for adult support, guidance, and reinforcement of his behavioral tendencies under such conditions materializes. A parent/coach must understand their co-constructive role in strengthening his capacity to

initiate a prosocial response when something negative occurs and seize the moments as they occur during play. Further, this duality extends beyond actual play. Authorized rest periods, where coaching is permitted, as well as pre/post-match discussions represent co-constructive moments where intentionality, forethought, self-reactiveness, and self-reflectiveness can be embedded into the conversation. Officiating assignments often afford the opportunity for me to observe player-parent/coach interaction during such moments. And doing so, I have found that most often such interaction centers on helping a player change a *losing game* (physical performance) rather than a *losing belief system* (self-regulatory efficacy). The substantial investment made by some parents/coaches in changing a players' losing game can be quite detailed, involving both descriptive and prescriptive counsel. So critical is this teaching/learning exchange to improving a players' chances of performing better that attempts to co-construct development (in a performance sense) occasionally take place at times when such communication is, by rule, prohibited e.g. coaching during play. The same teaching/learning process is needed to minimize antisocial player behavior. I believe there are some players whose mechanical audit of their questionable behavior may elicit some motivation to reprogram how they respond to negative experiences during play. However, Vygotsky's zone of proximal development theory presents compelling evidence suggesting that scaffolding i.e. adult guidance is likely to produce results well beyond that which a player may be capable of achieving alone (1978).

Modeling and Reinforcement: The Critical Role of Parenting in Co-Constructing the Created Environment

After some reflection on the framework I have constructed thus far for improving player behavior during sanctioned junior tournament play, I decided to add a postscript to the co-constructive manner in which personal agency is nurtured within junior competitors. And this postscript is prepared expressly for parents.

A number of conditions within the existing sanctioned tournament environment have been revealed that may impede a player's progress toward engaging the behavioral tools of personal agency. The time element i.e. continuous play, along with the distal and restrictive nature of adult support brings to question the effectiveness of tournament

play as a learning (and development) experience. Recognizing the unchangeable nature of some of these conditions (at least for now), I believe the importance of behavior modeled and reinforced by parents must be understood.

Earlier I alluded to the frequency with which a player looks at a parent in the stands when a negative experience occurs during play e.g. a questionable line call. Ostensibly, this glance serves one of two purposes (occasionally both). She may want a second opinion regarding what she perceives as an injustice. The other is that her psychological security may have been breached by this perceived injustice and solace sought by making eye contact with mom/dad. In either case, connection with a parent in reaction to a negative on-court experience may have an adolescent development correlate which draws attention to parent-child attachment theory.

This is more than conjecture. Adolescence is a period of development where the bidirectional experience of balancing the emerging need for autonomy with the security found in connectedness to parents must be reconciled. According to Noom et al, research suggests that parent-child relatedness has psychosocial development correlates, and that the fidelity of this relationship may determine whether an adolescents' tendency is toward pro or antisocial behavior (1999). And, even as desired independence gains momentum, adolescents are inclined to seek psychological security found in parent attachment when encountering stressful experiences (Cassidy & Shaver, 2002). Also, in terms of socialization development, parents are at the forefront of providing adolescents a working model of how to *manage interpersonal relationships* (Engels et al, 2001). Two implications are embedded in this sample of research literature which suggests a more thorough examination of attachment theory as it relates to sportspersonship may be warranted. The first is that once a parent becomes visibly engaged in a child's pursuits, *their exhibited behavior serves as a model that, because of attachment, the child may choose to emulate* (Smoll et al, 2011). The second is that correlates may exist between parent attachment and *adolescent self-esteem* (Laible et al, 2004).

Evidence of parental influence on a players' behavior is frequently demonstrated when a questionable line call occurs. Often is the case where a players' emotional response to a

perceived incorrect line call elevates in tone after seeing a negative response by mom/dad from the stands. As cited above, research evidence suggests that parent-child attachment matters when parent behavior intersects with a juniors' encounter with negative experiences. Subsequently, this negative parent response can potentially have both a proximal and temporal impact on the socioemotional trajectory of a player depending upon the fidelity of attachment. The immediate impact is on self-regulatory efficacy. Developing trust and empathy - a by-product of this behavioral tool - is a process that may be impeded each time a negative experience confronts a player and it is not supported in a prosocial manner by a parent. And over time, repeated exposure to a parents' negative response to negative experiences occurring during play may potentially have a self-reinforcing impact on a player's future negative emotional responses. In terms of shaping behavior, this is consistent with Skinner's "*Operant conditioning*" theory (McLeod, 2007) which suggests that reinforcement from environmental stimuli *increases the likelihood of a behavior being repeated*. In the context of negative experiences occurring during play e.g. questionable line calls, when a player's negative response to questionable line calls is repeatedly supported by a similar parent response, *the probability of a him repeatedly responding negatively to future questionable line calls is likely to increase*.

Summary and Recommendations

This report has been generated to present new information that may serve to explain why, in spite of noble sportspersonship initiatives, displays of antisocial player and parent behavior continue to surface in CDTA/NITA sanctioned junior tournaments. This seven year investigation included an examination of player and parent behavior within an ecological and social cognitive development framework as well as sanctioned tournament play as a structural entity. In addition, testimony from a cross section of key stakeholders was included in which opinions regarding causes of antisocial player and parent behavior were shared. The attempt was to assess, in a general way, the pervasiveness of such behavior across the landscape of district play and, through research evidence, present information from a relatively unexplored domain that might pinpoint its most probable antecedents.

Findings provide credible evidence that district-wide, while antisocial player and parent behavior exhibited during sanctioned tournament play gathers significant attention, such behavior is in the *minority* when compared to that exhibited by the many participants who support CDTA/NITA sportspersonship tenets in both theory and practice. Also, research evidence revealed antecedents to antisocial behavior with psychosocial developmental underpinnings whose *causal* or *correlational* effect must be determined by more substantive investigation. Further, while district sportspersonship tenets are reasonable, forthright, and explicit, compelling evidence exists suggesting that the persistent displays of antisocial player and parent behavior exhibited by this select minority may stem from *ignorance* of or *blatant disregard* for what these tenets embody.

If the above is accepted as a plausible explanation for continued displays of behavior that belies CDTA/NITA standards of player and parent conduct during its tournaments, then *due diligence towards addressing these possible causes of antisocial behavior begins with this report*. A product of this investigation is that research-based knowledge has generated *new information* that explains possible underlying causes of antisocial behavior. A substantial body of evidence has revealed a link between environmental influences and player behavior, the most significant being the *behavior of parents and other adults associated with tournament play*. Also, this knowledge has led to the creation of a behavioral framework that can facilitate *player self-directedness*, which, through the *co-constructive influence of parents*, will increase the likelihood of *prosocial behavior* when negative experiences occur during play.

Subsequently, presentation of this new information and the following recommendations, shifts due diligence to the CDTA/NITA. First, it is recommended that district leadership carefully dissect this report and assess the extent to which it accurately portrays the existing junior tournament environment, identifies salient issues surrounding antisocial behavior, and is congruent with established on-going sportspersonship initiatives. Next, it is recommended that district leaders consult with select individuals in or outside the local tennis community with expertise in the fields of psychology, adolescent development, and education, whose credentials and experiential knowledge of behavior and learning theory in various contexts would serve to substantiate or repudiate some or all findings contained in this report. Withstanding such scrutiny, it is further

recommended that the existing sportspersonship handout be revised to *include new information related to player and adult behavior from an ecological and social cognitive development perspective*. From this it is recommended that the junior competition committee draft a condensed version of this handout that is coherent, practical, and user-friendly. This condensed version should be disseminated to *all parents/coaches of CDTA/NITA junior tournament players as well as out-of-district participants who sign up for district tournaments* (copies should be available on-site at every tournament venue). In addition, it is recommended that a one-page oath should be presented to parents/coaches to read (and sign) *verifying they are familiar with and agree to abide by district guidelines pertaining to on-site conduct before, during, and after play*. Finally, it is recommended that signage regarding sportspersonship expectations for players and parents/coaches be *prominently displayed* at the tournament desk and *all viewing areas*.

Extending due diligence beyond the tournament site, it is recommended that *opportunities be provided for parents/coaches (and players) to gain new knowledge about issues surrounding sportspersonship*. District-sponsored **education and training** clinics should be strategically held throughout the year where antecedents to antisocial player and adult behavior during play can be addressed in both classroom and experiential settings. As revealed by this report, most instances of antisocial behavior are prompted by issues related to self-governance e.g. line call and score disputes, who calls a *not up, double bounce, touch* etc. when no official is present. Problem behavior resulting from such sources of conflict may be lessened by players and parents/coaches becoming more knowledgeable about how these and other *sticky situations* are resolved according to the *Code in Friend at Court (FAC)*.

Questionable opponent line calls and overrules made/not made by roving officials may be the most significant contributor to antisocial behavior. The training component of these clinics should involve *on-court vision activities that will empirically show the difficulty in accurately (and consistently) determining the bounce point of a tennis ball*. (As an appendix I have reintroduced vision science research previously disseminated to district leadership and others the past few years. Compelling evidence spearheaded by the Texas A&M scientific study on visual degradation of sports officials reveals limiting (uncontrollable) factors affecting accuracy in discerning the bounce point of a tennis ball.

Participation in exercises similar to what was used in this study, along with making calls from different vantage points (*especially from a roving official's position at the net post*) may promote player self-regulatory efficacy with respect to empathy and trust with close line calls made by an opponent or with an officials' decision to overrule/not overrule a call. Further, insight garnered from this experiential activity should (hopefully) reshape the perspective of many parents/coaches (and tournament directors) *who often sit in judgment of close line calls and overrules made/not made from a vantage point decidedly different than that afforded players and officials.*

Such due diligence will increase the *knowledge base* of all participants in CDTA/NITA sanctioned tournaments with respect to district expectations regarding conduct before, during, and after play; thus, **eliminating ignorance as an excuse for antisocial behavior.** Next, initiatives must be enacted to hold **accountable** the select few parents/coaches who, having been presented this new information, continue to show **disregard** for district sportspersonship expectations during tournament play. Such initiatives must include *consequences similar to those established for players.* Section IV in FAC clearly articulates the USTA's standard of conduct for players as well as the progression of consequences to be imposed when these standards are breached. A similar progression must be imposed on parent/coach behavior expressly *intended to influence the outcome of a match.*

The game belongs to the kids. At least twenty references to parent/coach conduct in the CDTA sportspersonship manual explicitly state that *once a match begins, all matters pertaining to outcome must be managed by the players,* with assistance coming only from a *certified official or court monitor.* Few would dispute that every instance of inappropriate player/coach involvement in a match is calculated to influence its trajectory, be it coaching or something related to a perceived injustice i.e. score dispute, line call, or gamesmanship. It appears that the only existing (published) consequences for inappropriate parent/coach involvement in a match are found under point penalty guidelines for misconduct. And these consequences *only directly impact the player.* Consequences for inappropriate parent/coach involvement in play with specific, direct, and immediate impact on the offending parent/coaches' on-site presence is only *implicit*

in officiating guidelines e.g. controlling spectator behavior, with subsequent enforcement (tacitly) imposed by and left to an officials' discretion.

Therefore, it is recommended that measures to deter inappropriate parent/coach involvement in match play be drafted by CDTA/NITA whose consequences are **immediate and specifically deal with the parent/coach**. Embedded in such measures should be a **zero** tolerance policy regarding (observable) antisocial parent/coach behavior (verbal or otherwise) intended to be seen/heard by and directed towards an official or opponent of the player they are associated with that occurs in reaction to issues pertaining to match play. Of most significance is **antisocial behavior centered on line calls**. Two reasons justify such strong consequences. The first relates to the subjective nature of making line calls. The second relates to the potential impact (overt) negative parent/coach behavior may have on player self-regulatory efficacy.

The act of making line calls in junior tennis, be it a player or official, parallels that of calling balls/strikes in baseball. As substantiated by vision science (see appendix), accuracy in discerning where a moving object intersects with a fixed point is impacted by a number of uncontrollable conditions (limiting factors) defined as *visual degradation*. This empirically tested phenomenon highlights the subjective nature of calling lines as well as balls/strikes. As one who watches a considerable number of major league baseball games (approximately 200+ each season) I can bear witness to this subjectivity by the numerous *incorrect calls* made as proven by technology. Of significance is the fact that in baseball, ball/strike calls can be *questioned* but *not argued*. Subsequently, umpires (at their discretion) have unilateral authority to *eject a player or anyone associated with either team whose observed verbal response to a ball/strike call is deemed argumentative*. The *error probability resulting from visual degradation*, as substantiated by vision science, places umpires in an *undefensible* position, which, in my opinion, justifies such discretion and authority.

The same holds true in sanctioned junior tournament play. As substantiated by empirical evidence, players and officials are placed in an undefensible position when, similar to arguing ball/strike calls in baseball, line calls are *overtly judged (argued) by parents/coaches, ostensibly, to influence match outcome*. Further, such judgments tend

to be fueled by emotion and occur without *forethought*, meaning, they often occur without taking into account error probability due to visual degradation caused by limiting factors, the most significant of which may be *vantage point*. Overt displays of antisocial parent/coach behavior in reaction to line calls presents an *inappropriate model for players, and may erode psychological safety as well as trust and empathy*, two critical behavioral tools linked to self-regulatory efficacy. Players who tend to react negatively to negative experiences during play can ill-afford to have such displays replicated and reinforced by the adult support system to which strong attachment often exists and whose behavior in such situations is likely to be emulated. Further, this potential negative impact extends to officials who are frequently called upon to make decisions on the accuracy of player line calls from the net post. When present, an official (or court monitor) becomes the only *direct and visible adult support provided juniors during play*. Therefore, it is critical that an *envelope of trust and psychological security be established between players and roving officials*. When a player requests an official to watch line calls, this often means opponent trust has eroded. Subsequently, her last line of defense in terms of restoring trust behavior when future close calls occur *rests with her relationship with the official*. And this relationship is *compromised by a negative reaction by a parent/coach to an officials' decision to overrule/not overrule a line call*.

It is inevitable that limiting factors will lead to inaccuracies with tennis line calls made by players and officials. Subsequently, the element of human error with respect to line calls represents an ever-present threat to the fidelity of the trusting and empathic relationship a player must struggle to maintain with an opponent as well as the on-court official.

Therefore, if practice is to remain consistent with sportspersonship theory, observable (overt) parent/coach behavior that violates CDTA/NITA adult standards of conduct **must no longer be tolerated**. It is recommended that such behavior be dealt with by measures which include (at some point) **removal from the viewing area or tournament site**. An embedded message contained in the USTA's guidelines for player conduct is that life decisions regarding behavior has corresponding consequences. *What holds true for players must also hold true for parents/coaches*.

Theory of Change for CDTA/NITA Sanctioned Junior Tournament Play

The apparent theory of change for CDTA/NITA sanctioned junior tournament participation is the belief that this activity will lead to involvement in a life-long healthy athletic endeavor, foster individual growth, sportspersonship, and positive peer socialization. Further, the above, along with educating players about the rules of tournament play, will in turn promote, develop, and service the game of tennis. While this theory of change addresses prosocial development in principle, it appears that the messaging pertaining to sportspersonship has failed to reach a select number of individuals whose antisocial behavior continues to garner a significant amount of attention. And while players may and sometimes do derive prosocial benefit from tournament play, the absence of intentional and coherent adult teaching practices that connect sportspersonship theory to practice makes this relationship appear more correlational than causal. New information, including a developmental framework grounded in ecological and social cognitive theory has been offered that I hope will incentivize district leaders to explore new avenues for improving the behavior of players and adults. Doing so may improve the manner in which this theory of change manifests across the landscape of district sanctioned junior tournament participation.

Future Directions for Research

Youth prosocial development through participation in sanctioned tournament play is the Holy Grail sought by the CDTA/NITA, something clearly articulated in the above theory of change. The unique nature and structure of junior competitive tennis gives rise to a number of significant behavioral considerations which must be explored on a level beyond the scope of this report, many of which center on the behavior of adults associated with tournament play. A formal process evaluation plan will facilitate an objective assessment of how well existing adult behaviors align with the district's theory of change. This evaluation should be followed by a more formal and objective investigation of the sanctioned junior tournament environment in order to discover what correlates exists between adult behavior and its influence on players.

As a beginning, I suggest that a formal investigation of the relationship between officiating and sanctioned junior tournament play be undertaken. An (indirect) antecedent to problem behavior during tournament play emanates from variance and (perceived) inconsistencies in roving officiating approach/philosophy during play. As articulated in earlier research articles, empirical evidence exists suggesting that the manner in which (roving) officiating intersects with self-governance has ecological and social cognitive implications which may have a causal or correlational link to problem player/parent behavior.

During the past seven years, as my research has become known to many parents/coaches and tournament directors, I have been engaged in numerous conversations regarding what officials do and (sometimes) don't. Perceptions of the function of officials (especially roving) harbored by players and adults district-wide are quite varied. And (unfortunately) based upon what many have shared, the many positive experiences brought about by officiating presence and involvement appear to be overshadowed by the more celebrated (and less occurring) instances where such presence and involvement *either exacerbated a problem called upon to resolve or, even more unfortunate, created a problem where none existed.* (Evidence as to the critical nature of this malaise may be seen in the number of tournament directors who choose to conduct Level 4 tournaments, regardless of draw size, without retaining the services of a certified official.)

Such an investigation might reveal insight and new knowledge that will increase the likelihood of an officials' involvement in tournament play serving its intended purpose: *to ensure proper control and a level playing field for all competitors, while also serving as a supportive, prosocial adult influence.*

A process evaluation plan may lead to future research that can answer the following questions prompted by this report:

What evidence of intentional player prosocial development practices exist at tournament venues?

How can parents/coaches, tournament directors, and officials better promote prosocial player behavior (personal agency) during tournament play?

Is self-governance, in its current state, developmentally/behaviorally appropriate for (all) players?

If not, what changes are needed to ensure a more psychologically secure competitive environment for all players?

Data needed:

Using the youth sports developmental model as a baseline measure of intentional prosocial developments practices, the following data should be collected during tournament play: Amount of unsupervised play

Observable incidents of player requests for an official due to conflict

Observable incidents of players resolving conflict without requesting an official

Youth input (sportspersonship award)

Observable incidents of positive/negative parent/coach behavior during play

Observable incidents of positive/negative parent/coach behavior after a match

Evidence of intentional prosocial teaching by parent/coach after a match

Evidence of intentional prosocial teaching by tournament director before play begins

Evidence of intentional prosocial teaching by tournament director when players report scores

Evidence of intentional prosocial teaching by roving officials

Data collection:

Data should be compiled by trained external observers who will be on-site during tournament play from start to finish. Documentation of observable indicators of adult practices during tournament play will be used to measure program quality based upon the following benchmarks of the youth sports developmental model and positive youth development best practices:

Fun

Youth agency

Intentional prosocial teaching

Evidence of learning

Adult support

Youth input

Intended audience (stakeholders):

CDTA/NITA Junior Tournament Competition Committees

Tournament Directors at CDTA/NITA member facilities that host sanctioned tournaments

Chicago Tennis Umpires Council Board of Directors

Limitations

A number of limitations are present in this report. One is the small sample size and subjective nature of some of the studies. More substantive qualitative and longitudinal study is needed to determine whether the link between my findings and player behavior is causal or correlational. Another is that this assessment, evaluation, and findings reflect the *singular view of one individual*. While a fair amount of objective data and empirical evidence is present, personal bias or predispositions related to subsequent conclusions must be taken into account. Also, my engagement and experiences with sanctioned junior tournament play, while extensive, stem primarily from the *vantage point of a certified tennis official*. Having never parented nor coached junior tournament players, what cannot be accounted for in this report is *first-hand direct knowledge* of what biases and predispositions are formulated by this personal relationship and their subsequent behavioral influence. References to parent/coach behavior, aside from what is contained in research literature, are derived from numerous conversations with such individuals as well as what can be inferred by direct observation of how these individuals have interacted with players (their own and others) and adults associated with play (including officials) over the course of my lengthy officiating career. Finally, given these acknowledged limitations, I am aware that my rather superficial foray into psychosocial development theory, which serves as the basis of many findings and conclusions, serves as fertile ground for scrutiny from district leadership and adult stakeholders. This is understandable. My hope is that the scientific data and development theory presented, albeit limited, might incentivize the adult community to approach this report with *open-minded skepticism*. Face value acceptance must be filtered by *objective*

exploration. Knowing the talent and resourcefulness of district leadership as I do, data considered subjective, skewed (and maybe biased) can easily be replaced by study of more substance e.g. *vision study pertaining to player line calls*. With references to psychosocial development theory deemed too *cursory* to serve as plausible explanations for antisocial player and adult behavioral tendencies, a more *thorough examination of the supportive literature may better determine its valence*.

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Appendix

Vision Research

Accuracy of Player Line Calls During Sanctioned Junior Tournament Play

Purpose

To investigate the accuracy of player line calls made during sanctioned junior tournament play.

Methods

From June 2013 to June 2014, line calls were directly observed from the vantage point of a roving official standing at the tennis net post during 33 USTA sanctioned junior tournaments encompassing approximately 1100 singles matches. The following chart reflects player responses on balls landing on or near a service line, baseline or sideline during a point:

1. A ball landing on or inside the line called out by the player but overruled by the roving official (columns 4-7)
2. A ball landing out of the boundary of the court but played as in by the player (columns 8-10)

**Junior Tennis Player Line Calls
June 2013-June 2014**

DATE	L	#M	OVERRULE				OUT BALL PLAYED			TOTALS	
			4	5	6	7	8	9	10	11	12
1	2	3	B	S	NS	FS	B	S	LL	O	OBP
6/8/10		121	1		1	1	19	24	14	3	57
6/15/16	6	21			1		8	20	1	1	29
6/17-19	6	82			1		5	20		1	25
7/5-7	6	86	2				5	8	1	2	14
7/12	6	51					2	8			8
7/13	6	27		2			1	4		2	8
7/15-17	6	71	4	2			4	7		6	11
7/28	6	7					2	3	1	0	6
9/7	6	16		1			2	22	1	1	25
9/14	6	25			1		2	4	1	1	7
9/22	6	3					5	10	2	0	17
9/27	6	13		1			9	20	5	1	34
11/4	1	12	1		1		2	10	1	2	13
11/8-10	6	42		1			6	25	3	1	34
12/8	7	14					6	12	3		21
1/10	5	19	4	1		1	7	25	1	6	33
1/19	3	13					8	20	1	0	29
2/3	1	12					5	8		0	13
2/8	5	18					4	5	1		10
2/9	5	8					2	9			11
2/16	5	12					3	9		0	12
3/1	2	47		1	1	1	3	10	2	3	15
3/14	5	16		1			7	6	1	1	14
3/21	5	34		1			7	7	1	1	15
4/4-5	5	75			2	2	3	17		4	20
4/18-19	5	14			1		4	12	1	1	17
4/20	3	15	1				1	6	4	1	11
4/25-26	5	29			1		8	27	3	1	38
5/2	5	7			1		6	7		1	13
5/17	5	11					2	6	1		9
5/25-26	2	32	3				4	12		3	16
5/31/6/1	3	48					1	13	4		18
6/8-10	3	99	1		2		17	61	3	3	91
33		1100	17	11	13	5	170	457	56	*46	*683
1	2	3	4	5	6	7	8	9	10	11	12

1=total number of events; 2=level of event; 3=number of matches observed during event;

4=baseline; 5=service line; 6=near sideline; 7=far sideline; 8=baseline; 9=service line;
10=long line; *11= total overruled; *12=total out balls played

Results

Based upon direct observance by a roving official standing at the net post during tournament play, 683 (94%) of balls landing out of the boundary of the court were played (not called "out") and 46 (6%) of balls landing inside the boundary of the court were incorrectly called "out" (overruled).

Discussion

The constant threat of balls landing near lines during play, combined with the self-governing nature of tournament play and scant officiating presence, adds to the angst experienced by players and adult stakeholders. And when winning as a desired outcome is added to the mix, mistrust and allegations of cheating expressed by players and stakeholders during play becomes inevitable. Empirical (subjective) evidence indicates that over the course of play, the overwhelming majority of incorrect line calls appear to be made *in favor of one's opponent*.

The Effect of Visual Acuity Degradation on the Visual Judgment of Sport Officials

I. GOMEZ, F. SPANIOL, J. DAWES *Department of Kinesiology, Texas A&M University-Corpus Christi, TX (5/7/2013)*

Purpose

The purpose of this study is to investigate the effect of visual acuity degradation on the judgment of sport officials. Visual acuity is the ability to clearly and distinctly see a stationary object enabling the identification and discrimination of certain objects at a distance. Visual acuity will be analyzed by a standard visual acuity wall chart. Visual judgment will be determined by a tennis ball line test where subjects had to determine if balls were judged as "in" or "out."

Subjects

Twenty-two Texas A&M University - Corpus Christi sport officials from the intramural department, (age $20.86 \pm .85$ yrs.) participated in a line calling drill of 30 balls verbally

stating, “in” or “out” for each ball. Of the twenty-two officials, 27% ($n = 6$) were females and 72% ($n=16$) were males. All subjects had two or more years of experience in officiating a variety of intramural sports. Subjects were not allowed to wear glasses but could wear their contact lenses due to the posttest’s demand of wearing the powered reading glasses.

Methods

Testing was administered at Texas A&M University - Corpus Christi’s Biomechanics Laboratory. Visual acuity was measured with an established visual acuity chart, the GUARDVISION™ 2012 LIFEGUARD VISION TEST #A apparatus. The pretest was performed with normal vision and the posttest was performed with a set of powered eye glasses (ranging from +1.75 to +2.75) designed to degrade vision to 20/50. The test protocol utilized a test administrator randomly dropping tennis balls on a line from a distance of 11.69m from the subject. The balls were intentionally dropped within three inches of the line to challenge the subjects to make the correct “in” or “out” call. Each subject was required to judge 30 line calls.

Statistical Analysis

Means and standard deviations were calculated for both the pretest and the posttest. A paired-samples t test was calculated to compare the mean pretest (normal vision) score to the mean posttest (degraded vision) score. The statistical software package SPSS version 19.0 was used for the data analysis. The alpha level was set at $p \leq 0.05$.

Results

The twenty-two Texas A&M University - Corpus Christi sport officials (age $20.86 \pm .85$ yrs.) participated in visual acuity and line call tests. A paired-samples t test was calculated to compare the mean pretest score (normal vision) to the mean posttest score (degraded vision). The mean pretest score was 25.73 ± 2.16 and the mean posttest score was 16.91 ± 3.22 . The results of the paired-samples t test determined a statistically significant difference between the pretest and posttest scores $t(21) = 2.69, p < .05$). In addition, subjects experienced an average of 34% more incorrect line calls when their vision was degraded to 20/50.

Discussion

The results of this study indicate that visual acuity degradation of sport officials to a level of 20/50 significantly reduces the ability to make correct line calls. The average subject experienced 34% more incorrect line calls with visual degradation. This is important to note since it is not uncommon for sport officials to work sport contests with acuity levels as low as 20/50 or more. Based on the results of this study it is recommended that all sport officials be administered standard visual acuity testing. It is also suggested that sport official governing bodies consider visual skills testing in addition to visual acuity testing for all sport officials. Suggestions for further research include testing the visual judgment of sport officials while they are in a dynamic state of motion (e.g. basketball, soccer, etc.)

Conclusion

The Texas A&M study demonstrates how trained sports officials, even under controlled conditions, are prone to err when making tennis line calls. If incorrect line calls are made by adults under these conditions, one can surmise that junior tennis players might also be prone to err when attempting to do so under the stress of competition. Research literature related to vision neurology has brought to light a number of significant variables that affect visual performance. What follows is a description of a few of these variables and how they might connect to the junior tournament experience.

The level of visual activity called upon by the demands of sports activity is referred to as *visual acuity*. An apt distinction between vision and visual acuity comes from Dr. Donald Getz (Z Health, 2011), who posits that vision is “...*the understanding of what is seen, and involves the ability to take incoming visual information, process that information and obtain meaning from it,*” and Daniel Gomez (May, 2013) et al who posits that visual acuity is “...*the ability to clearly and distinctly see a stationary object enabling the identification and discrimination of certain objects at a distance.*”

The variables that affect visual acuity are too numerous to present in such a brief report. Thus what follows are five that may be most easily understood by players, parents, tournament directors, and officials.

Visual activity initially breaks down into 2 types: *static* and *dynamic* (Knudson, 1997). Static visual acuity (SVA) is simply observing a stationary object while you (the observer) are at rest. Dynamic visual acuity (DVA) brings motion into play. Either you (the observer) are in motion; the object being observed is in motion, or both. So when it comes to visual accuracy, as demonstrated by the Snellen eye exam (Knudson, 1997), even SVA is finite. The further down the chart you go, ability to see fine detail will invariably max out. Once you add motion - either the observer or the object being observed - the point at which this occurs becomes accelerated.

Visual attention may be considered the focal point of visual acuity. In terms of vision science, the point at which both eyes focus on a single point is described as a *fixation*. A fixation, in turn, is shaped or influenced by what is described as a *visual field* or *arc* which is limited to 3 degrees (Knudson, 1997). With the size of the visual field about the width of the tip of a thumb, this suggests that peripheral vision becomes part of the equation when visual attention is called for.

Another variable that influences visual acuity is *vantage point*. This is the position of the observer relative to the object being observed. The importance of positioning when engaging visual acuity was articulated in 1983 where researchers at Vic Braden's Tennis Academy determined that *angular positioning had a direct impact on visual accuracy* (Braden, 1983). And later research has added that even unlimited viewing time doesn't totally eliminate the potential for inaccuracy.

Another critical variable that impacts visual acuity is *interference*. Interference emanates from a number of sources. These sources have been categorized as the "*Visual Superhighway*" (Seiller). Engaging visual acuity involves integration, interpretation, and processing of visual information, and anytime something from the environment or physical make-up of the observer interrupts the activity of the visual field, visual accuracy may be compromised leading to potential visual error. Interference may be

caused by *fatigue* due to the length of a sporting event, *pressure* arising from decision-making at critical moments during play, as well as *lack of experience* or *limited ability*.

When juxtaposed on junior tournament play it becomes evident that a lot is going on with a player's visual performance that is likely to affect accuracy before it can be ascertained that an incorrect line call was a deliberate act. Think of the situation. When making a line call a player may be *in motion* or *poorly positioned*, both of which affect visual accuracy. The *speed* of the shot may compromise *fixation* (where both eyes focus on a single point) causing the player to rely on *peripheral vision* to make the line call. (In terms of visual attention, peripheral vision is less reliable than fixation). How about *experience* and *ability*? During a point, for an inexperienced player or one possessing immature physical skills, the necessity of (mentally) tending to simple execution of a shot may compromise visual accuracy. And let's not forget *fatigue*. During the course of the day visual skills may diminish due to physical conditions e.g. prolonged exposure to heat or the number of matches being played.

The findings in the Texas A&M study show that variables affecting the visual accuracy of players also affect roving officials. Under controlled trial conditions visual accuracy is about 66%. This becomes significant when transposed on to match conditions, as research has shown that positioning at the tennis net post affects the visual accuracy of a roving official. It also stands to reason that experience, speed of play, as well as fatigue may also play a role.

Understanding the challenges to visual accuracy, one can extrapolate that incorrect line calls are inevitable, due in large part to limiting factors connected to the human system. With sanctioned junior tournament play, while the possibility of mal intent may exist, vision science provides credible evidence suggesting another reason for incorrect line calls: *error probability due to the effect of visual degradation*.

Accuracy of Line Calls made by Professional Line and Chair Officials

2013 US Open Line Calls

Match #	Chase review LC	Call overruled	Call confirmed	Chair overrule	Chase review	Overrule confirmed	Overrule reversed
1	3	2	1				
2	4	4		1	1	1	
3	2	1	1				
4	5	3	2				
5	1	1					
6	2	1	1				
7	2		2				
8				1	1	1	
9	1		1				
10	1		1				
11	1		1				
12	3	2	1	1	1	1	
13	4	2	2				
14	3	1	2				
15	3		3				
16	2		2				
17	2	2		1	1	1	
18	3		3				
19	1		1				
20	1		1				
21	4	1	3	2	2	1	1
22	1	1					
23	3	1	2				
24	2	2					
25	5	3	2				
26	3	1	2	1	1		1
27	1		1				
28	1		1				
29	2		2				
30	3	1	2				
31	1		1				
32	10	5	5	2	**	2	
33	2		2				
34	5	1	4				
35	3	1	2				
36	2	1	1	1	**	1	
37	2	1	1	1	**	1	
38	3		3				
39	5	1	4				
40	3	1	2	1	1		1
41	4	2	2	3		2	1
42	3		3				
43	1	1					
44	2	1	1				
45	7	3	4	1	1	1	
46	8	5	3				
47	2	1	1				
48	1		1				
49	4		4				
50	3		3				
51	7	3	4				
52	5	2	3	1	1	1	
53	3		3				
54	1	1					
55	2	2					
56	10	2	8	2	2	1	1

57	1	1					
58	2		2				
59	14	5	9				
60	3	2	1	1	1	1	1
61	3	1	2	1	1		1
62	4	2	2				
63	5	1	4				
64	12	3	9	2	**	2	
65	4	2	2	1	1	1	
66	5	1	4	1	1	1	
67	3	2	1				
68	8	2	6				
69	5	3	2	1	1	1	
70	1		1				
71	7	1	6				
72	11	2	9				
Total	256	91	165	26	17	20	7

*Indicates a line call made and reviewed for television audience but not challenged by player

**Indicates a chair overrule reviewed for television audience but not challenged by player

2014 Australian Open Line Calls

Match #	Chase review LC	Call overruled	Call confirmed	Chair overrule	Chase review	Overrule confirmed	Overrule reversed
1	1		1				
2	4	3	1				
3	*1	2					
4	1		1				
5	7	3	4	2	1		1
6	5	1	4				
7	2	1	1				
8	1	1					
9	3	1	2	1	1		1
10	12	1	11	1		1	
11	3	1	2		**		
12	2	1	1				
13	3	2	1				
14	1		1				
15	4		4				
16	2	1	1				
17	2		2				
18	2	1	1				
19	3		3				
20	2		2				
21	6	2	4				
22	1	1					
23	1		1				
24	5	1	4				
25	2		2				
26	8	2	6				
27	4	1	3				
28	1		1				
29	1		1				
30	4	2	2				
31	1		1				
32	3	1	2				
33	1		1				
34	1		1				
35	1		1				
36	3	1	2				
37	1		1				

38	4	3	1	1	1	1	
39	4	2	2				
40	1	1					
41	1		1				
42	2	1	1				
43	3		3				
44	4	1	3				
45	3		3				
46	1		1				
47	1	1					
48	1		1				
49	2		2				
50	1		1				
51	3	1	2				
52	4	1	3	1	1		1
53	4		4				
54	*5	2	4				
55	5	1	4	1	1		1
56	8	2	6				
57	3	1	2				
58	3		3				
59	1		1				
60	3	2	1				
61	3	1	2	2	2	1	1
62	3	2	1				
63	*5	3	3				
64	10	2	8	1	1	1	
65	4		4				
66	3	1	2	1	1	1	
67	8		8				
68	9		9				
69	5	2	3				
70	3	2	1				
71	11	3	8	1	1	1	
72	6	3	3				
73	2	1	1				
74	2	1	1				
Total	246	70	179	12	10	6	5

*Indicates a line call made and reviewed for television audience but not challenged by player

**Indicates a chair overrule reviewed for television audience but not challenged by player

2014 Wimbledon Line Calls

Match #	Chase review LC	Call overruled	Call confirmed	Chair overrule	Chase review	Overrule confirmed	Overrule reversed
1	2		2				
2	1		1				
3	2	1	1				
4	2		2				
5	1		1				
6	4	1	3				
7	4	1	3	1	1	1	
8	1		1				
9	2	1	1				
10	4	1	3				
11	1		1				
12	4	2	2				
13	1		1				
14	7	2	5				
15	3		3				
16	3	2	1				

17	3		3				
18	4	1	3	2	2	1	1
19	5		5				
20	2		2				
21	6	3	3				
22	2	1	1				
23	1	1					
24	5	2	3				
25	1	1		1	1	1	
26	1		1				
27	5		5				
28	2		2				
29	2		2				
30	1		1				
31	3		3				
32	7	3	4	2	2	1	1
33	5	2	3				
34	1		1				
35	2		2				
36	3		3				
37	5	2	3				
38	6	1	5				
39	2		2				
40	3	2	1				
41	6		6				
42	8	3	5	1	1		1
43	9	1	8				
44	6	1	5	1	1	1	
45	12	6	6	2	2	1	1
Total	160	41	119	10	10	6	4

Total number of televised Wimbledon matches affected by World Cup coverage

US Open 72 matches	256	91	165	26	17	20	7
Aus Open 74 matches	246	70	179	12	10	6	5
Wimbledon 45 matches	160	41	119	10	10	6	4
Total (191) matches	***662	202	463	48	***37	32	16
Percentages		30%	69%			66%	33%
	Call Reviewed	Call Overruled	Call Confirmed	Chair Overrule	Overrule Reviewed	Overrule Confirmed	Overrule Reversed

***Difference in totals reflect line calls and overrules made and reviewed for television audience but not challenged by players