

The Martina Hingis Effect in science

R. Uma Shaanker

Taking cue from the recent Grand Slam win by the Martina Hingis–Sania Mirza combine in tennis, the article reflects about the nature of collaboration between scientists from the North and South. While acknowledging the benefits of such collaborations, it also suggests that it is time that the South won their own Grand Slams in science.

July saw two Indians winning the Wimbledon Grand Slam. Sania Mirza in women's doubles and Leander Paes in mixed doubles. The common partner in both was the former Wimbledon single's champion, Martina Hingis. This naturally kicked off some speculation of what drove the wins – was it the pair effect or was it a Martina Hingis Effect. The tweet by BBC following the win, either by naivety or mischief, suggested the latter. The tweet read, 'Hingis wins Wimbledon doubles final'. Going by the BBC, the doubles seem to have been won by only a single player, Martina.

But is it true that the doubles matches were won more by the Martina Hingis Effect, than the individual contributions of Sania and Paes? Curious to settle this issue, I looked up the points earned by each of the players in the pair in the respective matches. It does appear that there was a shade of the Martina Effect in both matches, though one cannot rob away the individual contributions of Sania and Paes.

It is not uncommon in a team sport that, one or few of the partners tend to carry a disproportionate burden of the team and lead it to victory. Cricket fans would remind themselves of the singular contributions made by Shane Warne, Shahid Afridi, Chris Gayle for their respective teams. This is even more dramatic in soccer where the likes of Messi, Maradona, Pele reached the status of demigods by their tantalizing display of skill, astuteness and above all in leading their respective teams to glory. If for any reasons, one of these stars did not turn up for a crucial match, the rest of the team would crumble like a pack of cards. Such was the power of their presence.

Moving away from sport, I have been wondering if the Martina Hingis Effect also plays a significant role in our scientific world. In science, as in sport, people come together and collaborate in addressing research questions. Very often, scientists from the developing world seek

collaborations with their counterparts in Western laboratories. Many of these collaborations turn out to be highly fruitful and mutually beneficial. Analogous to the Grand Slam wins, such collaborations in science lead to the development of high-profile patents and or publications in some of the most reputed scientific journals.

Careful scrutiny, as in the Martina–Sania–Paes win, would indicate that the success of many of these scientific collaborations hinges more on the Martina Effect (read the effort of the Western lab or research group). Looking up a random sample of CVs that I had access to, I found that the Sania's in science had a much better publication record when they teamed up with Martinas, than when they went solo or with their cousin Sania's. My own publication record in a couple of years had a higher publication rating thanks to the Martina Effect. Having enjoyed such a mutually beneficial, if not equal partnership, it is not uncommon for the Sanias or the non-Western partner to actively seek to expand his or her collaborations, seeking one Martina here, and the other, there.

How exactly does a Martina Effect work in science? Among a number of reasons, is the 'catch-up' factor. In sciences as in sports, technologies and techniques, play a major role in realizing one's goals. Teaming with a Martina who not only has access to, but also has been actively using such resources, can easily surmount the handicap that the Sania's in science may be facing back home. Way back in 1990s, when access to PCRs was relatively scarce in India, teaming up with a Martina's lab allowed us to solve a problem in a jiffy. Also during the same period, I know of a certain group in India that accessed high-end GIS technologies in a Western lab to good use. In fact, in these days of high end technologies, instrumentation, software and the like in scientific research, a sure way to earn a Grand Slam, would be

to 'catch-up' by having a Martina in your team.

Another subtle but important 'catch-up' in science is to do with the art of conceptualizing research questions. The Martinas of science, just as the Martinas of sport, have been honing their skills, design and intellect to fight off the ruthless competition from their cousin Martinas in the West. Such fierce competition to survive imparts a certain degree of strength and tact to the Martinas in negotiating research questions that is often lacking in the Sania's of science. So what does one do? Easy. The Sania's can spend some time in certain Martina's lab, collaborate and enrich oneself in the art of conceptualization of problem and then go on to winning Grand Slam, even on their own. This newfound ability of the Sanias, puts them on the top, back at home. It is no wonder then that many leading institutes in India, actively headhunt for Sanias who have spent some time working with Martinas. And also headhunt for Martinas!!

In summary, the technological and intellectual prowess of the Martinas offers a springboard for the Sanias in science to launch of their own careers. It is another matter, as that in sport, in science too, more often than not, the Martina Effect the Sanias once enjoyed, starts to wear off with time. This is evident in research records of any number of post-doc fellows. So long as they are with a Martina lab, they turn up crisp and highly placed publications. But once away from the zone of influence of the Martinas, their publications become lackluster. For some, this signals a time to reconnect and revitalize themselves by finding another Martina through some other international collaboration. For many others, woodened by age and loss of their ranking in science (just as the ATP ranking) it is a downhill road to retirement and oblivion.

Finally is there anything amiss in the Martina Effect? Is piggybacking on a

COMMENTARY

Martina bad? Does it leave a bad taste in the mouth? I am not sure. But look at what Martina told after their (Martina-Sania) Grand Slam win. Hingis joked. 'No. Now we're working on getting Sania to No. 1. That's the main goal for me – to get her to No. 1 (<http://www.miamiopen.com/en/news-and-media/news/hingis-and-mirza-win-2015-miami-open-doubles-crown>). Even as a joke, this leaves me a little disturbed. It smacks of a tennis-colonialism. After all, without Martina, could the Sania, the native, ever dream of playing in the center court?

And while on this, it disturbs me no end, that as self-respecting scientists, as much as self-respecting players, such as Sania and Paes, we seem to suffer from an acute identity crisis. We seek the Martinas for credibility and fame. We seek the Martinas as would a B-grade actor seek a star for her cast. In a recent soul-search about why the Indian Institute of Science (IISc) is not making it to the top 100 universities in the world, a faculty said, 'what is required is a higher number of collaborations between IISc and research institutes in other countries (*read*

Western countries). This will lend publicity to the way the IISc scholars function, the courses they take up and the disciplines that are being taught here' (*Deccan Herald*, page 4, July 30, 2015). Time to introspect ?

R. Uma Shaanker is in the Department of Crop Physiology and School of Ecology and Conservation, University of Agricultural Sciences, GKVK, Bengaluru 560 065, India.

e-mail: umashaanker@gmail.com

Smile with Science

By – Santosh Kumar Sharma
e-mail: santosh_ujj@yahoo.com

