

# The Deutschland Drive: From Guttman to Gold

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## ABSTRACT

In 1944, German born Ludwig Guttman incorporated wheelchair basketball into the rehabilitation process for people with spinal cord injuries at Stoke Mandeville Hospital in the United Kingdom. These games led to competitions and the beginnings of the Stoke Mandeville Games which evolved into the Paralympic Games. Since women's wheelchair basketball has been a sport in the Paralympics, the women on the German National Team have made it to the championship game half of the time and have won the gold medal a quarter of the time. This makes the German National Team the most successful women's wheelchair basketball program in the world.

This case study focused on the members of the German Women's National team who won the gold medal at the 2012 Paralympics. Quantitative data revealed the women enjoyed participating in wheelchair basketball because of the team interaction in the sport. Results from qualitative data suggested one overarching theme of serious leisure identity with three subthemes: (a) post-traumatic opportunity, (b) serious leisure, and (c) self-actualization. **Keywords:** motivation, Paralympics, serious leisure, socialization, wheelchair basketball

## INTRODUCTION

Wheelchair basketball (WCBB) is a disability sport that is played recreationally and competitively at the national and international levels. "Disability sport" is a term used to describe sporting opportunities and organizations that move participants from an entry level to a high level of competition. Disability sports tend to have a strong competitive focus and are usually community based, not associated with interscholastic sports (Inclusive, 2010).

WCBB has several elements in common with stand-up basketball such as the court dimension, height of the rim, size of the basketball, and number of players from the same team on the court at one time. However, the skills and strategies for WCBB are different. WCBB is more inclusive than stand-up basketball. This means that both people with and without injuries can play, as long as everyone is using a wheelchair and plays by WCBB rules. In Germany, athletes without disabilities can play in WCBB leagues at the national level, but there are different requirements for WCBB at the international level. To play on this level a player must have a functional classification.

Functional classifications are based on guidelines determined by the International Wheelchair Basketball Federation (IWBF). The IWBF serves as the governing body for classification and athletes who wish to play WCBB on the international level must be approved by them. The qualifying process consists of presenting documentation and pictures of the athlete's injury to the IWBF from which they will determine if the athlete is eligible to play. This classification is conducted prior to competition and is based on the athlete's disability and skill performance. Classifications are reported on a point scale which ranges from 1.0-4.5. An athlete with a rating of 1.0 typically has an injury to the upper portion of the spine while an athlete with a 4.5 rating typically has a knee injury or an amputation. In this case, an athlete with a functional classification rating of 1.0 would have less trunk control and perhaps more physical disability than an athlete with a rating of 4.5. The sum of the functional ratings of all of the players from one team on the floor cannot exceed 14 points. This classification system results in an equal playing field among all competitors and promotes inclusion.

## METHODS

Both quantitative and qualitative methods were used for this study. Permission for this research was granted from the University of Wisconsin La Crosse Institutional Review Board. Quantitative data were obtained from the Participation Reasons Survey (PRS). The PRS is a 26 item questionnaire that is self-reporting and uses a five point

Likert scale with two anchors: 1 (not important to me) to 5 (very important to me). The survey was distributed using Qualtrics with the questions randomized to increase internal consistency. Statistical analyses were conducted on the results of the PRS.

Qualitative data were obtained by conducting a case study that included direct and participant observations, interviews, and reviews of documentation, archival records and physical artifacts. Data from this case study were analyzed using the constant comparative method to aid in generating a theory that is integrated, consistent, plausible, and close to the data. At the same time, data can be operationalized for testing in quantitative research (Glaser & Strauss, 1967). The researcher compared incidents applicable to each category, integrated categories and their properties, delimited the theory, and formulated a theory.

#### *Pilot Study*

A pilot study was conducted at the University of Wisconsin Whitewater in January 2014 with members from the women's wheelchair basketball team. The UW-Whitewater Women's WCBB team has a consistently strong program and were US national champions in 2012, 2013 and 2014. During this time, a member from Germany's 2012 national team was attending and playing for UW-Whitewater. The pilot helped develop relevant lines of questions and established a concise and effective design plan (Yin, 1994). The pilot also was used to troubleshoot possible problems which could arise in the study. The PRS was administered to athletes at UW-Whitewater and one interview was conducted from the woman who played for UW-Whitewater and the 2012 German National Team.

#### *Main Study*

The main study was conducted in Germany in March 2014. The researcher traveled to Frankfurt, Cologne and Hamburg to conduct interviews from members of the 2012 German National Team. Data from direct observation, participant observation and interviews were collected at the German National Team practice site in Hamburg. Archival reports, documentation, and physical artifacts included game films, published articles and personal photographs. The PRS was also administered to athletes on the 2012 German National Team that could read English.

## DATA PRESENTATION

Results were obtained from quantitative and qualitative data. The PRS survey was completed by 13 members from the 2012 German Women's Paralympic Basketball Team and the 2014 UW-Whitewater Women's Basketball Team. Data were also gathered from these participants regarding IWBF rating, age, number of years they have been playing WCBB and the number of years they have been disabled for. See table 1.

**Table 1.** PRS Group Statistics

	<b>Mean</b> (N=13)	<b>SD</b> (N=13)
IWBF Rating	2.92	1.26
Age (Years)	26	5.05
# of Years Playing WCBB	10.08	3.98
# of Years Disabled	15.06*	7.66

\* One athlete reported "0" for number of years disabled

Results from the PRS show that the most important reason these women enjoy participating in wheelchair basketball was because "Of the team interaction of the sport" (4.77). Of least importance was "It pleases others who are close to me" (2.00). Other top responses included: "It allows me to compete against others successfully" (4.54); "I like the particular challenges it provides" (4.38); "It offers opportunities to measure success" (4.38); "Because of the excitement of the activity" (4.38); and "I enjoy the inherent elements of sportsmanship" (4.38). See table 2.

**Table 2.** Participation Reasons Scale (PRS)

	<b>I enjoy participating in wheelchair basketball because:</b>	<b>Mean</b>
1	It gives me a chance to be with friends	4.00

2	It gives me a chance to get recognition and other rewards	3.08
3	It pleases others who are close to me	2.00
4	It offers me a chance to compare my skills with those of others	3.85
5	I enjoy the team interaction of the sport	4.77
6	It offers me an opportunity to improve my ability at the activity	4.15
7	It gives me a chance to test myself against my own standards	4.23
8	Of the excitement of the activity	4.38
9	I like to win	4.23
10	It offers opportunities for travel	3.62
11	It gives me a chance to perform the skills of the activity	4.23
12	It offers me the opportunity to be recognized for my ability	3.92
13	Of the physical feelings I derive from the experience	4.15
14	It offers me the opportunity to make new acquaintances	4.00
15	It provides an opportunity for emotional release	3.85
16	It improves my cardiovascular fitness	3.85
17	It keeps my weight down	2.92
18	It gives me a chance to use good equipment	2.69
19	It provides an opportunity for exercise	4.15
20	It offers opportunities to measure success	4.38
21	I enjoy the inherent elements of sportsmanship	4.38
22	It offers me the opportunity to be independent	3.62
23	It is a form of exercise that is therapeutic	2.77
24	I like the particular challenges it provides	4.38
25	It makes me feel needed and wanted by others	3.15
26	It allows me to compete against other successfully	4.54

Previous research using the PRS organized the 26 questions into five constructs: (a) Fitness Incentives (b) Ego Incentives (c) Task Incentives (d) Social Integration, and (e) Social Affective Involvement. A statistical analysis was conducted to find if the athletes' scores supported significance of the constructs. Because a significance of  $p=.004$  was found, additional questions were asked: (a) was there a correlation between the athletes' functional classification and each construct and (b) did the athletes' scores show significant preference of one construct over another construct? Constructs and means of athletes' scores can be found in table 3.

**Table 3.** PRS Constructs

		<b>Mean</b>
<b>I</b>	<b>Fitness Incentives</b>	<b>3.55</b>
13	Of the physical feelings I derive from the experience	4.15
16	It improves my cardiovascular fitness	3.85
17	It keeps my weight down	2.92
18	It gives me a chance to use good equipment	2.69
19	It provides an opportunity for exercise	4.15
<b>II</b>	<b>Ego Incentives</b>	<b>4.00</b>
2	It gives me a chance to get recognition and other rewards	3.08
4	It offers me a chance to compare my skills with those of others	3.85
9	I like to win	4.23
12	It offers me the opportunity to be recognized for my ability	3.92
20	It offers opportunities to measure success	4.38
26	It allows me to compete against other successfully	4.54
<b>III</b>	<b>Task Incentives</b>	<b>4.36</b>
5	I enjoy the team interaction of the sport	4.77
6	It offers me an opportunity to improve my ability at the activity	4.15

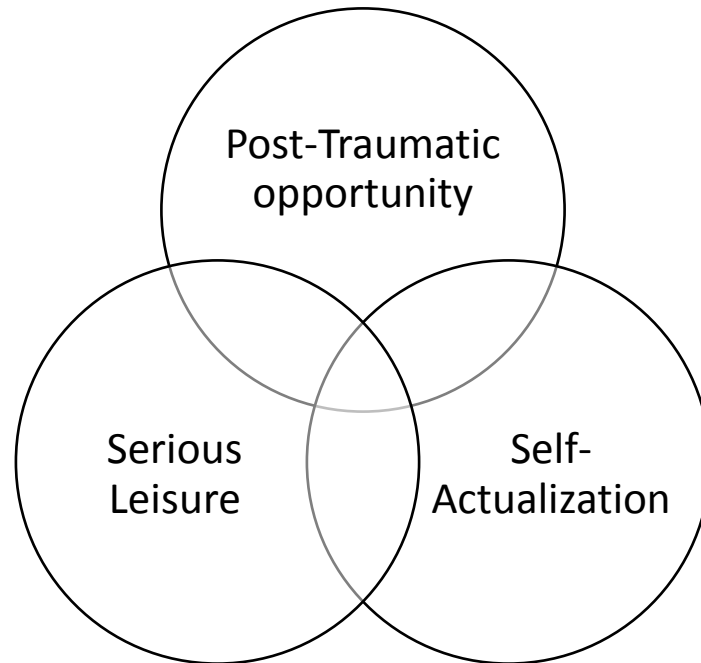
7	It gives me a chance to test myself against my own standards	4.23
8	Of the excitement of the activity	4.38
11	It gives me a chance to perform the skills of the activity	4.23
24	I like the particular challenges it provides	4.38
<b>IV Social Integration</b>		<b>3.41</b>
1	It gives me a chance to be with friends	4.00
3	It pleases others who are close to me	2.00
10	It offers opportunities for travel	3.62
14	It offers me the opportunity to make new acquaintances	4.00
<b>V Social Affective Involvement</b>		<b>3.66</b>
15	It provides an opportunity for emotional release	3.85
21	I enjoy the inherent elements of sportsmanship	4.38
22	It offers me the opportunity to be independent	3.62
23	It is a form of exercise that is therapeutic	2.77

Further testing of the constructs did not find any relationship between the functional classifications of the athletes' and each construct, but did confirm two significant preferences. Significance of  $p < .05$  was found between task incentives and fitness incentives, and task incentives and social affective involvement. The data from this survey indicated that these women were 99.6% likely to rank task incentive questions higher than fitness incentive questions and 96.3% likely to rank task incentive questions higher than social affective involvement questions. See table 4.

**Table 4.** Significant Rankings

<b>Social Constructs</b>	<b>p-value (<math>p &lt; .05</math>)</b>
Task Incentives > Social Affective Involvement	$p = 0.037$
Task Incentives > Fitness Incentives	$p = 0.009$

Qualitative data were obtained from the women on the 2012 German Paralympic Team solely. Data suggested one overarching theme of serious leisure identity and three sub themes: (a) post-traumatic opportunity, (b) serious leisure and (c) self-actualization. The Venn diagram illustrates this relationship (figure 1).



**Figure 1**

#### *Post Traumatic Opportunity*

Women on the German National Team reported that post traumatic opportunities were crucial to their involvement in the sport. Following their injury, they focused on things that they could do rather than those they could not. The women talked about various agents who were involved in exposing them to the sport and recommending opportunities for their participation. These included coaches, teachers, peers, parents, and staff from hospitals and basketball leagues. The trauma the athletes experienced along with the opportunity available shaped their new identity.

“I tried it [WCBB] during rehab in hospital with old people, I was the star there because I was so much faster. I was pretty weak after my accident; couldn’t get the ball up to the hoop, but speed-wise I was fast. I felt like, Oh, I’m good at this.”

“I first played WCBB because I lost a bet against Pat Anderson, the best player in the world, I had to practice WCBB once and the national team coach saw me playing and invited me to tryouts and Pat gave me his chair.”

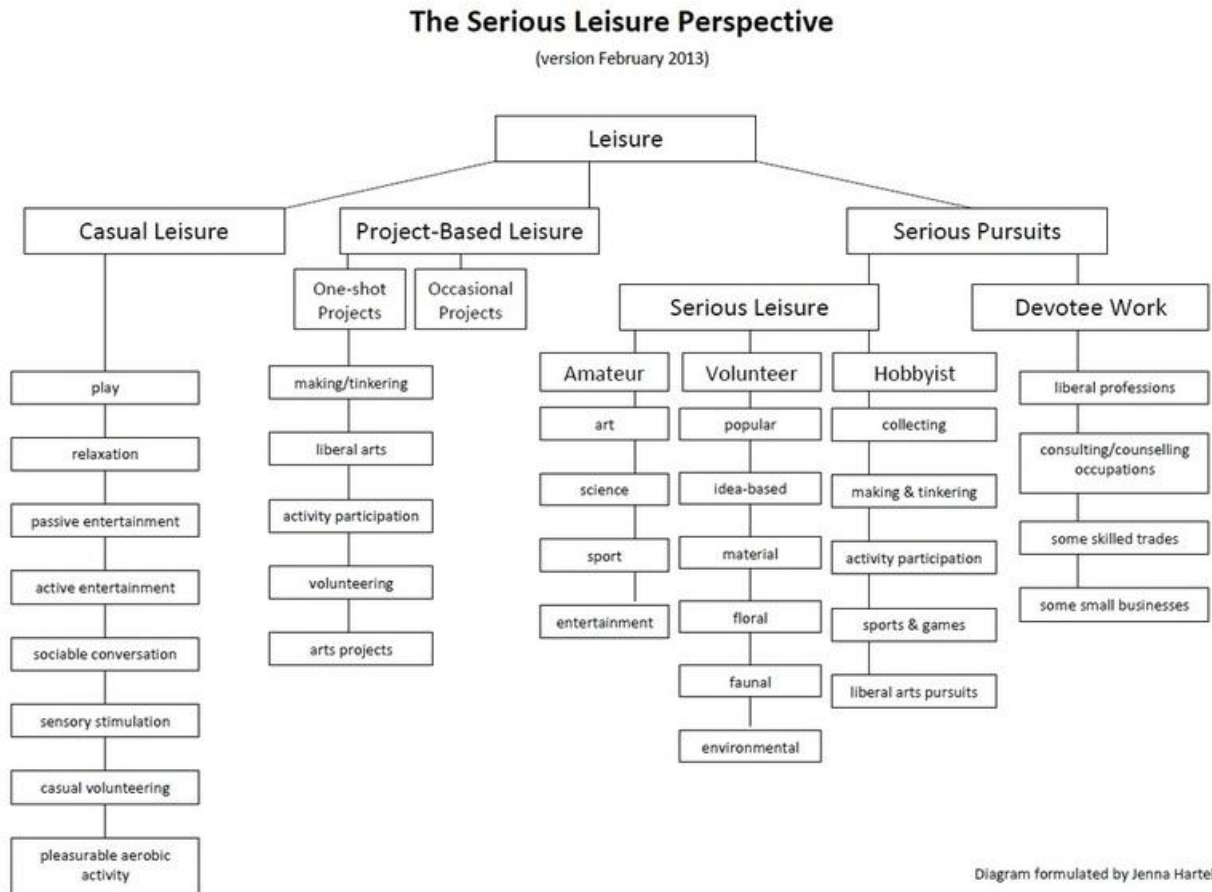
#### *Serious Leisure*

The serious leisure perspective (figure 2) is the name of the theoretical framework that bridges and synthesizes three main forms of leisure: serious leisure, casual leisure, and project-based leisure (Stebbins, 2008). Serious leisure has been defined by work from Stebbins and includes six identifiable characteristics: (a) need to persevere at the activity (b) availability of a leisure career (c) need to put in effort to gain skill and knowledge (d) realization of various special benefits (e) unique ethos and social world and (f) an attractive personal and social identity (2008).

All six characteristics of serious leisure were referred to by the women during interviews. WCBB was serious leisure for the athletes.

“I missed my best friends bridal shower...I missed my brother’s graduation...I missed by fathers 70<sup>th</sup> birthday party...I give my summers to the national team...can’t come, I have practice...can’t come, I have a game...I spend two weeks total with my family in the summer...my family would come to the gym so they could see me.”

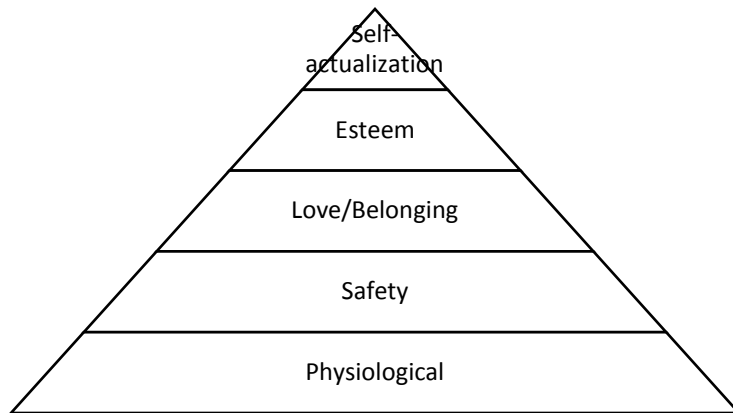
However, data from interviews did not support the three subcategories of serious leisure: (a) amateur, (b) hobbyist and (c) volunteer.



**Figure 2.**

*Self-actualization*

Self-actualization is the fulfillment of one’s talents and potentialities. Perhaps the most well-known reference to self-actualization appears at the top of Maslow’s Hierarchy of Needs (figure 3). Self-actualization is described as the motivation to accomplish everything that one can and become the most that one can be (Maslow, 1970). This type of motivation was repeatedly mentioned by the women during their interviews. “I had always been really athletic, happy to see I could still compete in sports, happy to do any kind of sport.”



**Figure 3.** Maslow's Hierarchy of Needs

### *Serious Leisure Identity*

Data from this study indicated that while post traumatic opportunity, serious leisure and self-actualization have specific meaning, there is considerable overlap. At the intersection of these three sub-themes is serious leisure identity. Playing on the WCBB team was more than serious leisure. As indicated by the PRS survey, the women were motivated to play because of the emotions they felt when participating in the sport. Comments they made during interviews support this emotional connection. In addition, the women explained how their identity changed due to the injury they sustained, whether it was a knee injury that prevented them from playing stand-up basketball or from a spinal cord injury (SCI) that had more serious physical implications. Their lifestyle had changed dramatically. In every case, athletes mentioned that an injury had taken away a piece of their identity. WCBB helped them reestablish their identity. "After a year I noticed how much that I missed sports and coaching, I really enjoyed it, but it's not the same as playing a sport so I knew I needed to do something." "I started just because I looked for a sport where I wanted to sweat, I missed the feeling." "I just wanted to play basketball, it was my life before and didn't want it to stop." "Tough not playing for 6 months, tough watching practice and not touching a ball."

## **DISCUSSION**

There are three points of discussion. First, the results of the PRS and what the data suggests. Second, to discuss serious leisure identity, more specifically what it is characterized by and finally to relate this case to Therapeutic Recreation.

For these women, no relationship was found between functional classification and each construct. This suggests that ability (or lack of ability) did not play a role in motivation with respect to fitness, ego, task, social integration or social affective. In other words, the extent of the injury did not have any relationship to what motivated each individual player to play WCBB.

Results using the constant comparative method supported the notion that these women were motivated to play WCBB for reasons that were independent of the degree of their physical capabilities. It was obvious that playing WCBB was dependent on an injury experienced by the athletes, but the motivation to want to play WCBB emerged from something deeper. In this case, serious leisure, post traumatic opportunity and self-actualization led to a serious leisure identity. I am suggesting that the German Women do more than participate in serious leisure. I believe they have developed a serious leisure identity.

In addition, pride, resiliency and sacrifice characterized their serious leisure identity. They were proud of what they did and who they were. "It's our sport and we love it." These women also demonstrated pride by advocating for their sport. "Our club teams pack up their chairs and introduce sport to schools and go and create a following." Team members who could ambulate were often questioned why they did not play stand-up basketball. "Playing WCBB I have those questions every weekend when traveling with the national team. You have to tell them everyone can play [WCBB] and that I am not allowed to play stand-up basketball."

Resiliency was demonstrated in three ways. First, many of the women acquired shoulder injuries from the stress and repetition related to playing the sport throughout the years. Rehabilitation of these injuries was continual. They literally participated in the rehabilitation of the injuries they received when playing WCBB so they can go back to playing WCBB. Second, to stay in shape for the sport and to stay healthy, many of the women participated in a

routine of cross-training in addition to physical therapy. Cross-training took the form of rowing, lifting weights, hand biking or biking. In order to continue to play WCBB, the women often incorporated these things into their daily schedules which were above and beyond their practice requirements. Third, there were no women's only club teams in Germany. If the women wanted to play basketball year round they had to play with men. Playing with the men resulted in other challenges like a more aggressive game and a higher level of competition. "If I can't play with the men, I can't play at all...I have a different role with the men...it's not a problem to be the only woman on the team."

The women on the German WCBB were not forced to play at this intensity. They chose to play. Because of this decision, they had to balance basketball with work and education. Some women worked 40 hours or more a week while still juggling intense training schedules. When the national team practice started, the women generally traveled every weekend to play in camps or tournaments in cities all over the world. But when Monday came around, it was back to work or school. "I didn't know when to go shopping, wash my clothes, clean my apartment..." "A year before the Paralympics I trained almost every day, sometimes not Sunday. I worked 40 hours a week and I slept only from 12a-5a." "I had an agreement with my boss that I would work on the train on the way to practice." WCBB was not their traditional job, but they treated it like it was their job. WCBB was what they decided to do during the majority of their free time.

Some players balanced undergraduate or graduate school in the US, while continuing to play for the German National Team. In order to accomplish this, they gave up class contact for online courses. "I work full time so that's [basketball] what I do after work and on the weekends. I am studying right now so after this [interview] I have to write a paper and go to practice."

The athletes had to sacrifice important, generally traditional and family centered events for the sport. "I missed my best friends bridal shower...I missed my brother's graduation...I missed my father's 70<sup>th</sup> birthday party...I give my summers to the national team...Can't come, I have practice...Can't come I have a game...I spend two weeks total with my family in the summer." "My family would come to the gym so they could see me."

It is my theory that WCBB has been and is more than serious leisure for the women on the German National team. They are not part of the sport, the sport is a part of them. It is who they are not what they do. "It's our sport and we love it." WCBB to them is more than a recreational activity, it is a leisure lifestyle that includes pride, resiliency and sacrifice. WCBB is their serious leisure identity.

### *Connection with Therapeutic Recreation*

Recreation Therapy (RT) is a treatment service designed to restore, remediate and rehabilitate a person's level of functioning and independence in life activities. RT programs are designed to promote health and wellness as well as reduce or eliminate the activity limitations and restrictions to participation in life situations caused by an illness or disabling condition (ATRA, 2009).

With regards to recreation therapy, data from this study were conflicting. One question on the PRS asked the women if they play WCBB because it was a form of exercise that was therapeutic. The mean of the scores from this question was 2.77 out of 5 indicating that therapeutic exercise was not a motivation to play WCBB. However, data from observations and interviews indicated that the women understood the therapeutic role WCBB played in their lives. "Every person needs sports, I would say if you are disabled you even need it more." "It took me a while to realize that training, especially arms, are helpful for my everyday life."

However, data from this study closely aligns with the therapeutic recreation leisure ability model. The Leisure Ability Model presents three elements on a continuum: functional intervention, leisure education and recreation participation (Stumbo & Peterson, 2009). WCBB was used to improve their physical, emotional, cognitive and social functioning level. Leisure education was addressed through learning where they could play this new sport, in addition to the rules. Finally, recreation participation was represented by their independent leisure in the sport.

According to Stumbo and Peterson (2009) the ultimate goal of independent leisure involvement and lifestyle lies beyond the parameters of the model, beyond recreation participation. The data from this study indicated that the women on the German WCBB Team have attained the ultimate goal.

## **LIMITATIONS**

There are three noteworthy limitations of this research: (a) the case study methodology, (b) the definition of leisure, and (c) the opportunity for participation. This case study focused on a group using ethnographic fieldwork and a specific population sample to illustrate certain topics within an evaluation in a descriptive mode (Yin, 1994).



A case study provides useful information about a specific topic that is not accessible by using other forms of research, but often it cannot be generalized.

Leisure can be defined as enjoyable activities that you do when you are not working. WCBB is not leisure for everyone, but the fact that WCBB is inherently leisure to these women is one of the main motivators to play. "My biggest motivator is fun, without fun I wouldn't do it." It is clear that with the amount of time spent doing the sport and the lack of physical rewards, there has to be something that is emotionally attractive for these women.

Finally, a serious leisure identity could not emerge without opportunity. WCBB in Germany is characterized by ample teams, support and resources. Europe, especially Germany, has a well-established WCBB League. There are 10 first-league teams and 16 second-league teams located in cities all over Germany, making the sport widely available and a good fit for any skill or commitment level. Some of the German WCBB teams are sponsored by trauma hospitals. Many players who experienced a traumatic injury were introduced to WCBB in the hospital. In addition to leagues in Germany, there is a European league where teams can play internationally. In both the German and European leagues the teams are co-ed and abled bodied individuals can play; you do not need to have a classified disability. "For women I think it's interesting because you have to play it with boys...I think it's cool because in the beginning the men take care of you, but as soon as they realize that you're here for doing the sport the same way they do, they see you as a teammate, not as a woman and that keeps you pushing." When women play on co-ed teams their functional rating is subtracted by 1.5. For instance, if a woman is a 1.0 player, on a co-ed team she is worth -0.5 towards the total 14 point team score. Agents in the socialization process included parents, peers, physical education teachers and trainers. Many of the women cited bosses who were supportive of their busy WCBB schedule. The bosses would make adjustments to their work schedule in order to accommodate their participation in WCBB.

## CONCLUSIONS

Whether the athletes on the German Women's WCBB Team had a limiting knee injury or a life changing SCI, they all happened to find WCBB by accident. For some women the journey to compete on the national level was a struggle. For other women, the journey was a smooth transition with new and exciting challenges. All of the women persevered to find a way to be successful. All of the women were pleased to find the unexpected opportunities presented to them by WCBB. "I never knew what was happening after that; I never knew I would play in the Paralympics. I just wanted to play basketball. It was my life before and I didn't want it to stop."

WCBB became their serious leisure identity. Playing WCBB meant more to these women than winning it all. Most of the women from the gold medal 2012 National Team are still playing. They still have individual and team goals that they have not yet reached. WCBB is part of their personal identities. "I am a little bit afraid of my life without the national team..." "After winning gold I took some time off, and went back because...I don't know...I just missed it."

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