3_Radar_Plot

```r
# Read data
ssn_data <- read.csv("Data/SSN_2017_2020.csv")
```

```r
# Sum each players 2020 season stats
netball_main <- ssn_data %>%
  filter(Season == 2020) %>%
  filter(player.minutesPlayed != 0) %>%                                # Remove players who didn't play a
  select(Name                 = "player.displayName",
         Minutes              = "player.minutesPlayed",
         Rebounds             = "player.rebounds",
         Penalites            = "player.penalties",
         General_Play_Turnovers = "player.generalPlayTurnovers",
         Possessions          = "player.possessions",
         Feeds                = "player.feeds",
         Intercepts           = "player.intercepts") %>%
  group_by(Name) %>%                                                   # Group by player to combine all i
  summarise_all(.funs = sum)
```

```r
# Convert stats to per minute basis, and only keep players who played above the median league minutes,
netball_main <- netball_main %>%
  group_by(Name) %>%
  summarise(MP = max(Minutes),
            Rebounds_min               = Rebounds/MP,
            Penalites_min              = Penalites/MP,
            General_Play_Turnovers_min = General_Play_Turnovers/MP,
            Possessions_min            = Possessions/MP,
            Feeds_min                  = Feeds/MP,
            Intercepts_min             = Intercepts/MP) %>%
  filter(MP >= median(MP)) %>%
  select(-MP)
```

```
## `summarise()` ungrouping output (override with `.groups` argument)
```

```r
# Create Z-Score function,  so different variables can be compared
z_score <- function(x){
  z = (x - mean(x, na.rm = T)) / sd(x, na.rm = T)
  return(z)
}
```

```r
# Calculate Z-Scores
netball_main <- netball_main %>%
  mutate_at(vars(2:7), .funs = z_score)
```

```r
# Create T-Score function, so Z-Scores can be be scaled from 1-100
```

```r
t_score <- function(x){
  t = (x * 10) + 50
  t = ifelse(t > 100, 100,
             ifelse(t < 0, 0, t))
}

# Calculate T-Scores
netball_main <- netball_main %>%
  mutate_at(vars(2:7), .funs = t_score)


# Conver to long format for easier plotting
netball_long <- netball_main %>%
  rename('Rebounds\nPer min'    = Rebounds_min,
         'Feeds\nPer min'       = Feeds_min,
         'Turnovers\nPer min'   = General_Play_Turnovers_min,
         'Intercepts\nPer min'  = Intercepts_min,
         'Penalties\nPer min'   = Penalites_min,
         'Possessions\nPer min' = Possessions_min) %>%
  pivot_longer(cols = 2:7, names_to = "variable", values_to = "value")


netball_long %>%
  filter(Name == "L.Langman") %>%
  ggplot(aes(x= variable, y = value, fill = variable)) +
          geom_col(color = "white", width = 1) +
          coord_polar(theta = "x") +
          geom_hline(yintercept = seq(50, 50, by = 1), size = 1.2) +
  theme(
    axis.text.x = element_text(face = "bold", size = 12),
    legend.title = element_blank(),
    legend.position = "none"
  ) +
  labs(title = "2020 L.Langman ",
       x = "",
       y = "")
```
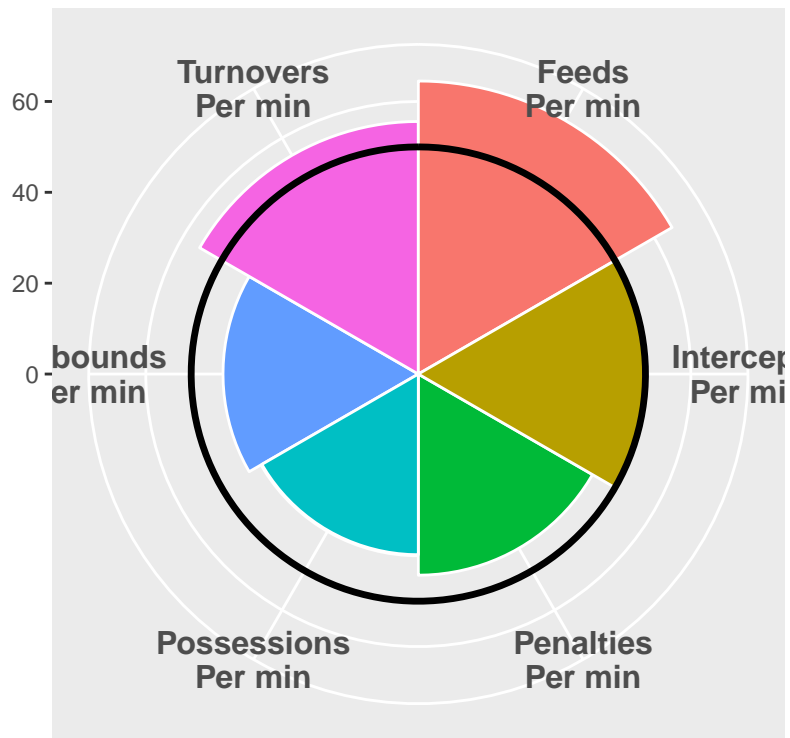
2020 L.Langman


```
ggsave("Radar_plot.png")
```

Saving 6.5 x 4.5 in image