Pre-Swing Principles: Posture

Posture is the position of the player's body relative to the ball and ground; and the preparation of the muscles prior to the swing taking place. Thus posture has a strong link with where the ball is positioned. This section focuses on posture at the address position, not during the swing.

The angles created by the player at the ankles, knees and hips, which establish the relationship between the arms and the body, play an important role in preparing the player to move dynamically, around a stable axis, during the swing. Correct posture will also reduce the risk of injuries during the swing.

This section will introduce you to the common types of posture seen amongst golfers and the characteristics of a golfing posture.

Types of Posture

The most commonly found postures amongst golfers are:

- Neutral posture
- S-Posture
- C-Posture
- Excessively upright posture
- Excessively tilted posture

Neutral Posture



Neutral posture or good posture is defined as "maintaining the primary and secondary curves of the spine". Good posture is also defined by "maintaining a good centre of gravity and line to gravity". Good posture in golf is needed to maintain a good spinal position throughout the golf swing. The ideal posture is dependant upon the type of club being used, the desired ball flight, the lie of the ball, the players swing and physical characteristics. A neutral posture is one whereby the spine should be tilted anteriorly. Thus allowing the body to rotate around this axis.

S-Posture



S-Posture is when there is excessive curvature in the lower back and the golfer sticks out their tail bone, away from the ball, too far in the address position. This will hinder the effectiveness of in-swing principles and impact positions.

C-Posture



C-Posture is the rounding of the upper back/spine. Here the golfer looks slouched over the ball. This position will also hinder the effectiveness of in-swing principles and impact positions.

Excessively upright posture



This is when there is a redution of anterior flex of the torso from the hips at address, and the golfer appears to be stood up at address. This generally occurs when the ball is positioned too close to the body or when the ball is above the golfers feet at address.

Excessively tilted posture



This is when there is an increase in anterior flex of the torso from the hips at address. This is common amongst tall golfers and when the ball is position too far away from the body. This can also occur when the ball is below the golfers feet at address.

It's difficult to make an effective and consistent swing from poor posture at address. Above are common examples found in golfers and this is not an exhaustive list. Poor posture stems from muscular imbalances and physical limitations. However, these vary from individual to individual. The causes of the postural conditions described above are established in the Sports Science module.

Please also note poor posture can stem from the incorrect club being used. If the club is too short or long this may affect posture. Please see Equipment Technology module for theory surrounding club fitting.

Poor posture will result in the golfer having a poor address position which will in turn affect the planes and angles of the golfer's swing, which will in turn affect performance.

Factors that will affect the golfers function as a result of poor posture:

- 1. Deviated swing plane.
- 2. Poor body alignment at the ball at address.
- 3. Reduced club head speed.
- 4. Poor rotation and spine angles in the golf swing itself.

Other Characteristics of the Posture

There are other characteristics of the posture that will influence the impact factors and subsequent ball flight characteristics, these include:

- Preparedness
- Weight Distribution
- Stance width

Preparedness

We use the term **preparedness** to include the aspects: static balance and muscular readiness. In preparing for the swing it is crucial that the body has the correct degree of static balance and muscular readiness.

This stage of muscular 'readiness' does not require excessive muscular tension. However, to go to the other extreme and ask a golfer (getting ready to perform a shot) to 'relax' or 'hang loose' would be incorrect. As is the case for a tennis player ready to receive a serve, the golfer should be in a state of balanced readiness - neither too tense nor too relaxed.

A state of readiness calls for a fine balance of reciprocal muscular enervation because on one side of the golfer's body the muscles are contracted, whilst on the other side of the body, muscles will be extended.

Weight Distribution

Weight distribution is difficult to teach or communicate to others, as there is no clear visual indication of right or wrong. Effective distribution of weight at setup (both between left and right feet and from forward to back) is something that can only be determined by **feel** and **pressure plates**.

In common with most sports, the "ready" position requires a forward-back balance where the weight is mostly borne by the balls of the feet. The heels and toes act as a stabiliser to this balance position.



The relative weight distribution on the back and lead foot will depend on the technique of the individual player. Common themes are apparent:

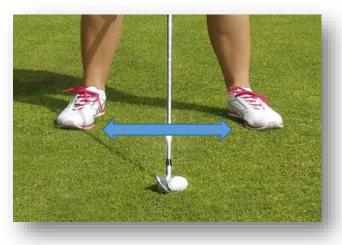
- Player's that predominantly use their 'body' to swing the club, tend to shift more weight to the back foot in the backswing. This will result in a high degree of right-left weight (lateral) transfer as the swing progresses.
- Players that predominantly use their hands and arms to swing have a tendency to distribute a greater portion of weight onto the lead foot in both the setup and during the swing.

Please note the above are common themes found amongst golfers, however this does not always happen. It is dependent upon the individual's physical characteristics and swing characteristics.



Stance Width

Stance width must provide the correct blend of stability and balance and can influence the posture. Minor movements in stance width won't have huge implications on the golf swing, however when stance width severely exceeds shoulder width or narrows to a couple of inches then the dynamic movement of the golf swing may be affected. Widening the stance excessively will lower the centre of gravity of the player and vice versa when narrowing the stance.



The optimum width of foot placement must take into account the type of shot that is desired, the players' physical characteristics and swing characteristics. Larger swings require more balance to compensate the increased movement, whereas chips and putts can be carried out with a narrower foot placement.

Pre-shot routine

In order for the individual player to find their ideal posture, it is again worth following a routine. Below is a basic one that golfers can use:

- The player grips the club handle precisely.
- From a standing vertical position, the player holds the club out horizontally away from the body (like a baseball bat).
- The player then bends forward at the hips until the club almost touches the ground.
- They then flex their knees and keep their back fairly straight with arms extended but relaxed and shoulders over the toes.
- The hands are placed slightly inside the vertical line dropping from the eyes.
- Thus the club should be approximately 90 degrees to the spine angle to maximise swing speed.

The coach can the check that the player weight is balanced.

Please note, there are many other ways for golfers to attain their ideal posture at set up. The above is purely an example of a routine that is used by many coaches.

Effects of Posture on Impact Factors & Ball Flight Characteristics

Clubhead Speed (Primary Influence – Distance, Curvature, Trajectory)

In order to be able to generate enough power to propel the ball the distances required to be successful at golf, a reasonable amount of effort is needed. The player must use energy to generate clubhead speed and then that 'power' must be passed on to the ball efficiently. The preparation of the player's posture at address and engaging the correct muscles provides the player with the opportunity to generate this power.

Posture and ball position are closely linked. If the ball is too close to the player, the posture can be excessively upright and excessively tilted if the ball is too far away. Imagine how difficult it would be if the player had to try to produce maximum power whilst standing on one leg with the ball positioned just one centimetre from the player's toe and it is clear why establishing good posture is essential for maximum power (clubhead speed).

Further to this, a C or S posture will affect the golfers' ability to rotate their upper body (please see sports science for more details). This will therefore affect the speed at which the golfer can move the clubhead through impact.

Centredness of Strike (Primary Influence – All)

As mentioned in the Ball Position section, establishing the correct distance between the player and the ball will heavily influence the player's ability to consistently strike the ball with the centre of the clubface. Posture plays a big part in setting this distance correctly. Good posture will also allow the player to establish and maintain balance throughout the swing; this is another essential requirement if the ball is to be consistently struck in the middle of the club.

Angle of Approach (Primary Influence – Trajectory)

Posture is one of the key pre-swing principles that influences the in swing principles: dynamic balance and swing centre, during the swing. However, it is not a direct link.

As mentioned in the ball position section, if the majority of weight is distributed on to the back foot at address, a shallower angle of approach will generally occur (assuming the weight stays there) and vice versa when the weight is placed on the lead foot. This is all however dependent upon swing mechanics.

A player could set up in certain positions that would lead a coach to believe a certain set of circumstances would prevail at impact and yet, due to the swing, something completely different would actually take place.

Swing Path (Primary Influence – Direction)

Standing too close to the ball or too far away would almost certainly influence the swing path direction. Generally speaking, standing too close to the ball will cause an in-to-out swing path and vice versa when the golfer is standing too far away. This is due to implications on the swing plane.

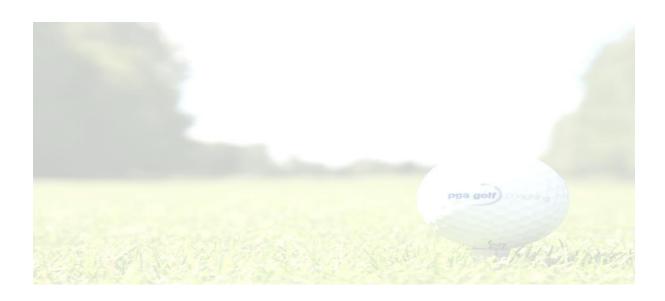
Furthermore, poor posture can result in an altered body alignment, more specially the shoulder alignment, thus affecting swing path.

Clubface Alignment (Primary Influence – Direction and Curvature)

Posture has no direct effect on the clubface, but such is posture's importance that it is clear that poor posture could, indirectly, influence the clubface angle.

Posture Review

You should now be able to identify the characteristics of posture and highlight the common types of posture found amongst golfers. You should also be able to explain the links between posture and the impact factors.



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