```
hselect_ax  THM

⊢  ∀'a:S. all(λP:'a → hbool. all(λx:'a. implies(P(x),P(select(P)))))
| by Simpsetp [‘hol_to_nuprl‘] THEN StrongAuto
|
1. 'a : S
2. P : 'a→𝔹
3. x : 'a
4. P(x)
⊢  P(@b x:'a. (P(x)))
| by TAbstract (@b x:'a. (P(x))) 𝔹 THEN Unab [‘bchoose‘]
|    THEN
|    L
|    Thm* ∀'a:S, P,Q:('a→Prop).
|         (∀x:'a. Q(x) ⇒ P(x)) ⇒ (∃x:'a. Q(x)) ⇒ P(@x:'a. Q(x))
|    {choose_elim_pos}
|    THEN
|    Unab [‘so_apply‘]
|    THEN
|    Simp
|    THEN
|    StrongAuto
|
1. 'a : S
2. P : 'a→𝔹
3. x : 'a
4. P(x)
⊢  ∃x:'a. P(x)  by DTerm x 0 THEN StrongAuto
END
```